Model AL-C2 Machine Code: D129/D130

Field Service Manual

Safety Notices

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. Note that some components of the copier and the paper tray unit are supplied with electrical voltage even if the main power switch is turned off.
- 4. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
- 5. If the Start key is pressed before the copier completes the warm-up period (the Start key starts blinking red and green alternatively), keep hands away from the mechanical and the electrical components as the copier starts making copies as soon as the warm-up period is completed.
- 6. The inside and the metal parts of the fusing unit become extremely hot while the copier is operating. Be careful to avoid touching those components with your bare hands.

⚠ WARNING

 To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.

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.
- This machine, which uses a 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

- 1. This machine and its peripherals must be serviced by a customer service representative who has completed the training course on those models.
- The NVRAM on the system control board has a lithium battery which can explode if replaced incorrectly. Replace the NVRAM only with an identical one. The manufacturer recommends

replacing the entire NVRAM. Do not recharge or burn this battery. Used NVRAM must be handled in accordance with local regulations.

Handling Toner

- Work carefully when removing paper jams or replacing toner bottles or cartridges to avoid spilling toner on clothing or the hands.
- If toner is inhaled, immediately gargle with large amounts of cold water and move to a well ventilated location. If there are signs of irritation or other problems, seek medical attention.
- If toner gets on the skin, wash immediately with soap and cold running water.
- If toner gets into the eyes, flush the eyes with cold running water or eye wash. If there are signs of irritation or other problems, seek medical attention.
- If toner is swallowed, drink a large amount of cold water to dilute the ingested toner. If there are signs of any problem, seek medical attention.
- If toner spills on clothing, wash the affected area immediately with soap and cold water. Never use hot water! Hot water can cause toner to set and permanently stain fabric.
- Always store toner and developer supplies such as toner and developer packages, cartridges, and bottles (including used toner and empty bottles and cartridges) out of the reach of children.
- Always store fresh toner supplies or empty bottles or cartridges in a cool, dry location that is not
 exposed to direct sunlight.

WARNING

Do not use the cleaner to suck spilled toner (including used toner). Sucked toner may cause firing
or explosion due to electrical contact flickering inside the cleaner. However, it is possible to use the
cleaner designed for dust explosion-proof purpose. If toner is spilled over the floor, sweep up
spilled toner slowly and clean remainder with wet cloth.

Safety and Ecological Notes for Disposal

- 1. Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
- 2. Dispose of used toner, the maintenance unit which includes developer or the organic photoconductor in accordance with local regulations. (These are non-toxic supplies.)
- 3. Dispose of replaced parts in accordance with local regulations.
- 4. When keeping used lithium batteries in order to dispose of them later, do not put more than 100 batteries per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.

Laser Safety

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

∴ WARNING

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

WARNING

• 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:

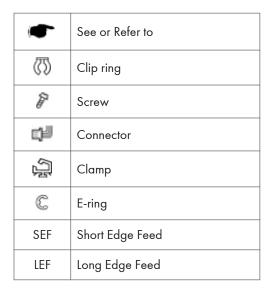


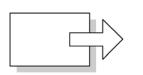
3d-laser_decal

Conventions in this Manual

Symbols and Abbreviations

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







Short Edge Feed (SEF)

Long Edge Feed (LEF)

Cautions, Notes, etc.

The following headings provide special information:

MARNING

 FAILURE TO OBEY WARNING INFORMATION COULD RESULT IN SERIOUS INJURY OR DEATH.

ACAUTION

• Obey these guidelines to ensure safe operation and prevent minor injuries.

Note

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

TABLE OF CONTENTS

| Safety Notices | 1 |
|---|----|
| Important Safety Notices | 1 |
| Safety and Ecological Notes for Disposal | 2 |
| Laser Safety | 3 |
| Conventions in this Manual | 4 |
| Symbols and Abbreviations | 4 |
| Cautions, Notes, etc | 4 |
| 1. Product Information | |
| Specifications | 15 |
| Machine Configuration | 16 |
| Copier | 16 |
| Guidance for Those Who are Familiar with Predecessor Products | 19 |
| Overview | 20 |
| Component Layout | 20 |
| Paper Path | 22 |
| Drive Layout | 23 |
| 2. Installation | |
| Installation Requirements | |
| Environment | 26 |
| Machine Level | 27 |
| Minimum Space Requirements | 27 |
| Power Requirements | 28 |
| Installation Flow Chart | 29 |
| Main Machine Installation | 31 |
| Accessory Check | 31 |
| Installation Procedure | 33 |
| Moving the Machine | 46 |
| Transporting the Machine | 46 |
| Paper Feed Unit Installation (D580) | 47 |
| Accessory Check | 47 |
| Installation Procedure | 47 |
| 2000-sheet LCT Installation (D581) | 51 |
| Accessory Check | 51 |

| Installation Procedure | 51 |
|--|-----|
| 1200-sheet LCT Installation (D631) | 55 |
| Component Check | 55 |
| Installation Procedure | 55 |
| ARDF Installation (D630) | 58 |
| Component Check | 58 |
| Installation Procedure | 58 |
| 1-Bin Tray Unit Installation (D632) | 63 |
| Component Check | 63 |
| Installation Procedure | 63 |
| Bridge Unit Installation (D634) | 66 |
| Component Check | 66 |
| Installation Procedure | 66 |
| 3000/2000-sheet (Booklet) Finisher (D636/D637) | 71 |
| Accessory Check | 71 |
| Installation Procedure | 72 |
| Punch Unit Installation (D570) | 78 |
| Component Check | 78 |
| Installation Procedure | 79 |
| Platen Cover (D593) | 84 |
| 1000-sheet Finisher (D588) | 85 |
| Accessory Check | 85 |
| Installation Procedure | 86 |
| Side Tray (D635) | 90 |
| Component Check | 90 |
| Installation Procedure | 91 |
| Internal Shift Tray (D633) | 95 |
| Component Check | 95 |
| Installation Procedure | 95 |
| Key Counter Installation | 98 |
| Installation Procedure | 98 |
| Key Counter Interface Unit Installation | 101 |
| Installation Procedure | 101 |

| Tray Heater | 103 |
|---|-----|
| Installation Procedure | 103 |
| Tray Heater (Optional Paper Feed Unit) | 105 |
| Component Check | 105 |
| Installation Procedure | 105 |
| HDD Installation (D640-11) | 112 |
| Component Check | 112 |
| Installation Procedure | 113 |
| Copy Data Security Unit (B829) | 116 |
| Component Check | 116 |
| Installation Procedure | 117 |
| Browser Unit Type I | 120 |
| Installation Procedure | 120 |
| Update Procedure | 122 |
| Card Reader Bracket Type C3352 (D593) | 124 |
| Component Check | 124 |
| Installation Procedure | 125 |
| 3. Preventive Maintenance | |
| PM Tables | 127 |
| 4. Replacement and Adjustment | |
| General Cautions | |
| Laser Unit | 129 |
| Used Toner | 129 |
| Special Tools and Lubricants | 130 |
| Special Tools | 130 |
| Lubricants | 130 |
| Exterior Covers | 131 |
| Front Door, Upper and Lower Inner Cover | 131 |
| Left Cover | |
| Rear Cover | |
| Right Rear Cover | |
| Front Right Cover | |
| Operation Panel | 134 |

| Paper Exit Cover | 135 |
|---|-----|
| Inner Tray | 136 |
| Scanner | 138 |
| Exposure Glass | 138 |
| Scanner Exterior Panels and Operation Panel | 138 |
| Lens Block Assembly | 141 |
| Original Size Sensor | 143 |
| Exposure Lamp | 144 |
| Scanner HP Sensor/Platen Cover Sensor | 148 |
| Scanner Motor | 150 |
| Scanner Motor Drive Board | 153 |
| Front Scanner Wire | 153 |
| Rear Scanner Wire | 157 |
| Laser Unit | 161 |
| Caution Decal Locations | 161 |
| Laser Unit | 162 |
| Polygon Mirror Motor | 163 |
| Laser Synchronization Detector | 163 |
| LD Unit | 164 |
| PCDU | 167 |
| PCDU (Photoconductor and Development Unit) | 167 |
| Drum | 167 |
| Pick-off Pawls | 170 |
| Charge Roller and Cleaning Roller | 170 |
| Drum Cleaning Blade | 171 |
| ID Sensor | 172 |
| Development | 174 |
| Development Filter | 174 |
| Development Roller | 174 |
| Developer | 177 |
| TD Sensor | 179 |
| Transfer | 181 |
| Transfer Belt Unit | 181 |

| Transfer Belt | 181 |
|---|-----|
| Toner Overflow Sensor | 184 |
| Transfer Belt Cleaning Blade/Toner Overflow Sensor | 184 |
| Paper Feed | 186 |
| Paper Feed Unit | 186 |
| Pick-Up, Feed and Separation Rollers | 187 |
| Tray Lift Motor | 188 |
| Relay, Tray Lift, Paper End and Paper Feed Sensors | 188 |
| Registration Sensor | 189 |
| Fusing | 192 |
| Fusing Unit | 192 |
| Web Roller Unit | 192 |
| Brake Pad | 193 |
| Web Holder Roller and Web Rollers | 194 |
| Pressure Roller Cleaning Roller | 197 |
| Thermostats | 198 |
| Thermistor | 199 |
| Hot Roller Strippers | 200 |
| Fusing Lamps | 201 |
| Hot Roller and Pressure Roller | 203 |
| Paper Exit | 205 |
| Paper Exit Unit | 205 |
| Fusing Exit, Paper Overflow, and Paper Exit Sensors | 205 |
| Junction Jam Sensor | 206 |
| Paper Exit Motor | 206 |
| Duplex | 208 |
| Duplex Unit | 208 |
| Right Door Cover | 211 |
| Duplex Door Sensor | 211 |
| Duplex Entrance Sensor | 212 |
| Duplex Exit Sensor | 213 |
| Duplex/By-pass Motor | 215 |
| Duplex Inverter Motor | 216 |

| By-pass | 218 |
|---|-----|
| By-pass Paper Size Sensor/By-pass Paper Length Sensor | 218 |
| By-pass Paper End Sensor | 220 |
| By-pass Pick-up, Feed and Separation Roller, Torque Limiter | 221 |
| By-pass Feed Clutch | 222 |
| Drive Area | 223 |
| Paper Feed Clutch | 223 |
| Development Paddle Motor | 223 |
| Transfer/Development Motor | 224 |
| Drum Motor | 225 |
| Fusing Motor | 225 |
| Web Motor | 226 |
| Paper Feed Motor | 227 |
| Transfer Belt Contact Motor | 227 |
| Registration Motor | 228 |
| Toner Supply Motor | 229 |
| Electrical Components | 230 |
| Controller Unit | 230 |
| HDD Unit | 230 |
| Controller Board | 233 |
| After Installing the Controller Board | 236 |
| Mother Board | 236 |
| BCU | 237 |
| IPU | 239 |
| IOB | 239 |
| PSU | 240 |
| High Voltage Power Supply | 241 |
| Fusing Exhaust Fan | 241 |
| Controller Fan | 242 |
| Copy Adjustments: Printing/Scanning | 243 |
| Overview | 243 |
| Printing | 243 |
| Scanning | 247 |

| ADF | 249 |
|---------------------------------|-----|
| Touch Screen Calibration | 250 |
| 5. Service Tables | |
| Service Program Mode | 253 |
| Service Program Mode Operation | 253 |
| Service Program Mode Tables | 254 |
| Service Program Mode Tables | 255 |
| SP Tables | 255 |
| Main SP Tables-1 | 256 |
| SP1-xxx: Feed | 256 |
| Main SP Tables-2 | 265 |
| SP2-xxx: Drum | 265 |
| Main SP Tables-3 | 270 |
| SP3-xxx: Process | 270 |
| Main SP Tables-4. | 271 |
| SP4-xxx: Scanner | 271 |
| Main SP Tables-5 | 292 |
| SP5-xxx: Mode | 292 |
| Main SP Tables-6 | 353 |
| SP6-xxx: Peripherals | 353 |
| Main SP Tables-7 | 363 |
| SP7-xxx: Data Log | 363 |
| Main SP Tables-8 | 378 |
| SP8-xxx: Data Log 2 | 378 |
| Main SP Tables-9 | 422 |
| Input Check Table | 422 |
| Output Check Table | 431 |
| Printer Service Tables | 438 |
| Scanner Service Tables | 446 |
| Updating the Firmware | 448 |
| Before You Begin | 448 |
| Updating Firmware | 448 |
| Handling Firmware Update Errors | 451 |

| Uploading/Downloading NVRAM Data | 453 |
|--|-----|
| Uploading NVRAM Data (SP5-824) | 453 |
| Downloading NVRAM Data (SP5-825) | 454 |
| Self-Diagnostic Mode | 456 |
| Self-Diagnostic Mode at Power On | 456 |
| Self-Diagnostic Test Flow | 457 |
| Detailed Self-Diagnostic Mode | 458 |
| Executing Detailed Self-Diagnosis | 458 |
| Using the Debug Log | 459 |
| Overview | 459 |
| Switching On And Setting Up Save Debug Log | 459 |
| 6. Troubleshooting | |
| Service Call Conditions | 465 |
| Summary | 465 |
| SC Code Descriptions | 466 |
| Electrical Component Defects | 530 |
| Sensors | 530 |
| Switches | 534 |
| Blown Fuse Conditions | 535 |
| Fuses | 536 |

1. Product Information

Specifications

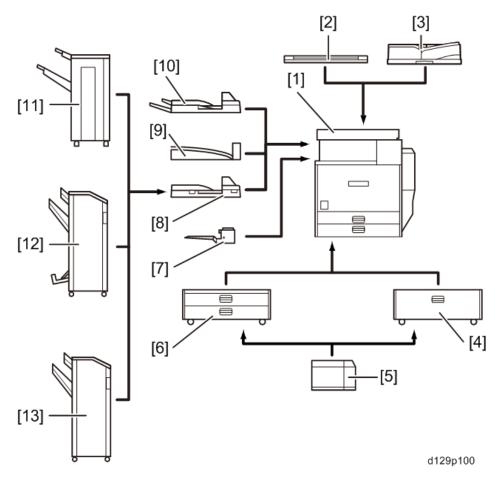
See "Appendices" for the following information:

- General Specifications
- Optional Equipment

1

Machine Configuration

Copier



Key: Symbol: U: Unique option, C: Option also used with other products

| т | - | | |
|---|---|--|--|
| н | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | Item | Callout | Key | Machine Code |
|--------|--|---------|-----|---------------------------------|
| | D129/D130 | [1] | - | D129/D130 |
| | Platen Cover (See Note 1) | [2] | С | D593 |
| | ARDF (See Note 1) | [3] | С | D630 |
| | 2000-sheet LCT | [4] | С | D581 |
| | 1200-sheet LCT | [5] | С | D631 |
| | Two-Tray Paper Feed Unit | [6] | С | D580 |
| | 1-Bin Tray | [7] | U | D632 |
| | Bridge Unit | [8] | С | D634 |
| | Internal Shift Tray | [9] | U | D633 |
| Copier | Side Tray | [10] | U | D635 |
| | 1000-sheet Finisher (See Note 2) | [11] | С | D588 |
| | 2000-Sheet Booklet Finisher (See Note 2) | [12] | С | D637 |
| | 3000-Sheet Finisher (See Note 2) | [13] | С | D636 |
| | -Punch Unit (See Note 3) | - | С | D570-00 (2/3-hole) NA |
| | -Punch Unit (See Note 3) | - | С | D570-01 (2/4-hole) EU |
| | -Punch Unit (See Note 3) | - | С | D570-02 (4-hole) Scandinavia |
| | Key Counter Bracket | - | С | A674 |
| | HDD (for basic model only) | - | U | D640 |
| | Copy Data Security Unit | - | С | B829 |

| | Item | Callout | Key | Machine Code |
|---------------------|------------------------|---------|-----|--------------|
| Fax | Fax Option | - | U | D629 |
| | G3 Interface Unit | - | U | D629 |
| | SAF Memory | - | С | G578 |
| | Handset | - | С | D645 |
| | Fax Communication Unit | - | U | D629 |
| | Printer/Scanner Unit | - | U | D641 |
| | Printer Unit | - | U | D641 |
| | Scanner Upgrade Unit | - | U | D641 |
| | PostScript3 Unit | - | U | D641 |
| | IPDS Unit | - | U | D641 |
| | Gigabit Ethernet | - | С | G874 |
| Printer/ Scanner | IEEE 1284 | - | С | B679 |
| | IEEE 802.11a/g, g | - | С | D377 |
| | Bluetooth | - | С | D566 |
| | Memory Unit 512 MB | - | С | D594 |
| | File Format Converter | - | С | D377 |
| | Browser Unit | - | U | D640 |
| | VM Card | - | С | D640 |
| | Netware | - | U | D629 |

NOTE:

- 1. The ARDF and platen cover cannot be installed together.
- 2. The finisher requires the bridge unit and two-tray paper feed unit or 2000-sheet LCT. The 1000-sheet finisher and 2000/3000-sheet (Booklet) finisher cannot be installed together.
- 3. The punch unit requires the 2000/3000-sheet (Booklet) finisher.

Guidance for Those Who are Familiar with Predecessor Products

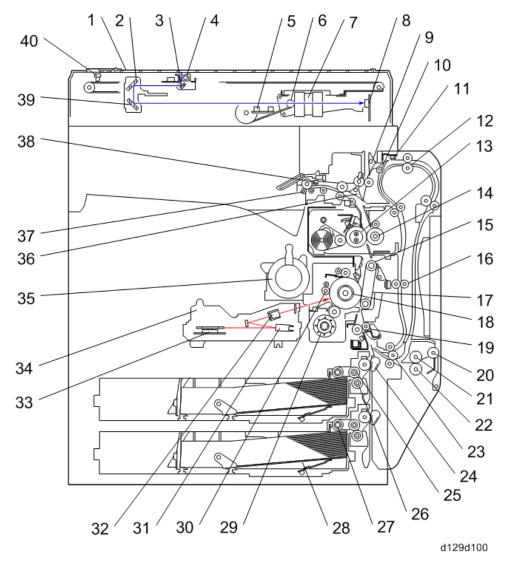
The D129/D130 series are successor models to the D091/D092 series. If you have experience with the predecessor products, the following information will be of help when you read this manual.

Different Points from Predecessor Products

| | D129/D130 | D091/D092 |
|------------------------------|--|--|
| Controller Type | GW+ Controller | GW Controller |
| Operation Panel | Tilt Operation Panel Type Includes USB/SD slot (not all functions can be used in Basic models) | Stationary Operation Panel Type |
| Scanner Lamp | LED | Xenon |
| Safety Shut Down Function | Available | Not Available |
| PDF Direct | Standard (SP model only) Included in Printer/Scanner. | Option |
| Арр2Ме | Standard (SP model only) Included in Printer/Scanner, Printer SD Card. Users who bought the VM card can download App2Me from the Web Site. | Standard (SP model only) Included in VM SD Card. |
| Data Overwrite Security | Standard | Option |
| HDD Encryption | Standard | Option |

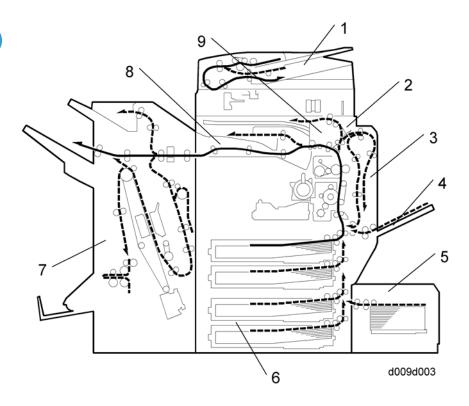
Overview

Component Layout

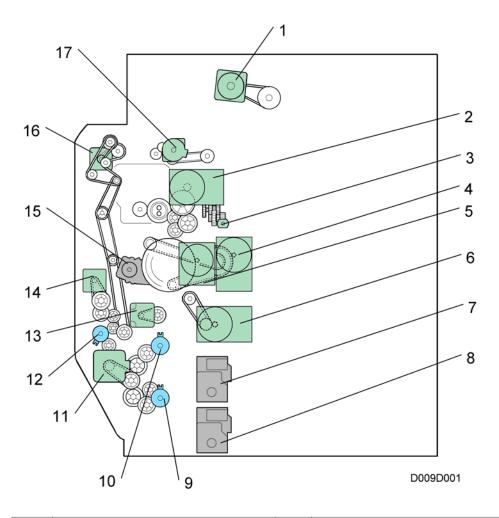


| 1 | Exposure Glass | 21 | By-pass Feed Roller |
|---|----------------|----|---------------------------------|
| 2 | 2nd Mirror | 22 | By-pass Separation Roller |
| 3 | 1 st Mirror | 23 | Duplex/by-pass transport roller |
| 4 | Exposure Lamp | 24 | Upper Relay Belt |

| 5 Original Length Sensors 25 Feed Roller 6 Scanner Motor 26 Separation Roller 7 Lens 27 Pick-up Roller 8 SBU 28 Bottom Plate 9 Junction Gate 2 29 Development Unit 10 Duplex Inverter Gate 30 Charge Roller 11 Duplex Entrance Sensor 31 Fθ Mirror 12 Duplex Inverter Roller 32 Barrel Toroidal Lens (BTL) 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror 20 By-pass Pick-up Roller 40 Scanner HP Sensor | | | | |
|---|----|------------------------------|----|----------------------------|
| 7 Lens 27 Pick-up Roller 8 SBU 28 Bottom Plate 9 Junction Gate 2 29 Development Unit 10 Duplex Inverter Gate 30 Charge Roller 11 Duplex Entrance Sensor 31 Fθ Mirror 12 Duplex Inverter Roller 32 Barrel Toroidal Lens (BTL) 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 5 | Original Length Sensors | 25 | Feed Roller |
| 8 SBU 28 Bottom Plate 9 Junction Gate 2 29 Development Unit 10 Duplex Inverter Gate 30 Charge Roller 11 Duplex Entrance Sensor 31 FØ Mirror 12 Duplex Inverter Roller 32 Barrel Toroidal Lens (BTL) 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 6 | Scanner Motor | 26 | Separation Roller |
| 9 Junction Gate 2 29 Development Unit 10 Duplex Inverter Gate 30 Charge Roller 11 Duplex Entrance Sensor 31 FO Mirror 12 Duplex Inverter Roller 32 Barrel Toroidal Lens (BTL) 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 7 | Lens | 27 | Pick-up Roller |
| 10 Duplex Inverter Gate 11 Duplex Entrance Sensor 12 Duplex Inverter Roller 13 Barrel Toroidal Lens (BTL) 13 Hot Roller 14 Pressure Roller 15 Transfer Belt Cleaning Blade 16 Duplex Transport Roller 17 Transfer Belt 18 OPC Drum 19 Registration Roller 30 Charge Roller 31 F0 Mirror 31 F0 Mirror 32 Barrel Toroidal Lens (BTL) 33 Polygonal Mirror Motor 34 Laser Unit 35 Toner Bottle Holder 36 Junction Gate 1 37 Exit Roller 38 Paper Exit Sensor 39 3rd Mirror | 8 | SBU | 28 | Bottom Plate |
| 11 Duplex Entrance Sensor 12 Duplex Inverter Roller 13 Barrel Toroidal Lens (BTL) 13 Hot Roller 14 Pressure Roller 15 Transfer Belt Cleaning Blade 16 Duplex Transport Roller 17 Transfer Belt 18 OPC Drum 19 Registration Roller 31 F Mirror 32 Barrel Toroidal Lens (BTL) 33 Polygonal Mirror Motor 34 Laser Unit 35 Toner Bottle Holder 36 Junction Gate 1 37 Exit Roller 38 Paper Exit Sensor 39 3rd Mirror | 9 | Junction Gate 2 | 29 | Development Unit |
| 12 Duplex Inverter Roller 32 Barrel Toroidal Lens (BTL) 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 10 | Duplex Inverter Gate | 30 | Charge Roller |
| 13 Hot Roller 33 Polygonal Mirror Motor 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 11 | Duplex Entrance Sensor | 31 | Fθ Mirror |
| 14 Pressure Roller 34 Laser Unit 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 12 | Duplex Inverter Roller | 32 | Barrel Toroidal Lens (BTL) |
| 15 Transfer Belt Cleaning Blade 35 Toner Bottle Holder 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 13 | Hot Roller | 33 | Polygonal Mirror Motor |
| 16 Duplex Transport Roller 36 Junction Gate 1 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 14 | Pressure Roller | 34 | Laser Unit |
| 17 Transfer Belt 37 Exit Roller 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 15 | Transfer Belt Cleaning Blade | 35 | Toner Bottle Holder |
| 18 OPC Drum 38 Paper Exit Sensor 19 Registration Roller 39 3rd Mirror | 16 | Duplex Transport Roller | 36 | Junction Gate 1 |
| 19 Registration Roller 39 3rd Mirror | 17 | Transfer Belt | 37 | Exit Roller |
| | 18 | OPC Drum | 38 | Paper Exit Sensor |
| 20 By-pass Pick-up Roller 40 Scanner HP Sensor | 19 | Registration Roller | 39 | 3rd Mirror |
| | 20 | By-pass Pick-up Roller | 40 | Scanner HP Sensor |



| 1 | ARDF |
|---|---------------------------------------|
| 2 | Interchange Unit |
| 3 | Duplex Unit |
| 4 | By-pass Tray |
| 5 | Large Capacity Tray (LCT: 1200-sheet) |
| 6 | Paper Tray Unit |
| 7 | Two-Tray Finisher |
| 8 | Bridge Unit |
| 9 | 1-Bin Tray |



| 1 | Scanner Motor | 10 | Paper Feed Clutch 1 |
|---|----------------------------|----|-----------------------------|
| 2 | Fusing Motor | 11 | Feed Motor |
| 3 | Web Motor | 12 | By-pass Paper Feed Clutch |
| 4 | Transfer/Development Motor | 13 | Registration Motor |
| 5 | Drum Motor | 14 | Duplex/By-pass Motor |
| 6 | Development Paddle Motor | 15 | Transfer Belt Contact Motor |
| 7 | Tray Lift Motor 1 | 16 | Duplex Inverter Motor |

| 8 | Tray Lift Motor 2 | 17 | Paper Exit Motor |
|---|---------------------|----|------------------|
| 9 | Paper Feed Clutch 2 | | |

2

2. Installation

Installation Requirements

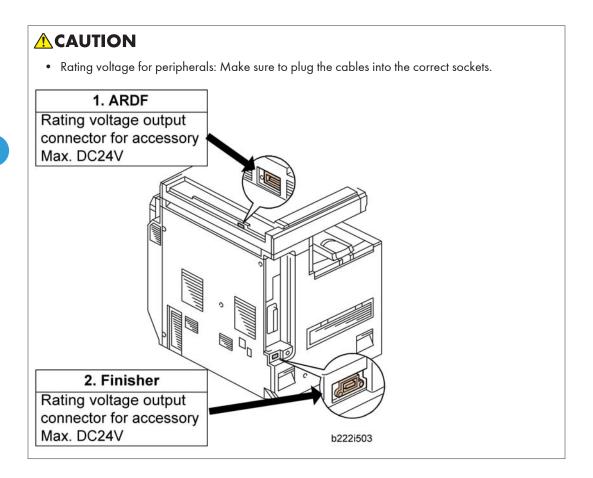
ACAUTION

Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the
hard disk or memory, press the operation power switch to switch the power off, wait for the power
LED to go off, and then switch the main power switch off.

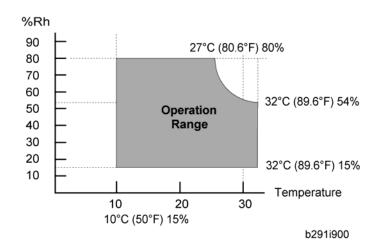
- Install the machine in a safe place for keeping security.
- Make sure that the operation instructions are kept at a customer's hand.



• The main power LED lights or flashes while the platen cover or ARDF is open, while the main machine is communicating with a facsimile or the network server, or while the machine is accessing the hard disk or memory for reading or writing data.



Environment



| Temperature Range: | 10°C to 32°C (50°F to 90°F) |
|-----------------------|---|
| Humidity Range: | 15% to 80% RH |
| Ambient Illumination: | Less than 1,500 lux (do not expose to direct sunlight.) |
| Ventilation: | Room air should turn at least 30 m3/hr/person |
| Ambient Dust: | Less than 0.10 mg/m3 (2.7 x 10/6 oz/yd3) |

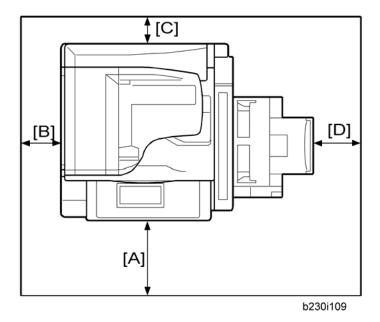
- 1. Avoid areas exposed to sudden temperature changes:
 - 1) Areas directly exposed to cool air from an air conditioner.
 - 2) Areas directly exposed to heat from a heater.
- 2. Do not place the machine where it will be exposed to corrosive gases.
- 3. Do not install the machine at any location over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

Machine Level

| Front to back: | Within 5 mm (0.2") of level |
|----------------|-----------------------------|
| Right to left: | Within 5 mm (0.2") of level |

Minimum Space Requirements

Place the main machine near the power source, providing clearance as shown:



• Front [A]: Over 75 cm (29.6")

• Left [B]: 10 cm (4")

• Rear [C]: 10 cm (4")

• Right [D]: 55 cm (21.7")



• The 75 cm (29.6") recommended for the space at the front is for pulling out the paper tray only. If the operator stands at the front of the main machine, more space is required.

Power Requirements

ACAUTION

- Make sure that the wall outlet is near the main machine and easily accessible. Make sure the plug
 is firmly inserted in the outlet.
- · Avoid multi-wiring.
- Be sure to ground the machine.
- 1. Input voltage level:

North America 120 V, 60 Hz: More than 12.5 A

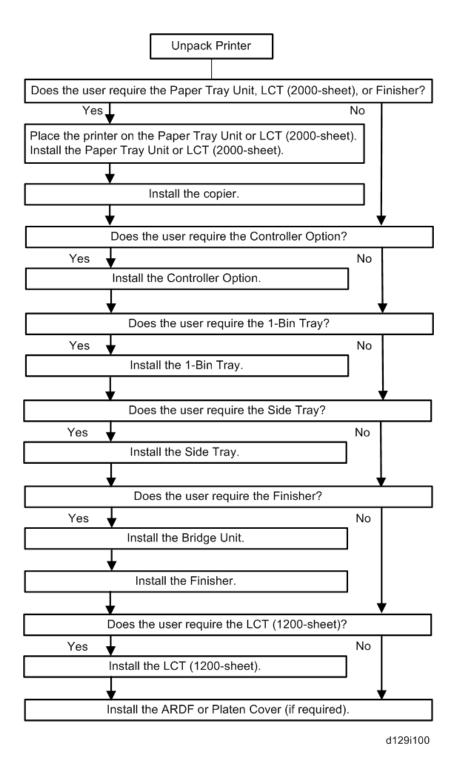
Europe/Asia 220 V to 240V, 50 Hz/60 Hz: more than 7 A

- 2. Permissible voltage fluctuation: 10% to 15%
- 3. Never set anything on the power cord.

9

Installation Flow Chart

The following flow chart shows how to install the optional units more efficiently.



Bridge Unit: Needed for the finishers.

Paper Tray Unit or LCT 2000-sheet: Needed for the LCT 1200-sheet and finishers.

Main Machine Installation

Accessory Check

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

| | Description | Q'ty |
|----|--|------|
| 1 | Decal – Energy Save (-91, -61, -17, -57, -18, -58, -27, -67, -29, -69, -19, -59, -28, -68) | 1 |
| 2 | Rating plate (-17, -18, -19, -21, -27, -28, -29, -57, -58, -59, -61, -67, -69, -68) | 1 |
| 3 | Decal – VERMONT (-91, -17, -57, -18, -58) | 1 |
| 4 | Model Name Decal (-91, -92, 17, -57) | 1 |
| 5 | Decal – WEEE (-27, -67) | 1 |
| 6 | Main SW Decal | 1 |
| 7 | Decal – Eco Label (-21, -61) | 1 |
| 8 | Decal – Rohs (-21, -61) | 1 |
| 9 | Decal – Rohs date(-21, -61) | 1 |
| 10 | Decal – Certificates (-21, -61) | 2 |
| 11 | Decal – LASERCLASS1 (-19, -59, -28, -68, -21, -61) | 1 |
| 12 | Decal – Impoter (-19, -59) | 1 |
| 13 | Decal – SDK (-57, -58, -67, -69, -59, -68, -61) | 1 |
| 14 | Decal – Caution - Copy | 1 |
| 15 | Emblem Cover | 1 |
| 16 | Emblem | 1 |
| 17 | Decal - Brand | 1 |
| 18 | Warranty (-21, -61) | 1 |
| 19 | Quick Reference Guide – Safety (-27, -67) | 1 |

| | Description | Q'ty |
|----|---|------|
| 20 | Sheet – Communication management – Blank (-27, -67, -19, -59) | 1 |
| 21 | Decal – Paper Tray (-91, -17, -57, -18, -58, -27, -67, -29, -69, -19, -59, -28, -68, -21, -61) | 1 |
| 22 | Decal – Caution – Original (-91, -17, -57, -18, -58) | 1 |
| 23 | Sheet – EMC – Traceability (-27, -67) | 1 |
| 24 | Sheet - Name - Tel (-21, -61) | 1 |
| 25 | Stamp (-91, -17, -57, -18, -58, -) | 1 |
| 26 | Exposure Glass Cleaning Cloth | 1 |
| 27 | Cloth Holder | 1 |
| 28 | Ferrite Core | 1 |
| 29 | Sheet – Exposure Glass (-91, -17, -18, -19, -21, -27, -28, -29, -57, -58, -59, -61, -67, -69, -68) | 1 |
| 30 | Power Supply Cord | 1 |
| 31 | CD-ROM: Operation Instruction (-91, -92, -17, -18, -21, -27, -28, -29, -57, -58, -67, -69, -68) | 1 |
| 32 | CD-ROM: Driver (-57, -58, -67, -69, -68) | 1 |
| 33 | CD-ROM: Operation Instruction/Driver (-19, -59, -21, -61) | 1 |
| 34 | Operation Instruction – Read This First (-91, -92, -17, -18, -19, -21, -27, -29, -57, -58, -59, -61, -67, -69) | 1 |
| 35 | Operation Instruction – User Guide (-91, -92, -17, -18, -19, -21, -27, -29, -57, -58, -59, -61, -67, -69) | 1 |
| 36 | Sheet – EULA (-57, -58, -67, -68, -69, -19, -59, -21, -61) | 1 |
| 37 | Sheet - Caution (-57, -58, -67, -68, -69, -68, -61) | 1 |
| 38 | CD-ROM: Operation Instruction - App 2 Me (-57, -58, -67, -69, -59) | 1 |

| | Description | Q'ty |
|----|--|------|
| 39 | Quick Reference Guide - App 2 Me (-57, -58, -69, -59) | 1 |
| 40 | Quick Reference Guide – Start Up (-27, -67) | 1 |
| 41 | Sheet – Notes – Manual – CD (-19, -59, -21, -61) | 1 |

Installation Procedure

Preliminary Procedures

Put the machine on the paper feed unit or the LCT first if you will install an optional paper feed 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.



d129i102

- 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. Open the right door [A].

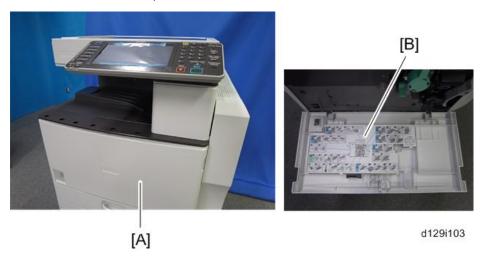


4. Remove the two stoppers [A] from the fusing unit.

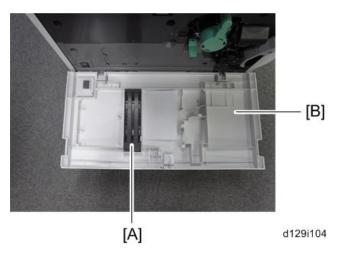


d129i101

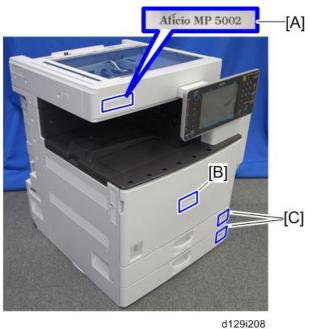
5. Remove the scanner unit stay [A].



6. Open the front door [A], and then remove the jam location sheet [B].



- 7. Keep the scanner unit stay [A] inside the front door [B].
- 8. Reattach the jam location sheet.
- 9. Close the front door.

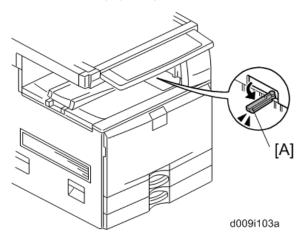


- 01231200
- 10. Attach the correct brand decal to the machine [A].
- 11. Attach the correct emblem and the cover to the front door [B] of the machine, if the emblem is not attached.



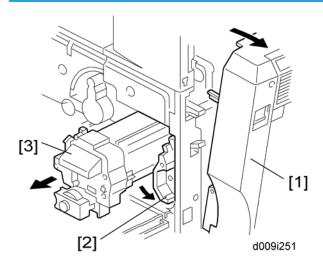
 If you want to change the emblem that has been already attached, remove the panel with a small screwdriver, and then install the correct emblem.





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

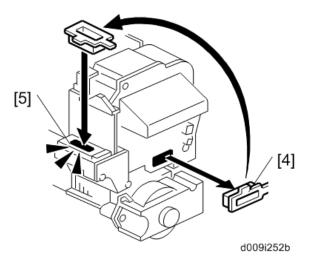
PCDU (Photoconductor and Development Unit)



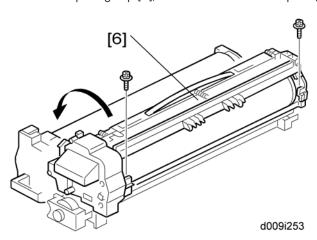
- 1. Open the front door.
- 2. Open the right door [1].
- 3. Release the lock lever [2].
- 4. Pull out the PCDU [3] and place it on a clean flat surface.
- 5. Spread a large piece of paper on a flat surface.



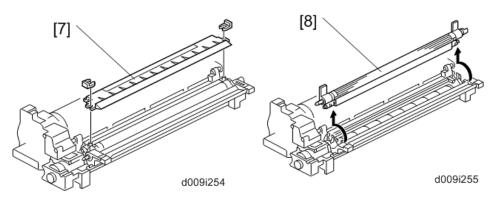
• Make sure the area is free of pins, paper clips, staples, etc. to avoid attraction to the magnetic development roller.



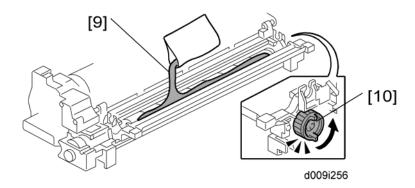
6. Remove the opening cap [4], and then install it in the opening [5] of the PCDU.



7. Open the PCDU [6] (** x 2).



- 8. Remove the entrance seal plate [7] ($() \times 2)$.
- 9. Remove the development roller unit [8], and set it on the paper.

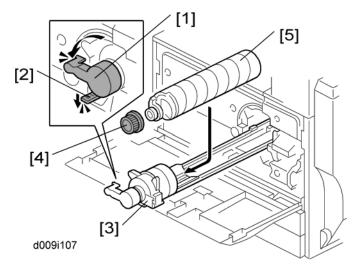


10. Pour the developer [9] into the development unit.



- The developer lot number is embossed on the end of the developer package. Do not discard
 the package until you have recorded the lot number. (*p.177 "Developer")
- 1) Pour approximately 1/3 of the developer evenly along the length of the development unit.
- 2) Rotate the drive gear [10] to work the developer into the unit.
- 3) Repeat until all the developer is in the development unit.
- 4) Continue to turn the drive gear until the developer is even with the top of the unit.
- 11. Put the opening cap [4] back in its original place.
- 12. Reassemble the PCDU.
- 13. Re-install the PCDU.

Toner Bottle



- 1. Open the front door.
- 2. Turn the toner bottle holder lever [1] counterclockwise, push down the lever [2], and then pull out the toner bottle holder [3].
- 3. Hold the toner bottle [5] horizontally, and shake it 5 or 6 times.
- 4. Unscrew the bottle cap [4] and set the bottle [5] in the holder.
- 5. Push the toner bottle holder into the main machine until it locks in place.
- 6. Turn the toner bottle holder lever [1] clockwise to lock it.
- 7. Close the front door.

Paper Trays

- 1. Open the 1st paper tray, and then press down on the right side of the lock switch to unlock the side fences.
- 2. Press in on the sides of the fence release, and slide the side fences to the appropriate mark for the paper size.
- 3. Pinch the sides of the end fence and move it to the appropriate mark for the paper size, then load the paper.
- 4. Check the position of the stack.
 - Confirm that there is no gap between the stack and the side fences. If you see a gap, adjust
 the position of the side fences.
- 5. Press down the lock to lock the side fences.
- 6. Repeat this procedure to load paper in the 2nd paper tray.

Initialize TD Sensor and Developer

- 1. Connect the main machine to the power outlet, switch on the main machine, and wait for the fusing unit to warm up.
- 2. Enter Copy SP Mode.
- 3. Press SP Direct to highlight "SP Direct", enter 2801, and then press .
- 4. When the message prompts you to enter the lot number of the developer, enter the 7-digit lot number, press on the touch-panel. Press [Yes], and then press [Execute]. This initializes the TD sensor. It takes 60 to 90 sec.



- The lot number is printed on the end of the developer package. Recording the lot number could help troubleshoot problems later. If the lot number is unavailable, enter any seven-digit number.
- 5. Press SP Direct to highlight "SP Direct" and enter 2805, press , and then press "Execute" on the touch-panel. This initializes the developer.
- 6. Press "Exit" twice to return to the copy window.

Set Paper Size for Paper Trays

- 1. Press User Tools/Counter 🕪.
- 2. On the touch panel, press "System Settings".
- 3. Press the "Tray Paper Settings" tab.
- 4. Press the button for the tray to change.
- 5. Change the setting and press the [OK] button.
- 6. Repeat for each tray installed.
- 7. Press Exit twice to return to the main display
 - The 1st, 2nd, 3rd, and 4th paper trays are provided with the paper size switches. The detected paper size by the paper size switches has priority over the UP settings. However, if you change the "Auto Detect" with the UP setting, you can select the paper size.
- 8. Check the copy quality and machine operation.

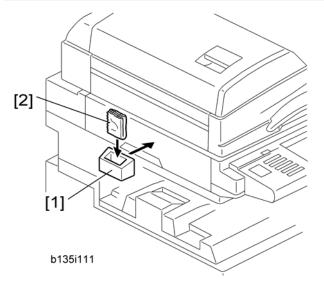
Electrical Total Counter

The electrical total counter no longer requires initialization. The new incrementing counter is set to "0" at the factory.

RTB 29

Energy saver setting needs changing in some machines (should be 0 but was set to 2 in the factory).

Exposure Glass Cleaner



- 1. Attach the exposure glass cleaner holder [1] to the left side of the machine.
- 2. Place the exposure glass cleaner [2] inside the holder.



• The exposure glass cleaner is used to clean the ARDF exposure glass, the glass strip to the left of the large exposure glass.

Settings Relevant to the Service Contract

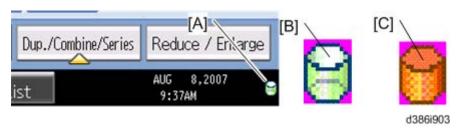
Change the necessary settings for the following SP modes if the customer has made a service contract.

| Item | SP No. | Function | Default |
|---------------------------------|----------------------------|---|--------------------------|
| A3/11" x 17" double counting | SP5-104-001 (SSP) | 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. | |

Data Overwrite Security

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

- 1. Do SP5-878-1 (Option Setup Data Overwrite Security) and touch [EXECUTE].
- 2. Go out of the SP mode, turn off the operation switch, then turn off the main power switch.
- 3. Turn the machine power on.
- Press [User Tools] and select System Setting > Administrator Tools > Auto Erase Memory Setting >
 On
- 5. Exit from User Tools mode.



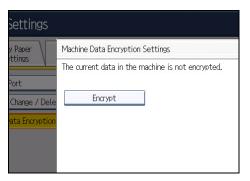
- 6. Check the display and make sure that the overwrite erase icon [A] is displayed.
- 7. Make a Sample Copy.
- 8. Check the overwrite erase icon.
 - The icon [B] changes to [C] when job data is stored in the hard disk.
 - The icon goes back to its usual shape [B] after this function has completed a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

HDD Encryption

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

- 1. Do SP5-878-2 (Option Setup Encryption Option) and touch [EXECUTE]
- 2. Go out of the SP mode, turn off the operation switch, then turn off the main power switch.
- 3. Turn the machine power on.

4. Push [User Tools] and select System Setting > Administrator Tools > Machine Data Encryption Setting.



5. Press [Encrypt].



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

To carry all of the data over to the hard disk, select [All data]. To carry over only the machine setting data, select [File System Data Only]. To reset all of the data, select [Format All Data].



7. Press the [Start] Key.

The encryption key for backup data is printed.

App 2 Me Setting (SP model only)

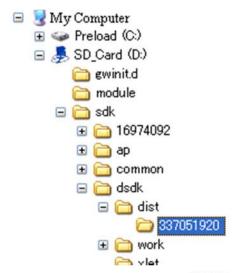
SP models have VM and "App 2 Me" built in. Do the following procedure if a customer wants to use "App 2 Me".

1. Press "User Tools" key on the operation panel.

- 2. Touch the "Extended Feature Settings" button twice.
- 3. Touch the "App 2 Me" line in the Startup Setting tab.
- 4. Touch the "Extended Feature Info" tab on the LCD.
- 5. Touch the "App 2 Me" line.
- 6. Set the setting of "Auto Start" to "On".
- 7. Touch the "Exit" button.
- 8. Exit the "User Tools" settings.

Update Procedure for App 2 Me Provider

- 1. Push the "User/Tools" key.
- 2. If an administrator setting is registered for the machine, steps 2 and 3 are required. Otherwise, skip to step 4.
- 3. Push the "Login/Logout" key.
- 4. Login with the administrator user name and password.
- 5. Touch "Extended Feature Settings" twice on the LCD.
- 6. Touch all the applications. Then, the status will be changed to "Stop".
- 7. Turn off the machine. And then remove the VM Card.



d377i501

- 8. Prepare newer App 2 Me Provider zip file from Firmware Download Center. Unzip the zip file. (The folder name is "337051920".) And then copy the App 2 Me Provider folder in the specified path of VM card. The path is "SD_Card Drive\sdk\dsdk\dist\337051920" as shown above.
- 9. Turn the SD card label face to the rear of the machine. Then push it slowly into Slot 2 (Lower Slot) until you hear a click.
- 10. Turn on the main power switch.

- 11. Press the "User Tools" key on the operation panel.
- 12. Touch the "Extended Feature Settings" button twice.
- 13. Touch the "Extended Feature Info" tab on LCD.
- 14. Touch the "App2Me" line.
- 15. Set the setting of the "Auto Start" to "On".
- 16. Touch the "Exit" button.
- 17. Exit the "User Tools/Counter" settings.

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

- 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. Make sure there is no paper left in the paper trays. Then fix down the bottom plates with a sheet of paper and tape.
- 3. Do one of the following:
 - Attach shipping tape to the covers and doors.
 - Shrink-wrap the machine tightly.

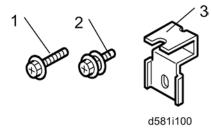
2

Paper Feed Unit Installation (D580)

Accessory Check

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

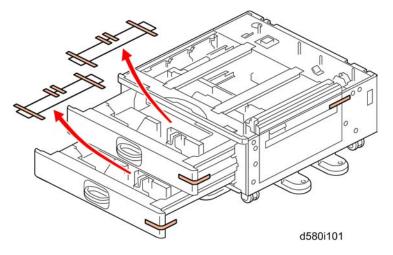
| No. | Description | Q'ty |
|-----|----------------------------------|------|
| 1 | Screw (M4x10) | 2 |
| 2 | Screw with Spring Washer (M4x10) | 1 |
| 3 | Securing Bracket | 2 |



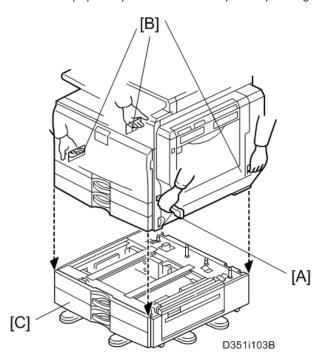
Installation Procedure

ACAUTION

- Unplug the machine power cord before starting the following procedure.
- The handles of the main machine for lifting must be inserted inside the machine and locked unless these handles are used for the installation or relocation of the main machine.
- You need two or more persons to lift the copier. The copier is highly unstable when lifted by one person, and may cause human injury or property damage.



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



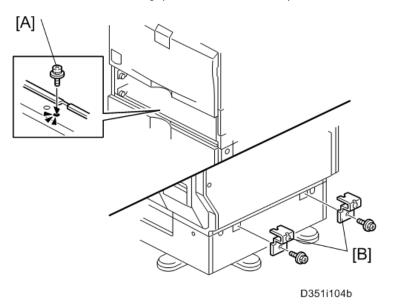
- 3. Grasp the handle [A] and grips [B] of the machine.
- 4. Lift the copier and install it on the paper feed unit [C].



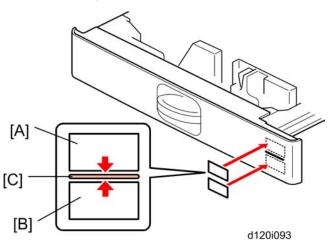
• You need two or more persons to lift the copier.



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



- 5. Remove trays 1 and 2 of the machine.
- 6. Fasten the spring washer screw [A].
- 7. Reinstall all trays.
- 8. Attach the securing brackets [B] (x 1 each; M4x10).



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



• The paper tray number and size sheet is in the accessory box of the main machine.

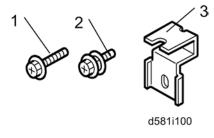
- 10. Lock the caster stoppers for the front two casters under the paper feed unit.
- 11. Load paper into the paper feed unit.
- 12. Turn on the main power switch of the machine.
- 13. Check the paper feed unit operation and copy quality.

2000-sheet LCT Installation (D581)

Accessory Check

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

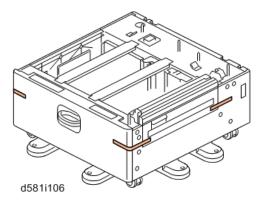
| No. | Description | Q'ty |
|-----|----------------------------------|------|
| 1 | Screw (M4x10) | 2 |
| 2 | Screw with Spring washer (M4x10) | 1 |
| 3 | Securing bracket | 2 |



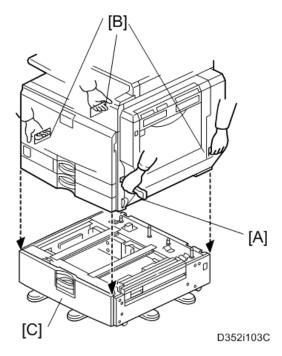
Installation Procedure

ACAUTION

- Unplug the machine power cord before starting the following procedure.
- The handles of the main machine for lifting must be inserted inside the machine and locked, unless these handles are used for the installation or relocation of the main machine.
- You need two or more persons to lift the copier. The copier is highly unstable when lifted by one person, and may cause human injury or property damage.



1. Remove the strips of tape.



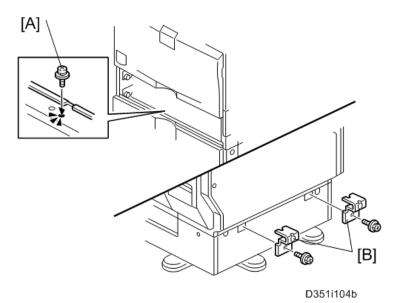
- 2. Grasp the handle [A] and grips [B] of the machine.
- 3. Lift the copier and install it on the LCT [C].



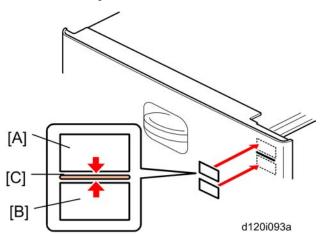
• You need two or more persons to lift the copier.



• 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 [A].
- 6. Reinstall all trays.
- 7. Attach the securing brackets [B] (x 1 each; M4x10).



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



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

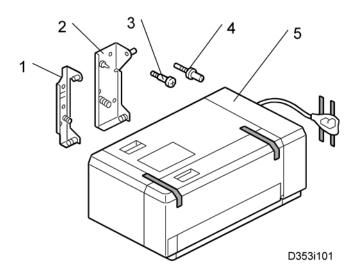
- 11. Turn on the main power switch of the machine.
- 12. Check the LCT operation and copy quality.

1200-sheet LCT Installation (D631)

Component Check

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

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



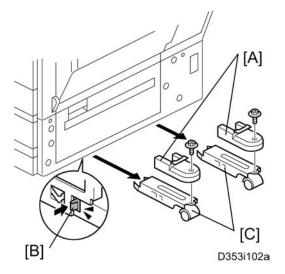
Installation Procedure

ACAUTION

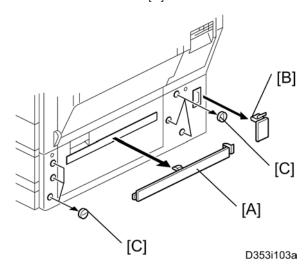
• Unplug the main machine power cord before starting the following procedure.



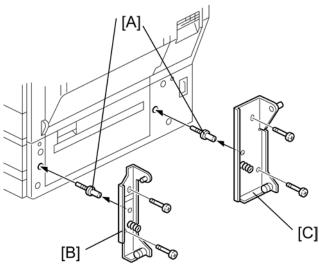
• The Paper Tray Unit (D580) or LCT 2000-sheet (D581) must be installed before installing this 1200-sheet LCT.



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

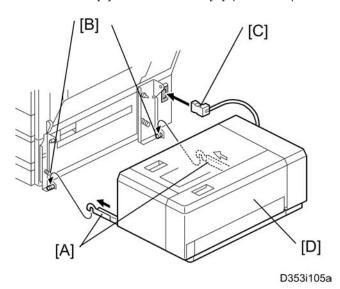


5. Remove the paper path cover [A], connector cover [B] and six hole covers [C].



D353i104a

- 6. Insert the joint pins [A].
- 7. Attach the front [B] and rear brackets [C]. (*F x2 each)



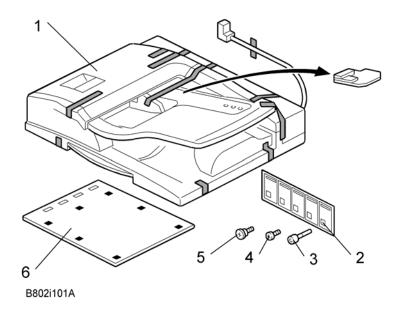
- 8. Pull out the front and rear rails [A], and then hang them on each bracket [B].
- 9. Connect the LCT cable [C] to the main machine.
- 10. Slide the LCT [D] into the main machine.
- 11. Make sure that the front and rear sides of the LCT are closely attached to the main machine.

ARDF Installation (D630)

Component Check

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

| No. | Description | Q'ty |
|-----|-----------------------------------|------|
| 1 | ARDF | 1 |
| 2 | Attention Decal Sheet – Top Cover | 1 |
| 3 | Stamp | 1 |
| 4 | Knob Screw | 2 |
| 5 | Stud Screw | 2 |
| 6 | Platen Sheet | 1 |

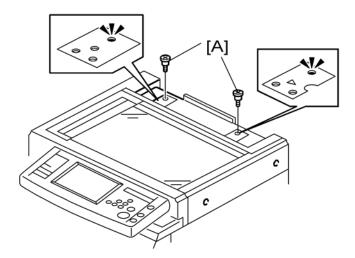


Installation Procedure

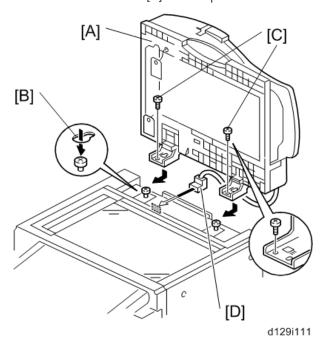
ACAUTION

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

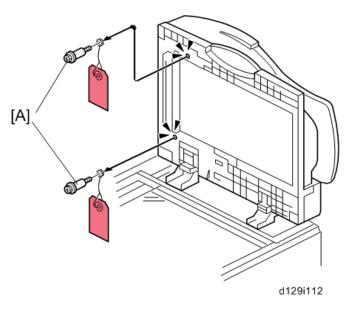
1. Remove the all tapes and shipping retainers.



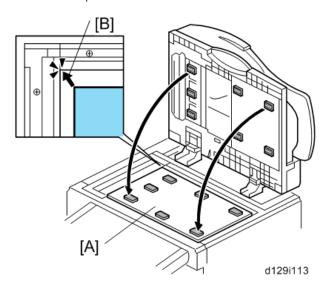
2. Insert the two stud screws [A] on the top of the machine.



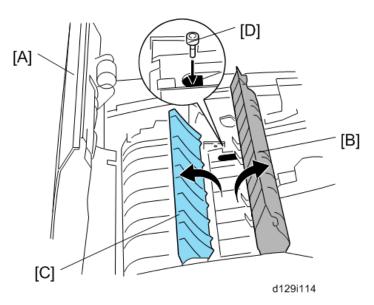
- 3. Mount the ARDF [A] by aligning the screw keyholes [B] of the ARDF support plate over the stud screws.
- 4. Slide the ARDF toward the front of the machine.
- 5. Secure the ARDF with the two knob screws [C].
- 6. Connect the I/F cable [D] to the machine.



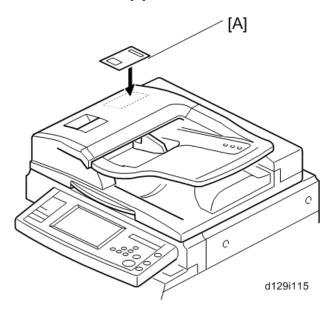
- 7. Remove two screws [A] from the bottom of the ARDF.
- 8. Remove all tapes on the ARDF.



- 9. Place the platen sheet [A] on the exposure glass.
- 10. Align the rear left corner (of the platen sheet) with the corner [B] on the exposure glass.
- 11. Close the ARDF.
- 12. Open the ARDF and check that the platen sheet is correctly attached.



- 13. Open the ARDF cover [A].
- 14. Open the feed-in guide plate [B] and feed-out guide plate [C].
- 15. Install the stamp [D] into the ARDF.
- 16. Close two guide plates [C] [B].
- 17. Close the ARDF cover [A].



- 18. Attach the decal [A] to the top cover as shown. Choose the language you want.
- 19. Plug in and turn on the main power switch of the machine, and then check the ARDF operation.

2

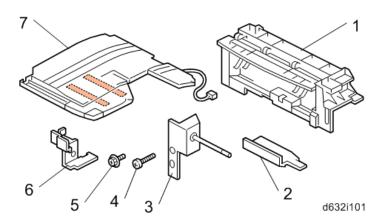
20. Make a full size copy. Check that the registrations (side-to-side and leading edge) and image skew are correct. If they are not, adjust the registrations and image skew referring to the "Copy Adjustments" in the section of the "Replacements and Adjustments".

1-Bin Tray Unit Installation (D632)

Component Check

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

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



Installation Procedure

ACAUTION

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

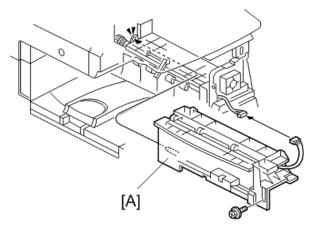
If the bridge unit (D634) or side tray (D635) has already been installed in the machine, remove it before installing 1-bin tray unit (D632). This will make it easier for you to do the following procedure.

1. Remove all tapes.

- 2. Open the right door of the machine.
- 3. Remove the front right cover (p.133).
- 4. Remove the paper exit cover (p.135).

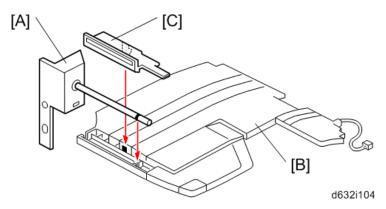


• Keep the screw removed in step 4 for step 5.

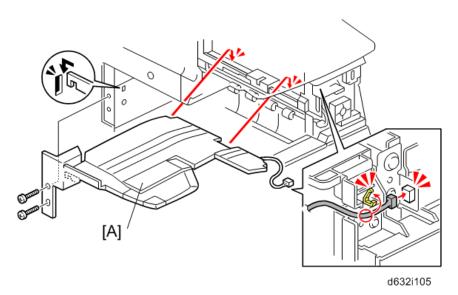


d414i103a

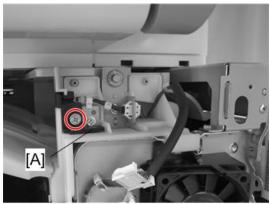
5. Install the 1 bin tray unit [A] ($\mathbb{P} \times 1, \mathbb{P} \times 1$ [This screw was removed in step 4]).



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



- 7. Install the tray [A] with the tray support bar in the machine (M3 x 16: \Re x 2).
- 8. Connect the harness to the connector of the 1-bin tray unit ($\mathbb{Z}^2 \times 1$).



d632i106a

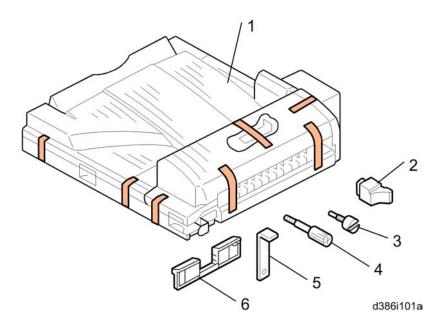
- 9. Attach the harness cover [A] (\mathscr{F} x 1; M3 x 8).
- 10. Reinstall the front right cover on the machine, and then close the right door of the machine.
- 11. Turn on the main power switch of the machine.
- 12. Check the 1-bin tray unit operation.

Component Check

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

Bridge Unit Installation (D634)

| No. | Description | Q'ty |
|-----|----------------------|------|
| 1 | Bridge Unit | 1 |
| 2 | Frame Cover | 1 |
| 3 | Knob Screw | 1 |
| 4 | Long Knob Screw | 1 |
| 5 | Holder Bracket Cover | 1 |
| 6 | Guide | 2 |



Installation Procedure

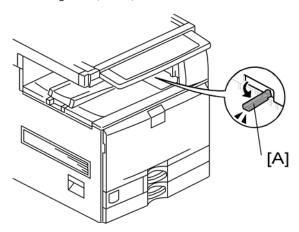
ACAUTION

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

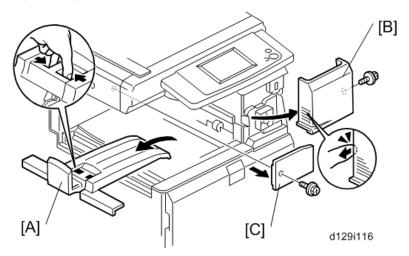
2

U Note

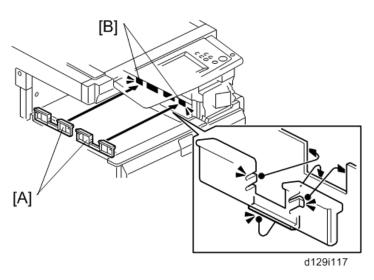
- If you will install the 1-bin tray (D632) on the machine, install the 1-bin tray first before installing the bridge unit (D634). This makes it easy to do the following procedure.
- If you will install the finisher unit (D588, D636 or D637) on the machine, install it after installing the bridge unit (D634).



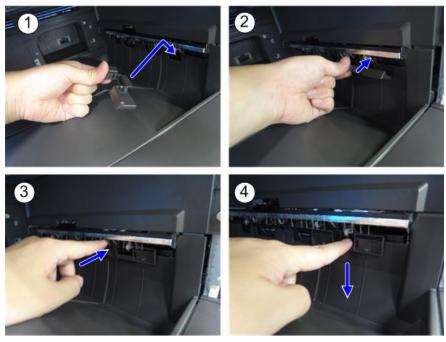
- 1. Remove all tapes.
- 2. If the sensor feeler [A] is out, fold it into the machine.
- 3. Open the right door of the machine.



- 4. Remove the upper inner tray [A].
- 5. Remove the front right cover [B] (x 1).
- 6. Remove the connector cover [C] (*x 1).

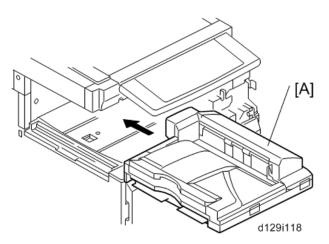


7. Attach the two guides [A] to the cutouts [B] in the inner tray.

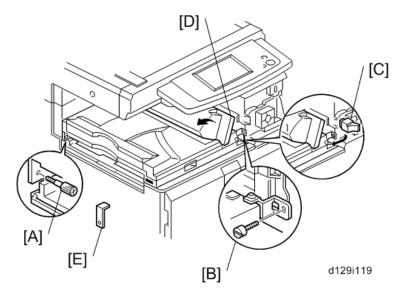


d129i209

- 1) Place the lower hook of the guide in the cutout of the paper exit.
- 2) Attach the guide as shown until the two side hooks hold the paper exit.
- 3) Press the guide.
- 4) Press down the guide as shown.



8. Install the bridge unit [A] in the machine.



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



- Open the bridge unit cover [D] when installing the front right cover. Otherwise, you cannot reinstall it.
- 12. Install the optional finisher (refer to the finisher installation procedure).



Holder bracket [E] is used in the installation procedure of the finisher (D588, D636 or D637).
 Do not install it at this time.



d129i200

- 13. Pull out the extension tray [A] only if the 1000-sheet finisher (D588) will be installed on the main machine.
- 14. Turn on the main power switch of the machine.
- 15. Check the bridge unit operation.

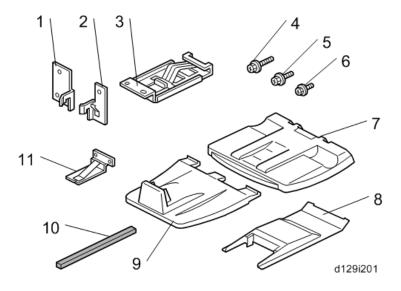
2

3000/2000-sheet (Booklet) Finisher (D636/ D637)

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 (earth) 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 (D637 only) | 1 |
| 10 | Cushion (with double-sided tape) | 1 |
| 11 | Small Ground (earth) plate | 2 |



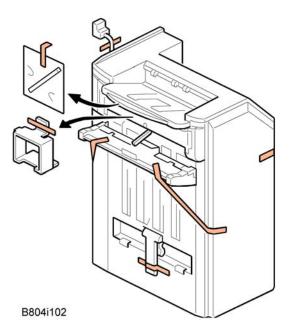
Installation Procedure

ACAUTION

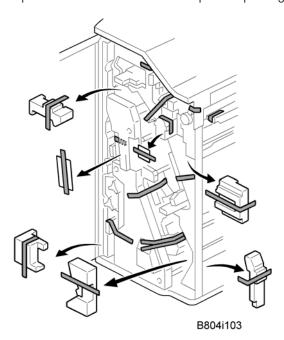
• Unplug the main machine power cord before starting the following procedure.

If this finisher is installed on this machine, the following options must be installed before installing this finisher.

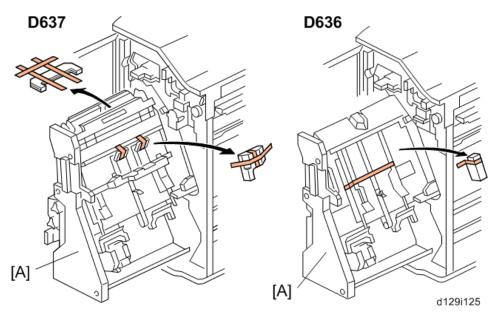
- Bridge Unit (D634)
- Paper Feed Unit (D580) or LCIT (D581)



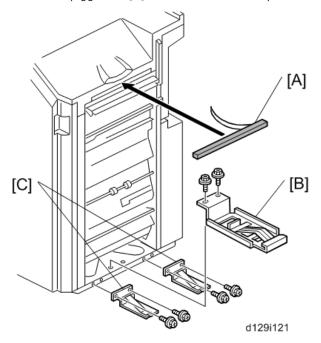
1. Unpack the finisher and remove all tapes and packing materials from the finisher.



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



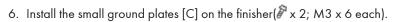
3. Pull out the jogger unit [A], and then remove all tapes and retainers.

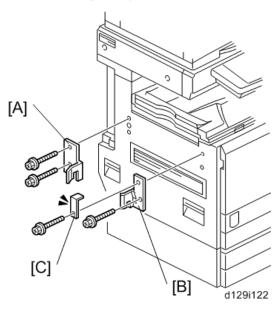


4. Attach the cushion [A] to the finisher.



- Make sure that the cushion is placed within 0 to 1 mm from the edge of the cover.
- 5. Install the ground plate [B] on the finisher (\mathscr{F} x 2; M3 x 6).

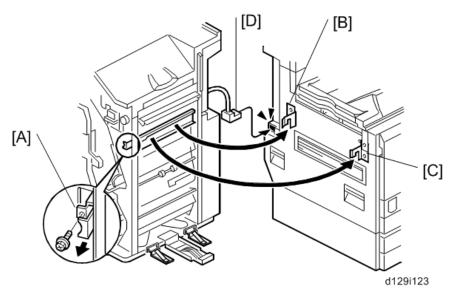




- 7. Attach the rear joint bracket [A] (*x 2; M4 x 14).
- 8. Attach the front joint bracket [B] and the holder bracket [C] (\mathscr{F} x 2; M4 x 14).

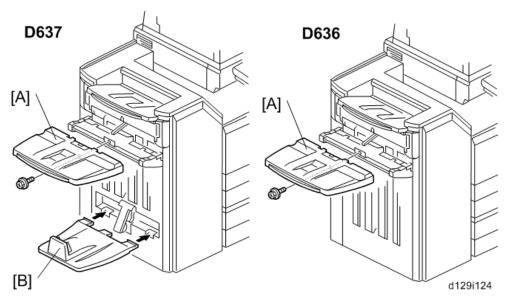


• Holder bracket [C] must be placed outside the front joint bracket [B]. This bracket is provided with the Bridge Unit (D634).



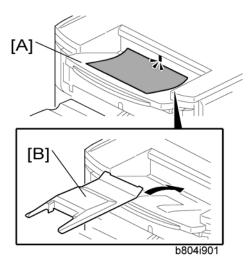
9. Pull the lock lever [A] (x 1).

- Slowly push the finisher to the left side of the machine, keeping its front door open until the brackets
 [B] [C] go into their slots.
- 11. Push the lock lever [A], and then secure it (\mathscr{F} x 1).
- 12. Close the front door of the finisher.
- 13. Connect the finisher connector [D] to the machine.

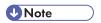


- 14. Install the upper output tray [A] (*x 1; M3 x 8).
- 15. Only for D637, install the lower output tray [B].
- 16. Turn on the main power switch of the machine.
- 17. Check the finisher operation.

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.



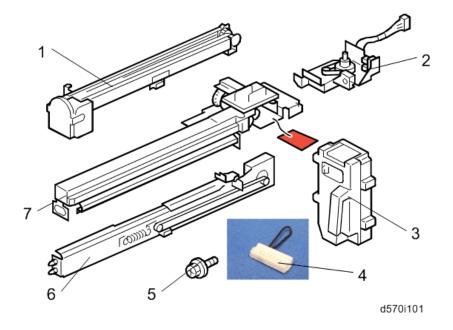
• Keep this tray in the manual pocket if this tray does not need to be installed.

The Punch Unit D570 can be installed in the 3000/2000-Sheet (Booklet) Finisher D636/D637.

Component Check

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

| No. | Description | Q'ty |
|-----|-----------------------------|------|
| 1 | Punch-out Waste Unit | 1 |
| 2 | Slide Drive Unit | 1 |
| 3 | Punch Waste Hopper | 1 |
| 4 | Wire harness: short-circuit | 1 |
| 5 | Screws (M3 x 6) | 5 |
| 6 | Side-to-Side Detection Unit | 1 |
| 7 | Punching Unit | 1 |



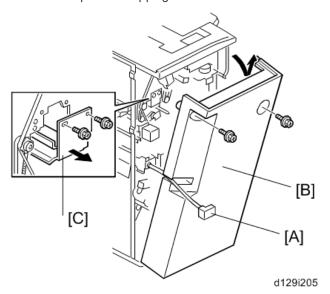
2

7

Installation Procedure

ACAUTION

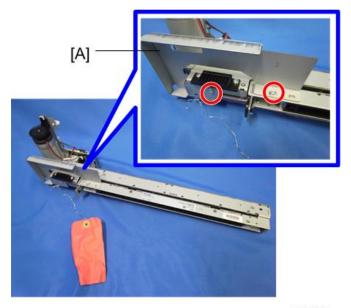
- Unplug the main machine power cord before starting the following procedure. If the 2000/3000-sheet booklet finisher has been installed, disconnect it and pull it away from the machine.
- 1. Remove all tapes and shipping retainers.



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

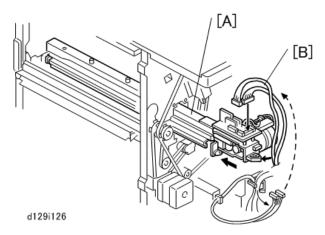


- At the base of the back cover, be sure to disconnect the tabs that fasten the cover to the frame.
- 4. Remove the guide plate [C] (x 2).

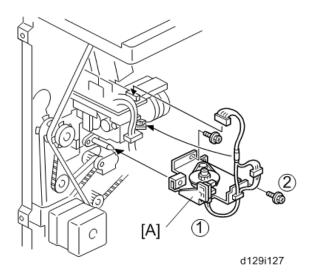


d129i204

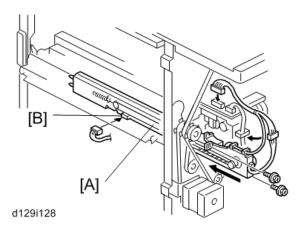
5. Remove the shipping retainer [A] ($\slash\hspace{-0.6em}P \times 2)$ from the punch unit.



- 6. Move the punch unit [A] along its rails into the finisher. Make sure that the pin engages correctly at the front and rear.
- 7. Connect the cables [B] of the finisher to the connectors (CN601 and CN602) on the punch unit board ($^{\sim}$ x 2, $^{\sim}$ x 1).
 - The cables [B] are coiled and attached to the PCB.



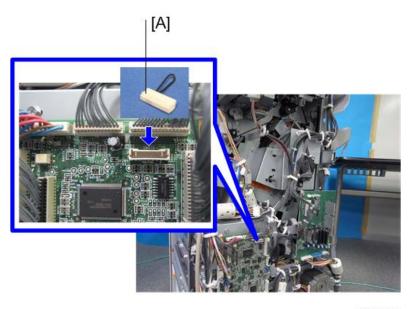
- 8. Attach the slide drive unit [A] to the finisher and connect it to the punch unit (x 2, 1). Push in the slide drive unit at 1 when you attach the screw 2.
- 9. Make sure that the punch unit moves freely and is not blocked by the screws.



- Put the side-to-side detection unit [A] in the machine. Make sure that the two pins are engaged correctly at the front.
- 11. 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.
- 12. Attach the side-to-side detection unit and connect it at the rear ($\mathscr{F} \times 2$, $\overset{\smile}{\Longrightarrow} \times 1$, $\overset{\smile}{\Longrightarrow} \times 1$).
- 13. Pull the short connector out of the connector [B], then connect the cable of the finisher ($\mathbb{Z}^{2} \times 1$).

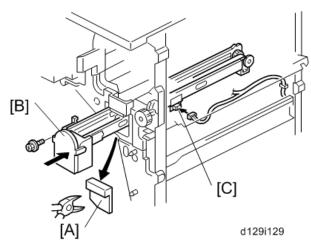


• This is the 3-pin connector.



d129i133

14. Connect "Wire harness: short-circuit" [A] to the CN110 connector.

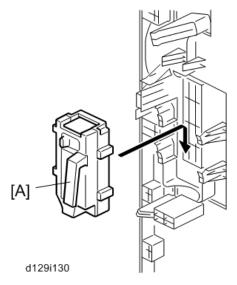


- 15. At the front, use a pair of wire cutters to remove the part [A] of the cover.
- 16. Install the punch-waste transport unit [B] in the finisher.
- 17. Make sure that the punch-waste transport unit moves smoothly on its rails. If it does not, make sure that the rails are aligned with the grooves.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



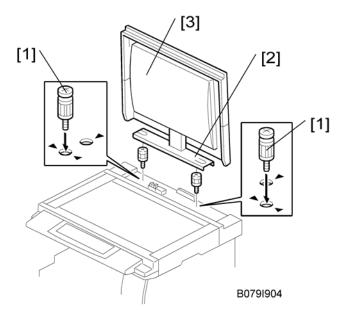
• This is the 4-pin connector.

19. Connect the cable to connector [C] and attach the punch-waste transport unit ($\mathscr{F} \times 1$, $\overset{\square}{\Longrightarrow} \times 1$).



- 20. Set the hopper [A] in its holder.
- 21. Reassemble the finisher, and then install it on the main machine.
- 22. Connect the power cord to the outlet, and then turn the main power switch on.
- 23. Check the punch unit operation.

Platen Cover (D593)



- 1. Install screws [1] (\mathscr{F} x 2) on the top cover as shown.
- 2. Position the platen cover bracket [2] on the heads of the stud screws, and slide the platen cover [3] to the left.

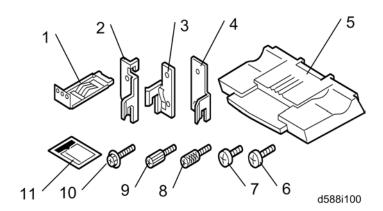
9

1000-sheet Finisher (D588)

Accessory Check

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

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

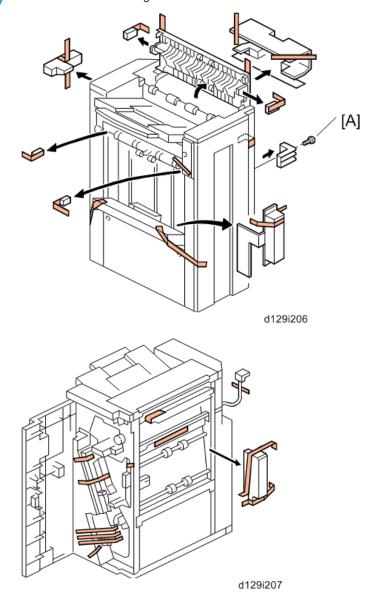


Installation Procedure

ACAUTION

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

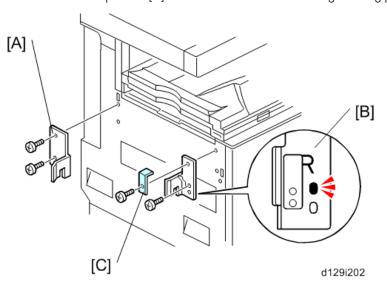
If this finisher is installed, the Bridge Unit (D634) and Paper Feed Unit (D580) or LCT (D581) must be installed before installing this finisher.



1. Unpack the finisher and remove the tapes.



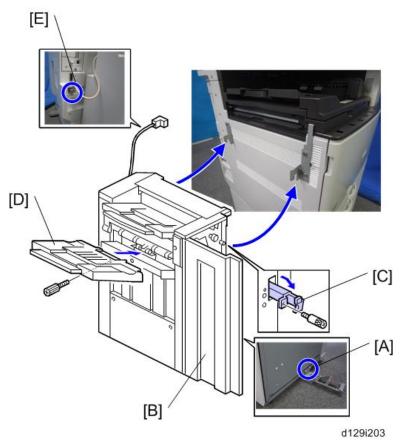
• Be sure to keep screw [A]. It will be needed to secure the grounding plate in step 3.



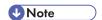
2. Install the rear joint bracket [A] (\mathscr{F} x 2; M4 x 13) and front joint bracket [B] (\mathscr{F} x 2; M4 x 13).



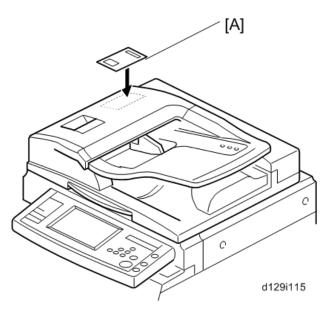
• Holder bracket [C] must be placed outside the front joint bracket [B]. This bracket is provided with the Bridge Unit (D634).



3. Install the grounding plate [A] on the finisher (\mathscr{F} x 2; M3 x 8)



- Use the screw removed in step 1 and the screw from the accessory box.
- 4. Open the front door [B]. Then pull the locking lever [C].
- 5. Align the finisher on the joint brackets, and lock it in place by pushing the locking lever.
- 6. Secure the locking lever (\mathscr{F} x 1; knob M3 x 8) and close the front door.
- 7. Install the copy tray [D] (\mathscr{F} x 1; knob M4 x 10).
- 8. Connect the finisher cable [E] to the main machine as shown above.



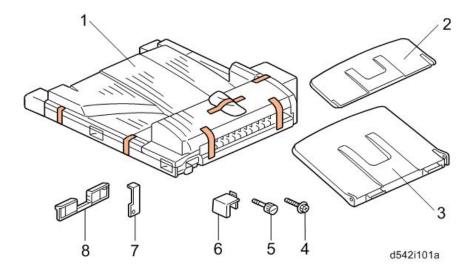
- 9. Attach the staple position decal [A] to the ARDF as shown.
- 10. Turn on the main power switch and check the finisher operation.

Side Tray (D635)

Component Check

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

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



9

Installation Procedure

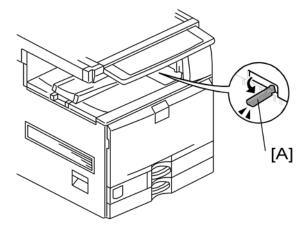


ACAUTION

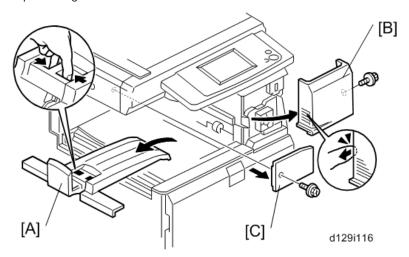
• Turn off the main switch of the copier and unplug the power cord before you start the installation procedure.



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

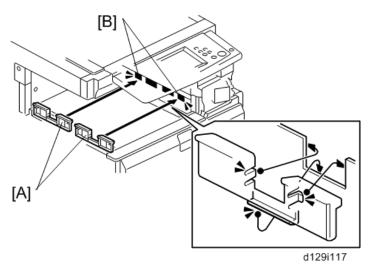


- 1. Remove all tapes.
- 2. If the sensor feeler [A] is out, fold it into the machine.
- 3. Open the right door of the machine.

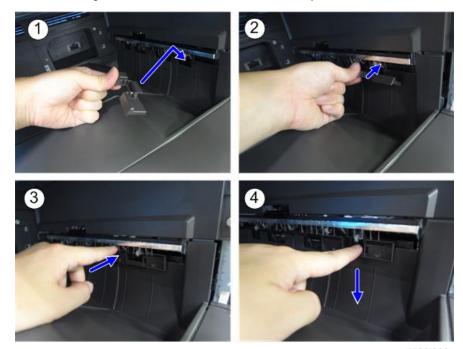


- 4. Remove the inner tray [A].
- 5. Remove the front right cover [B] (x 1).

6. Remove the connector cover [C] (x 1).

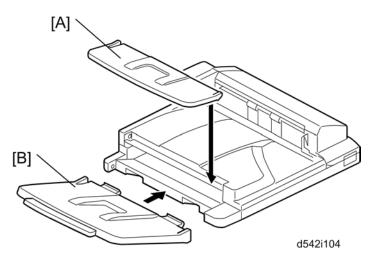


7. Attach the two guides [A] to the cutouts [B] in the inner tray.

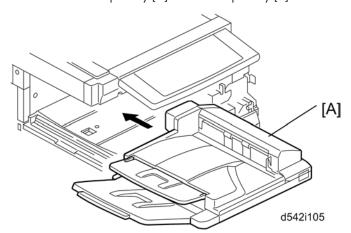


d129i209

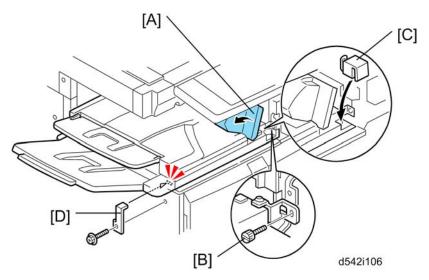
- 1) Place the lower hook of the guide in the cutout of the paper exit.
- 2) Attach the guide as shown until the two side hooks hold the paper exit.
- 3) Press the guide.
- 4) Press down the guide as shown.



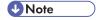
 $8. \ \, \text{Attach the main output tray [A] and sub output tray [B] to the side tray unit.}$



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



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



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

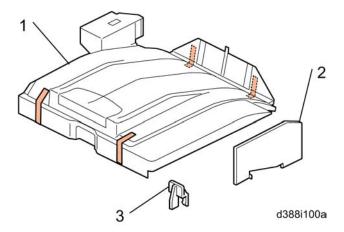
2

Internal Shift Tray (D633)

Component Check

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

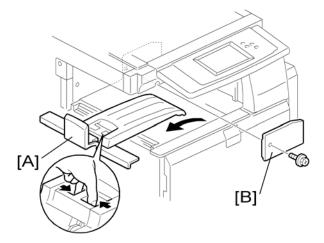
| No. | Description | Q'ty |
|-----|---------------------|------|
| 1 | Shift Tray Unit | 1 |
| 2 | Paper Guide - Small | 2 |
| 3 | Connector Cover | 1 |



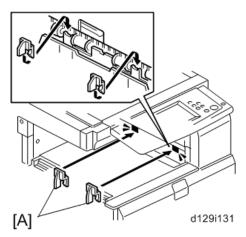
Installation Procedure



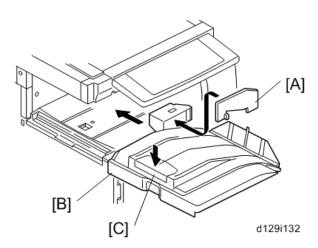
• Unplug the copier power cord before starting the following procedure.



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



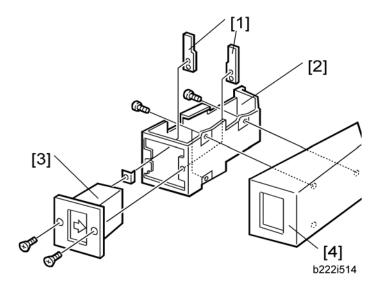
4. Install the small paper guides [A].



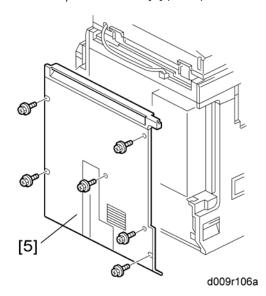
- 5. Attach the connector cover [A] to the shift tray unit [B].
- 6. Install the shift tray unit [B] in the machine.
- 7. Push down the left edge [C] of the shift tray.
- 8. Turn on the main power switch of the machine.
- 9. Check the shift tray unit operation.

Key Counter Installation

Installation Procedure

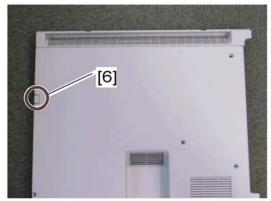


- 1. Hold the key counter plate nuts [1] on the inside of the key counter bracket [2] and insert the key counter holder [3].
- 2. Secure the key counter holder to the bracket (\mathscr{F} x 2).
- 3. Install the key counter cover [4] (x 2).



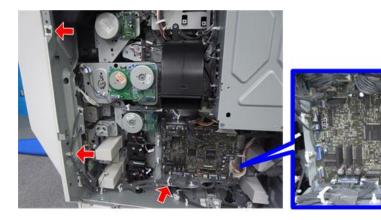
9

4. Rear cover [5] (x 5)



d009i514

5. Cut off the part [6] of the rear cover.



d129i210

6. Connect the harness to CN211 [7] on the IOB ($\stackrel{\frown}{\bowtie}$ x 3).



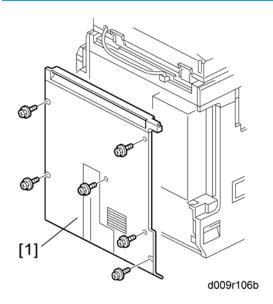
d129i211

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

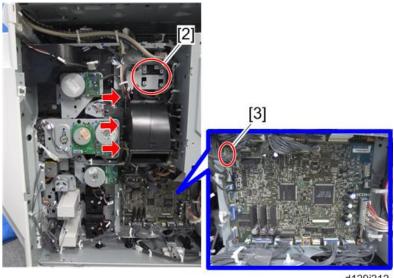
2

Key Counter Interface Unit Installation

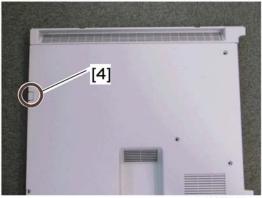
Installation Procedure



1. Rear cover [1] (*\bar{\rho} x 6)

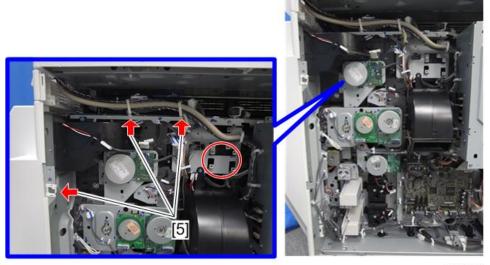


- d129i212
- 2. Install the key counter interface board in the location [2] (\mathscr{F} x 4).
- 3. Connect the harness to CN3 on the key counter interface board.
- 4. Connect the other terminal of the harness to CN214 [3] on the IOB ($\stackrel{\leftarrow}{\bowtie}$ x 3).



d009i514a

5. Cut off the part [4] of the rear cover.

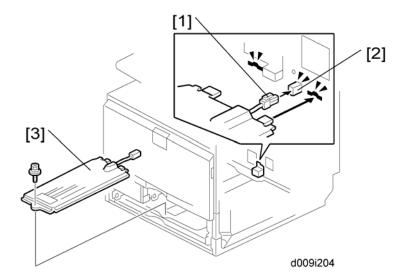


d129i213

- 6. Connect the harness from the counter device to CN4 on the key counter interface board and clamp it with three clamps [5].
- 7. Reassemble the machine.

Tray Heater

Installation Procedure



- 1. Remove trays 1 and 2 from the machine.
- 2. Connect the connector [1] of the heater to the connector [2] of the main machine.
- 3. Install the heater [3] inside the machine ($\mathcal{F} \times 1$).



d129i217

4. Remove the connector cover [4] ($\mathscr{F} \times 1$).



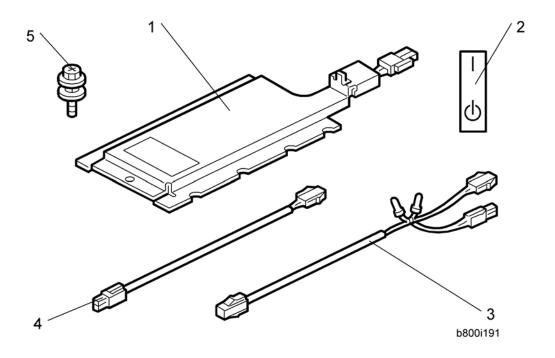
d129i218

- 5. Release the heater relay connector [5] (🛱 x 1).
- 6. Connect the heater relay connector to the connector [6] (front side) of the main frame ($\cancel{\square} \times 1$).
- 7. Reassemble the machine.

Tray Heater (Optional Paper Feed Unit)

Component Check

| No. | Description | Q'ty |
|-----|------------------------|------|
| 1 | Tray heater | 1 |
| 2 | On-standby decal | 1 |
| 3 | Harness 2 | 1 |
| 4 | Harness 1 | 1 |
| 5 | Screw M4 x 10 | 2 |
| - | Installation procedure | 1 |



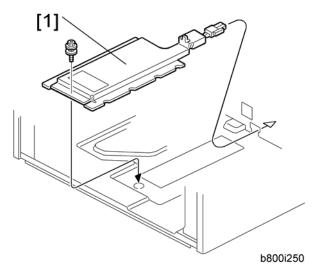
Installation Procedure

ACAUTION

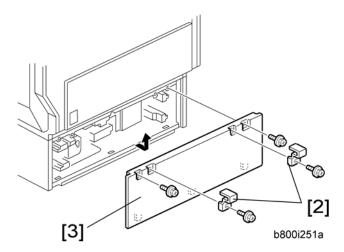
• Unplug the machine power cord before starting the following procedure.

For installing the tray heater in the D580 (Two-tray paper feed unit)

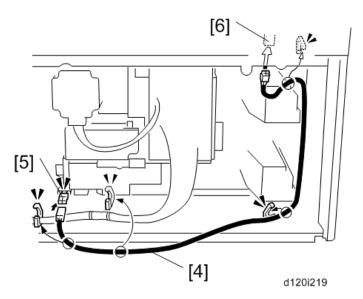
1. Pull out the two trays from the optional paper feed unit.



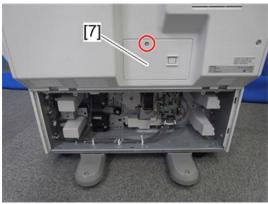
2. Install the tray heater [1] in the optional paper feed unit (\mathscr{F} x 1).



3. Remove the two securing brackets [2] (x 1 each), and then the rear cover [3] of the optional paper feed unit (x 2).

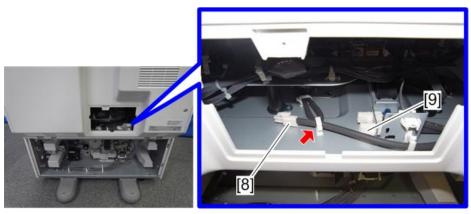


- 4. Connect the harness [4] to the connector [5] of the tray heater.
- 5. Route the harness [4] as shown and clamp it with four clamps ($\stackrel{\frown}{\bowtie} \times 4$).
- 6. Connect the harness [4] to the connector [6] of the mainframe.



d129i220

7. Remove the connector cover [7] (\mathscr{F} x 1).



d129i221

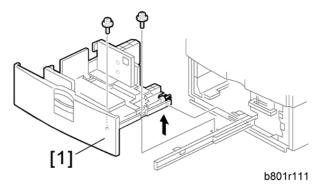
- 8. Release the optional heater relay connector [8] $(\stackrel{\frown}{\bowtie} \times 1)$.
- 9. Connect the optional heater relay connector to the connector [9] (rear side) of the main frame (x 1).
- 10. Reassemble the mainframe and optional paper feed unit.

For installing the tray heater in the D581 (LCT)

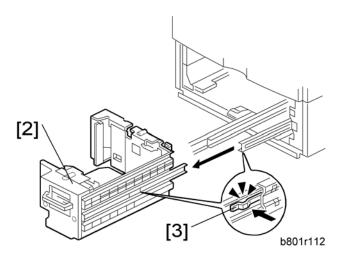
- 1. Remove the rear cover of the mainframe ($\mathscr{F} \times 6$).
- 2. Pull out the LCT drawer.



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



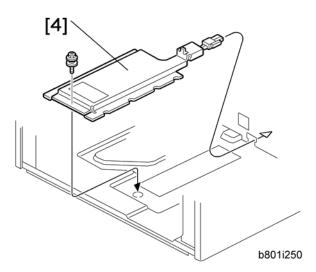
3. Left tray [1] (x 2)



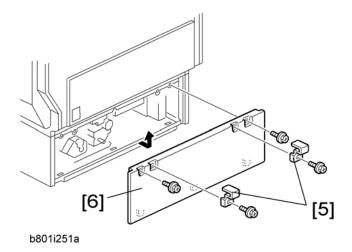
4. Remove the right tray [2] while pressing down the stopper [3].



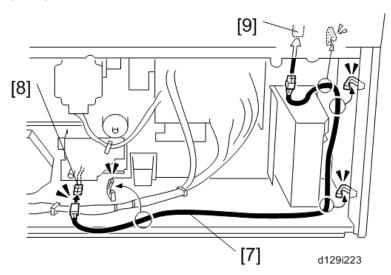
• When reinstalling the right tray, set the right tray on the guide rail and carefully push the tray in, making sure to keep the tray level.



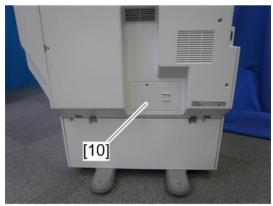
5. Install the tray heater [4] in the optional LCT (\mathcal{F} x 1).



6. Remove the two securing brackets [5] ($\mathscr{F} \times 1$ each), and then the rear cover [6] of the optional LCT ($\mathscr{F} \times 2$).

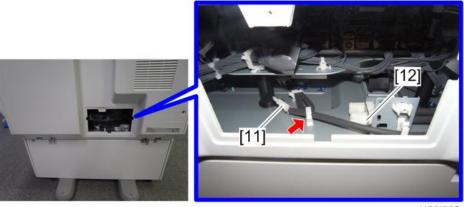


- 7. Connect the harness [7] to the connector [8] of the tray heater.
- 8. Route the harness [7] as shown and clamp it with four clamps ($\stackrel{\frown}{\bowtie}$ x 4).
- 9. Connect the harness [7] to the connector [9] of the mainframe.
- 10. Reassemble the rear cover of the optional LCT.



d129i224

11. Remove the connector cover [10] (x 1).



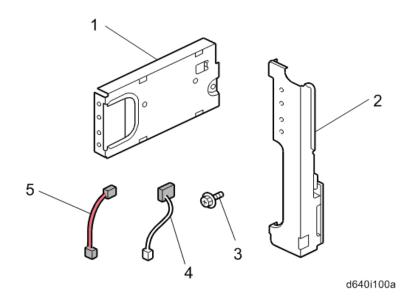
d129i225

- 12. Release the optional heater relay connector [11] ($\frac{\cite{11}}{\cite{11}}$ x 1).
- 13. Connect the optional heater relay connector to the connector [12] (rear side) of the main frame (x 1).
- 14. Reassemble the mainframe and optional LCT.

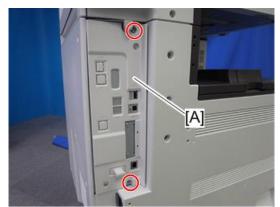
HDD Installation (D640-11)

Component Check

| No. | Description | Q'ty |
|-----|-----------------------|------|
| 1 | HDD Unit | 1 |
| 2 | Connecting Board Unit | 1 |
| 3 | Screw - M3 x 6 | 5 |
| 4 | Harness 1 | 1 |
| 5 | Harness 2 | 1 |

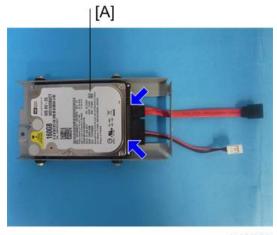


Installation Procedure



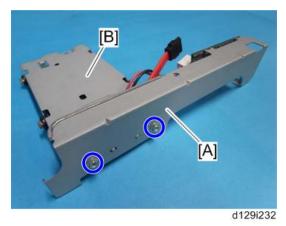
d129i231

1. Remove the controller board unit [A] ($\hspace{-0.8em}\not\hspace{-0.8em} P \times 2$).

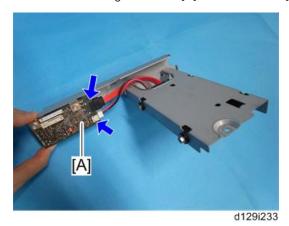


d129i300

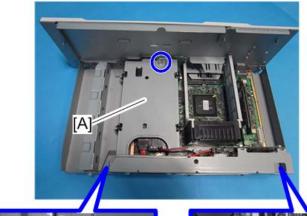
2. Connect the two harnesses to the HDD unit [A] ($\mathbb{H}^{2}\times 2$).



3. Install the connecting board unit [A] on the HDD unit [B] ($\ensuremath{\slash\hspace{-0.4em}P} \times 2$).



4. Connect the two harnesses from the HDD unit to the connecting board [A] ($^{\square}$ x 2).







d129i234

- 5. Install the HDD unit [A] on the controller board unit (\mathscr{F} x 3).
- 6. Reinstall the controller board unit in the machine.

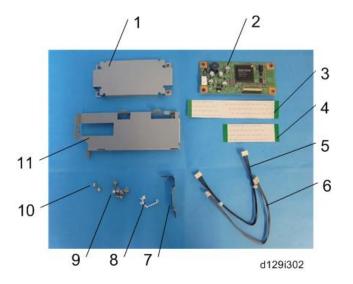
After Installing the HDD

- 1. Do SP5832-001 to format the hard disk.
- 2. Do SP5853-001 to copy the preset stamp data from the firmware to the hard disk.
- 3. Do SP5846-040 to copy the address book to the hard disk from the controller board.
- 4. Do SP5846-041 to let the user get access to the address book.
- 5. Turn the main power switch off/on.

Copy Data Security Unit (B829)

Component Check

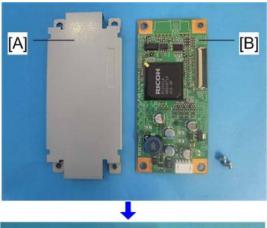
| No. | Description | Q'ty | For this model |
|-----|-----------------------|------|----------------|
| 1 | Bracket 1 | 1 | Yes |
| 2 | ICIB-3 | 1 | Yes |
| 3 | Flexible cable: Long | 1 | Not used |
| 4 | Flexible cable: Short | 1 | Not used |
| 5 | Harness with bands | 1 | Not used |
| 6 | Harness |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

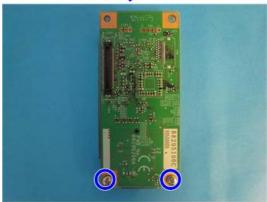


Installation Procedure

ACAUTION

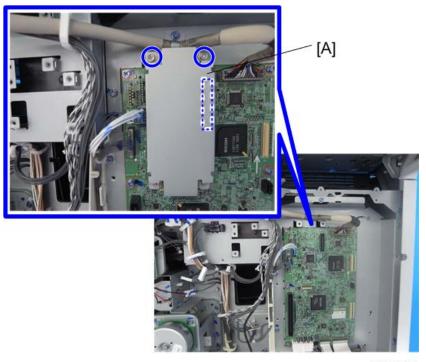
- Unplug the main machine power cord before you do the following procedure.
- 1. Rear cover (p.132)
- 2. Controller unit (p.230)
- 3. Controller box (p.236 "Mother Board")





d129i303

4. Attach bracket 1 [A] to the ICIB-3 [B] (*F x 2; M3 x 4).



d129i304

- 5. Connect the ICIB-3 with bracket 1 [A] to CN 505 on the IPU (F x 2; M3 x 6).
- 6. Reassemble the machine.

User Tool Setting

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



- The machine will issue an SC165 error if the machine is powered on with the ICIB-1 removed and the "Data Security for Copying" feature is 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 settings. And then SC165 will appear every time the machine is
 switched on, and the machine cannot be used.

Check All Connections

Make sure that the machine can recognize the option.

- 1. Plug in the power cord.
- 2. Turn on the main switch.
- Enter the printer user mode. Then print the configuration page.
 User Tools > Printer Features > List Test Print > Configuration Page
- 4. All installed options are shown sin the "System Reference" column.

Browser Unit Type I

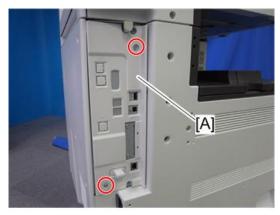
Installation Procedure

This option requires a HDD unit.

Browser RTB 1
Replace the entire procedure.

ACAUTION

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



d129i230

1. Remove the controller cover [A] (Fx 2).



d641i117

- 2. Turn the SD-card label face to the rear of the machine. Then push it slowly into Slot 1 (Upper Slot) [A] until you hear a click.
- 3. Plug in and turn on the main power switch.
- 4. Push the "User Tools" key.

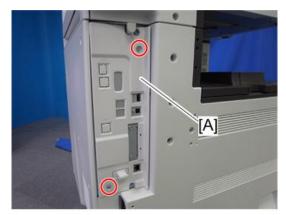
If an administrator setting is registered for the machine, steps 5 and 6 are required. Otherwise, skip to step 7.

- 5. Push the "Login/Logout" key.
- 6. Login with the administrator user name and password.
- 7. Touch "Extended Feature Settings" twice on the LCD.
- 8. Touch "Install" on the LCD.
- 9. Touch "SD Card".
- 10. Touch the "Browser" line.
- 11. Under "Install to", touch "Machine HDD" and touch "Next".
- 12. When you see "Ready to Install", check the information on the screen to confirm your previous selection.
- 13. Touch "OK". You will see "Installing the extended feature... Please wait.", and then "Completed".
- 14. Touch "Exit" to go back to the setting screen.
- 15. Touch "Change Allocation".
- 16. Touch the "Browser" line.
- 17. Press one of the hard keys, which you want to use for the Browser Unit. By default, this function is assigned to the "Other Functions" key (bottom key of the 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 it.
- 22. Turn on the main power switch.
- 23. When the machine reaches the Ready condition, press the key that you installed in Step 22 above. A message will be displayed confirming that the browser option was successfully installed.
- 24. Turn off the main power switch.
- 25. Remove the SD card from Slot 1 (Upper Slot) [A].
- 26. Attach the controller cover [A] (x 1).
- 27. Tell a customer to keep the SD card in a safe place after you have installed the application program from the card to the HDD.

This is because:

- The SD card is 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



d129i230

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



d641i117

- Turn the SD-card label face to the rear of the machine. Then push it slowly into Slot 1 (Upper Slot)
 [A] 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 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

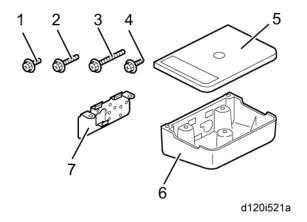
- 10. A confirmation message appears on the LCD.
- 11. Touch "Yes" to proceed.
- 12. A reconfirmation message appears on the LCD.
- 13. Touch "Yes" to uninstall the browser unit.
- 14. You will see "Uninstalling the extended feature... Please wait.", and then "Completed".
- 15. Touch "Exit" to go back to the setting screen.
- 16. Exit "User/Tools" setting, and then turn off the main power switch.
- 17. Remove the SD card from Slot 1 (Upper Slot).
- 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.

Card Reader Bracket Type C3352 (D593)

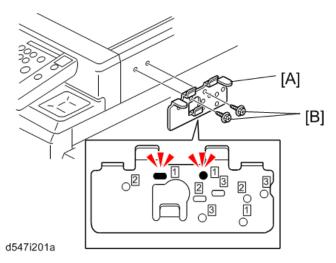
Component Check

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

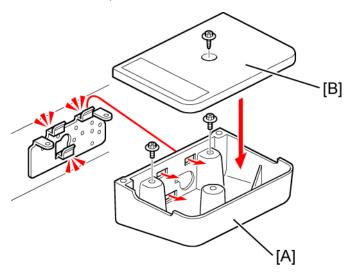
| No | Description | Q'ty | For This Model |
|----|------------------------|------|----------------|
| 1 | Screw: M3 x 8 | 5 | Yes |
| 2 | Screw: M3 x 14 | 1 | Not used |
| 3 | Screw: M4 x 25 | 1 | Not used |
| 4 | Tapping Screw: M3 x 10 | 3 | Yes |
| 5 | Upper Tray | 1 | Yes |
| 6 | Lower Tray | 1 | Yes |
| 7 | Tray Bracket | 1 | Yes |



Installation Procedure



- 1. Attach the tray bracket [A] to the scanner right cover (F [B] x 2: M3x 8
 - For this model, use the screw holes marked "1" on the table bracket.



d120i577

- 2. Attach the lower tray [A] to the tray bracket (Fx 2: M3x8).
- 3. Attach the upper tray [B] to the tray bracket (Fx 1: M3x8).
- 4. Connect the cable to the designated connector (the connector to use depends on the type of device to be connected).

3. Preventive Maintenance

PM Tables

See "Appendices" for the following information:

• PM Tables

4. Replacement and Adjustment

General Cautions

ACAUTION

• To avoid damage to the transfer belt, drum, or development unit when it is removed or re-installed, never turn off power switch while electrical components are active.

ACAUTION

• Turn off the main power switch and unplug the machine before attempting any of the procedures in this section.

Laser Unit

- 1. Do not loosen the screws that secure the LD drive board to the laser diode casing. Doing so would throw the LD unit out of adjustment.
- 2. Do not adjust the variable resistors on the LD unit, as they are adjusted in the factory.
- 3. The polygon mirror and F-theta lenses are very sensitive to dust. Do not open the optical housing unit.
- 4. Do not touch the glass surface of the polygon mirror motor unit with bare hands.
- 5. After replacing the LD unit, do the laser beam pitch adjustment.

Used Toner

Dispose of used toner in accordance with local regulations. Never throw toner into an open flame, for toner dust may ignite.

Special Tools and Lubricants

Special Tools

| Part Number | Description | Q'ty |
|-------------|-------------------------------------|------|
| A0069104 | Scanner Positioning Pin (4 pc./set) | 1 |
| A2929500 | Test Chart – S5S (10 pc./set) | 1 |
| A2309003 | Adjustment Cam – Laser Unit | 1 |
| A2309004 | Positioning Pin – Laser Unit | 1 |
| B6455010 | SD Card | 1 |
| G0219350 | Loop Back Connector | 1 |

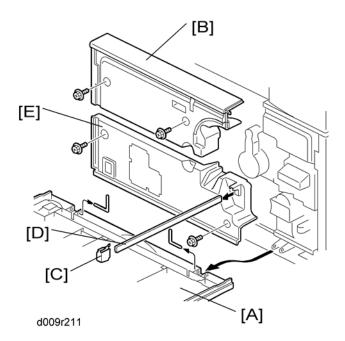
Lubricants

| Part Number | Description | Q'ty |
|-------------|------------------------|------|
| A2579300 | Grease Barrierta S552R | 1 |
| 52039502 | Silicone Grease G-501 | 1 |

Exterior Covers

Front Door, Upper and Lower Inner Cover

1. Left Cover (p.132)



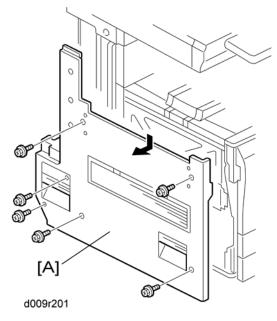
2. Open and remove the front door [A] (pin x 2).

Upper Inner Cover

- 1. Open the front door [A].
- 2. Upper inner cover [B] (x 2)

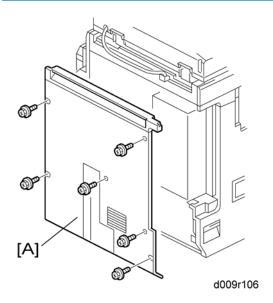
Lower Inner Cover

- 1. Remove the front door [A] (pin x 2)
- 2. Shield glass cover [C]
- 3. Shield glass [D] (*\begin{align*} x 2)
- 4. Lower inner cover [E]



1. Left cover [A] (x 6)

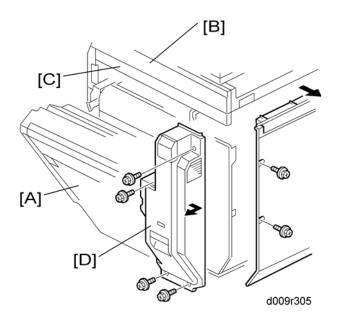
Rear Cover



1. Rear cover [A] (*\bar{\rho} x 6)

Right Rear Cover

1. Rear cover(p.132)



- 2. Open the right door [A].
- 3. Scanner right cover [B] (* x 2)
- 4. Right top cover [C] (*x 1)
- 5. Right rear cover [D] (*\bar{\bar{\rho}} \times 4)

Front Right Cover



d129r800





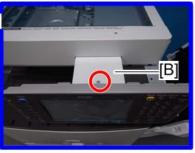
d129r820

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

Operation Panel

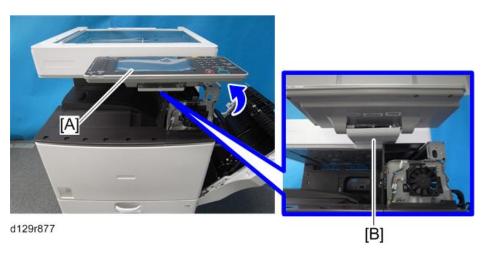
1. Front right cover (p.133)



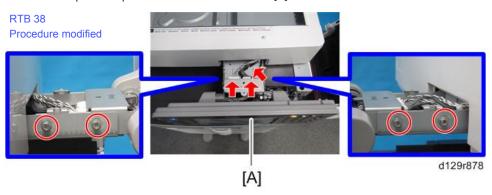


d129r876

- 2. Position the operation panel [A] as shown above.
- 3. Operation panel connector upper cover [B] ($\widehat{\mathscr{F}} \times 1$)



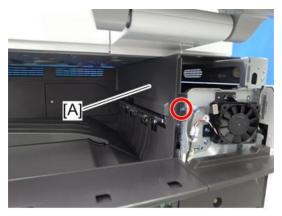
- 4. Position the operation panel [A] as shown above.
- 5. Remove the operation panel connector lower cover [B].



Paper Exit Cover

1. Front right cover (p.133)

Operation panel LCD replacement procedures RTB 38



d129r803

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

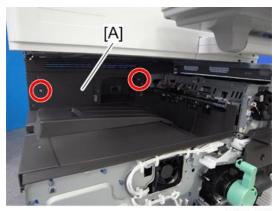
Inner Tray

- 1. Left cover (p.132)
- 2. Upper inner cover (p.131 "Front Door, Upper and Lower Inner Cover")
- 3. Paper exit cover (p.135)



d129r819

4. Connector cover [A]



d129r804

5. Inner rear cover [A]

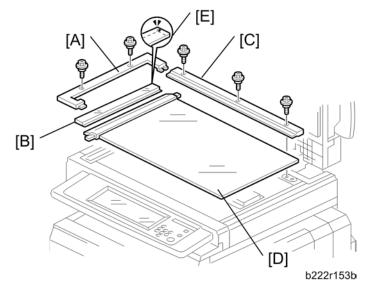


d129r805

6. Inner tray [A]

Scanner

Exposure Glass



- 1. Glass cover [A] (x 2)
- 2. ARDF exposure glass [B]
- 3. Rear scale [C] (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.

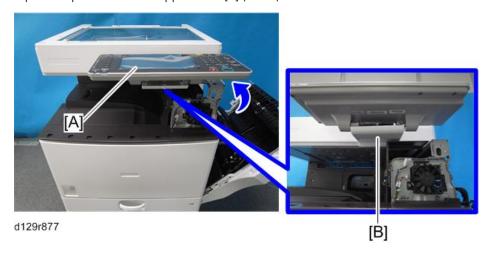
Scanner Exterior Panels and Operation Panel

Operation panel

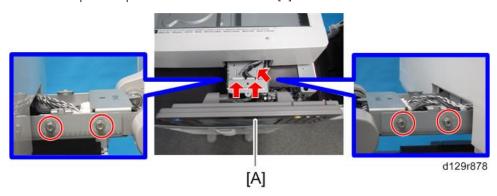
1. Front right cover (p.133)



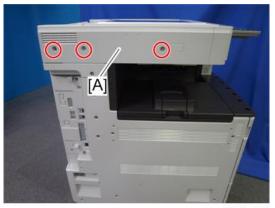
- 2. Position the operation panel [A] as shown above.
- 3. Operation panel connector upper cover [B] (*x 1)



- 4. Position the operation panel [A] as shown above.
- 5. Remove the operation panel connector lower cover [B].



6. Operation panel [A] (x 4, 1 x 3)



d129r821

1. Scanner left cover [A] (Fx 3)

Scanner right cover



d129r856

1. Scanner right cover [A] (*x 2)

Scanner front cover

1. Operation panel (p.134)



d129r857

2. Scanner front cover [A] (Fx 2)

Scanner rear cover

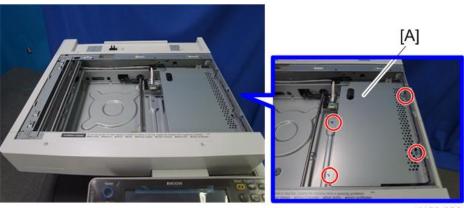


d129r858

1. Scanner rear cover [A] (x 1)

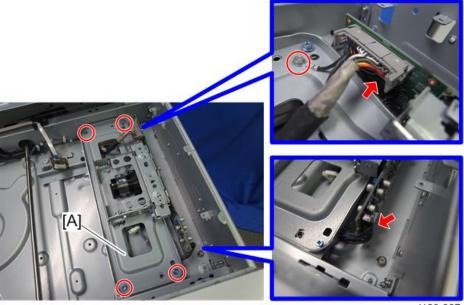
Lens Block Assembly

- 1. Exposure glass (p.138)
- 2. Scanner right cover (p.138 "Scanner Exterior Panels and Operation Panel")



d129r826

- 3. SBU cover [A] (x 4)
- 4. Original size sensor bracket (p.143 "Original Size Sensor")



d129r827

5. Lens block assembly [A] (F x 4, Grand screw x 1, V x 2)

• Do not remove the other screws on the lens block unit.

When reassembling

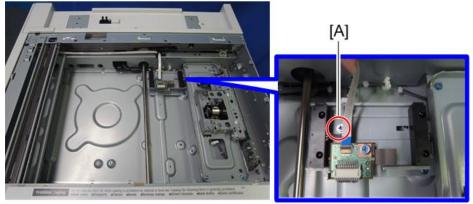
Adjust the following SP modes after you replace the lens block assembly:

• SP4-008 (Sub Scan Mag): ("Scanning" in "Copy Adjustments: Printing/Scanning")

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

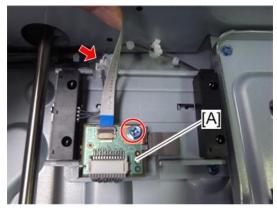
Original Size Sensor

- 1. Exposure glass with left scale (p.138 "Exposure Glass")
- 2. Scanner right cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 3. SBU cover (p.141 "Lens Block Assembly")



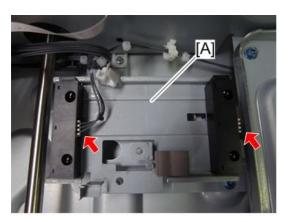
d129r828

4. Remove the screw [A] on the sensor board bracket.



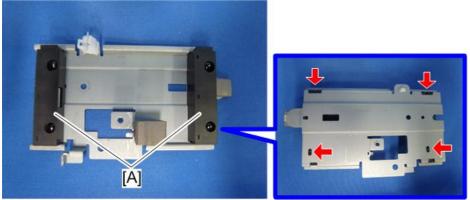
d129r829

5. Circuit chip [A] (₹x 1, □ x 1)



d129r830

6. Original size sensor bracket [A] (x 2)



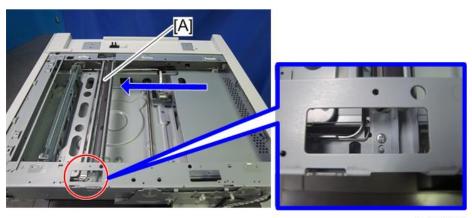
d129r831

7. Original size sensors [A] (hooks)

Exposure Lamp

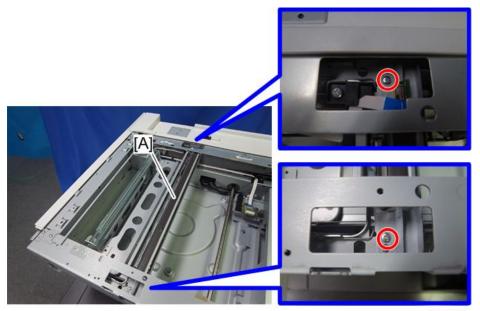
Mportant (

- Before replacing the scanner lamp, check and note the first three digits in the bar-code on the new scanner lamp ("Chromaticity rank adjustment" in this section).
- 1. Operation panel (p.134)
- 2. Exposure glass (p.138)
- 3. Scanner front cover (p.138 "Scanner Exterior Panels and Operation Panel")



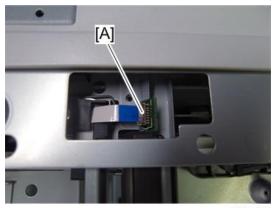
d129r832

4. Move the first scanner carriage [A] to the position shown above.



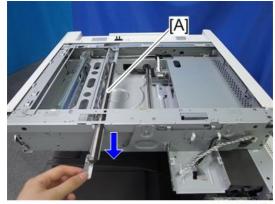
d129r833

5. Remove the two screws on the scanner lamp [A].



d129r83

6. Disconnect the connector [A] on the scanner lamp.

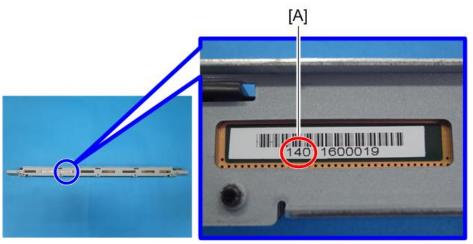


d129r835

7. Pull out the scanner lamp [A].

Chromaticity rank adjustment

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



d129r879

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

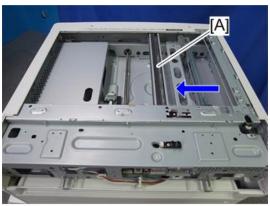
| 1 st Three Digits | SP Setting (SP4-954-005) | 1 st Three Digits | SP Setting (SP4-954-005) |
|------------------------------|--------------------------|------------------------------|--------------------------|
| 139 | 3 | 166 | 12 |
| 140 | 2 | 167 | 11 |
| 141 | 1 | 168 | 10 |
| 142 | 6 | 169 | 15 |
| 143 | 5 | 170 | 14 |
| 144 | 4 | 171 | 13 |
| 145 | 9 | 172 | 18 |
| 146 | 8 | 173 | 17 |
| 147 | 7 | 174 | 16 |
| 148 | 12 | 204 | 3 |
| 149 | 11 | 205 | 2 |
| 150 | 10 | 206 | 1 |
| 151 | 15 | 207 | 6 |

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

Scanner HP Sensor/Platen Cover Sensor

Scanner HP Sensor

- 1. Scanner rear cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 2. Exposure glass (p.138)



d129r836

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

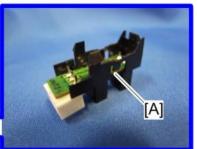




d129r837

4. Remove the mylar [A].





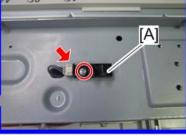
d129r838

5. Remove the scanner HP sensor [A] (\mathbb{H} x 1, three snaps)

Platen Cover Sensor

1. Scanner rear cover (p.138 "Scanner Exterior Panels and Operation Panel")



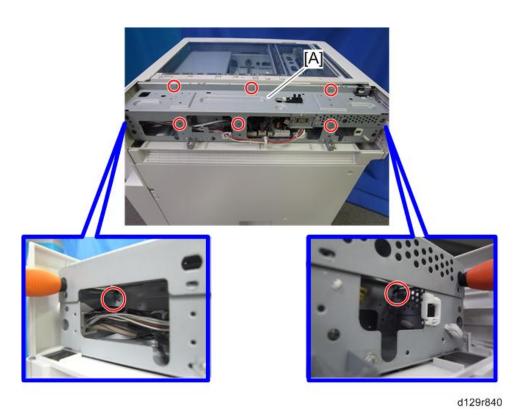


d129r839

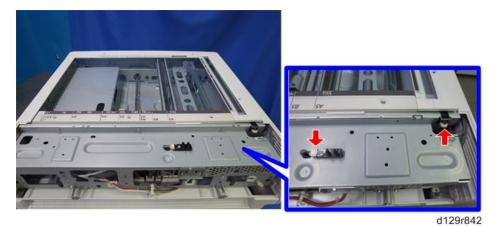
2. Platen cover sensor [A] (x 1, x 1)

Scanner Motor

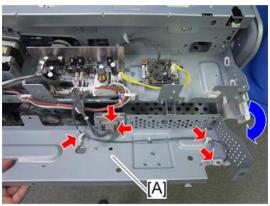
1. Scanner rear cover (p.138 "Scanner Exterior Panels and Operation Panel")



2. Remove the 8 screws of the scanner rear frame [A].

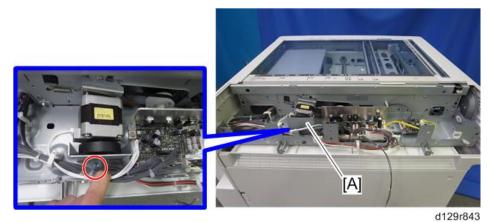


3. Disconnect the two connectors.

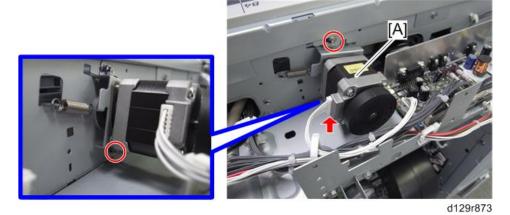


d129r841

4. Pull over the scanner rear stay [A] and remove it ($\mathbb{Z}^2 \times 2$, $\mathbb{Z} \times 3$).



5. Scanner motor bracket [A] (*x 1)



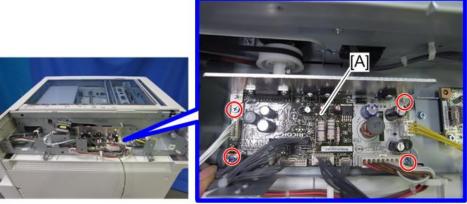
6. Scanner motor [A] (♠x 2, ♣x 1, spring x 1, belt x 1)



 After replacing the scanner motor, do the image adjustments in the following section of the manual ("" "Scanning" in "Copy Adjustments: Printing/Scanning").

Scanner Motor Drive Board

- 1. Scanner rear cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 2. Scanner rear stay. (p.150 "Scanner Motor")

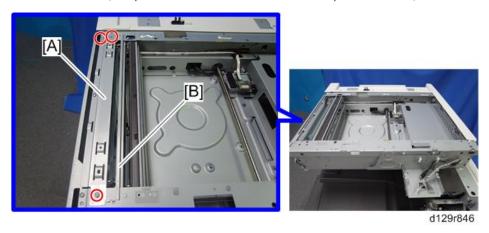


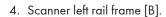
d129r845

3. SIO [A] (* x 4, * x All)

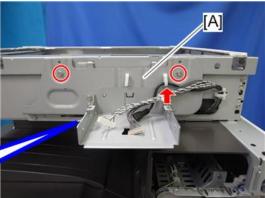
Front Scanner Wire

- 1. Scanner front cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 2. Scanner left cover (p.138 "Scanner Exterior Panels and Operation Panel")









d129r847

5. Operation panel stay [A] (x 5, x 1)

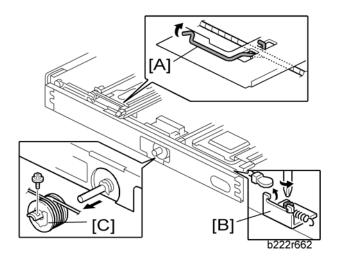






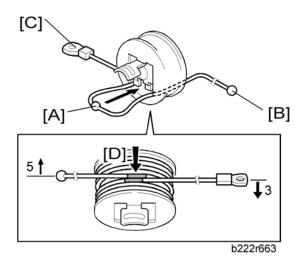
d129r849

- 6. Scanner front stay [A] (F x 5)
- 7. To make reassembly easy, slide the 1st scanner carriage to the right.



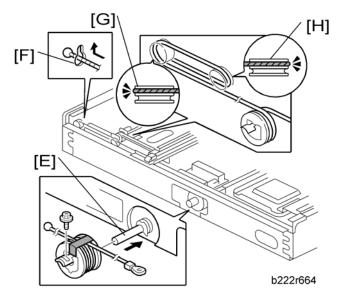
- 8. Front scanner wire clamp [A]
- 9. Front scanner wire bracket [B] (F x 1)
- 10. Front scanner wire and scanner drive pulley [C] (x 1)

Reassembling the Front Scanner Wire



- 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.

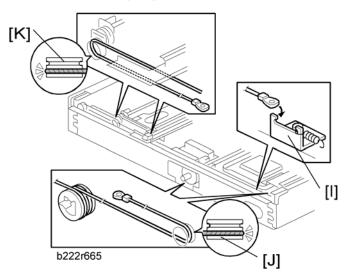
• The two red marks [D] come together when you have done this. Stick the wire to the pulley with tape. This lets you easily handle the assembly at the time of installation.



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



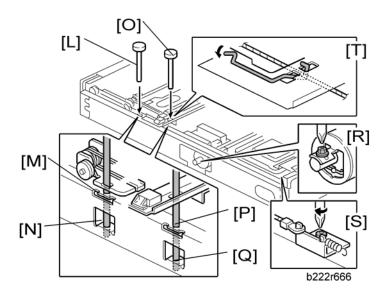
- · Do not attach the pulley to the shaft with the screw at this time.
- 5. Insert the left end into the slit [F]. The end should go via the rear track of the left pulley [G] and the rear track of the movable pulley [H].



6. Hook the right end onto the front scanner wire bracket [I]. 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.



- 7. Remove the tape from the drive pulley.
- 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.

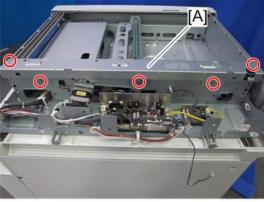


- Make sure the 1st and 2nd carriages move smoothly after you remove the positioning pins.
 Do steps 8 through 13 again if they do not.
- After replacing the scanner wire, do the image adjustments in the following section of the manual ("Scanning" in "Copy Adjustments: Printing/Scanning").

Rear Scanner Wire

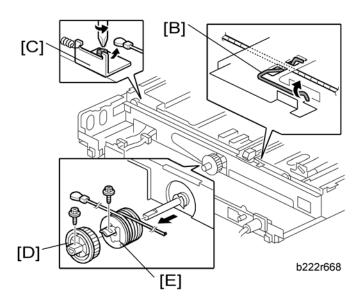
1. Scanner front cover (p.138 "Scanner Exterior Panels and Operation Panel")

- 2. Scanner left cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 3. Scanner left stay (p.153 "Front Scanner Wire")
- 4. Scanner left rail frame (p.153 "Front Scanner Wire")
- 5. Scanner rear cover (p.138 "Scanner Exterior Panels and Operation Panel")
- 6. Scanner rear stay (p.150 "Scanner Motor")



d129r851

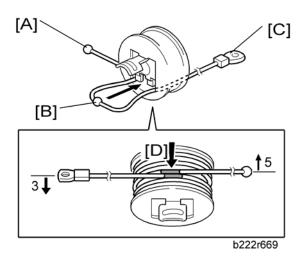
- 7. Rear rail frame [A] (** x 5)
- 8. SIO (p.153 "Scanner Motor Drive Board")



- 9. To make reassembly easy, slide the first scanner to the center.
- 10. Rear scanner wire clamp [B]
- 11. Rear scanner wire bracket [C] (*F x 1)
- 12. Scanner motor gear [D] (*\bar{\mathbb{E}} \times 1)

13. Rear scanner wire and scanner drive pulley [E] (** x 1)

Reassembling the Rear Scanner Wire



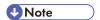
- 1. Position the center ball [B] in the middle of the forked holder.
- 2. Pass the end with the ball [A] through the right square hole from the front.
- 3. Position the center ball [B] in the middle of the notch, as shown by the arrow.
- 4. Pass the ball end [A] through the drive pulley notch.
- Wind 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 "Copy Adjustments: Printing/Scanning").

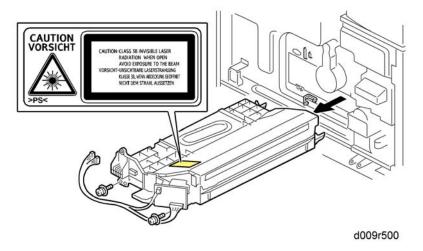
Laser Unit

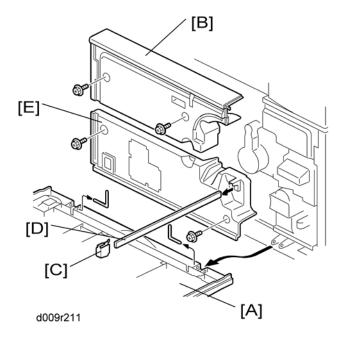
MARNING

• Turn off the main power switch and unplug the machine before attempting any of the procedures in this section. Laser beams can seriously damage your eyes.

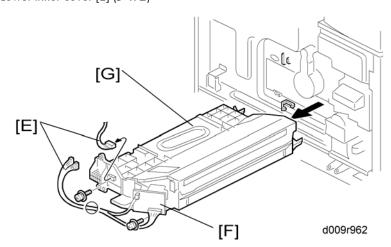
Caution Decal Locations

Two caution decals are located in the laser section as shown below. (See the next page for removal instructions.)





- 1. Open the front door.
- 2. Front door [A] (pins x 2)
- 3. Upper inner cover [B] (x 2)
- 4. Glass cap [C]
- 5. Shield glass [D]
- 6. Lower inner cover [E] (Fx 2)



7. Laser unit connectors [E] (x 3, x 1)

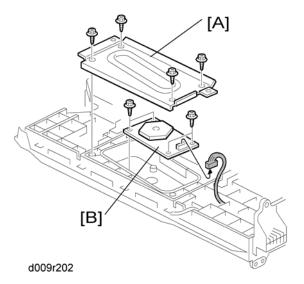


- Do not disconnect the harnesses on the LD board [F] unless the LD unit has to be replaced. This board is precisely adjusted in the factory.
- 8. Laser unit [G] (x 2)



• When sliding out the laser unit, do not hold the LD board. Hold the laser unit.

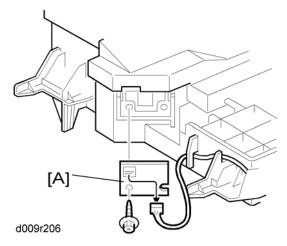
Polygon Mirror Motor



- 1. Laser unit (p.162)
- 2. Laser unit cover [A] (x 4)
- 3. Polygon mirror motor [B] (*x 4, * 1)
- 4. After replacing the polygon mirror motor, do the image adjustment (p.243 "Copy Adjustments: Printing/Scanning").

Laser Synchronization Detector

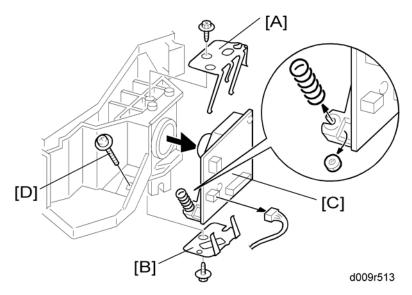
1. Laser unit (p.162)



2. Laser synchronization detector [A] (x1, 1)

LD Unit

1. Laser unit (p.162)

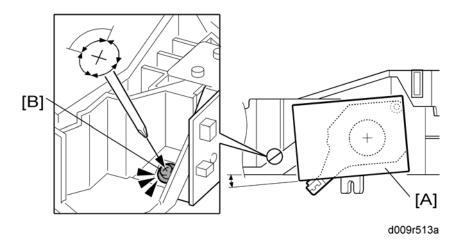


- 2. Upper spring plate [A] (Fx 1)
- 3. Lower spring plate [B] (x 1)
- 4. LD unit [C] (x 1, 1 x 1, spring x 1)



 To avoid damaging the LD board, hold it securely when disconnecting the connectors. Hold the laser unit casing. 5. After replacing the LD board, do the "Laser Beam Pitch Adjustment" (described in the following section). Keep the lower inner cover removed before doing this adjustment because you need to adjust the adjustor screw [D] on the LD unit with a screwdriver.

Laser Beam Pitch Adjustment

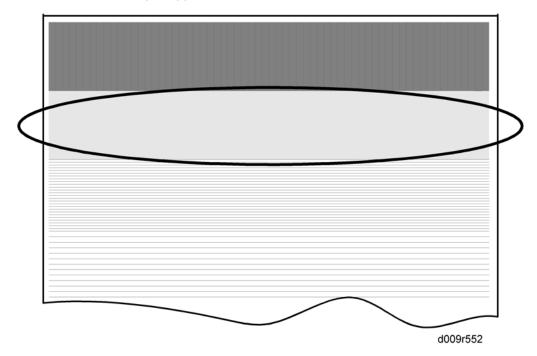


- 1. Install a (new) LD unit [A] with the left side of the LD unit being lower than the right side. (This makes this adjustment easier.)
- 2. Print the test pattern "Hounds Tooth Check (2-Dot Horizontal)" (No. 16 in SP2109-001).
- Check if the vertical stripes appear on the second pattern (counted from the leading edge) of the printout.
 - Correct: No vertical stripes appear (see the sample following this procedure.)
 - Wrong: Vertical stripes appear (see the sample following this procedure.)
- 4. Turn the adjustor screw [B] by 90 degrees clockwise (counterclockwise).

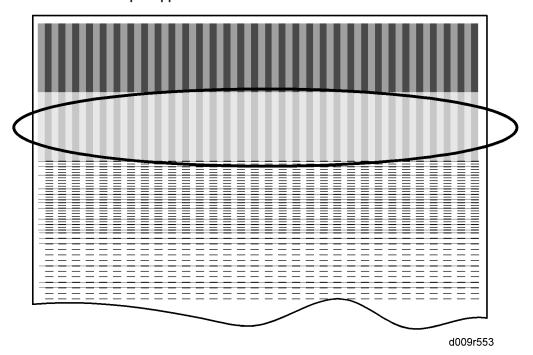


- If the image of the printout is getting worse, try reverse rotation (clockwise ←→ counterclockwise)
- 5. Print the test pattern and check it out.
- 6. Try steps 2 to 4 again until you get an image with no vertical stripes.
- 7. Reassemble the machine after completing this adjustment.

Correct: No vertical stripes appear



Incorrect: Vertical stripes appear

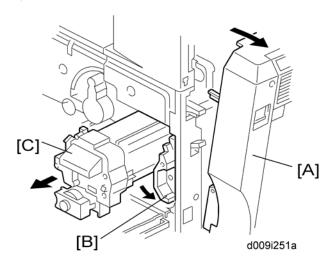


4

PCDU

PCDU (Photoconductor and Development Unit)

1. Open the front door.



- 2. Open the right door [A].
- 3. Release the lock lever [B].
- 4. Pull out the PCDU [C] and place it on a clean flat surface.
- 5. Spread a large piece of paper on a flat surface.



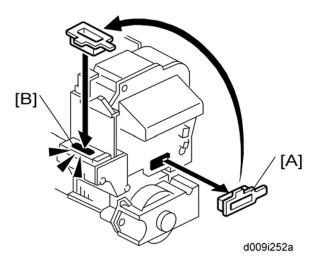
 Make sure the area is free of pins, paper clips, staples, etc. to avoid attraction to the magnetic development roller.

Reinstallation

Open the right cover before you install the PCDU in the machine.

Drum

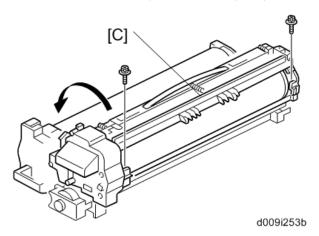
1. Remove the PCDU (p.167)



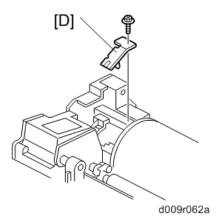
- 2. Toner cap [A]
- 3. Insert cap [A] into the opening of the PCDU [B].



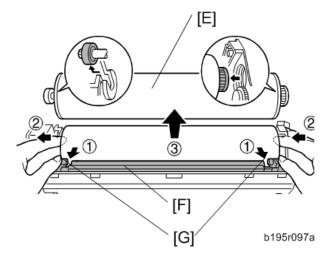
• Make sure that the cap is inserted completely into the opening.



4. Open the PCDU [C] ($\ensuremath{\widehat{\mathcal{F}}}$ x 2).



5. Bracket [D] (x 1)



6. Pull the drum [E] towards the front ② (the left side in the illustration) while releasing the charge roller [F] using the release levers ③ [G], and then remove the drum ③.

ACAUTION

• Never touch the drum surface with bare hands.

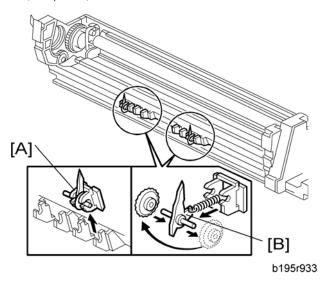
Re-installation

- 1. Replace the drum and close the PCDU ($\rat{P} \times 2$).
- 2. Put the opening cap [A in the previous procedure] back in its original place.
- 3. After replacing the drum, do these SPs:
 - SP 2001: Charge Bias Setting make sure that this is at the default setting
 - SP 3001-2: P Sensor Initial Setting (P sensor = ID Sensor)
 - SP 2805: Process Setting

• SP 2810-1: Grayscale Setting

Pick-off Pawls

1. Drum (p.167)



- 2. Pawl assembly [A]
- 3. Pick-off pawl [B] (spring x 1, spur x 1)

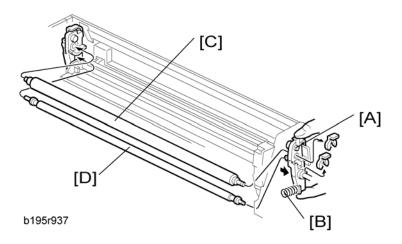
Pick-off Pawl Position Adjustment

If the pick-off pawl has marked the drum with a line, the pick-off pawl position can be adjusted using either method:

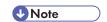
- Changing the spur position
- Changing the pick-off pawl assembly position

Charge Roller and Cleaning Roller

1. Drum (p.167)



- 2. Push the charge roller holder [A] toward the front of the drum ($(() \times 2)$ and remove the spring [B].
- 3. Charge roller [C].



- Disengage the charge roller on the right side to remove it. Try to avoid touching the charge roller.
- 4. Cleaning roller [D]



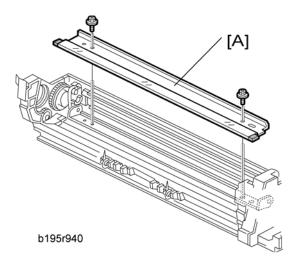
- Disengage the cleaning roller on the left to remove it.
- 5. After replacing the charge roller and cleaning roller, check the value of SP2001-001. If it is not at the standard value (1500), set SP2001-001 to "1500".



• If this is not done, the carrier will be attracted to the drum because the charge roller voltage will be too high.

Drum Cleaning Blade

- 1. Drum (p.167)
- 2. Charge roller and cleaning roller (p.170)



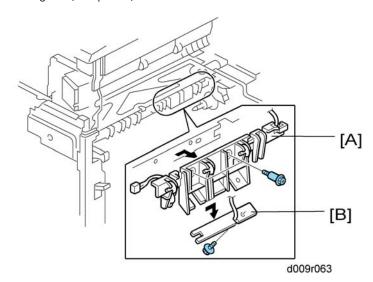
3. Remove drum cleaning blade [A] (\mathscr{F} x 2)

Re-installation

Put toner on the edge of cleaning blade and the mylar at the back side of cleaning blade before reinstalling this blade.

ID Sensor

- 1. PCDU (p.167)
- 2. Fusing unit (p.192)



4. ID sensor [B] (x 1)

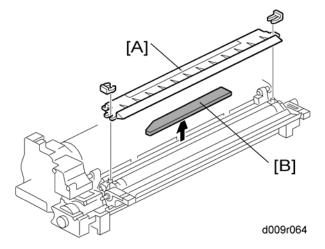


• Do SP3-001-002 to initialize the ID sensor after replacing.

Development

Development Filter

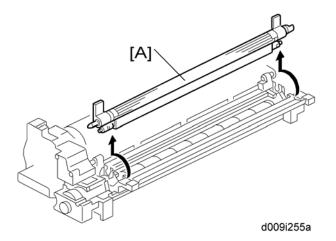
- 1. PCDU (p.167)
- 2. Open the PCDU. (p.167 "Drum")



- 3. Upper development cover [A] ((() x2)
- 4. Development filter [B]

Development Roller

- 1. PCDU (p.167)
- 2. Open the PCDU. (p.167 "Drum")
- 3. Upper development cover (p.174 "Development Filter")



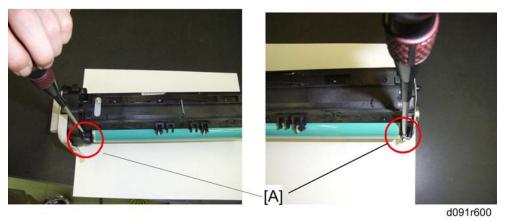
4. Development roller [A]



• Work carefully to avoid scratching or nicking the development roller.

Cleaning Procedure

1. PCDU (p.167)



2. Remove the two screws [A] and open the PCDU as shown above.





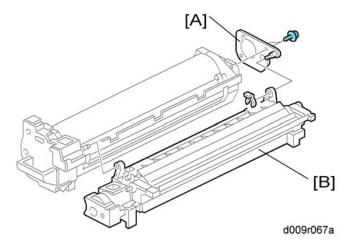
- 4. Fold up a sheet of copy paper [A] to fit the width of the uncovered area of the development roller, as shown below.
- 5. Slide the paper [A] along the length of the roller to clean the toner off the surface.



- 6. Rotate the development roller [A] in the direction of the arrow until the section you cleaned is no longer visible.
- 7. Repeat steps 5 and 6 until you have cleaned the entire surface of the roller.
- 8. Reassemble the PCDU and install the PCDU into the machine.

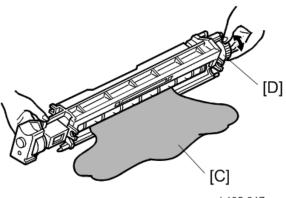
Developer

- 1. PCDU (p.167)
- 2. Open the PCDU. (p.167 "Drum")
- 3. Development roller (p.174)



- 4. Joint bracket [A] (₹ x 2, ∅ x 1)
- 5. Development unit [B]

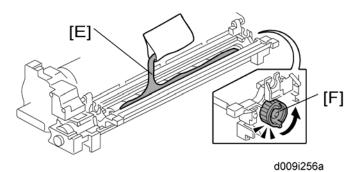




- b195r947a
- 6. Tip out the old developer [C].
- 7. Turn drive gear [D] to ensure that no developer remains in the unit or on the developer roller.



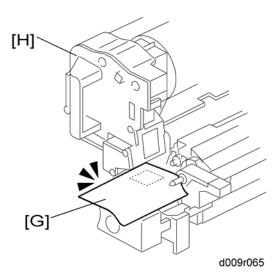
- Dispose of the used developer in accordance with local regulations. Work carefully to avoid scratching or nicking the development roller.
- 8. Clean the development roller with a dry cloth.



- 9. Pour approximately 1/3 of the developer [E] evenly along the length of the development unit.
- 10. Rotate the drive gear [F] to work the developer into the unit.
- 11. Repeat steps 8 and 9 until all toner is in the unit and level with the edges.
- 12. Re-install the development roller.



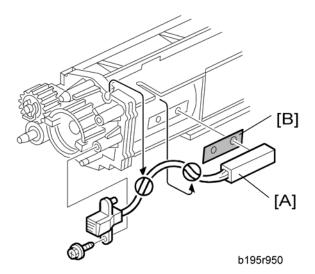
Make sure that the seals at the both sides of the development roller are set inside the case
after you re-install the development roller.



- 13. Place a piece of paper [G] over the toner entrance hole. This prevents used toner falling from the drum into the development unit during the TD sensor initial setting and interfering with the Vref setting (toner density reference voltage)
- 14. Secure the drum [H] to the development unit, to close the PCDU (\mathscr{F} x 2).
- 15. Install the PCDU in the machine and close the front and right doors.
- 16. Turn on the main power switch, and wait for the machine to warm up.
- 17. Do SP2801 to initialize the TD sensor and enter the developer lot number.
- 18. After performing the TD sensor initial setting, remove the sheet of paper from the PCDU.

TD Sensor

- 1. PCDU (p.167)
- 2. Empty all developer from the development unit. (p.177 "Developer")



- 3. Seal
- 4. TD sensor [A] (x1)



- The TD sensor is attached to the casing with double-sided tape [B]. Pry it off with the flat head of a screwdriver. Use fresh double-sided tape to re-attach the sensor.
- 5. Pour new developer into the development unit and perform the TD sensor initial setting using SP2-801.



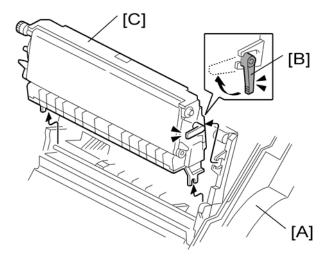
 When performing the TD sensor initial setting, cover the toner entrance hole with a piece of paper.

Transfer

Transfer Belt Unit

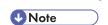


• To avoid exposing the drum to strong light, cover it with paper if the right cover will be open for a long period.



d009r025

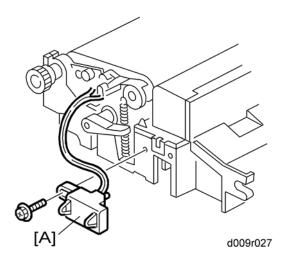
- 1. Open the right door [A].
- 2. Release the lever [B].
- 3. Transfer belt unit [C]



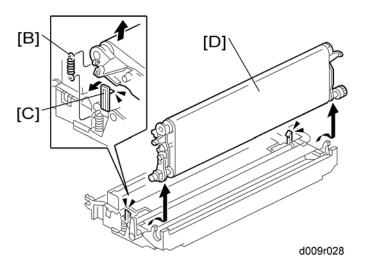
• Avoid touching the transfer belt surface.

Transfer Belt

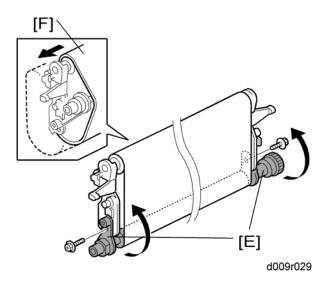
1. Transfer belt unit (p.181)



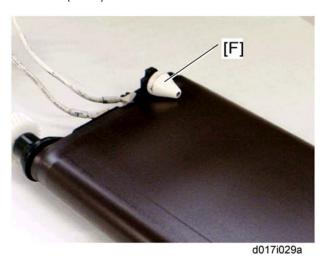
2. Connector [A] (x 1)



- 3. Remove the springs (front and rear) [B].
- 4. Release the hooks (front and rear) [C].
- 5. Transfer belt with rollers [D]



6. Lay the transfer belt with rollers on a flat clean surface, and fold the unit [E] to release the tension on the belt ($\mathcal{F} \times 2$).



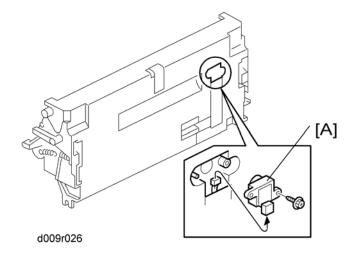
7. Transfer belt [F]



- Avoid touching the transfer belt surface.
- Before installing the new transfer belt, clean all the rollers and shafts with alcohol to prevent the belt from slipping.
- When reinstalling the transfer belt, make sure that the belt is under the pin [F].
- To avoid damaging the transfer belt during installation, manually turn the rollers and make sure that the new transfer belt is not running over the edges of any of the rollers.

Toner Overflow Sensor

1. Transfer belt unit (p.181)

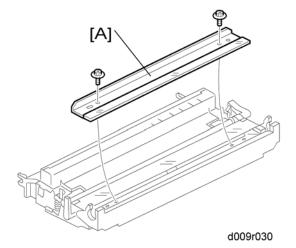


2. Toner overflow sensor [A] (\mathscr{F} x 1, $\overset{\blacksquare}{\square}$ x 1)

Transfer Belt Cleaning Blade/Toner Overflow Sensor

Transfer Belt Cleaning Blade

- 1. Transfer belt unit (p.181)
- 2. Transfer belt (p.181)



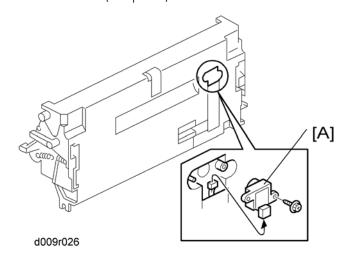
3. Transfer belt cleaning blade [A] (F x 2)



• Avoid touching the edge of the new blade. Check the new blade for dust or damage.

Toner Overflow Sensor

1. Transfer belt unit (🖛 p.181)



2. Toner overflow sensor [A] (F x 1, V x 1)

Paper Feed

Paper Feed Unit

Tray 1 and Tray 2

- 1. Right rear cover (p.133)
- 2. Duplex unit (p.208)
- 3. Pull out tray 1 and tray 2.



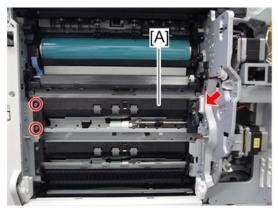
d129r855

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



d129r806

5. Harness cover [A] (x 1)



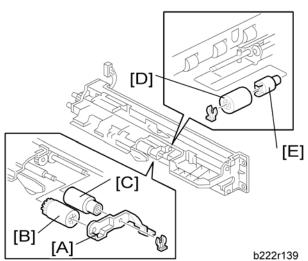
d129r807

6. Paper feed unit [A] (₹ x 2, ■ x 1)

Pick-Up, Feed and Separation Rollers

Tray 1 and Tray 2

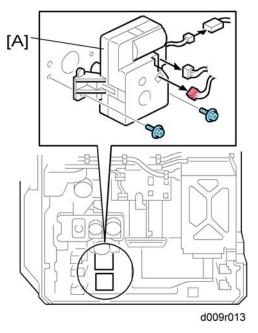
1. Paper feed unit (p.186 "Paper Feed Unit")



- 2. Roller holder [A] (((() x 1)
- 3. Pick-up roller [B]
- 4. Feed roller [C]
- 5. Separation roller [D] and torque limiter [E] ((() x 1)

Tray Lift Motor

1. Rear cover (p.132)

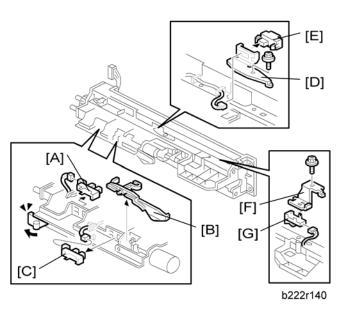


2. Tray lift motor 1 or 2 [A] (x 2, 1 x 3)

Relay, Tray Lift, Paper End and Paper Feed Sensors

Tray 1 and Tray 2

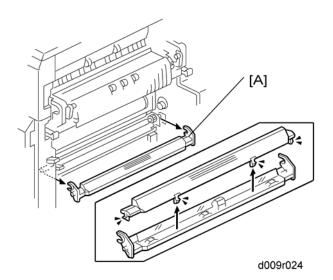
- 1. Right rear cover (p.133)
- 2. Duplex unit (p.208)
- 3. Paper feed unit (p.186)



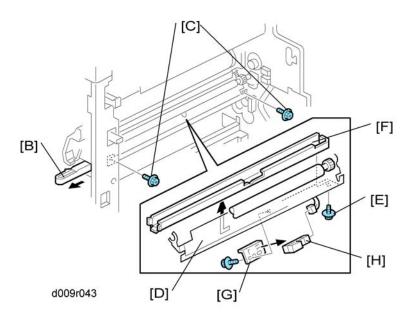
- 4. Tray lift sensor [A] (x 1)
- 5. Paper end feeler [B] and paper end sensor [C] (hook, 🚅 x 1 each)
- 6. Relay sensor bracket [D] (*x 1)
- 7. Relay sensor [E] (🕮 x 1, hook)
- 8. Paper feed sensor bracket [F] (F x 1)
- 9. Paper feed sensor [G] (🚅 x 1, hook)

Registration Sensor

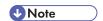
- 1. Right rear cover (p.133)
- 2. Duplex unit (p.208)
- 3. Paper feed unit for tray 1 (p.186 "Paper Feed Unit")
- 4. Paper Trays 1 and 2



5. Paper dust box [A]



- 6. Open the front door.
- 7. Pull out the paper dust container [B].
- 8. Remove two screws [C].



- This makes the paper guide [D] tilt a little bit. Now you can access the screw [E].
- 9. Dust container rail [F] ([E] x 1)
- 10. Sensor bracket [G] (x 1)



- You can only access the screw on the sensor bracket from the inside (paper tray location) of the machine.
- 11. Registration sensor [H] (🔎 x 1, hooks)

Reinstall the registration sensor

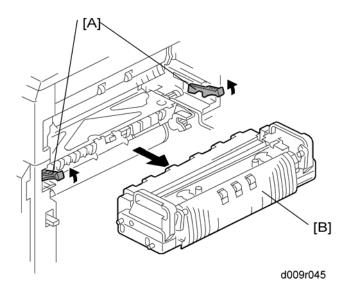
It is very difficult to secure the sensor bracket to the frame. First attach the sensor bracket with tape temporarily.

Fusing

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. Turn off the main power switch.
- 2. Open the right door.



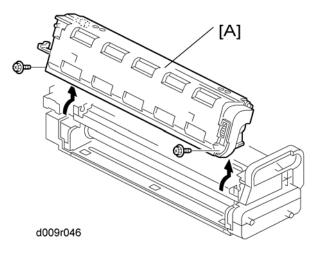
- 3. Pull up the lock levers [A].
- 4. Pull the fusing unit [B] until you hear a click.



- The lock levers lock the fusing unit again at this time to prevent the fusing unit from falling down.
- 5. Pull up the lock levers [A] again, and then remove the fusing unit [B].

Web Roller Unit

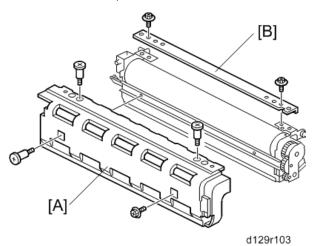
1. Fusing unit (p.192)



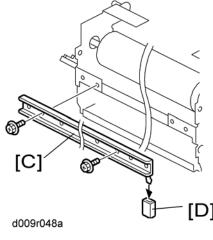
2. Web roller unit [A] (** x 2)

Brake Pad

1. Web roller unit (p.192)



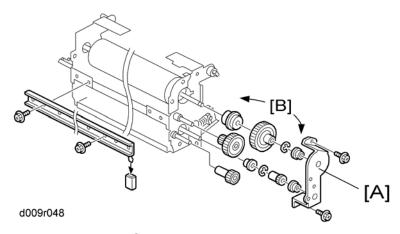
- 2. Web left cover [A] (x 1, stepped screw x 3)
- 3. Web top frame [B] (* x 2)



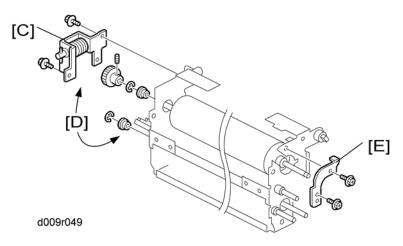
- 4. Web left frame [C] (x 2)
- 5. Brake pad [D]

Web Holder Roller and Web Rollers

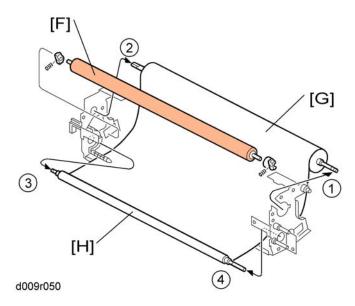
- 1. Web roller unit (p.192)
- 2. Web left cover (p.193 "Brake Pad")
- 3. Web top frame (p.193 "Brake Pad")
- 4. Web left frame (p.193 "Brake Pad")



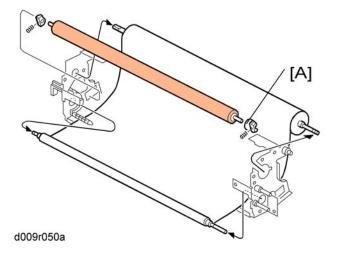
- 5. Front gear bracket [A] (Fx 2)
- 6. All gears and bushings (rear side) [B] (\mathbb{C} x 2)



- 7. Rear gear bracket [C] (*x 2)
- 8. All gear and bushings (rear side) [D] (\mathbb{C} x 2, spring x 1)
- 9. Front bracket [E] (🗗 x 2)

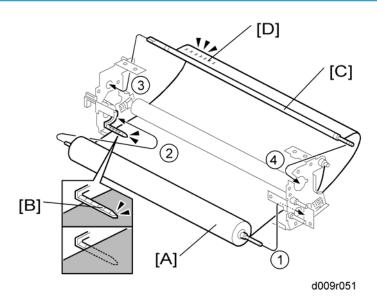


- 10. Web holder roller [F] (holder x 2, spring x 2)
- 11. Web take up roller [G] ($\textcircled{1} \rightarrow \textcircled{2}$)
- 12. Web supply roller [H] ($^{3} \rightarrow _{)}$



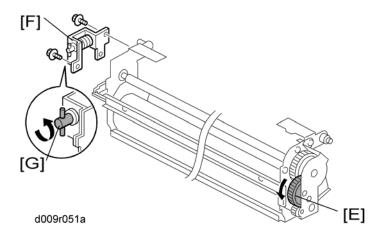
The holder [A] has a one-way clutch. Make sure that the holder [A] is set at the front side.

Installing new web rollers



- 1. Install the web supply roller [A] first ($^{\textcircled{1}} \rightarrow ^{\textcircled{2}}$). Make sure that the web sheet is under the pin [B].
- Install the web take up roller [C] (³ → ⁴). Make sure that the printed number [D] is outside the web take up roller.
- 3. Reinstall the rear gear bracket (p.194 "Web Holder Roller and Web Rollers").
- 4. Reinstall the front and rear gears and bushings (p.194 "Web Holder Roller and Web Rollers").

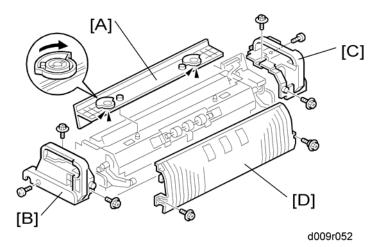
5. Reinstall the rear gear bracket (p.194 "Web Holder Roller and Web Rollers").



- 6. Turn the rear gear [E] in the arrow direction to remove the slack in the web sheet.
- 7. Reinstall the front gear bracket [F] (p.194 "Web Holder Roller and Web Rollers").
- 8. Turn the coupling [G] in the arrow direction to remove the slack in the web sheet.
- 9. Reinstall the web unit.
- 10. If you install a new cleaning web, reset SP 7806-008 (press "Execute" on the LCD).

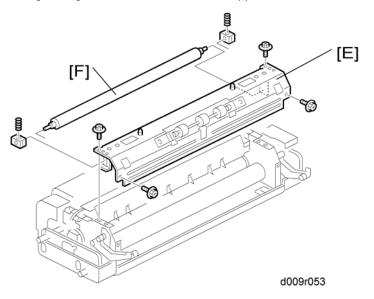
Pressure Roller Cleaning Roller

1. Fusing unit (p.192)



- 2. Fusing exit guide [A] (lock x 2)
- 3. Fusing front upper cover [B] (Fx 3)

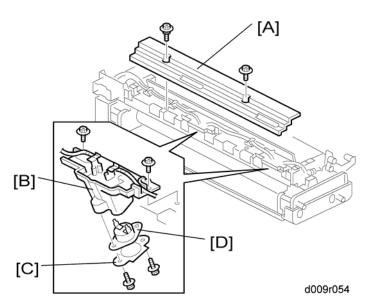
- 4. Fusing rear upper cover [C] (x 3)
- 5. Fusing outer guide [D] (front: Fx 1, rear: stepped screw x 1)



- 6. Cleaning roller unit [E] (*x 4)
- 7. Pressure roller cleaning roller [F] (spring x 2, holder x 2)

Thermostats

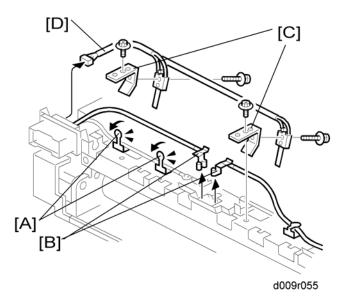
- 1. Fusing unit (p.192)
- 2. Web roller unit (p.192)



- 3. Fusing top cover [A] (front: $\mathscr{F} \times 1$, rear: stepped screw x 1)
- 4. Thermostat holder [B] (x 2)
- 5. Thermostat cover [C] (x 2)
- 6. Thermostat [D] (terminal x 2)

Thermistor

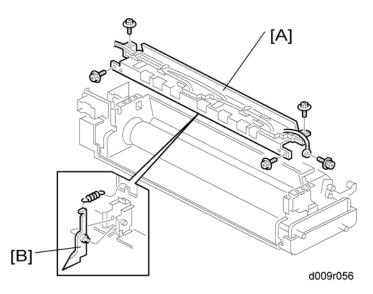
- 1. Fusing unit (p.192)
- 2. Web roller unit (p.192)
- 3. Fusing top cover (p.198 "Thermostats")



- 4. Pull the two tabs [A].
- 5. Disconnect the two terminals [B].
- 6. Sensor stays [C] (x 1 each)
- 7. Thermistors [D] (x 2, 1 x 1)

Hot Roller Strippers

- 1. Fusing unit (p.192)
- 2. Web roller unit (p.192)
- 3. Fusing top cover (p.198 "Thermostats")



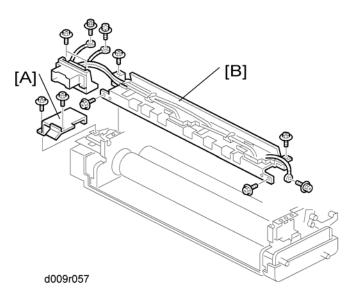
4. Fusing top frame [A] (x 5)



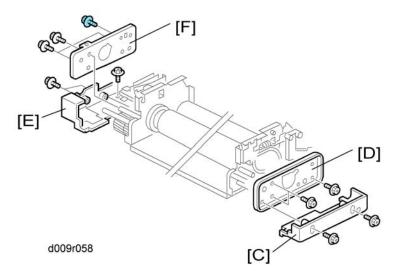
- The cords on this frame are still connected to the fusing unit at this time. Be careful not to damage the cords when removing the hot roller stripper [B].
- 5. Hot roller stripper [B] (spring x 1)

Fusing Lamps

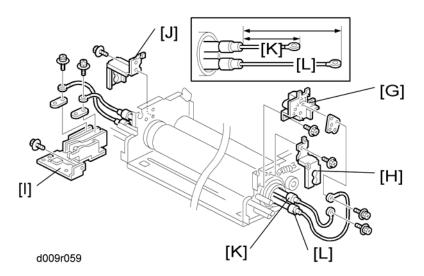
- 1. Fusing unit (p.192)
- 2. Web roller unit (p.192)
- 3. Fusing top cover (p.198 "Thermostats")



- 4. Connector cover [A] (x 2)
- 5. Fusing top frame with connector [B] ($\mathscr{F} \times 9$)



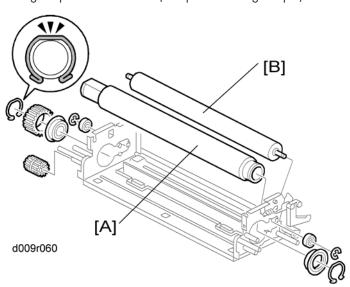
- 6. Fusing front lower cover [C] (x 2)
- 7. Fusing front frame [D] (Fx 3)
- 8. Fusing rear lower cover [E] ($\mathscr{F} \times 2$)
- 9. Fusing rear frame [F] (F x 5)



- 10. Terminal bracket [G] (*F x 4)
- 11. Front holder bracket [H] (x 1)
- 12. Terminal base [I] (* x 3)
- 13. Rear holder bracket [J] (* x 1)
- 14. Fusing lamp-Center (550W) [K]
- 15. Fusing lamp-End (750W) [L]

Hot Roller and Pressure Roller

1. Fusing lamps-Center and End (p.201 "Fusing Lamps")



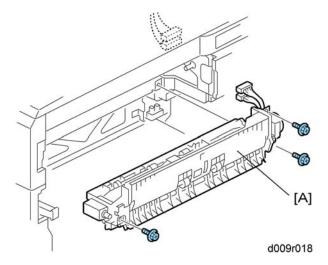
- 2. Hot roller [A] (snap ring \times 2, gear \times 2, bushing \times 2)
- 3. Pressure roller [B] (© x 2, bushing x 2)

4

Paper Exit

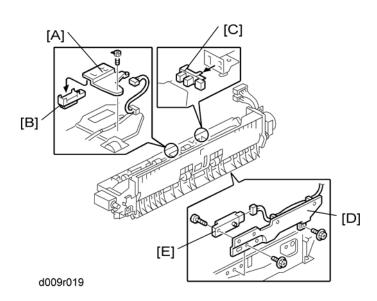
Paper Exit Unit

- 1. Fusing unit (p.192)
- 2. Fusing exhaust fan duct (p.241 "Fusing Exhaust Fan")



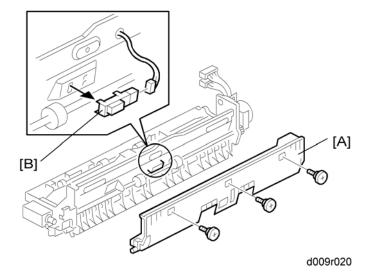
3. Paper exit unit [A] (> x 3, 💵 x 2)

Fusing Exit, Paper Overflow, and Paper Exit Sensors



- 1. Paper exit unit (p.205)
- 2. Sensor bracket [A] (x 1)
- 3. Paper exit sensor [B] (🚅 x 1, hooks)
- 4. Paper overflow sensor [C] (🕮 x 1, hooks)
- 5. Sensor bracket [D] (x 2)
- 6. Fusing exit sensor [E] ($F \times 1$, I = 1

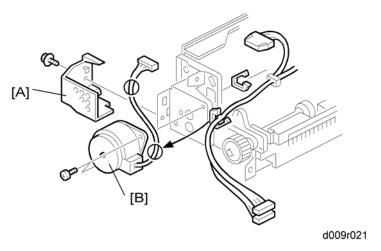
Junction Jam Sensor



- 1. Paper exit unit (p.205)
- 2. Paper guide [A] (** x 3)
- 3. Junction jam sensor [B] (🕮 x 1)

Paper Exit Motor

1. Paper exit unit (p.205)

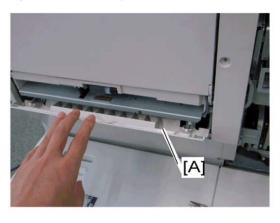


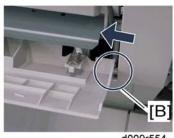
- 2. Motor cover [A] (🖟 x 1)

Duplex

Duplex Unit

1. Right rear cover (p.133)





d009r554

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





d009r555

5. Release the front link [C] (\heartsuit x 1).



d009r557

6. Keep the right door fully open.

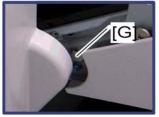


7. Push up the duplex unit a little bit, while pressing the bracket [D] to lock the spring [E].



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





d009r558

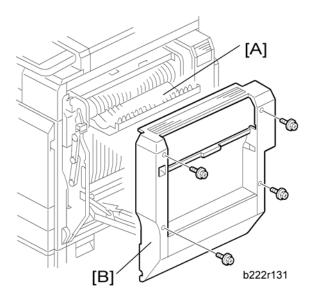
- 8. Wire [F] (🖾 x 1)
- 9. Push the projection [G].



d129r813

10. Duplex unit (🟴 x 3, 🖨 x 1, ground cable x 1)

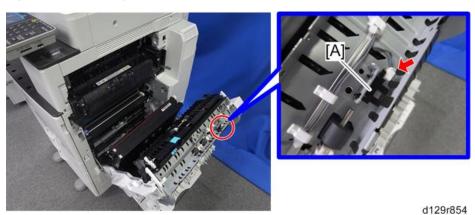
Right Door Cover



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

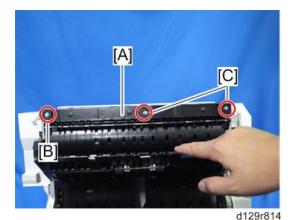
Duplex Door Sensor

1. Right door cover (p.211)

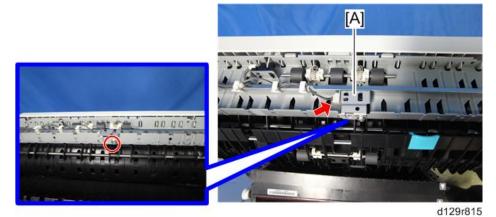


2. Duplex door sensor [A] (💷 x 1, hook)

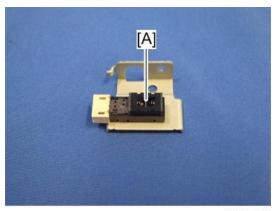
- 1. Right door cover (p.211)
- 2. Open the right door.



3. Duplex entrance guide [A] ([B]: $P \times 1$, [C]: Stepped screw $\times 2$)



4. Duplex entrance sensor bracket [A] (x 1, x 1)

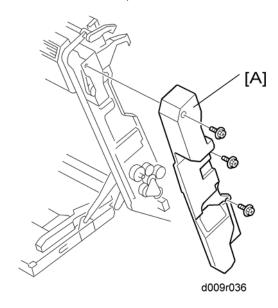


d129r816

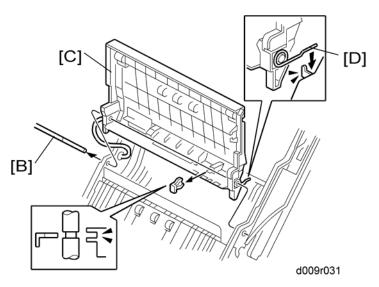
5. Duplex entrance sensor [A] (hooks)

Duplex Exit Sensor

1. Transfer belt unit (p.181)



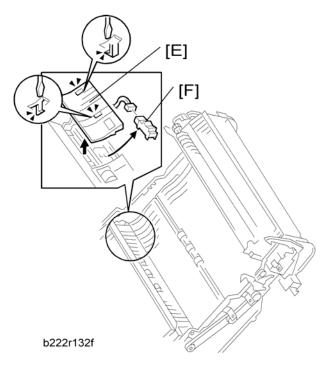
2. Right door rear cover [A] (*\bar{k} x 3)



- 4. Transfer belt unit holder [C] (🕶 x 1, 🖨 x 1)



• When re-installing the transfer belt unit holder, make sure that the spring [D] correctly hooks onto the frame.

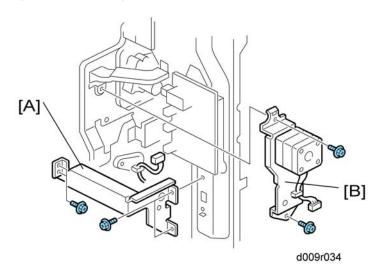


5. Guide plate [E] (two hooks)

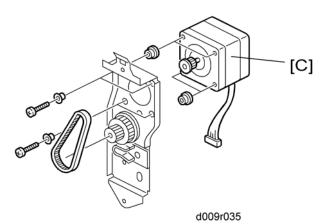
6. Duplex exit sensor [F] (🗐 x 1, hooks)

Duplex/By-pass Motor

- 1. Rear cover (p.132)
- 2. Right rear cover (p.133)



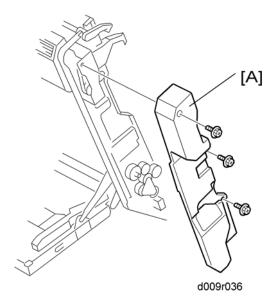
- 3. Frame [A] (x 4)
- 4. Duplex/By-pass motor bracket [B] (F x 2, 💵 x 1)



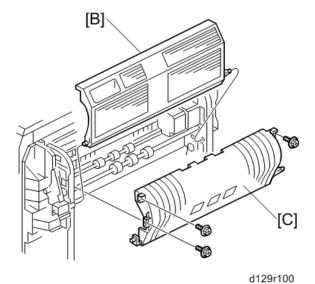
5. Duplex/By-pass motor [C] ($\mathscr{F} \times 4$, bushing x 8, timing belt x 1)

Duplex Inverter Motor

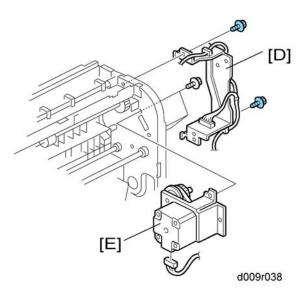
- 1. Right door cover (p.211)
- 2. Open the right door.



3. Right door rear cover [A] (*\bar{p} x 3)



- 4. Duplex door [B]
- 5. Duplex guide plate [C] (x 3)



- 6. Bracket [D] (Fx 2)
- 7. Duplex inverter motor [E] (x 3, 1 x 1)

By-pass Paper Size Sensor/By-pass Paper Length Sensor



d129r871

1. Open the lower right cover [A].



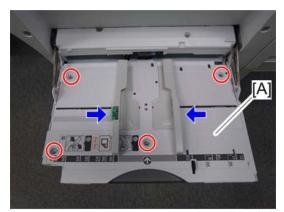
d129r808

2. Disconnect the connector and clamp.



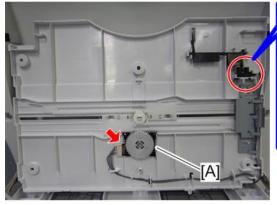
d129r874

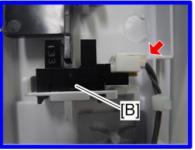
3. Open the by-pass tray [A].



d129r875

- 4. Move the side fences to the center.
- 5. By-pass tray cover [A] (** x 4)

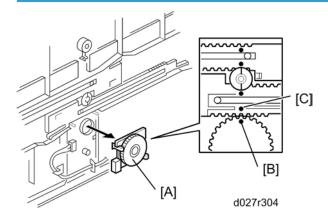




d129r852

- 6. By-pass paper size sensor [A] (🕮 x 1)
- 7. By-pass paper length sensor [B] (🕮 x 1)

When reinstalling the by-pass paper size sensor



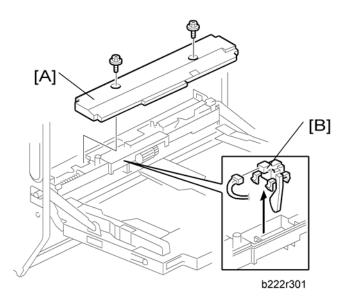
- 1. Adjust the projection [A] of the left side fence bar (it must be centered).
- 2. Install the by-pass paper size detection switch so that the hole [B] in this switch faces the projection [C] of the left side fence bar.
- 3. Reassemble the copier.
- 4. Plug in and turn on the main power switch.
- 5. Check this switch operation with SP5803-024 (By-pass: Paper Size Sensor< 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 Paper End Sensor

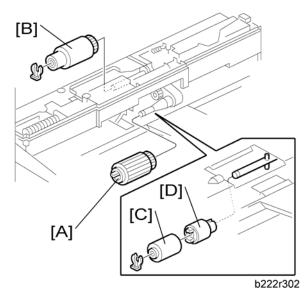
1. Right door cover (p.211)



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

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

- 1. Right door cover (p.211)
- 2. By-pass feed unit cover (p.220 "By-pass Paper End Sensor")

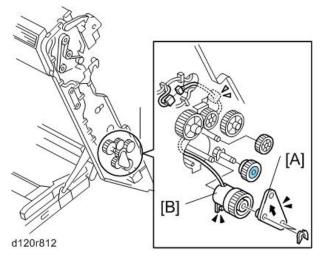


3. By-pass pick-up roller [A] (hook)

- 4. By-pass feed roller [B] (🖾 x 1)
- 5. By-pass separation roller [C] (🖾 x 1)
- 6. Torque limiter [D]

By-pass Feed Clutch

- 1. Open the right door.
- 2. Right door rear cover (p.213 "Duplex Exit Sensor")
- 3. Transfer belt unit (p.181)
- 4. Transfer belt unit holder (p.213 "Duplex Exit Sensor")



- 5. By-pass feed clutch holder [A] (🖾 x 2)
- 6. By-pass feed clutch [B] (♥ x 1, ♠ x 1)

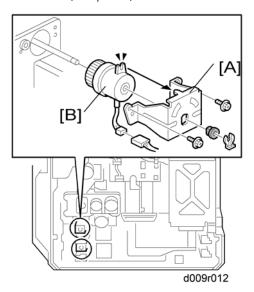
4

Drive Area

Paper Feed Clutch

Tray 1 and Tray 2

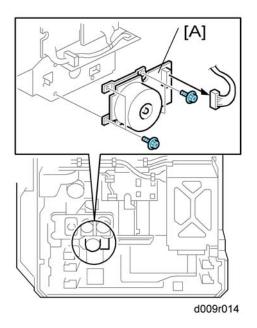
1. Rear cover (p.132)



- 2. Clutch bracket [A] (\mathscr{F} x 2, $\langle \overline{\mathbb{O}} \times \mathbb{1}$, bushing x 1)
- 3. Paper feed clutch [B] (🕮 x 1)

Development Paddle Motor

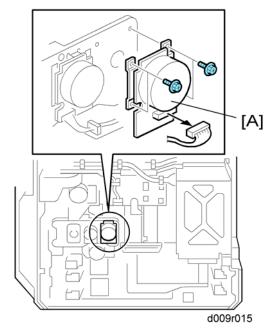
1. Rear cover (p.132)



2. Development paddle motor [A] (*x 4, * 1)

Transfer/Development Motor

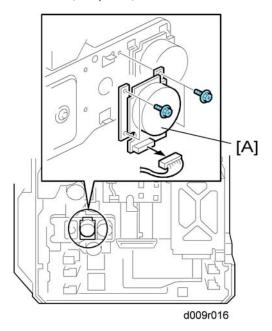
1. Rear cover (p.132)



2. Transfer/development motor [A] (** x 4, ** x 1)

Drum Motor

1. Rear cover (p.132)

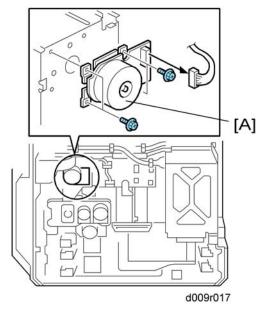


2. Drum motor [A] (x 4, 1 x 1)

Fusing Motor

1. Rear cover (p.132)

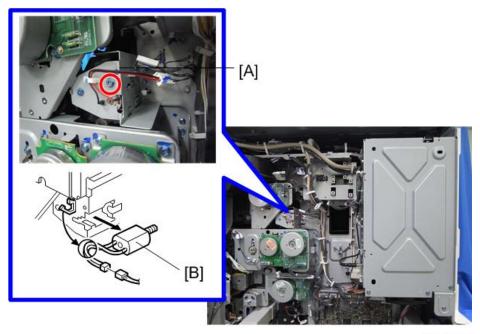




2. Fusing motor [A] (** x 4, *** x 1)

Web Motor

1. Rear cover (p.132)

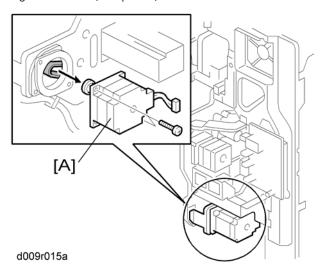


d129r102

- 2. Bracket [A] (x 1)
- 3. Web motor [B] (♥ x 1, ♠ x 1)

Paper Feed Motor

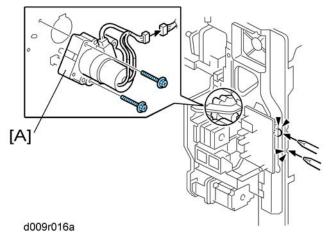
- 1. Rear cover (p.132)
- 2. Right rear cover (p.133)



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

Transfer Belt Contact Motor

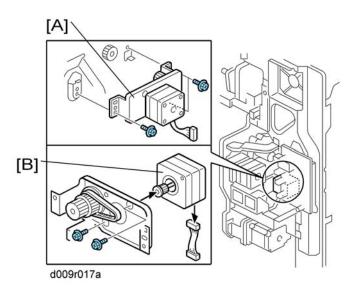
- 1. Rear cover (p.132)
- 2. Right rear cover (p.133)



3. Transfer belt contact motor [A] (*x 2, * x 1)

Registration Motor

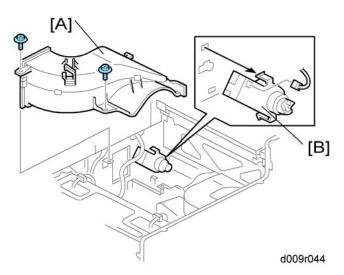
- 1. Rear cover (p.132)
- 2. Right rear cover (p.133)



- 3. Registration motor bracket [A] (*\begin{align*} x 3, \quad \quad x 1)
- 4. Registration motor [B] (x 2, 1

Toner Supply Motor

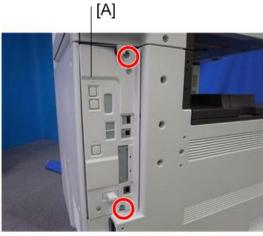
- 1. Left cover (p.132)
- 2. Upper inner cover (p.131 "Front Door, Upper and Lower Inner Cover")
- 3. Inner Tray (p.136)



- 4. Exhaust duct [A] (🗗 x 2)
- 5. Toner supply motor [B] (hooks, 🔎 x 1)

Electrical Components

Controller Unit



d129r110

1. Controller unit [A] (x 2)

HDD Unit

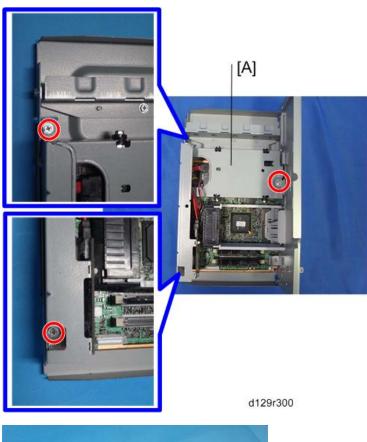
Before Replacing the HDD Unit

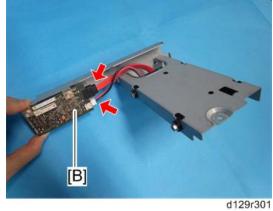
Copy the address book data to an SD card from the HDD with SP5846-051 if possible.

Replacement Procedure

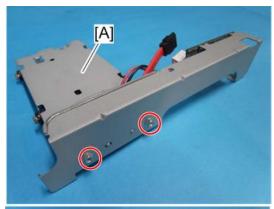
1. Controller unit (p.230)







2. HDD unit [A] with connecting board [B] ($\mathscr{F}\times 3$, $^{\blacksquare\!\!\square}\times 2)$





d129r880

3. HDD unit [A] (* x 2, * x 2)

After installing the new HDD unit

- 1. Do SP5832-001 to format the hard disk.
- 2. Do SP5853-001 to copy the preset stamp data from the firmware to the hard disk.
- 3. Do **SP5846-052** to copy back the address book to the hard disk from the SD card to which you have already copied the address book data if possible.
- 4. Turn the main power switch off/on.

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, fixed stamps, document server address book
- The address book and document server documents (if needed) must be input again.

Controller Board



- The battery on the control board can explode if replaced incorrectly.
- Dispose of the old battery in accordance with the instructions.

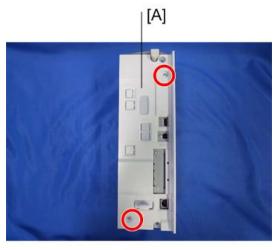
Before Replacing the Controller Board in the Model without HDD

When you replace the controller board in a model without a HDD, address book data can be copied from an old controller board to a new controller board using an SD card.

Copy the address book data to an SD card from the flash ROM on the controller board with SP5846-051 if possible.

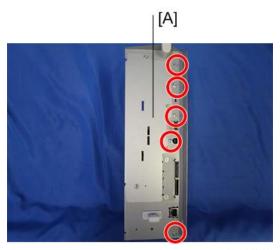
Replacement Procedure

- 1. Controller unit (p.230)
- 2. HDD unit (if it has been installed.) (p.230)



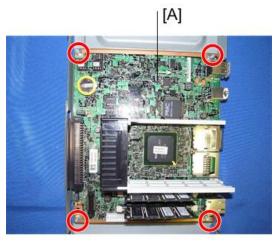
d129r112

3. Controller cover [A] (x 2)



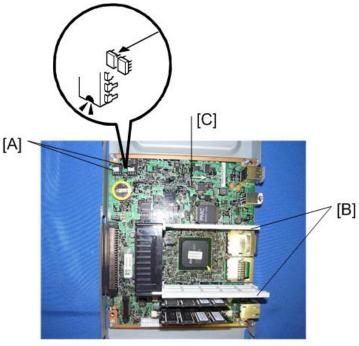
d129r113

4. Controller right bracket [A] (*\begin{align*} x 5 \)



d129r115

5. Controller board assembly [A] (x 4, connector caps)



d129r116

- 6. NVRAMs [A]
- 7. Interface rails [B] (hooks each)
- 8. DIMM-RAM (If it is installed.)
- 9. Controller board [C]

When Installing the New Controller Board

- 1. Remove the NVRAMs from the old controller board.
- 2. Install them on the new controller board after you replace the controller board.
- 3. Replace the NVRAMs 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 NVRAMs.

ACAUTION

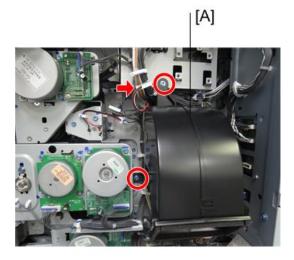
- Keep NVRAMs away from any objects that can cause static electricity. Static electricity can damage NVRAM data.
- Make sure the NVRAMs are correctly installed on the controller board.
- Make sure that the DIP-switch settings on the old controller board are the same for the new controller board. Do not change the DIP switches on the controller board in the field.

After Installing the Controller Board

- For a model without a HDD, do SP5846-052 to copy back the address book to the flash ROM on the controller board from the SD card to which you have already copied the address book data if possible.
- 2. If the customer is using the data encryption feature, the encryption key must be restored.
- 3. Turn the main power switch off/on.

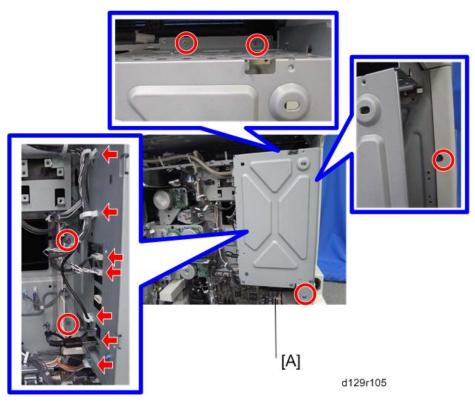
Mother Board

- 1. Rear cover (p.132)
- 2. Controller unit (p.230)

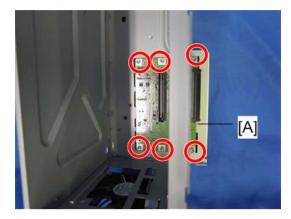


d129r104

3. Exhaust fan duct [A] (* x 2, * x 1)



4. Controller box [A] (x 6, 🚅 x 4, 🛱 x 3)

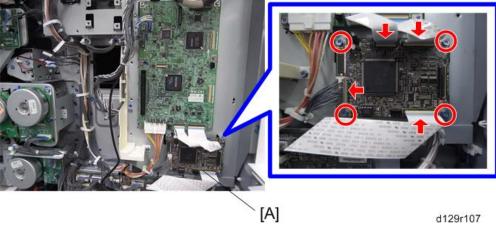


d129r106

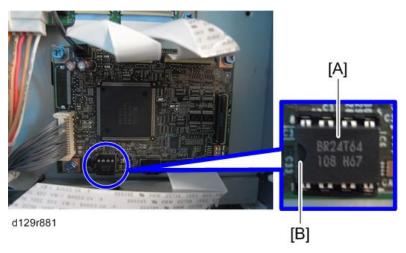
5. Mother board [A] (* x 6)

BCU

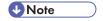
1. Controller box (p.236 "Mother Board")



2. BCU [A] (x 4, 1 x 4)



- 3. Remove the NVRAM [A] from the old board and install it on the new board.
- 4. Set the DIP switches on the new BCU board to the same settings as the old board.



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

When installing the new BCU

- 1. Remove the NVRAM from the old BCU.
- 2. Install the NVRAM on the new BCU after you replace the BCU.
- 3. Reassemble the machine.
- 4. Turn on the main power switch.

- 5. "SC995-01" occurs.
- 6. Enter the serial number with SP5-811-004.
- 7. Turn the main power switch off and on.



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

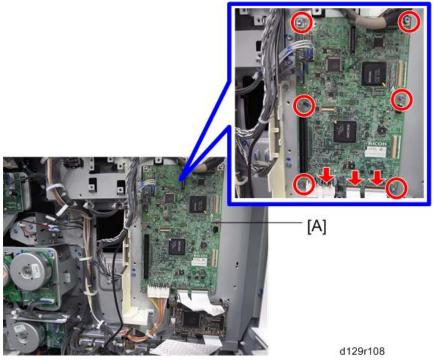
ACAUTION

 Keep NVRAM away from any objects that can cause static electricity. Static electricity can damage NVRAM data.

RTB 45: How to replace the NVRAM on the BCU

IPU

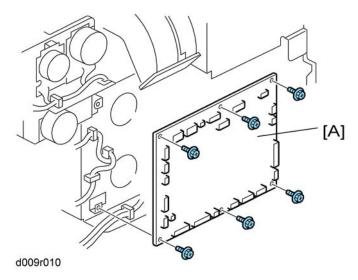
1. Controller box (p.236 "Mother Board")



2. IPU[[A] (ℯx 6, 🚅 x all)

IOB

1. Rear cover (p.132)



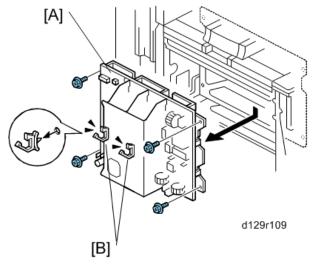
2. IOB [A] (x 6, x 6, x all)

When installing a new IOB

Set the bit switches on the new IOB to the same settings as the old IOB.

PSU

1. Left cover (p.132)

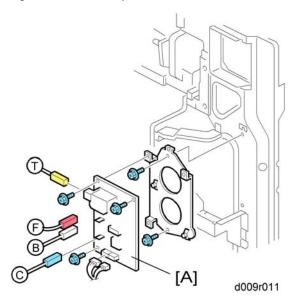


- 2. PSU [A] (x 4, x all)
- 3. Two clamps [B] (These clamps will be used for the new PSU.)

RTB 56 Some components remain charged for some time after the power is disconnected.

High Voltage Power Supply

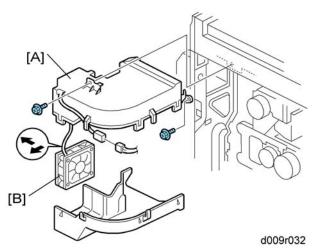
- 1. Rear cover (p.132)
- 2. Right rear cover (p.133)



3. High voltage power supply board [A] ($\slash\hspace{-0.6em}P \times 5, \slash\hspace{-0.6em}P \times all)$

Fusing Exhaust Fan

1. Rear cover (p.132)



2. Fusing exhaust duct [A] (\mathscr{F} x 2, $\overset{\square}{\longrightarrow}$ x 1)

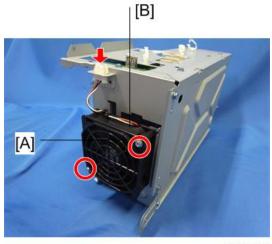
- 3. Separate the duct (hooks).
- 4. Fusing exhaust fan [B]

When installing the fusing exhaust fan

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

Controller Fan

1. Controller box (p.236 "Mother Board")



d129r117

- 2. Fan cover [A] (x 2)
- 3. Controller fan [B] (🕮 x 1)

When installing the controller fan

Make sure that the controller fan is installed with its decal facing upward.

4

Copy Adjustments: Printing/Scanning

Overview

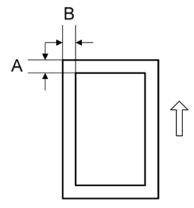
Perform these adjustments after replacing any of the following:

- Scanner Wire
- Lens Block/SBU Assembly
- Scanner Drive Motor
- Polygon Mirror Motor
- Paper Side Fence
- Memory All Clear

Printing

- 1. Make sure paper is installed correctly in each paper tray before you start these adjustments.
- 2. Use the Trimming Area Pattern (SP2-109-1, No. 14) to print the test pattern for the following procedures.

Registration - Leading Edge/Side-to-Side



b195r827

1. Check the leading edge registration [A] for each paper type and paper feed station, and adjust it with following SP modes.

| | SP No. | Specification |
|------------------|-----------|---------------|
| Tray: Plain | SP1-001-1 | |
| Tray: Thick 1 | SP1-001-2 | |
| Tray: Thick 2 | SP1-001-3 | |
| By-pass: Plain | SP1-001-4 | 0.100 |
| By-pass: Thick 1 | SP1-001-5 | 0 ±9.0 mm |
| By-pass: Thick 2 | SP1-001-6 | |
| Duplex: Plain | SP1-001-7 | |
| Duplex: Thick 1 | SP1-001-8 | |

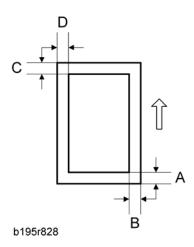
2. Check side-to-side registration [B] for each paper feed station, and adjust with the following SP modes.

| | SP No. | Specification |
|---------|-----------|---------------|
| By-pass | SP1-002-1 | |
| Tray 1 | SP1-002-2 | |
| Tray 2 | SP1-002-3 | |
| Tray 3 | SP1-002-4 | 0 ±4.0 mm |
| Tray 4 | SP1-002-5 | |
| LCT | SP1-002-6 | |
| Duplex | SP1-002-7 | |

Blank Margin



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



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

| | SP No. | Specification | |
|---|------------|------------------------|--|
| Leading Edge | SP2-103-1 | 3.0 mm [0.0 to 9.0 mm] | |
| Trailing Edge | SP2-103-2 | | |
| Left | SP2-103-3 | 20 | |
| Right | SP2-103-4 | 2.0 mm [0.0 to 9.0 mm] | |
| Duplex: Trailing Edge: L Size: Plain | SP2-103-5 | 1.0 mm [0.0 to 4.0 mm] | |
| Duplex: Trailing Edge: M Size: Plain | SP2-103-6 | 0.8 mm [0.0 to 4.0 mm] | |
| Duplex: Trailing Edge: S Size: Plain | SP2-103-7 | 0.6 mm [0.0 to 4.0 mm] | |
| Duplex: Left: Plain | SP2-103-8 | 0.0 [0.0 1.5] | |
| Duplex: Right: Plain | SP2-103-9 | 0.3 mm [0.0 to 1.5 mm] | |
| Duplex: Trailing Edge: L Size: Thick | SP2-103-10 | 0.8 mm [0.0 to 4.0 mm] | |
| Duplex: Trailing Edge: M Size: Thick | SP2-103-11 | 0.6 mm [0.0 to 4.0 mm] | |

| | SP No. | Specification |
|---|------------|------------------------|
| Duplex: Trailing Edge: S Size: Thick | SP2-103-12 | 0.4 mm [0.0 to 4.0 mm] |
| Duplex: Left: Thick | SP2-103-13 | 0.1 mm [0.0 to 1.5 mm] |
| Duplex: Right: Thick | SP2-103-14 | |

• L Size: Paper length is 297.1 mm or more.

• M Size: Paper length is 216.1 to 297 mm

• S Size: Paper length is 216 mm or less.

Main Scan Magnification

1. Use SP2-109-001 no 5 (Grid Pattern) to print a single dot pattern.

 Check magnification, and then SP2-102 (Magnification Adjustment Main Scan) to adjust magnification if required. Specification: ±2%.

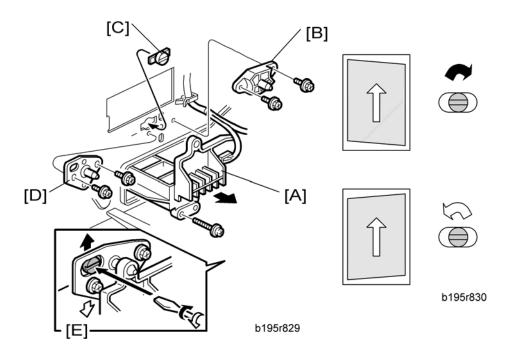
Parallelogram Image Adjustment

Do the following procedure if a parallelogram prints while adjusting the printing registration or printing margin using a trimming area pattern.

The following procedure should be done after adjusting the side-to-side registration for each paper tray station.

Use SP2-109-1 No. 14 (Trimming Area) to determine whether a parallelogram image appears. If the parallelogram pattern appears, perform the following procedure.





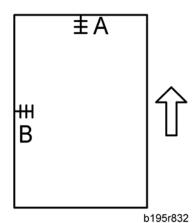
- 1. Laser unit [A]
- 2. Bracket [B] (x2)
- 3. Install adjustment cam [C] (P/N: A2309003).
- 4. Secure positioning pin [D] (P/N A2309004) with the two screws removed with the bracket [B]. Do not tighten the screws at this time.
- 5. To adjust the position of the laser unit [E]
 - 1) Adjust the laser unit position by turning the adjustment cam. (See the illustration above.)
 - 2) Tighten the adjustment bracket.
 - 3) Print the trimming area pattern to check the image. If the results are not satisfactory, repeat steps 5-1) to 5-3).

Scanning

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



• Use the S5S test chart to perform the following adjustments.



- 1. Place the test chart on the exposure glass and make a copy from one of the feed stations.
- 2. Check the leading edge [A] and side-to-side [B] registration, and adjust them with the following SP modes if necessary.

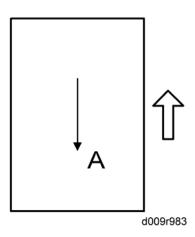
| | SP No. | Specification |
|--------------|-----------|---------------|
| Leading Edge | SP4-010-1 | 0 ±2.0 mm |
| Side-to-side | SP4-011-1 | 0 ±2.5 mm |

Magnification

Use the S5S test chart to perform the following adjustment.

Sub Scan Magnification

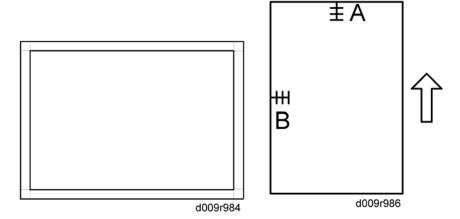




- 1. Place the test chart on the exposure glass and make a copy from one of the feed stations.
- 2. Check the magnification ratio. Use SP4-008 (Scanner Sub Scan Magnification) to adjust if necessary. Specification: ±0.9%.

ADF

Registration



- 1. Make a temporary test chart as shown above using A3/DLT paper.
- 2. Place the temporary test chart on the ADF and make a copy from one of the feed stations.
- 3. Check the registration, and adjust using the following SP modes if necessary.

| | SP No. | Specification |
|------------------------|-----------|-----------------|
| Side-to-side: 1st side | SP6-006-1 | 0.0 mm ±3 mm |
| Side-to-side: 2nd side | SP6-006-2 | |
| Leading Edge | SP6-006-3 | 0.0 mm ±5 mm |
| Leading Edge: 1st side | SP6-006-5 | 0.0 mm ±3 mm |
| Leading Edge: 2nd side | SP6-006-6 | 0.0 mm ±2.5 mm |
| Trailing Erase edge: | SP6-006-7 | 0.0 mm ±10.0 mm |

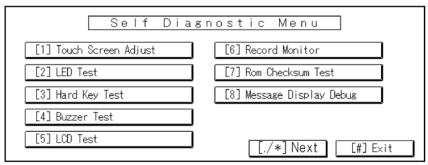
Touch Screen Calibration

After clearing the memory, or if the touch panel detection function is not working correctly, follow this procedure to calibrate the touch screen.

RTB 32: Modified this sentence

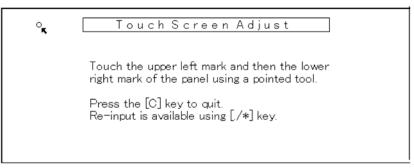


• Do not attempt to use items [2] to [7] on the Self-Diagnostic Menu. These items are for design use only.



b195r834

- 1. Press , "1", "9", "9", "3", and then press 5 times to open the Self-Diagnostics menu.
- 2. On the touch screen press "Touch Screen Adjust" (or press "1").



b195r9835

- 3. Use a pointed (not sharp!) tool to press the upper left mark ${}^{\circ}\mathbf{x}$.
- 4. Press the lower right mark after it appears.
- 5. Touch a few spots on the touch panel to confirm that the marker (+) appears exactly where the screen is touched.
 - If the + mark does not appear where the screen is touched, press Cancel and repeat from Step 2.
- 6. When you are finished, press [#] OK on the screen (or press ^(#)).
- 7. Touch [#] Exit on the screen to close the Self-Diagnostic menu and save the calibration settings.

5. Service Tables

Service Program Mode

CAUTION

Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the
hard disk or memory, press the operation switch to switch the power off, wait for the power LED to
go off, and then switch the main power switch off.



The main power LED lights or flashes while the platen cover or ARDF is open, while the main
machine is communicating with a facsimile or the network server, or while the machine is accessing
the hard disk or memory for reading or writing data.

Service Program Mode Operation

The service program (SP) mode is used to check electrical data, change modes, and adjust values.

ACAUTION

Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the
hard disk or memory, press the operation switch to switch the power off, wait for the power LED to
go off, and then switch the main power switch off.

Service Mode Lock/Unlock

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

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

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

- This unlocks the machine and lets you get access to all the SP codes.
- The service technician can do servicing on 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. If you must use the printer bit switches, go into the SP mode and set SP5169 to "1".
- 3. After machine servicing is completed:
 - Change SP5169 from "1" to "0".
 - Turn the machine off and on.

- Tell the administrator that you completed servicing the machine.
- The administrator will then set the "Service Mode Lock" to ON.

Service Program Mode Tables

Please note these general changes in this section:

- Group 8(Data Log 2) is a new group of counters.
- Along with the addition of Group 8, many of the Group 7 counters have been removed.

Service Table Key

| Notation | What it means |
|---------------------------------|---|
| [range / default / step] | Example: [-9 to +9 / 0 / 0.1 mm step]. The setting can be adjusted in the range ±9, value reset to +3.0 after an NVRAM reset, and the value can be changed in 0.1 mm steps with each key press. |
| * | Value stored in NVRAM. After a RAM reset, this default value (factory setting) is restored. |
| DFU | Denotes "Design or Factory Use". Do not change this value. |
| Japan only | The feature or item is for Japan only. Do not change this value. |
| C2b | D129 |
| C2c | D130 |
| SSP | This denotes a "Special Service Program" mode. |

Service Program Mode Tables

SP Tables

There are the most commonly used SP codes in the "Main SP Tables - 1 to - 9" of "Main Chapters".

See "Appendices" for the following information:

- System SP Tables
- Printer SP Tables
- Scanner SP Tables

Main SP Tables-1

SP1-xxx: Feed

| | Leading Edge Registration Adjusts the leading edge registration by changing the registration clutch operation timing. | |
|-------|--|-----------------------------------|
| 1001* | | |
| 001 | Tray: Plain | |
| 002 | Tray: Thick 1 | |
| 003 | Tray: Thick 2 | |
| 004 | By-pass: Plain | [-9 to 9/ 0 / 0.1 mm step] |
| 005 | By-pass: Thick 1 | [-9 10 9/ 0 / 0.1 mm siep] |
| 006 | By-pass: Thick 2 | |
| 007 | Duplex: Plain | |
| 008 | Duplex: Thick 1 | |

| | Side-to-Side Registration Adjusts the side to side registration by changing the laser main scan start position for each mode. | |
|-------|--|-------------------------|
| 1002* | | |
| 001 | By-pass | |
| 002 | Tray 1 | |
| 003 | Tray 2 | |
| 004 | Tray 3 | [-4 to 4/0/0.1 mm step] |
| 005 | Tray 4 | |
| 006 | LCT | |
| 007 | Duplex | |

| | Registration Buckle Adjustment Adjusts the paper feed motor timing. Paper feed motor timing determines the amount of paper buckle at Registration. (A "+" setting causes more buckling.) | |
|-------|---|-----------------------------------|
| 1003* | | |
| 001 | Tray 1: Plain | |
| 002 | Tray 1: Thick 1 | |
| 003 | Tray 1: Thick 2 | [0+5/4/] |
| 004 | Tray 2, 3, 4: Plain | [-9 to 5 / -4 / 1 mm step] |
| 005 | Tray 2, 3, 4: Thick1 | |
| 006 | Tray 2, 3, 4: Thick2 | |
| 007 | By-pass: Plain | |
| 008 | By-pass: Thick 1 | [-9 to 5 / -2 / 1 mm step] |
| 009 | By-pass: Thick 2 | |
| 010 | Duplex: Plain | [-9 to 5 / -4 / 1 mm step] |
| 011 | Duplex: Thick 1 | [-9 to 5 / -3 / 1 mm step] |
| 012 | LCT: Plain | |
| 013 | LCT: Thick 1 | [-9 to 5 / -4 / 1 mm step] |
| 014 | LCT: Thick2 | |

| 1007* | | By-pass Paper Size Detection | |
|-------|------|---|--|
| | 1007 | Controls paper size detection for the by-pass feed table. | |
| | 001 | Detection Timing | [-15 to 15 / 0 / 5 mm step] |
| | 002 | LG Detection | [0 to 1 / 0 / 1] 0: LTSEF, 1: LG |

| | Fusing Temperature Adjustment | | | |
|--|--|-------------------------------------|--------------------------------|--|
| 1105* | Allows adjustment of the hot roller temperature at the center and ends of the roller for the quality or thickness of the paper. The hot roller in this machine has two fusing lamps: one heats the center of the roller, the other heats both ends. Each fusing lamp can be adjusted separately. | | | |
| | The "re-load temperature" is the "prexceeds this setting, the machine calload Temp. = Fusing. Temp – SP Va | n operc | ate. Do no | • |
| 001 | Roller Center | | | 70 / 140 / 1 deg] 70 / 150 / 1 deg] |
| 001 | Adjusts the fusing temperature at the | | | |
| | / rapsos me roomg romper arens ar me | | | |
| 002 | Roller Ends | | | 70 / 145 / 1 deg] 70 / 155 / 1 deg] |
| | Adjusts the fusing temperature at the | e ends o | of the hot | roller. |
| | Re-load Temp. Minus: Roller Center | r | | [0 to 60 / 0 / 1 deg] |
| | Sets the reload temperature for the target temperature. | center o | of the hot | roller. This setting depends on the |
| 003 | Reload temp. = Target Temp - This SP Setting | | | |
| | ●Note | | | |
| | Do not set a temperature that i Trays) | s higher | than the | setting for SP1105 1 (Roller Center: |
| | Re-load Temp. Minus: Roller Ends | | | [0 to 60 / 0 / 1 deg] |
| | Sets the reload temperature for the target temperature. | ends of | the hot ro | oller. This setting depends on the |
| 004 | Reload temp. = Target Temp – This | SP Settir | ng | |
| | ↓ Note | | | |
| Do not set a temperature that is higher than the setting for SP1105 2 (Roller Trays) | | setting for SP1 105 2 (Roller Ends: | | |
| 005 to 022 | The following SPs adjust the fusing t each paper type. | empera | ture at the | e center or ends of the hot roller for |
| 005 | | (| C2b: [10 | 0 to 170 / 145 / 1 deg] |
| 005 | 5 Roller Center: M-Thick C2c: [100 to 170 / 155 / 1 deg] | | 0 to 170 / 155 / 1 deg] | |

| 006 | Roller Ends: M-Thick | C2b: [100 to 170 / 150 / 1 deg] C2c: [100 to 170 / 160 / 1 deg] |
|-----|---------------------------|---|
| 007 | Roller Center: Thick 1 | [100 170 /100 /1 1 |
| 008 | Roller Ends: Thick 1 | [100 to 170 / 130 / 1 deg] |
| 009 | Roller Center: Thick 2 | [100+ 170 / 150 / 1 d .] |
| 010 | Wait Temp: Center Minus | [100 to 170 / 150 / 1 deg] |
| 011 | Wait Temp: Ends Minus | C2b: [100 to 170 / 130 / 1 deg] C2c: [100 to 170 / 140 / 1 deg] |
| 012 | Roller Ends: Thin | C2b: [100 to 170 / 135 / 1 deg] C2c: [100 to 170 / 145 / 1 deg] |
| 013 | Roller Center: OHP: Plain | [100 to 170 / 150 / 1 deg] |
| 014 | Roller Ends: OHP: Plain | [100+ 170 /155/1 J .] |
| 015 | Roller Center: OHP: Thick | [100 to 170 / 155 / 1 deg] |
| 016 | Roller Ends: OHP: Thick | [100 to 170 / 160 / 1 deg] |
| 017 | Roller Center: Special 1 | C2b: [100 to 170 / 140 / 1 deg] C2c: [100 to 170 / 150 / 1 deg] |
| 018 | Roller Ends: Special 1 | C2b: [100 to 170 / 145 / 1 deg] C2c: [100 to 170 / 155 / 1 deg] |
| 019 | Roller Center: Special 2 | C2b: [100 to 170 / 140 / 1 deg] C2c: [100 to 170 / 150 / 1 deg] |
| 020 | Roller Ends: Special 2 | C2b: [100 to 170 / 145 / 1 deg] C2c: [100 to 170 / 155 / 1 deg] |
| 021 | Roller Center: Special 3 | C2b: [100 to 170 / 140 / 1 deg] C2c: [100 to 170 / 150 / 1 deg] |
| 022 | Roller Ends: Special 3 | C2b: [100 to 170 / 145 / 1 deg] C2c: [100 to 170 / 155 / 1 deg] |

| 023 | Feed Waiting: Plain | Turns the feed waiting mode on or off for each |
|-----|---|---|
| 024 | Feed Waiting: M-Thick | paper type. |
| 025 | Feed Waiting: Thick 1 | [0 to 1 / 0 / 1] |
| | - | 0=Off, 1=On The paper waits at the registration roller until |
| 026 | Feed Waiting: Thick 2 Feed Waiting: Thin | the fusing temperature reaches the prescribed temperature (adjustable with SP1105-028 to -37). If you enable this feature, also set SP 1105-38 to a convenient value for the customer. |
| 028 | Feed Wait: Center Minus: Plain | |
| | | |
| 029 | Feed Wait: Ends Minus: Plain | |
| 030 | Feed Wait: Center Minus: M-Thick | |
| 031 | Feed Wait: Ends Minus: M-Thick | |
| 032 | Feed Wait: Center Minus: Thick 1 | Adjusts the offset value for each re-load temperature to exit the feed waiting mode. |
| 033 | Feed Wait: Ends Minus: Thick 1 | [0 to 60 / 0 / 1 deg] |
| 034 | Feed Wait: Center Minus: Thick 2 | |
| 035 | Feed Wait: Ends Minus: Thick 2 | |
| 036 | Feed Wait: Center Minus: Thin | |
| 037 | Feed Wait: Ends Minus: Thin | |
| | | Sets the maximum feed waiting time. |
| | | [0 to 30 / 0 / 1 sec] |
| 038 | Feed Waiting: Maximum Time | The paper is fed when the time specified with this SP has passed even though the fusing temperature has not reached the prescribed temperature. |
| | | 0: Disabled. |

| 1106 | Fusing Temperature Display | |
|------|----------------------------|--|
|------|----------------------------|--|

| 001 | Roller Center | Displays the temperature of the fusing unit. |
|-----|----------------------------|--|
| 002 | Roller Ends | [-20 to 250 / 0 / 1 deg] |
| 003 | Machine Inside at Power On | Displays the temperature inside the machine. |
| 004 | Machine Inside | [-20 to 250 / 0 / 1 deg] |

| | MotorSpeedAdjust | | |
|-------|--|---|--|
| | Adjusts the speeds of each motor. Each step decreases or increases motor speed in 0.05% increments | | |
| | Regist: Registration motor, Feed: Feed motor, | | |
| 1801* | Duplex: Duplex/By-pass motor, Inverter: Duplex inverter motor, | | |
| | Exit: Paper exit motor, Bridge: Bridge unit drive motor, | | |
| | OpcMot: Drum motor, TransferMot: Transfer/Development Motor, | | |
| | FusingMot: Fusing motor, | | |
| | DevPuddleMot: Development Paddle | e motor | |
| 001 | Regist: 90: Thick 2 | | |
| 002 | Regist: 154: Thick 1 | [-2 to 2 / 0.4 / 0.05 %] | |
| 003 | Regist: 180: Plain | [-2 10 2 / 0.4 / 0.03 %] | |
| 004 | Regist: 230: Plain | | |
| 005 | Feed: 90: Thick 2 | [-2 to 2 / -0.4 / 0.05 %] | |
| 006 | Feed: 154: Thick 1 | [-2 10 2 / -0.4 / 0.03 %] | |
| 007 | Feed: 180: Plain | [-2 to 2 / -1 / 0.05 %] | |
| 008 | Feed: 230: Plain | [-2 10 2 / -1 / 0.03 %] | |
| 009 | Duplex_CW: 90: Thick 2 | [-4 to 4 / 0.4 / 0.1 %] | |
| 010 | Duplex_CW: 154: Thick 1 | [-410 4 / 0.4 / 0.1 %] | |
| 011 | Duplex_CW: 180: Plain | [-4 to 4 / -2.3 / 0.1 %] | |
| 012 | Duplex_CW: 230: Plain | [-4104/-2.3/0.1/0] | |
| 013 | Duplex_CCW: 90: Thick 2 | [-4 to 4 / 0.4 / 0.1 %] | |
| 014 | Duplex_CCW: 154: Thick 1 | [-410 4 / 0.4 / 0.1 / ₀] | |

| 015 | Duplex_CCW: 180: Plain | [4+4/02/01%] |
|-----|----------------------------|---------------------------------|
| 016 | Duplex_CCW: 230: Plain | [-4 to 4 / -0.2 / 0.1 %] |
| 017 | Inverter_CW: 90: Thick 2 | |
| 018 | Inverter_CW: 154: Thick 1 | |
| 019 | Inverter_CW: 180: Plain | |
| 020 | Inverter_CW: 230: Plain | |
| 021 | Inverter_CCW: 90: Thick 2 | |
| 022 | Inverter_CCW: 154: Thick 1 | |
| 023 | Inverter_CCW: 180: Plain | |
| 024 | Inverter_CCW: 230: Plain | [-4 to 4 / 0 / 0.1 %] |
| 025 | Exit_CW: 90: Thick 2 | [-4 10 4 / 0 / 0.1 /6] |
| 026 | Exit_CW: 154: Thick 1 | |
| 027 | Exit_CW: 180: Plain | |
| 028 | Exit_CW: 230: Plain | |
| 029 | Bridge: 90: Thick 2 | |
| 030 | Bridge: 154: Thick 1 | |
| 031 | Bridge: 180: Plain | |
| 032 | Bridge: 230: Plain | |

| 033 | OpcMot:90 | |
|-----|------------------|-------------------------------|
| 034 | OpcMot:154 | |
| 035 | OpcMot:180 | |
| 036 | OpcMot:230 | |
| 037 | TransferMot:90 | |
| 038 | TransferMot: 154 | [-4 to 4 / 0 / 0.01 %] |
| 039 | TransferMot: 180 | [-4 10 4 / U / 0.01 %] |
| 040 | TransferMot:230 | |
| 041 | FusingMot:90 | |
| 042 | FusingMot:154 | |
| 043 | FusingMot:180 | |
| 044 | FusingMot:230 | |
| 045 | DevPuddleMot | [-4 to 4 / 0 / 0.1 %] |

| 1902* | Cleaning Web Setting | | |
|-------|--|---|--|
| 001 | Web Consumption | [0 to 120 / 0 / 1 %] | |
| 001 | Displays the consumed amount of the | e web roll. | |
| | Web Motor Interval | C2b: [3 to 130 / 8.4 / 0.1 sec] | |
| 002 | VVeb Motor Interval | C2c: [3 to 130 / 6.7 / 0.1 sec] | |
| | Adjusts the interval for web motor rotation. | | |
| 003 | Web Motor Time | [0.3 to 10 / 4.2 / 0.1 sec] | |
| 003 | Adjusts the rotation time of the web motor. | | |
| | | C2b: EU [0 to 100 / 90 / 1 %] | |
| 004 | Web Near End Setting | C2b: ASIA/NA [0 to 100 / 92 / 1 %] | |
| | | C2c: EU [0 to 100 / 90 / 1 %] | |
| | | C2c: ASIA/NA [0 to 100 / 92 / 1 %] | |
| | Adjusts the threshold for web near end. | | |

| 005 | Web Motor Interval: Thick 1 | [3 to | o 130 / 11.2 / 0.1 sec] |
|-----|--|------------------------------------|---|
| 003 | Adjusts the interval for web motor rotation (thick 1). | | |
| 006 | Web Motor Interval: Thick 2 | [3 to 130 / 16.8 / 0.1 sec] | |
| 008 | Adjusts the interval for web motor rote | ation | (thick 2). |
| | Paper Interval Time | [0 to | o 10 / 5 / 1 sec] |
| 007 | Adjusts the threshold for paper feeding. When the time between trailing edge detection and leading edge detection is within the value of this setting, the machine determines that the paper is still being fed. | | rithin the value of this setting, the machine |
| 008 | Web Motor Setting: Web End | | [0 to 60 / 27 / 1 sec] |
| 008 | Adjusts the motor rotation time after the web end. | | |
| 009 | Web Motor Rotation: Power On | | [0 to 10 / 0 / 1 times] |
| 009 | Adjusts the number of web motor rotations at the re-load state. | | |
| 010 | Web Motor Interval: Pre-idle | | [0 to 30 / 0 / 1 sec] |
| 010 | Adjusts the motor waiting time after the fusing motor idling. | | |
| 011 | Web Motor Rotation: Pre-idle | | [0 to 10 / 0 / 1 times] |
| 011 | Adjusts the number of web motor rotations at the fusing idling state. | | |

| 1950* | Tray Lock at Jam | [0 or 1 / 0 / 1] 0= OFF, 1= ON |
|-------|------------------|---------------------------------|
| 1930 | Not used | |

Main SP Tables-2

SP2-xxx: Drum

| 2005* | Bias Control | | |
|-------|--|---------------------------------------|--|
| | Bias Correction 1 | [0.1 to 1 / 0.85 / 0.05 step] | |
| 001 | Adjusts the lower threshold value for the charge roller correction. When the value of VSDP/VSG is greater than this value, the charge roller voltage increases by 30 V (e.g., from -500 to -530). | | |
| | Bias Correction 2 | [0.1 to 1 / 0.9 / 0.05 step] | |
| 002 | Adjusts the upper threshold value for the charge roller correction. When the value of VSDP/VSG is greater than this value, the charge roller voltage decreases by 30 V (absolute value). | | |
| 003 | Bias Adjustment 1 | [1000 to 2000 / 1500 / 10 vol] | |
| 003 | Adjusts the lower limit value for charge roller voltage correction. | | |
| 004 | Bias Adjustment 2 | [1000 to 2000 / 2000 / 10 vol] | |
| | Adjusts the upper limit value for charge roller voltage correction. | | |
| 005 | Bias Adjustment 3 | [0 to 100 / 30 / 10 vol] | |
| | Adjusts the correction voltage adjustment step size. | | |

| | Erase Margin Adjustment | | |
|----------------------------------|---|------------------------------|--|
| | Adjusts the erase margin by deleting image data at the margins. | | |
| 2103* | L Size: 297.1 mm or more (length) | | |
| M Size: 216.1 to 297 mm (length) | | | |
| | S Size: 216 mm or less (length) | | |
| 001 | Leading Edge | [0 to 9 / 3 / 0.1 mm] | |
| 002 | Trailing Edge | [0 10 9 / 3 / 0.1 mm] | |
| 003 | Left | [0 to 9 / 2 / 0.1 mm] | |
| 004 | Right | [0 10 7 / 2 / 0.111111] | |

| 005 | Duplex Trail.: L Size: Plain | [0 to 4 / 1 / 0.1 mm] |
|-----|------------------------------|----------------------------------|
| 006 | Duplex Trail.: M Size: Plain | [0 to 4 / 0.8 / 0.1 mm] |
| 007 | Duplex Trail.: S Size: Plain | [0 to 4 / 0.6 / 0.1 mm] |
| 008 | Duplex Left: Plain | [0 to 1.5 / 0.3 / 0.1mm] |
| 009 | Duplex Right: Plain | [0 10 1.5 / 0.3 / 0.1mm] |
| 010 | Duplex Trail.: L Size: Thick | [0 to 4 / 0.8 / 0.1 mm] |
| 011 | Duplex Trail.: M Size: Thick | [0 to 4 / 0.6 / 0.1 mm] |
| 012 | Duplex Trail.: S Size: Thick | [0 to 4 / 0.4 / 0.1 mm] |
| 013 | Duplex Left: Thick | [0 to 1.5 / 0.1 / 0.1 mm] |
| 014 | Duplex Right: Thick | [0 to 1.5 / 0.1 / 0.1mm] |

| | LD Power Adjustment | |
|---|---------------------|---|
| Adjusts the LD power for each mode. Each LD power setting is decided by the process control. | | |
| 001 | LD1: Copy | [-50 to 79 / -24 (C2b), 5 (C2c) /1] |
| 002 | LD2: Copy | [-30 10 /9 / -24 (C2b), 3 (C2c) / 1] |
| 003 | LD1: Printer/Fax | [50 to 70 / 44 (C2h) 25 (C2a)/1] |
| 004 | LD2: Printer/Fax | [-50 to 79 / -44 (C2b), -25 (C2c) /1] |

| 2109 Test Pattern | |
|-------------------|--|
|-------------------|--|

| | Pattern Selection | [0 to 24 / 0 / 1 Test pattern of the | |
|-----|--|---|---|
| 001 | 0: None 1: Vertical Line (1 dot) 2: Vertical Line (2 dot) 3: Horizontal Line (1 dot) 4: Horizontal Line (2 dot) 5: Grid Vertical Line 6: Grid Horizontal Line 7: Grid pattern small 8: Grid Pattern Large 9: Argyle Pattern Small 10: Argyle Pattern Large 11: Independent pattern 12: Independent Pattern | t) | 13: Independent Pattern (4 dot) 14: Trimming Area 15: Hound's Tooth Check (Vertical) 16: Hound's Tooth Check (Horizontal) 17: Black Band (Horizontal) 18: Black band (Vertical) 19: Checker Flag Pattern 20: Grayscale (Vertical Margin) 21: Grayscale (Horizontal Margin) 22: Two Beam Density Pattern 23: Full Dot Pattern 24:All white Pattern |
| 002 | Density | , | f the test pattern which is output in ais SP is not used for the Grayscale patterns. |

Adjusts the TD sensor reference voltage (Vref). Change this value after replacing the development unit with another development unit that contains toner. [1 to 5 / 4 / 0.01] 1. Check the value of SP2-220 in both the machine containing the test unit and the machine that you are going to move it to. 2. Install the test development unit, and then input the VREF for this unit into SP2-220. 3. After the test, put back the old development unit, and change SP2-220 back to the original value.

| | Reverse Interval Drum, Transfer | [0 to 2000 / 0 / 1 sheets] | |
|--|---|-----------------------------------|--|
| 2221* | Adjusts the threshold for the reverse rotation of the drum and development/transfer motors. This helps the drum and transfer belt cleaning operations. This reverse rotation will interrupt a multiple printing job. | | |
| | TD Sensor Initial Setting | Initialization | |
| 2801 | Performs the TD sensor initial setting and allows the service technician to enter the number of the developer. (The lot number is embossed on the edge of the developer package.) This SP mode controls the voltage applied to the TD sensor to make the sensor output about 3.0 V. Press "Execute" to start. After finishing this, the TD senoutput voltage is displayed. Use this mode only after installing the machine, changing the TD sensor, or additional new developer. | | |
| 00/0* | Toner Overflow Sensor | [0 = OFF, 1= ON] | |
| 2960* | Selects whether or not the toner overflow sensor is activated. | | |
| | Grayscale Limit (SSP) | | |
| 2972* Controls the halftone density level to prevent deterioration of the OPC. | | • | |

| | Grayscale Limit (SSP) | |
|-------|---|--|
| 2972* | Controls the halftone density level to prevent deterioration of the OPC. The halftone density is detected by the ID sensor, and the machine adjusts the intensity of the LD beam according to the upper/lower limit setting. | |
| | Upper Limit [0 to 100 / 58 (C2b), 63 (C2c) / 1vol] | |
| 001 | Defines the upper limit for grayscale. A larger value allows a wider range of halftones at the pale end of the scale. If the image contains pale areas with fuzzy borders surrounded by dark areas, reduce this value to make the borders clearer. | |
| | Lower Limit | [0 to 100 / 52 (C2b), 57 (C2c) / 1vol] |
| 002 | Defines the lower limit for grayscale. A smaller value allows a wider range of halftones at the dark end of the scale. | |

| | Grayscale Cycle (SSP) | [0 to 1000 / 100 / 10 sheets] |
|-------|-----------------------|--|
| 2973* | | erval in order to prevent deterioration of the OPC. If the setting, at the end of the job, or if the door is opened is executed. |

| 2974* | Image Density | |
|--|-----------------|-------------------------|
| | Adjustment Mode | [1 to 5 / 3 / 1] |
| Adjusts image density. Changing this setting adjusts development bias and ID output voltage that in turn raises or lowers image density. | | |

| | 2980* | Charge Counter | [0 to 1000000 / 0 / 1 sheets] |
|--|-------|---|---------------------------------------|
| | | Set the number of pages to print after toner and carrier initialization before the charge input is increased to compensate for deterioration over time in the polarity of the carrier. | |
| | | The strength in the polarity of the carrier in the toner will eventually decrease and cause lower charge output. Setting the charge output to increase after a specified number of copies can compensate for this effect. | |

Main SP Tables-3

SP3-xxx: Process

| 3001 | P Sensor Setting | |
|------|---|--------------------------------|
| 001* | Current | [0 to 43 / 13 / 0.1 mA] |
| | Allows you to reset the PWM of the ID sensor LED to avoid a service call error after clearing NVRAM or replacing the NVRAM. The PWM data is stored by executing SP-3001-2. | |
| 002 | Initialization | - |
| | Performs the ID sensor initial setting. ID sensor output for the bare drum (VSG) is adjusted automatically to 4.0 ±0.2 V. | |
| | Press "Execute" to start. Perform this setting after replacing or cleaning the ID sensor, replacing the drum, or clearing NVRAM. | |

| 3045* | Toner End Setting DFU | |
|-------|------------------------------|------------------------------|
| 001 | ON/OFF | [0 to 1 / 0 / 1] 0=Off, 1=On |

| 3 | 902* | New PCU Detection (Not used) | |
|---|------|--|--|
| | 001 | ON/OFF Setting | [0 to 1 / 0 / 1] 0: On, 1: Off |
| | | Turns on or off the new unit detection for the transfer belt unit and fusing unit. | |

Main SP Tables-4

SP4-xxx: Scanner

| 4008* | Sub Scan Mag. Adjustment |
|-------|---|
| | Adjusts the magnification of the sub scan direction during scanning. Changing this value changes the scanner motor speed. |
| | [-1 to 1 / 0 / 0.1%] |

| | L-Edge Regist Adjustment |
|-------|---|
| 4010* | Adjusts the leading edge registration for scanning. |
| | As you enter a negative value, the image moves toward the leading edge. |

Scanner Erase Margin: Scale Adjusts scanning margins for the leading and trailing edges (sub scan) and right and left edge (main scan). ■ Note 4012* • Do not adjust unless the customer desires a scanner margin greater than the printer margin. • These settings are adjusted to erase shadows caused by the gap between the original and the scale of the scanner unit. 001 Book: Leading Edge [0 to 3 / 1 / 0.1 mm]002 Book: Trailing Edge [0 to 3 / 0 / 0.1 mm]003 Book: Left [0 to 3 / 1 / 0.1 mm]004 Book: Right [0 to 3 / 0 / 0.1 mm]005 ADF: Leading Edge [0 to 3 / 0 / 0.1 mm]007 [0 to 3 / 0 / 0.1 mm]ADF: Right 800 ADF: Left [0 to 3 / 0 / 0.1 mm]

| 4013 | Scanner Free Run | |
|------|---|------------------|
| 4013 | Performs a scanner free run with the exposure lamp on or off. | |
| 001 | Lamp: OFF | [0 to 1 / 0 / 1] |
| 002 | Lamp: ON | 0=Off, 1=On |

| 4014 | Scan | |
|------|----------------------|---|
| 001 | HP Detection Enable | Scanner free run with HP sensor check. |
| 002 | HP Detection Disable | Scanner free run without HP sensor check. |

| | Dust Check |
|-------|---|
| 4020* | This function checks the narrow scanning glass of the ADF for dust that can cause black lines in copies. If dust is detected a system banner message is displayed, but processing does not stop. |
| | Dust Detect: On/Off |
| | Issues a warning if there is dust on the narrow scanning glass of the ADF when the original size is detected before a job starts. This function can detect dust on the white plate above the scanning glass, as well as dust on the glass. Sensitivity of the level of detection is adjusted with SP4020-2. |
| 001 | [0 to 1 / 1 / 1] |
| | 0: Off. No dust warning. |
| | 1: On. Dust warning. This warning does not stop the job. |
| | U Note |
| | Before switching this setting on, clean the ADF scanning glass and the white plate above the scanning glass. |

| | Dust Detect: Lvl |
|-----|---|
| | Adjusts the sensitivity for dust detection on the ADF scanning glass. This SP is available only after SP4020-1 is switched on. |
| 002 | [0 to 8 / 4 / 1] If you see black streaks in copies when no warning has been issued, raise the setting to increase the level of sensitivity. If warnings are issued when you see not black streaks in copies, lower the setting. Note |
| | Dust that triggers a warning could move be removed from the glass by the originals in the feed path. If the dust is removed by passing originals, this is not detected and the warning remains on. |
| | Dust Reject: Lvl |
| 003 | Selects the level of the sub scan line correction when using the ARDF. $[0 \text{ to } 4 \ / \ 0 \ / \ 1]$ |
| | 0: OFF, 1: Weakest, 2: Weak, 3: Strong, 4: Strongest |

| 4301 | Displays a code that represents the original size detected by the original sensors. (*** "Input Check Table" in "Main SP Tables-9") |
|------|---|
| | APS Min. Size |
| | Determines whether an original of non-standard size is detected as A5/HLT size by the APS sensor. |
| 4303 | 0: No original |
| | 1: A5 - lengthwise (SEF) |
| | 2: A5 - Sideways (LEF) |
| | If "O" is selected, "Cannot detect original size" will be displayed. |

APS Operation Check

| | 8K/16K Detection |
|------|--|
| | [0 to 3 / 0 / 1 step] |
| 4305 | 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-Lenghtwise |
| | 3: 8K 16K |

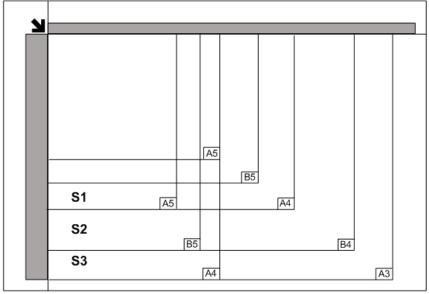
| 4308* | Scan Size Detection | |
|-------|--|--|
| | Detection ON/OFF | |
| | Selects whether the machine detects the original size. | |
| 001 | [0 to 1 / 1 / 1 step] | |
| | 0: OFF | |
| | 1: ON | |

| 4309* Scan Size Detect: Setting | |
|---------------------------------|---|
| | Original Density Thresh |
| 001 | Adjust the density for the scan size detection. [0 to 255 / 18 / 1 step] |
| | Detection Time |
| 002 | Adjust the detection time for scan size detection. [20 to 100 / 60 / 20 msec] |
| | Lamp ON: Delay Time |
| 003 | Adjust the timing when to lamp on for the scan size detection. [0 to 200 / 40 / 20 msec] |
| | LED PWM Duty |
| 004 | Adjust the light value for the scan size detection. [0 to 100 / 60 / 1 %] |

| 4210 | Scan Size Detect Value | [0 to 255 / 0 / 1 digit] |
|------|---|---------------------------------|
| 4310 | Displays the scanned data for the original width detection. | |
| 001 | S1: R | |
| 002 | \$1: G | |
| 003 | S1: B | |
| 004 | S2: R | |
| 005 | S2: G | |
| 006 | S2: B | |
| 007 | S3: R | |
| 008 | \$3: G | |
| 009 | S3: B | |



• Each detection point (S1, S2, S3) in SP4310 is as follows.



d120s001

| | IPU Test Patte | ern | | |
|------|-------------------------------|---------------------------|----------------------------|--|
| | Selects the IPU test Pattern. | | | |
| | | [0 to 28 / 0 / 1] | | |
| | | 0: Scanned image | 15: Gray pattern (1) | |
| | | 1: Gradation main scan A | 16: Gray pattern (2) | |
| | | 2: Gradation main scan B | 17: Gray pattern (3) | |
| | Test Pattern | 3: Gradation main scan C | 18: Shading pattern | |
| | | 4: Gradation main scan D | 19: Thin line pattern | |
| 4417 | | 5: Gradation sub scan (1) | 20: Scanned + Grid pattern | |
| 4417 | | 6: Grid pattern (1) | 21: Scanned + Gray scale | |
| | | 7: Slant grid pattern | 22: Scanned + Color patch | |
| | | 8: Gradation K | 23: Scanned + Slant Grid C | |
| | | 9: Gray patch 16 | 24: Scanned + Slant Grid D | |
| | | 10: Gray patch 16 (1) | 25: Gray Scale 18 text | |
| | | 11: Gray patch 16 (2) | 26: Gray Scale 18 photo | |
| | | 12: Gray patch 64 | 27: Gray Scale 256 text | |
| | | 13: Grid pattern (2) | 28: Gray Scale 256 photo | |
| | | 14: Color patch K | | |

| 4429* | Select Copy Data Security | |
|-------|---------------------------|--|
| 001 | Copying | Adjusts the density of the embedded message with |
| 002 | Scanning | the copy data security unit. [0 to 3 / 3 / 1] |
| 003 | Fax Operation | 3: Darkest density |

| 4450 | Scan Image Path Selection |
|------|---------------------------|
|------|---------------------------|

| 001 | Black Subtraction ON/OFF | [0 to 1 / 1 / 1] 0=OFF, 1=ON | |
|-----|--------------------------|--|------------------------------|
| | 001 | Uses or does not use the black reduction image path. | |
| | 002 | SH ON/OFF | [0 to 1 / 0 / 1] 0=OFF, 1=ON |
| | | Uses or does not use the shading image path. | |

| | Printer Vector Correction | | |
|---------|--|--|--|
| 4540* | This SP corrects the printer coverage of 12 hues (RY, YR, YG, etc. x 4 Colors [R, G, B, Option]) for a total of 48 parameters. | | |
| 001-004 | RY Phase: Option/R/G/B | | |
| 005-008 | YR Phase: Option/R/G/B | | |
| 009-012 | YG Phase: Option/R/G/B | | |
| 013-016 | GY Phase: Option/R/G/B | | |
| 017-020 | GC Phase: Option/R/G/B | Specifies the printer vector correction value. [0 to 255 / 0 / 1] | |
| 021-024 | CG Phase: Option/R/G/B | | |
| 025-028 | CB Phase: Option/R/G/B | | |
| 029-032 | BC Phase: Option/R/G/B | | |
| 033-036 | BM Phase: Option/R/G/B | | |
| 037-040 | MB Phase: Option/R/G/B | | |
| 041-044 | MR Phase: Option/R/G/B | | |
| 045-048 | RM Phase: Option/R/G/B | | |

| 4600 | SBU Version | |
|------|------------------------------------|---------------------------------|
| 001 | SBU ID Displays the ID of the SBU. | |
| 002 | GASBU-N ID | Displays the ID of the GASBU. |
| 003 | VSP5100 ID | Displays the ID of the VSP5100. |

| 4602 | Scanner Memory Access |
|------|-----------------------|
|------|-----------------------|

| 001 | Scanner Memory Access | Enables the read and write check for the SBU registers. |
|-----|-----------------------|---|
|-----|-----------------------|---|

| 4603 | AGC Execution | |
|------|--|--|
| 001 | HP Detection Enable Executes the AGC with the scanner detection. | |
| 002 | HP Detection Disable | Executes the AGC with the scanner detection. |

| 4609* | Gray Balance Set: R | |
|-------|---|---------------------------------------|
| 001 | Book Scan | [-384 to 255 / -46 / 1 digit] |
| 001 | Displays the scanning level value (adjustment) for the red signal in Book Scan. | |
| 002 | DF Scan | [-384 to 255 / -46 / 1 digit] |
| 002 | Displays the scanning level value (adjus | tment) for the red signal in DF Scan. |

| 4610* | Gray Balance Set: G | |
|--|---|--|
| 001 | Book Scan | [-384 to 255 / -20 / 1 digit] |
| Displays the scanning level value (adjustment) for the green signal in B | | stment) for the green signal in Book Scan. |
| 002 | DF Scan | [-384 to 255 / -20 / 1 digit] |
| 002 | Displays the scanning level value (adjustment) for the green signal in DF Scan. | |

| 4611* | * | Gray Balance Set: B | |
|---|-----|--|--------------------------------------|
| | 001 | Book Scan | [-384 to 255 / -28 / 1 digit] |
| Displays the scanning level value (adjustment) for the blue signal in Book Scan | | tment) for the blue signal in Book Scan. | |
| | 202 | DF Scan | [-384 to 255 / -28 / 1 digit] |
| 002 | | Displays the scanning level value (adjustment) for the blue signal in DF Scan. | |

| 462 | 23 | Black Level Adj. Display | |
|--------------------|----|---|---|
| 001 Displays the b | | Latest: RE Color | [0 to 16383 / 0 / 1 digit] |
| | | Displays the black offset value (rough adjuprinting speed). | ack offset value (rough adjustment) for the even red signal in the SBU (color |

Latest: RO Color [0 to 16383 / 0 / 1 digit]

Displays the black offset value (rough adjustment) for the odd red signal in the SBU (color printing speed).

U Note

• RE: Red Even signal, RO: Red Odd signal

| 4624 | Black Level Adj. Display |
|------|---|
| | Latest: GE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |
| | Latest: GO Color |
| 002 | [0 to 16383 / 0 / 1 digit] |
| | Displays the black offset value (rough adjustment) for the odd green signal in the SBU (color printing speed). |

Note

• GE: Green Even signal, GO: Green Odd signal

| 4625 | Black Level Adj. Display |
|------|---|
| | Latest: BE Color |
| 001 | [O to 16383 / 0 / 1 digit] Displays the black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). |
| | Latest: BO Color |
| 002 | [O to 16383 / O / 1 digit] Displays the black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). |



• BE: Blue Even signal, BO: Blue Odd signal

| | Analog Gain Adjust | |
|------|--|--|
| 4628 | Displays the gain value of the amplifiers on the controller for Red. Only for the color scanner | |
| 001 | Latest: R Color [0 to 7 / 0 / 1 digit] | |

| | Analog Gain Adjust | |
|------|--|----------------------------------|
| 4629 | Displays the gain value of the amplifiers on the controller for Green. | |
| | SP4629-003 and -004 are used o | nly for the color scanner model. |
| 001 | Latest: G Color | [0 to 7 / 0 / 1 digit] |

| | | Analog Gain Adjust | |
|--|-----|-------------------------------------|------------------------------------|
| Displays the gain value of the amplifiers on the | | Displays the gain value of the ampl | ifiers on the controller for Blue. |
| | 001 | Latest: B Color | [0 to 7 / 0 / 1 digit] |

| | 4631 | Digital Gain Adjust | |
|---|------|---|--|
| Displays the gain value of the amplifiers on the controller for RE or R | | fiers on the controller for RE or RO. | |
| | 001 | 001 Latest: RE Color [0 to 1023 / 0 / 1 digit] | |
| | 002 | Latest RO Color [0 to 1023 / 0 / 1 digit] | |

| 4632 | Digital Gain Adjust | |
|------|---|----------------------------------|
| | Displays the gain value of the amplifiers on the controller for GE or GO. | |
| 001 | Latest: GE Color | [0 to 1023 / 0 / 1 digit] |
| 002 | Latest: GO Color | [0 to 1023 / 0 / 1 digit] |

| 4633 | Digital Gain Adjust | |
|------|---|----------------------------------|
| 4033 | Displays the gain value of the amplifiers on the controller for BE or BO. | |
| 001 | Latest: BE Color | [0 to 1023 / 0 / 1 digit] |
| 002 | Latest: BO Color | [0 to 1023 / 0 / 1 digit] |

| 4645 | Scan Adjust Error | |
|------|--|-----------------------------------|
| 4043 | Displays the error value of the white level or black level adjustment. | |
| 001 | White level | [0 to 65535 / 0 / 1 digit] |
| 002 | Black level | [0 to 65535 / 0 / 1 digit] |

| | Scanner Hard Error | |
|------|--|--|
| | Displays the result of the SBU connection check. | |
| 4647 | Power-ON | [0 to 35535 / 0 / 1] |
| | | 0: OK, 1: SBU connection check failure |
| | | If the SBU connection check fails, SC144-001, -002 or -003 |
| | | occurs. |

| 4654* | Black Level Adj. Display |
|-------|---|
| | Latest Correct Value: RE Color |
| 001 | [0 to 16383 / 0 / 1 digit] Displays the previous black offset value (rough adjustment) for the even red signal in the SBU (color printing speed). |
| | Last Correct Value: RO Color |
| 002 | [0 to 16383 / 0 / 1 digit] Displays the previous black offset value (rough adjustment) for the odd red signal in the SBU (color printing speed). |

₩Note

• RE: Red Even signal, RO: Red Odd signal

| 4655* | Black Level Adj. Display |
|-------|--|
| | Last Correct Value: GE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the previous black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |

Last Correct Value: GO Color

[0 to 16383 / 0 / 1 digit]

Displays the previous black offset value (rough adjustment) for the even green signal in the SBU (color printing speed).



• GE: Green Even signal, GO: Green Odd signal

| 4656* | Black Level Adj. Display | |
|-------|---|--|
| | Last Correct Value: BE Color | |
| 001 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the previous black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). | |
| | Last Correct Value: BO Color | |
| 002 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the previous black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). | |



• BE: Blue Even signal, BO: Blue Odd signal

| 4658* | Analog Gain Adjust | |
|-------|---|--------------------------------|
| 4036 | Displays the previous gain value of the amplifiers on the controller for Red. | |
| 001 | Last Correct Value: R Color | [0 to 7 / 0 / 1 digit] |
| | | |

| | Analog Gain Adjust | |
|-------|---|--------------------------------|
| 4659* | Displays the previous gain value of the amplifiers on the controller for Green. | |
| | SP4659-003 and -004 are used only | y for the color scanner model. |
| 001 | Last Correct Value: G Color | [0 to 7 / 0 / 1 digit] |

| 4660* | Analog Gain Adjust |
|-------|--|
| 4000 | Displays the previous gain value of the amplifiers on the controller for Blue. |

| 001 Last Correct Value: B Color [0 to 7 / 0 / 1 digit] |
|--|
|--|

| 4661* | Digital Gain Adjust |
|-------|--|
| | Last Correct Value: RE Color |
| 001 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the even red signal in the SBU (color printing speed). |
| | Last Correct Value: RO Color |
| 002 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the odd red signal in the SBU (color printing speed). |

Note

• RE: Red Even signal, RO: Red Odd signal

| 4662* | Digital Gain Adjust |
|-------|--|
| | Last Correct Value: GE Color |
| 001 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |
| | Last Correct Value: GO Color |
| 002 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the odd green signal in the SBU (color printing speed). |

UNote

• GE: Green Even signal, GO: Green Odd signal

| 4663* |
|-------|
|-------|

| | Last Correct Value: BE Color |
|-----|---|
| 001 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). |
| | Last Correct Value: BO Color |
| 002 | [0 to 1023 / 0 / 1 digit] |
| | Displays the previous 2nd black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). |



• BE: Blue Even signal, BO: Blue Odd signal

| 4673 Black Level Adj. Display | |
|-------------------------------|--|
| | Factory Setting: RE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the factory setting value of the 2nd black offset level rough adjustment for the even red signal in the SBU (color printing speed). |
| | Factory Setting: RO Color |
| 002 | [0 to 16383 / 0 / 1 digit] |
| | Displays the factory setting values of the 2nd black offset level rough adjustment for the odd red signal in the SBU (color printing speed). |

UNote

• RE: Red Even signal, RO: Red Odd signal

| 4674 | Black Level Adj. Display |
|------|--|
| 001 | Factory Setting: GE Color |
| | [0 to 16383 / 0 / 1 digit] |
| | Displays the factory setting value of the 2nd black offset level rough adjustment for the even green signal in the SBU (color printing speed). |

Factory Setting: GO Color

[0 to 16383 / 0 / 1 digit]

Displays the factory setting values of the 2nd black offset level rough adjustment for the odd green signal in the SBU (color printing speed).



• GE: Green Even signal, GO: Green Odd signal

| 4675 | Black Level Adj. Display |
|------|--|
| | Factory Setting: BE Color |
| 001 | [0 to 16383 / 0 / 1 digit] Displays the factory setting value of the 2nd black offset level rough adjustment for the even blue signal in the SBU (color printing speed). |
| | Factory Setting: BO Color |
| 002 | [0 to 16383 / 0 / 1 digit] |
| | Displays the factory setting values of the 2nd black offset level rough adjustment for the odd blue signal in the SBU (color printing speed). |

U Note

• BE: Blue Even signal, BO: Blue Odd signal

| | Analog Gain Adjust | |
|------|---|--------------------------------|
| 4677 | Displays the factory setting values of the gain adjustment for Red. SP4677-003 and -004 are used only for the color scanner model. | |
| | 31 4077 -003 dild -004 die 03ed offiny for the color scarnier model. | |
| 001 | Factory Setting: R | [0 to 7 / 0 / 1 digit] |

| 4678 | | Analog Gain Adjust | |
|------|------|---|--------------------------------|
| | 4678 | Displays the factory setting values of the gain adjustment for Green. SP4678-003 and -004 are used only for the color scanner model. | |
| | 001 | Factory Setting: G | [0 to 7 / 0 / 1 digit] |

| 4470 | 4679 | Analog Gain Adjust | |
|------|-------|--|--------------------------------|
| | 407 9 | Displays the factory setting values of the gain adjustment for Blue. | |
| | 001 | Factory Setting: B | [0 to 7 / 0 / 1 digit] |

| 4680* | Digital Gain Adjust |
|-------|--|
| | Factory Setting: RE Color |
| 001 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for Red. |
| | Factory Setting: RO Color |
| 002 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for odd Red. |

| 4681* | Digital Gain Adjust |
|-------|--|
| | Factory Setting: GE Color |
| 001 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for Green. |
| | Factory Setting: GO Color |
| 002 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for odd Green. |

| 4682* | Digital Gain Adjust | |
|-------|---|--|
| | Factory Setting: BE Color | |
| 001 | [0 to 1023 / 0 / 1 digit] | |
| | Displays the gain value of the amplifiers on the controller for Blue. | |
| 002 | Factory Setting: BO Color | |
| 002 | Displays the gain value of the amplifiers on the controller for odd Blue. | |

| | Scan Image Density Adjustment |
|-------|---|
| 4688* | Adjusts the white shading parameter when scanning an image with the ARDF. |
| 4000 | Adjusts the density level if the ID of outputs made in the DF and Platen mode is different. |
| | [80 to 120 / 98 / 1 %] |

| 4690 | White Level Peak Read | |
|--|---------------------------|-----------------------------------|
| Displays the peak level of the white level scanning. | | el scanning. |
| 001 | RE [0., 1002 (0./1.); ;;] | |
| 002 | RO | [0 to 1023 / 0 / 1 digit] |

| 4691 | White Level Peak Read | |
|--|-----------------------|----------------------------------|
| Displays the peak level of the white level scanning. | | el scanning. |
| 001 | GE | [0 1002 / 0 / 1 |
| 002 | GO | [0 to 1023 / 0 / 1 digit] |

| 4692 | White Level Peak Read | |
|--|------------------------------------|----------------------------------|
| Displays the peak level of the white level scanning. | | el scanning. |
| 001 | BE [0., 1000 / 0 / 1 /: ::1 | |
| 002 | ВО | [0 to 1023 / 0 / 1 digit] |

| 4693 | Black Level Peak Read | |
|------|--|-----------------------------------|
| 4093 | Displays the peak level of the black level scanning. | |
| 001 | RE | [0 to 1023 / 0 / 1 digit] |
| 002 | RO | [0 10 1023 / 0 / 1 digit] |

| 4404 | Black Level Peak Read |
|------|---|
| 4694 | Display the peak level of the black level scanning. |

| 001 | [0 to 1023 / 0 / 1 digit] |
|-----|----------------------------------|
| 002 | [0 10 1023 / 0 / 1 digit] |

| 4695 | Black Level Peak Read | |
|------|---|-----------------------------------|
| 4093 | Display the peak level of the black level scanning. | |
| 001 | BE | [0 - 1022 / 0 / 1 - 1::1 |
| 002 | ВО | [0 to 1023 / 0 / 1 digit] |

| 4802 | DF Shading FreeRun | |
|-------------|---|------------------|
| 001 | Lamp OFF | [0 to 1 / 0 / 1] |
| 002 Lamp ON | Executes the scanner free run of the shading movement with exposure lamp on or off. | |
| | Press "OFF" to stop this free run. Otherwise, the free run continues. | |

| 4804 | Home Position | Moves the exposure lamp a short distance and immediately returns it to its home position. |
|------|---------------|---|
| | | Touch [Execute] > "Completed" > [Exit] |

Carriage Save Moves the exposure lamp a short distance away from the home position and stops. Touch [Execute] > "Completed" > [Exit] Do SP4804 to return the exposure lamp to its home position. Note This SP is done before shipping the machine to another location. Cycling the machine power off/on also returns the exposure lamp to its home position.

| | SBU Test Pattern Change |
|------|------------------------------------|
| 4807 | [0 to 255 / 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 |

| | - | Man Gamma Adj (DFU) |
|--|---|--|
| | | Adjusts the offset data of the printer gamma for black in Photo mode or Letter mode. |
| | | Touch [Change] to open the printer gamma screen. |
| | | Enter the manual gamma adjustment screen. |

| 4954 | Read/Restore Std | |
|------|--|--------------------|
| 001 | Read New Chart | |
| 001 | Execute the scanning of the A4 chart. | |
| 002 | Recall Prev Chart | |
| 002 | Clear the data of the scanned A4 chart. | |
| 003 | Read Std Chart | |
| 003 | Execute the scanning of the A4 standard ch | art. |
| 004 | Set Std Chart | |
| 004 | Overwrite the standard data. | |
| | Read/Restore Std | [0 to 255 / 0 / 1] |
| 005* | Adjusts chromaticity rank. When replacing to according to the barcode on the new scann | |

| 1001 | IPU Image Pass Selection DFU |
|------|---|
| 4771 | if of findge if ass Selection Di O |
| | |

| | RGB | Frame Memory | | |
|-----|---|---|--|--|
| | Selects the image path. Enter the number to be selected using the 10-key pad. | | | |
| | [0 to | 11 / 2/ 1] | | |
| | 0 | Scanner input RGB images | | |
| | 1 | Scanner I/F RGB images | | |
| | 2 | RGB images done by Shading correction (Shading ON, Black offset ON) | | |
| | 3 | Shading data | | |
| 001 | 4 | Inner pattern data: Gray scale | | |
| | 5 | RGB images done by Line skipping correction | | |
| | 6 | RGB images done by Digital AE | | |
| | 7 | RGB images done by Vertical line correction | | |
| | 8 | RGB image done by Scanner gamma correction | | |
| | 9 | RGB image done by Filtering correction | | |
| | 10 | RGB images done by Full color ADS | | |
| | 11 | RGB image done by Color correction | | |

| 4993* | High Light Correction | |
|-------|-----------------------|---|
| 001 | Sensitivity Selection | Selects the Highlight correction level. [0 to 9 / 4 / 1 / step] 0: weakest sensitivity 9: strongest sensitivity |
| 002 | Range Selection | Selects the Highlight correction level. [0 to 9 / 4 / 1 / step] 0: weakest skew correction, 9: strongest skew correction |

| 4994* | Text/Photo Detect Level Adj. |
|-------|------------------------------|
|-------|------------------------------|

High Compression PDF

Selects the definition level between Text and Photo for high compression PDF.

001

[0 to 2 / 1 / 1]

- 0: Text priority
- 1: Normal
- 2: Photo priority

5

Main SP Tables-5

SP5-xxx: Mode

| 5024* | mm/inch Display Selection | 0: Europe/Asia (mm) 1: North America (inch) |
|-------|--|---|
| 3024 | Selects the unit of measurement. After selection, turn the main power | switch off and on. |

| 5047* | Paper Display |
|-------|---|
| | Turns on or off the printed paper display on the LCD. |
| | [0 to 1 / 0 / 1] |
| | 0: Not displayed, 1: Displayed |

| 5055* | Display IP Address | |
|-------|--|--|
| | Display or does not display the IP address on the LCD. | |
| | [0 to 1 / 0 / 1] | |
| | 0: OFF, 1: ON | |

| 5056* | Coverage Counter Display |
|-------|--|
| | Display or does not display the coverage counter on the LCD. |
| | [0 to 1 / 0 / 1] |
| | 0: Not displayed, 1: Displayed |

| 5061* | Toner Remaining Icon Display Change |
|-------|--|
| | Display or does not display the remaining toner display icon on the LCD. |
| | [0 to 1 / 0 / 1] |
| | 0: Not display, 1: Display |

| Set Bypass Paper Size Display |
|-------------------------------|
|-------------------------------|

Turn on or off the paper size confirmation pop-up on the LED. This pop-up prevents mismatching between a paper size selected by the operation panel and an actual paper size on the by-pass tray.

[0 or 1 / 0 / -]

0: Off, 1: On

| 5104* | A3/DLT Double Count (SSP) | RTB 42 SP5104: Information added |
|-------|---------------------------|--|
| | • | oubled for A3/DLT. "Yes" counts except from the ed, A3 and DLT paper are counted twice, that is A4 |

| 5113* | Optional Counter Type |
|-------|---|
| | Default Optional Counter Type |
| | Selects the type of counter: |
| | 0: None |
| | 1: Key Card (RK3, 4) Japan only |
| 001 | 2: Key Card Down |
| | 3: Pre-paid Card |
| | 4: Coin Rack |
| | 5: MF Key Card |
| | 11: Exp. Key Card (Add) |
| | 12: Exp. Key Card (Deduct) |
| | External Optional Counter Type |
| | Enables the SDK application. This lets you select a number for the external device for user access control. |
| | Note: "SDK" refers to software on an SD card. |
| 002 | [0 to 3 / 0 / 1] |
| | 0: None |
| | 1: Expansion Device 1 |
| | 2: Expansion Device 2 |
| | 3: Expansion Device 3 |

| 5114* | Optional Counter I/F | |
|-------|----------------------|--|
|-------|----------------------|--|

| | MF Key Card Extension |
|-----|--|
| 001 | Use this SP and change the setting to "1" only when the "5" (MF Key Card) is selected with SP5113-001. |
| | [0: Not installed / 1: Installed (scanning accounting)] |

| | Disable Copying |
|-------|--|
| 5118* | Temporarily denies access to the machine. Japan Only [0 to 1 / 0 / 1] |
| | 0: Release for normal operation [Default] |
| | 1: Prohibit access to machine |

| | Mode Clear Opt. Counter Removal |
|-------|--|
| 5120* | Selects if mode clear is done for an optional counter when an optional counter is removed. |
| 3120 | 0: Yes. (Always mode clear) |
| | 1: StandBy. (Mode clear before/after a job) |
| | 2: No. (No mode clear) |

| | Counter Up Timing |
|-------|--|
| 5121* | Determines whether the optional key counter counts up at paper feed-in or at paper exit. |
| | [0 to 1 / 0 / 1] |
| | 0: Feed, 1: Exit |

| | F Size Original Setting |
|-------|----------------------------------|
| | Selects F size original setting. |
| 5126* | [0 to 2 / 0 / 1 step] |
| 0120 | 0: 8 1/2 x 13 (Foolscap) |
| | 1: 8 1/4 x 13 (Folio) |
| | 2: 8 x 13 (F) |

| | APS Mode |
|-------|---|
| 5127* | Selects whether the APS function is enabled or disabled with the contact of a pre-paid card or coin lock. |
| | 0: Disable (APS active) [Default], 1: Enable (APS not active) |

| | Paper Size Type Selection |
|-------|--|
| | Selects the paper size (type) for both originals and copy paper. |
| 5131* | [0 to 2 / - / 1 step] |
| | 0: Japan, 1: North America, 2: Europe |
| | After changing the setting, turn the copier off and on. If the paper size of the archive files stored on the HDD is different, abnormal copies could result. |

| | Bypass Length Setting |
|------|--|
| | Sets up the by-pass tray for long paper. |
| 5150 | [0 to 1 / 0 / 1] |
| 0100 | 0: Off [Default] |
| | 1: On. Sets the tray for feeding paper up to 600 mm long. |
| | With this SP selected on, paper jams are not detected in the paper path. |

| | 5162* | App. Switch Method |
|--|-------|--|
| | | Determines whether the application screen is switched with a hardware switch or software switch. |
| | | 0: Soft Key Set |
| | | 1: Hard Key Set |

| | | Fax Printing Mode at Optional Counter Off |
|--|-------|---|
| | 5167* | Enables or disables the automatic print out without an accounting device. This SP is used when the receiving fax is accounted for by an external accounting device. |
| | | 0: Automatic printing |
| | | 1: No automatic printing |

| | CE Lai | |
|-------|--|---|
| | CE Login | |
| 5140* | If you will change the printer bit switches, you must 'log in' to service mode with this SP before you go into the printer SP mode. | |
| 3109 | [0 to 1 / 0 / 1] | |
| | O: Off. Printer bit switches cannot be adjusted. | |
| | 1: On. Printer bit switches can be adjusted. | |
| 5169* | If you will change the printer bit switches, you must 'log in' to service mode with this S before you go into the printer SP mode. [0 to 1 / 0 / 1] 0: Off. Printer bit switches cannot be adjusted. | P |

| 5181* | Paper Size Setting | |
|-------|------------------------------|---|
| 3101 | Adjusts the paper size for e | each tray. [0 to 1 / - / 1] |
| 001 | Tray 1: 1 | 0: A4 LEF, 1: LT LEF |
| 002 | Tray 1: 2 | 0: A3, 1: DLT |
| 003 | Tray 1: 3 | 0: B4, 1: LG |
| 004 | Tray 1: 4 | 0: B5 LEF, 1: Exe LEF |
| 005 | Tray 2: 1 | 0: A4 LEF, 1: LT LEF |
| 006 | Tray 2: 2 | 0: A3, 1: DLT |
| 007 | Tray 2: 3 | 0: B4, 1: LG |
| 008 | Tray 2: 4 | O: B5 LEF, 1: Exe LEF |
| 009 | Tray 3: 1 (Tandem) | 0: A4 LEF, 1: LT LEF |
| 010 | Tray 3: 2 | 0: A3, 1: DLT |
| 011 | Tray 3: 3 | 0: B4, 1: LG |
| 012 | Tray 3: 4 | O: B5 LEF, 1: Exe LEF |
| 013 | Tray 4: 1 | 0: A4 LEF, 1: LT LEF |
| 014 | Tray 4: 2 | 0: A3, 1: DLT |
| 015 | Tray 4: 3 | 0: B4, 1: LG |
| 016 | Tray 4: 4 | O: B5 LEF, 1: Exe LEF |
| 017 | LCT | [0 to 2 / - / 1] 0: A4 LEF, 1: LT LEF, 2: B5 LEF |

| | RK4: Setting (Japan only) |
|------|--|
| 5186 | Enable or distance the prevention for RK4 (Accounting device) Disconnection. If the RK4 is disconnected for 10 seconds when this SP is set to "1 (Enable)", the machine automatically jams a sheet of paper and stops. [0 to 1 / 0 / 1] |

| 5188* | Copy Nv Version | |
|-------|--|--|
| 3100 | Displays the NV version on the controller. | |

| 5193 | External Controller Info. Settings |
|------|------------------------------------|
| 5193 | DFU |

| 5195* | Limitless SW | |
|-------|--------------|--|
| 3193 | DFU | |

| | Paper Exit After Staple End |
|------|---|
| 5100 | This SP determines whether a machine can continue to output paper if staple supply runs cannot continue to operate. |
| 5199 | [0 to 1 / 0 / 1] |
| | 0: OFF. Paper cannot exit if no staples are available. |
| | 1: ON. Paper can exit with no staples. |

| 5212* | Page Numbering | |
|-------|--|--|
| 003 | Duplex Printout Left/Right Position | Horizontally positions the page numbers printed on both sides during duplexing. [-10 to 10/0/1 mm] O is center, minus is left, + is right. |
| 004 | Duplex Printout High/Low Position | Vertically positions the page numbers printed on both sides during duplexing. [-10 to 10/0/1 mm] O is center, minus is down, + is up. |

| 5302* | Set Time |
|-------|---|
| | Time Difference |
| | Sets the time clock for the local time. This setting is done at the factory before delivery. The setting is GMT expressed in minutes. |
| | [-1440 to 1440 / - / 1 min.] |
| | Japan: +540 (Tokyo) |
| 002 | NA: -300 (NY) |
| | EU: +60 (Paris) |
| | CH: +480 (Peking) |
| | TW: +480 (Taipei) |
| | AS: +480 (Hong Kong) |
| | KO: +540 (Korea) |

| 5307 | Summer Time | Summer Time | |
|------|---|--|--|
| | [0 | to 1 / 1 (NA/EU), 0 (ASIA) / 1 /step] | |
| | | Disabled | |
| | 1: | Enabled | |
| 001 | Enables or disables the summ | er time mode. | |
| | Make sure that both SP5 activated even if this SP i | -307-3 and -4 are correctly set. Otherwise, this SP is not s 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] |
| 003 | 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] |
| | For example: 3500010 |
| | The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March. |
| | The digits are counted from the left. |
| | Make sure that SP5-307-1 is set to "1". |
| | Rule Set (End) |
| | Specifies the end setting for the summer time mode. |
| | There are 8 digits in this SP. |
| | 1st and 2nd digits: The month. [1 to 12] |
| 004 | 3rd digit: The week of the month. [0 to 5] |
| | 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". |
| | |

| | User Code Count Clear | |
|------|--|--|
| 5404 | Clears the counts of the user codes assigned by the key operator to restrict the use of the machine. Press [Execute] to clear. | |

| 5413 | Lockout Setting | |
|------|-----------------------------|--|
| 001 | Lockout On/Off | [0 to 1 / 0 / 1] 0: OFF, 1:ON |
| 001 | Turns on or off the account | lock for the local address book account. |

| 002 | Lockout Threshold | [1 to 10 / 5 / 1] |
|-----|---|---|
| 002 | Sets the maximum trial times for accessing the address book account. | |
| | | [0 to 1 / 0 / 1] 0: OFF (Lockout is not cancelled.) |
| 003 | Cancellation On/Off | 1: ON (Lockout is cancelled if a user ID and password are correctly entered after the lockout function has been executed and a specific time has passed.) |
| | Turns on or off the cancellation function of the account lockout. | |
| | Cancellation Time | [1 to 9999 / 60 / 1 min] |
| 004 | Sets the interval of the retry for accessing the local address book account after the lockout function has been executed. | |
| | This setting is enabled only | if SP5413-3 is set to "1" (ON). |

| 5414 | Access Mitigation |
|------|--|
| | Mitigation ON / OFF |
| 001 | Permits or does not permit consecutive access to the machine with the same ID and password. |
| 001 | [0 to 1 / 0 / 1] |
| | 0: OFF (Permitted) |
| | 1: ON (Not permitted) |
| | Mitigation Time |
| 002 | Sets the prohibiting time for consecutive access to the machine with the same ID and password. |
| | [0 to 60 / 15 / 1 min] |

| 5415* | Password Attack | |
|-------|--|----------------------------------|
| | Permissible Number | [0 to 100 / 30 / 1 times] |
| 001 | Sets the threshold number of attempts to attack the system with random passwords to gain illegal access to the system. | |

| 002 | Detect Time | [0 to 10 / 5 / 1 sec] |
|-----|------------------------------|------------------------------|
| 002 | Sets a detection time to cou | int a password attack. |

| 5416* | Access Information | |
|-------|---|--|
| | Access User Max Num | [50 to 200 / 200 / 1] |
| 001 | Sets the number of users for the accordination. | cess exclusion and password attack detection |
| | Access Password Num | [50 to 200 / 200 / 1] |
| 002 | Sets the number of passwords for the access exclusion and password attack detection function. | |
| 003 | Monitor interval | [1 to 10 / 3 / 1 sec] |
| 003 | Sets the interval of watching out for | user information and passwords. |

| 5417 | Access Attack | |
|------|--|--|
| 001 | Access Permissible number | [0 to 500 / 100 / 1] |
| 001 | Sets a limit on access attempts to prevent password cracking. | |
| 002 | Access Detect Time | [10 to 30 / 10 / 1 sec] |
| 002 | Sets a detection time to count password cracking. | |
| | Productivity Fall Weight | [0 to 9 / 3 / 1 sec] |
| 003 | Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected. | |
| | Attack Max Num | [50 to 200 / 200 / 1] |
| 004 | - | received for certification in order to slow down ssive number of access attempts have been |

| | User Authentication | |
|-------|--|---|
| 5420* | These settings should be done with the System Administrator. • These functions are enabled only after the user access feature has been enabled. | |
| | These functions are enabled a | only after the user access feature has been enablea. |
| 001 | Сору | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the copy application. |
| 011 | Document Server | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the document server. |
| 021 | Fax | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the fax application. |
| 031 | Scanner | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the scanner application. |
| 041 | Printer | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the printer application. |
| 051 | SDK1 | [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. |
| 081 | Browser | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the browser application. |

| 5481 | Authentication Error Code | |
|------|---|--|
| 3461 | These SP codes determine how the authentication failures are displayed. | |

| O01 System Log Disp [0 or 1 / 0 / -] 0: OFF [Default], 1: ON Determines whether an error code appears in the system log after a user authentication failure occurs. [0 or 1 / 1 / 1] | | | |
|--|-----|---------------------|---|
| after a user authentication failure occurs. | 001 | 001 System Log Disp | 0: OFF [Default], 1: ON |
| [0 or 1 / 1 / 1] | | | , , , |
| | | | [0 or 1 / 1 / 1] |
| | 002 | Panel Disp | Determines whether an error code appears on the operation panel after a user authentication failure occurs. |

| | MF KeyCard (Japan only) |
|------|---|
| | Sets up operation of the machine with a keycard. |
| 5490 | [0 to 1 / 0 / 1] |
| | 0: Disabled. Cancels operation without a user code. |
| | 1: Enabled. Allows operation without a user code. |

| 5501* | PM Alarm |
|-------|---|
| | PM Alarm Level |
| 001 | Sets the PM alarm interval. |
| | [0 to 9999 / 0 / 1 k copies/step] |
| | 0: No PM alarm |
| | Original Count Alarm (DFU) |
| 002 | Selects whether the PM alarm for the number of scans is enabled or not. |
| 002 | If this is "1", the PM alarm function is enabled. |
| | [0 = No / 1 = Yes] |

| | Jam Alarm |
|-------|---|
| | Sets the alarm to sound for the specified jam level (document misfeeds are not included). |
| 5504* | [0 to 3 / 3 / 1 step] |
| 3304 | 0: Zero (Off) |
| | 1: Low (2.5K jams) |
| | 2: Medium (3K jams) |
| | 3: High (6K jams) |

| | | Error Alarm | |
|--|-------|--|--|
| | | Sets the number of sheets to clear the error alarm counter. | |
| | 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 sheets (for example, default 5000 (C1b) or 10000 (C1c) sheets). The error alarm occurs when the SC error alarm counter reaches "5". | |
| | | [0 to 255 / 45 (C2b) , 50 (C1b/C1.5b) , 60 (C2c) , 100 (C1c/C1.5c) / 100 copies / step] | |

| 5508 | CC Call | |
|------|--------------------------------|--|
| 001 | Jam Remains | Enables/disables initiating a call. |
| 002 | Continuous Jams | [0 to 1 / 1 / 1] |
| 003 | Continuous Door Open | 0: Disable 1: Enable |
| 011 | Jam Detection: Time Length | Sets the length of time to determine the length of an unattended paper jam. [3 to 30 / 10 / 1 minute] |
| 012 | Jam Detection Continuous Count | Sets the number of continuous paper jams required to initiate a call. [2 to 10 / 5 / 1 time] |
| 013 | Door Open: Time Length | Sets the length of time the remains opens to determine when to initiate a call. [3 to 30/10/1 minute] |

| | SC/Alarm Setting | | |
|------------------------------------|--|-----------------------------------|--|
| 5515* | With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs. | | |
| 001 | SC Call | | |
| 002 | Service Parts Near End Call | | |
| 003 Service Parts End Call | | | |
| 004 | User Call | | |
| 006 | Communication Information Test Call | [0 or 1 / 1 / 1] 0: OFF | |
| 007 | Machine Information Notice | 1: ON | |
| 008 | Alarm Notice | | |
| 010 Supply Automatic Ordering Call | | | |
| 011 | Supply Management Report Call | | |
| 012 Jam/Door Open Call | | | |

| | Individual PM Part Alarm Call | | |
|------|--|--|--|
| 5516 | With @Remote in use, these SP codes can be set to issue an PM alarm call when one of the SP parts reaches its yield. | | |
| 001 | Disable/Enable Setting (0: Not send, 1: Send) | [0 or 1 / 1 / -] 0: Not send, 1: Send | |
| 004 | Percent yield for triggering PM alert | [1 to 255 / 75 / 1 %/step] | |

| | Memory Clear | |
|------|---|---|
| 5801 | Resets NVRAM data to the default settings. Before executing any of these SP codes, print an SMC Report. | |
| 001 | All Clear | Initializes items 2 to 15 below. |
| 002 | Engine | Initializes all registration settings for the engine and copy process 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 image file system. (IMH: Image Memory Handler) |
| 005 | MCS | Initializes the automatic delete time setting for stored documents. (MCS: Memory Control Service) |
| 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 | Initializes the printer defaults, programs registered, the printer SP bit switches, and the printer CSS counter. |
| 009 | Scanner Application | Initializes the defaults for the scanner and all the scanner SP modes. |
| 010 | Web Service | Deletes the Netfile (NFA) management files and thumbnails, and initializes the Job login ID. Netfiles: Jobs to be printed from the document server using a PC and the DeskTopBinder software |
| 011 | NCS | Initializes the system defaults and interface settings (IP addresses also), the SmartDeviceMonitor for Admin settings, WebStatusMonitor settings, and the TELNET settings. (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 (Log Count Service) settings. |
|-----|-----------|---|
| 020 | Web Uapli | Initializes the web user application settings. |
| 021 | ECS | Initializes ECS (Engine Control Service). |
| 023 | AICS | Initializes the AICS settings. |

| | FreeRun | |
|-------|---|---|
| 5802* | Performs a free run on the copier engine. The correct paper should be loaded in the 1st tray or 2nd tray, but paper is not fed. The main switch has to be turned off and on after using the free run mode for a test. | |
| 001 | TRAY1:A4LEF | - |
| 002 | TRAY2:A3 | - |
| 003 | TRAY2:A4SEF | - |

| | Input Check |
|------|---|
| 5803 | Displays the signals received from sensors and switches. ("Input Check Table" in "Main SP Tables-9") |

| | Output Check |
|------|--|
| 5804 | Turns on the electrical components individually for test purposes. ("Output Check Table" in "Main SP Tables-9") |

| | Anti-Condensation Heater | |
|------|--------------------------|--|
| 5805 | [0 or 1 / 0 / -] | |
| | 0:OFF / 1:ON | |

| 5810 | | SC Reset | |
|------|-----|-----------------|---|
| | 001 | Fusing SC Reset | Resets all level A service call conditions, such as fusing errors. To clear the service call, touch "Execute" on the LCD, then turn the main power switch off/on. |

| 5811 |
|------|
|------|

| 002 | Display | Displays the machine serial number. |
|-----|---------|-------------------------------------|
| 003 | BCU | Inputs the serial number. |
| 005 | FRAM | Displays the FRAM serial number. |

| 5812* | Service Tel. No. Setting | | |
|--|--------------------------|---|--|
| 001 Service coi | | Inputs the telephone number of the CE (displayed when a service call condition occurs.) | |
| | | Use this to input the fax number of the CE printed on the Counter Report (UP mode). | |
| OO3 Supply Inputs the telephone number of the supplemode screen. | | Inputs the telephone number of the supplier displayed on the user mode screen. | |
| ()()4 () peration | | Allows the service center contact telephone number to be displayed on the user mode screen. | |

| 5816 | Remote Service | |
|------|---|--|
| | I/F Setting | |
| | Selects the remote service setting. | |
| 001 | [0 to 2 / 2 / 1 /step] | |
| 001 | O: Remote service off | |
| | 1: CSS remote service on | |
| | 2: @Remote service on | |
| | CE Call | |
| | Performs the CE Call at the start or end of the service. | |
| 002 | [0 or 1 / 0 / 1 /step] | |
| 002 | 0: Start of the service | |
| | 1: End of the service | |
| | NOTE: This SP is activated only when SP 5816-001 is set to "2". | |

| | Function Flag |
|-----|--|
| | Enables or disables the remote service function. |
| 003 | [0 to 1 / 0 / 1 /step] |
| | 0: Disabled, 1: Enabled |
| | NOTE: This SP setting is changed to "1" after @Remote registration has been completed. |
| | Communication Test Call |
| 004 | This SP issues a test call from a GW machine to determine whether it can communicate successfully with the call center after it has been set up for NRS. Successful return will be in the range 0 to 99. |
| | Device Information Call |
| 005 | This SP issues a call to notify the NRS device information to the call center. Successful return will be in the range 0 to 99. |
| | SSL Disable |
| | Uses or does not use the RCG certification by SSL when calling the RCG. |
| 007 | [0 to 1 / 0 / 1 /step] |
| | 0: Uses the RCG certification |
| | 1: Does no use the RCG certification |
| | RCG Connect Timeout |
| 008 | Specifies the connect timeout interval when calling the RCG. |
| | [1 to 90 / 30 / 1 second /step] |
| | RCG Write Timeout |
| 009 | Specifies the write timeout interval when calling the RCG. |
| | [0 to 100 / 60 / 1 second /step] |
| | RCG Read Timeout |
| 010 | Specifies the read timeout interval when calling the RCG. |
| | [0 to 100 / 60 / 1 second /step] |

| | Port 80 Enable |
|-------|--|
| 011 | Enables/disables access via port 80 to the SOAP method. |
| 011 | [0 or 1 / 0 / -] |
| | 0: Disabled, 1: Enabled |
| | @Remote Communication Permission |
| | [0 to 2 / 1 / 1] |
| 012 | 0: Not permitted |
| | 1: Permitted |
| | 2: Partially limited |
| | RFU (Remote Firmware Update) Timing |
| | Selects the RFU timing. |
| 013 | [0 or 1 / 1 / -] |
| | 0: RFU is executed whenever update request is received. |
| | 1: RFU is executed only when the machine is in the sleep mode. |
| | RCG Error Cause |
| 0.1.4 | [0 or 1 / 0 / –] |
| 014 | 0: Normal |
| | 1: Fails to reflect the client/server certificate settings by network failure to reboot. Transition to 0 on restarting the machine. |
| | RCG-C Registed |
| 021 | This SP displays the Embedded RC Gate installation end flag. |
| 021 | 0: Installation not completed |
| | 1: Installation completed |
| | Connect Type (N/M) |
| | This SP displays and selects the Embedded RC Gate connection method. |
| 023 | [0 or 1 / 0 / 1 /step |
| | 0: Internet connection |
| | 1: Dial-up connection |

| | Cert. Expire Timing DFU |
|-----|---|
| 061 | |
| | Proximity of the expiration of the certification. |
| | Use Proxy |
| 062 | This SP setting determines if the proxy server is used when the machine communicates with the service center. |
| | Proxy Host |
| 063 | This SP sets the address of the proxy server used for communication between Embedded RC Gate-N and the gateway. Use this SP to set up or display the customer proxy server address. The address is necessary to set up Embedded RC Gate-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 Port Number |
| 064 | This SP sets the port number of the proxy server used for communication between Embedded RC Gate-N and the gateway. This setting is necessary to set up Embedded RC Gate-N. ••• Note |
| | This port number is customer information and is not printed in the SMC report. |
| | Proxy User Name |
| 065 | This SP sets the HTTP proxy certification user name. Note • The length of the name is limited to 31 characters. Any character beyond the 31st character is ignored. |
| | This name is customer information and is not printed in the SMC report. |
| | Proxy Password |
| 066 | 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 Embedded RC Gate is set correctly. | |
| | 1 | The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated. | |
| | 2 | The certification update is completed and the GW URL is being notified of the successful update. | |
| | 3 | The certification update failed, and the GW URL is being notified of the failed update. | |
| | 4 | The period of the certification has expired and new request for an update is being sent to the GW URL. | |
| | 11 | A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection. | |
| 067 | 12 | The rescue certification setting is completed and the GW URL is being notified of the certification update request. | |
| | 13 | The notification of the request for certification update has completed successfully, and the system is waiting for the certification update request from the rescue GW URL. | |
| | 14 | The notification of the certification request has been received from the rescue GW controller, and the certification is being stored. | |
| | 15 | The certification has been stored, and the GW URL is being notified of the successful completion of this event. | |
| | 16 | The storing of the certification has failed, and the GW URL is being notified of the failure of this event. | |
| | 17 | The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded. | |
| | 18 | The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update. | |

| | CERT | : Error | | |
|-----|---|--|---|--|
| | Displays a number code that describes the reason for the request for update of the certification. | | | |
| | 0 | Normal. There is no request for certification update in progress. | | |
| | 1 | Request for certification | update in progress. The current certification has expired. | |
| 068 | 2 | An SSL error notification has been issued. Issued after the certification has expired. | | |
| | 3 | Notification of shift from a common authentication to an individual certification. | | |
| | 4 | Notification of a commo | on certification without ID2. | |
| | 5 | Notification that no certi | fication was issued. | |
| | 6 | Notification that GW UF | RL does not exist. | |
| 069 | CERT | : Up ID | The ID of the request for certification. | |
| 083 | Firm | Up 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 Ver. | | Displays the macro version of the @Remote certification. | |
| 088 | CERT: PAC Ver. | | Displays the PAC version of the @Remote certification. | |
| 089 | CERT: ID2 Code | | Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asteriskes (*) indicate that no @Remote certification exists. "000000" indicates "Common certification". | |
| 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 @Remote certification exists. "000000" indicates "Common certification". | |

| ()QT (FRI: SerialNo | | Displays serial number for the @Remote certification. Asterisks (*) indicate that no @Remote certification exists. | |
|-----------------------|--|--|--|
| 092 | CERT: Issuer | Displays the common name of the issuer of the @Remote certification. CN = the following 30 bytes. Asteriskes () indicate that no @Remote certification 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. | |
| 007 | Server CN Check | | |
| 096 | Not used | | |
| 004 | GW Host | | |
| 096 | Not used | | |
| 097 | GW URL Path | | |
| 097 | Not used | | |
| 099 | Debug RescueG/WURL Set | | |
| 099 | Not used | | |
| | CERT: Encrypt Level | | |
| | Displays the encryption level for the NRS certificate. | | |
| 102* | [1 or 2 / 1 / -] | | |
| | 1: Indicates that the certificate encryption level is 512 bits. | | |
| | 2: Indicates that the certificate encryption level is 2048 bits. | | |
| 150 | Selection Country | | |
| 130 | Not used | | |
| 151 | Line Type Automatic Judgment | | |
| | Not used | | |
| 1.50 | Line Type Judgment Result | | |
| 152 | Not used | | |
| | | | |

| 1.50 | Selection Dial / Push | | | | |
|----------|---------------------------------------|--|--|--|--|
| 153 | Not used | | | | |
| 1.5.4 | Outside Line Outgoing Number | | | | |
| 154 | Not used | | | | |
| 1.5.4 | Dial Up User Name | | | | |
| 156 | Not used | | | | |
| 157 | Dial Up Password | | | | |
| 137 | Not used | | | | |
| 161 | Local Phone Number | | | | |
| 101 | Not used | | | | |
| 162 | Connection Timing Adjustment Incoming | | | | |
| 102 | Not used | | | | |
| 163 | Access Point | | | | |
| 103 | Not used | | | | |
| 164 | Line Connecting | | | | |
| Not used | | | | | |
| 173 | Modem Serial No. | | | | |
| 170 | Not used | | | | |
| 174 | Retransmission Limit | | | | |
| 174 | Not used | | | | |
| 186 | RCG-C M DebugBitSW | | | | |
| 100 | Not used | | | | |
| 187 | FAX TX Priority | | | | |
| 107 | Not used | | | | |
| 200 | Manual Polling | | | | |
| 200 | Executes the manual polling. | | | | |

| Regist Status Displays a number that indicates the status of the @Remote service device. 0: Neither the @Remote device nor Embedded RCG Gate is set. 1: The Embedded RCG Gate is being set. Only Box registration is completed. In this status, @Remote device cannot communicate with this device. 2: The Embedded RCG Gate is set. In this status, the @Remote device cannot communicate with this device. 3: The @Remote device is being set. In this status the Embedded RCG Gate cannot set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | | | | | | |
|---|---|--|--|--|--|--|
| 0: Neither the @Remote device nor Embedded RCG Gate is set. 1: The Embedded RCG Gate is being set. Only Box registration is completed. In this status, @Remote device cannot communicate with this device. 2: The Embedded RCG Gate is set. In this status, the @Remote device cannot communicate with this device. 3: The @Remote device is being set. In this status the Embedded RCG Gate cannot set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | Regist Status | | | | | |
| 1: The Embedded RCG Gate is being set. Only Box registration is completed. In this status, @Remote device cannot communicate with this device. 2: The Embedded RCG Gate is set. In this status, the @Remote device cannot communicate with this device. 3: The @Remote device is being set. In this status the Embedded RCG Gate cannot set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | Displays a number that indicates the status of the @Remote service device. | | | | | |
| status, @Remote device cannot communicate with this device. 2: The Embedded RCG Gate is set. In this status, the @Remote device cannot communicate with this device. 3: The @Remote device is being set. In this status the Embedded RCG Gate cannot set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | 0: Neither the @Remote device nor Embedded RCG Gate is set. | | | | | |
| communicate with this device. 3: The @Remote device is being set. In this status the Embedded RCG Gate cannot set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | S | | | | | |
| set. 4: The @Remote module has not started. 202 Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. 0: Succeeded 1: Confirmation number error 2: Registration in progress | | | | | | |
| Letter Number Allows entry of the request number needed for the Embedded RCG Gate. 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. O: Succeeded 1: Confirmation number error 2: Registration in progress | be | | | | | |
| 203 Confirm Execute Executes the confirmation request to the @Remote Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. O: Succeeded 1: Confirmation number error 2: Registration in progress | | | | | | |
| Confirm Execute Gateway. 204 Confirm Result Displays a number that indicates the result of the confirmation executed with SP5816-203. O: Succeeded 1: Confirmation number error 2: Registration in progress | | | | | | |
| Displays a number that indicates the result of the confirmation executed with SP5816-203. O: Succeeded 1: Confirmation number error 2: Registration in progress | | | | | | |
| SP5816-203. O: Succeeded 1: Confirmation number error 2: Registration in progress | Confirm Result | | | | | |
| 1: Confirmation number error 2: Registration in progress | • • | | | | | |
| 2: Registration in progress | 0: Succeeded | | | | | |
| | | | | | | |
| 0.5 | | | | | | |
| 3: Proxy error (proxy enabled) | 3: Proxy error (proxy enabled) | | | | | |
| 4: Proxy error (proxy disabled) | | | | | | |
| 5: Proxy error (Illegal user name or password) | | | | | | |
| 6: Communication error | | | | | | |
| 7: Certification update error | | | | | | |
| 8: Other error | | | | | | |
| 9: Confirmation executing | | | | | | |
| Confirm Place | | | | | | |
| Displays the result of the notification sent to the device from the Gateway in answer confirmation request. Displayed only when the result is registered at the Gateway. | Displays the result of the notification sent to the device from the Gateway in answer to the confirmation request. Displayed only when the result is registered at the Gateway. | | | | | |
| 206 Register Execute Executes "Embedded RCG Registration". | | | | | | |

Register Result

Displays a number that indicates the registration result.

- 0: Succeeded
- 2: Registration in progress
- 3: Proxy error (proxy enabled)
- 207
 - 4: Proxy error (proxy disabled)
 - 5: Proxy error (Illegal user name or password)
 - 6: Communication error
 - 7: Certification update error
 - 8: Other error
 - 9: Registration executing

Error Code

Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.

| | Cause | Code | Meaning |
|-----|---------------------------------------|--------|--|
| | Illegal Modem Parameter | -11001 | Chat parameter error |
| | | -11002 | Chat execution error |
| | | -11003 | Unexpected error |
| | Operation Error, Incorrect Setting | -12002 | Inquiry, registration attempted without acquiring device status. |
| | | -12003 | Attempted registration without execution of an inquiry and no previous registration. |
| 208 | | -12004 | Attempted setting with illegal entries for certification and ID2. |
| | | -12005 | @Remote communication is prohibited. The device has an Embedded RC gate-related problem. |
| | | -12006 | A confirmation request was made after the confirmation had been already completed. |
| | | -12007 | The request number used at registration was different from the one used at confirmation. |
| | | -12008 | Update certification failed because mainframe was in use. |
| | | -12009 | ID2 mismatch between an individual certification and NVRAM |
| | | -12010 | Certification area is not initialized. |

| | | -2385 | Attempted dial up overseas without the correct international prefix for the telephone number. | |
|-----|--------------------------------------|--|---|--|
| | | -2387 | Not supported at the Service Center | |
| | Error Caused by Response from GW URL | -2389 | Database out of service | |
| | from GVV UKL | -2390 | Program out of service | |
| | | -2391 | Two registrations for same device | |
| | | -2392 | Parameter error | |
| | | -2393 | RCG device not managed | |
| | | | Device not managed | |
| | | -2395 | Box ID for RCG device is illegal | |
| | | -2396 | Device ID for RCG device is illegal | |
| | | -2397 | Incorrect ID2 format | |
| | | -2398 | Incorrect request number format | |
| | | Releases the machine from its Embedded RCG Gate setup. | | |
| 209 | Instl Clear | NOTE: Turn off and on the main power switch after this setting has been changed. | | |
| 250 | CommLog Print | Prints the communication log. | | |

| 5821* | Remote Service Address | | | |
|-------|------------------------|---|--|--|
| 002 | RCG IP Address | Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [00000000h to FFFFFFFFh / 0000000h / 1] | | |
| 003 | RCG Port | Sets the port number of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [0 to 65535 / 443 / 1] | | |

| 004 | RCG URL Path | Sets the URL path of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [0 to 16 characters / /RCG/services/ /-] |
|-----|--------------|--|
|-----|--------------|--|

| | NV-RAM Data Upload |
|------|---|
| 5824 | Uploads the NVRAM data to an SD card. Push Execute. |
| | Note: When uploading data in this SP mode, the front door must be open. |

| | NV-RAM Data Download | |
|------|--|--|
| 5825 | Downloads data from an SD card to the NVRAM in the machine. After downloading is completed, remove the card and turn the machine power off and on. | |

| 5828 | Network Setting |
|------|--|
| | IPv4 Address (Ethernet/IEEE 802.11) |
| 001 | This SP allows you to check and reset the IPv4 address for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd |
| | IPv4 Subnet Mask (Ethernet/IEEE 802.11) |
| 002 | This SP allows you to check and reset the IPv4 subnet mask for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd |
| | IPv4 Default Gateway (Ethernet/IEEE 802.11) |
| 003 | This SP allows you to check and reset the IPv4 default gateway used by the network for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd |
| | DHCP (Ethernet/IEEE 802.11) |
| 006 | This SP code allows you check and change the setting that determines whether the IP address is used with DHCP on an Ethernet or wireless (802.11) LAN network. [0 to 1 / 1 / 1] |
| | 0: Not used (manual setting) |
| | 1: Used |

| | Active IPv4 Address | | | | | | |
|-----|---|--|--|--|--|--|--|
| 021 | This SP allows you to check the IPv4 address that was used when the machine started up with DHCP. | | | | | | |
| | Active IPv4 Subnet Mask | | | | | | |
| 022 | This SP allows you to check the IPv4 subnet mask setting that was used when the machine started up with DHCP. | | | | | | |
| | Active IPv4 Gateway Address | | | | | | |
| 023 | This SP allows you to check the IPv4 default gateway setting that was used when machine started up with DHCP. | | | | | | |
| 050 | 1284 Compatibility (Centro) | Enables and disables bi-directional communication on the parallel connection between the machine and a computer. [0 to 1 / 1 / 1] 0:Off, 1: On | | | | | |
| 052 | ECP (Centro) | Disables and enables the ECP feature (1284 Mode) for data transfer. [0 to 1 / 1 / 1] 0: Disabled, 1: Enabled | | | | | |
| 065 | Job Spooling | Switches the job spooling on and off. [0 to 1 / 0 / 1] 0: No spooling, 1: Spooling enabled | | | | | |
| 066 | Job Spooling Clear: Start Time | This SP determines whether the job interrupted at power off is resumed at the next power on. This SP operates only when SP5828-065 is set to "1". [0 to 1 / 1 / 1] 1: OFF Resumes printing spooled jog. 0: ON Clears spooled job. | | | | | |

| | Job Spooling (Protocol) | | This SP determines whether job spooling is enabled or disabled for each protocol. This is a 8-bit setting. [0 to 1 / 1 / 1] | | |
|-----|-----------------------------------|-----------------------------|--|-------------------------------------|---|
| | | | _ | 0: No spooling, 1: Spooling enabled | |
| 069 | 0 | LPR | | 4 | BMLinks (Japan Only) |
| | 1 | FTP (Not Used) | | 5 | DIPRINT |
| | 2 IPP | | | 6 | Reserved (Not Used) |
| | 3 | SMB | | 7 | Reserved (Not Used) |
| | TELNET | | 1 | | enables Telnet operation. If this SP is e Telnet port is closed. |
| 090 | (0: | OFF 1:ON) | [0 to 1 | | · - |
| | | | 0: Disa | ble, | 1: Enable |
| | Web (0:OFF 1:ON) | | Disables or enables the Web operation. | | |
| 091 | | | [0 to 1 / 1 / 1] 0: Disable, 1: Enable | | |
| 145 | Active IPv6 Link Local Address | | This is the IPv6 local address referenced on the Ethernet or wireless LAN (802.11) 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. These notations can be abbreviated. See "Note: IPV6 Addresses" below this table. | | |
| 147 | Ac | tive IPv6 Stateless Address | | | |
| 149 | Active IPv6 Stateless Address | | These SPs are the IPv6 stateless addresses (1 to 5) referenced on the Ethernet or wireless LAN (802.11b) | | |
| 151 | Ac | tive IPv6 Stateless Address | in the format: "Stateless Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. | | |
| 153 | Ac | tive IPv6 Stateless Address | | | |
| 155 | Ac | tive IPv6 Stateless Address | | | |

| 156 | IPv6 Manual Address |
|-----|---|
| | This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11) 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. These notations can be abbreviated. See "Note: IPV6 Addresses" below this table. |
| | IPv6 Gateway Address |
| 158 | This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN (802.11). The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. These notations can be abbreviated. See "Note: IPV6 Addresses" below this table. |

Note: IPV6 Addresses

Ethernet and the Wireless LAN (802.11) reference the IPV6 "Link-Local address + Prefix Length". The IPV6 address consists of 128 bits divided into 8 blocks of 16 bits: aaaa:bbbb:cccc:ddd:eeee:ffff:gggg:hhhh:

The prefix length is inserted at the 17th byte (Prefix Range: 0x0 to 0x80). The initial setting is 0x40 (64).

For example, the data: "2001123456789012abcdef012345678940h" is expressed:

"2001:1234:5678:9012:abcd:ef01:2345:6789": prefixlen 64

However, the actual IPV6 address display is abbreviated according to the following rules.

Rules for Abbreviating IPV6 Addresses

1. The IPV6 address is expressed in hexadecimal delimited by colons (:) with the following characters:

0123456789abcdefABCDEF

2. A colon is inserted as a delimiter every 4th hexadecimal character.

fe80:0000:0000:0000:0207:40ff:0000:340e

3. The notations can be abbreviated by eliminating zeros where the MSB and digits following the MSB are zero. The example in "2" above, then, becomes

fe80:0:0:0207:40ff:0:340e

4. Sections where only zeros exist can be abbreviated with double colons (::). This abbreviation can be done also where succeeding sections contain only zeros (but this can be done only at one point in the address). The example in "2" and "3" above then becomes:

fe80::207:40ff:0:340e (only the first null sets zero digits are abbreviated as "::")

fe80:0:0:0:207:40ff::340e (only the last null set before "340e" is abbreviated as "::")

| 161 | IPv6 Stateless Auto Setting | Enable or disables the automatic setting for IPv6 stateless. | |
|-----|---|--|--|
| | | [0 or 1 / 1 / 1] | |
| | | 1: Enable, 0: Disable | |
| | Web Item visible | | |
| | Displays or does not display the Web system items. | | |
| 236 | [0 x 0000 to 0 x ffff / 0 x ffff] 0: Not displayed, 1: Displayed | | |
| 200 | bit0: Net RICOH | | |
| | bit1: Consumable Supplier | | |
| | bit2-15: Reserved (all) | | |
| | Web shopping link visible | | |
| 237 | 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 | | |
| | | | |

| | Web supplies Link visible | | | |
|-----|--|--|--|--|
| 238 | 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 to 1 / 1 / 1] | | |
| | 0: Not display, 1:Display | | | |
| | Web Link1 Name | | | |
| 239 | 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. | | | |
| | Web Link 1 URL | | | |
| 240 | his 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. | | | |
| | Web Link 1 visible | | | |
| 241 | 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" | | |
| | DHCPv6 DUID | | | |
| 249 | Sets DHCPv6 DUID. | | | |
| 247 | [0000000000000000000000000000000000000 | | | |
| | FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF | Fh / 00000000000000000000000000000000000 | | |

| | HDD |
|------|---|
| 5832 | Enter the SP number for the partition to initialize, then press #. When the execution ends, cycle the machine off and on. |
| 001 | HDD Formatting (All) |
| 002 | HDD Formatting (IMH) |
| 003 | HDD Formatting (Thumbnail) |

| 004 | HDD Formatting (Job Log) |
|-----|--|
| 005 | HDD Formatting (Printer Fonts) |
| 006 | HDD Formatting (User Info) |
| 007 | Mail RX Data |
| 008 | Mail TX Data |
| 009 | HDD Formatting (Data for Design) |
| 010 | HDD Formatting (Log) |
| 011 | HDD Formatting (Ridoc I/F) (for Ridoc Desk Top Binder) |

| 5836* | Capture Setting | | |
|-------|--|--|--|
| 001 | Capture Function (0:Off 1:On) | | |
| | With this function disabled, the settings related to the capture feature cannot be initialized, displayed, or selected. | | |
| | [0 to 1 / 0 / 1] | | |
| | 0: Disable, 1: Enable | | |
| | Panel Setting | | |
| 002 | Determines whether each capture related setting can be selected or updated from the initial system screen. $[0 \text{ to } 1 \ / \ 0 \ / \ 1]$ | | |
| | 0: Disable, 1: Enable | | |
| | The setting for SP5836-001 has priority. | | |
| 072 | Reduction for Copy B&W Text | [0 to 6 / 0 / 1] | |
| 0/2 | | 0:1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 073 | Daduation for Consu D 8 VA/ Other | [0 to 6 / 0 / 1] | |
| 0/3 | Reduction for Copy B&W Other | 0:1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 075 | Reduction for Printer B&W | [0 to 6 / 0 / 1] | |
| 075 | | 0 1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 078 | Reduction for Printer B&W 1200 | 1: 1/2 , 3: 1/4, 4: 1/6, 5: 1/8 | |

| 082 | Format for Copy B&W Text | | [0 to 3 / 1 / 1] O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
|-----|--|--|--|
| 083 | Format Copy B&W Other | | [0 to 3 / 1 / 1] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
| 085 | Format for Printer B&W | | [0 to 3 / 1 / 1] O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
| | Default for JPEG | | [5 to 95 / 50 / 1] |
| 091 | Sets the JPEG format default for documents sent to the document management se with the MLB, with JPEG selected as the format. Enabled only when optional File Format Converter (MLB: Media Link Board) is installed. | | ormat. Enabled only when optional File |
| 101 | Primary srv IP address | | e IP address for the primary capture server. pasically 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 b | pasically 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. | |
| 122 | Reso: Copy (Mono) | [0 to 255 / 3 / 1/step] | |
| | Selects the resolution for BW copy mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi | | |
| 124 | Reso: Print (Mono) | | pasically adjusted by the remote system. |

| | Selects the resolution for BW print mode. This is basically adjusted by the remote system. | | |
|-----|--|--|--|
| | 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi | | |
| 126 | Reso: Fax (Mono) This is basically adjusted by the remote system. [0 to 255 / 3 / 1/step] | | |
| | Selects the resolution for BW fax mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | | |
| 127 | Reso: Scan (Color) This is basically adjusted by the remote system. [0 to 255 / 4 / 1/step] | | |
| | Selects the resolution for color scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | | |
| 128 | Reso: Scan (Mono) This is basically adjusted by the remote system. [0 to 255 / 3 / 1/step] | | |
| | Selects the resolution for BW scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | | |
| 141 | All Addr Info Switch | [0 or 1 / 1 / -] 0: Off, 1: On | |
| | Turns on or off all the address information transmission for the captured resources. | | |
| 142 | Stand-by Doc Max Number | [10 to 9999 / 2000 / 1/step] | |
| | Selects the maximum number of a server. | captured documents to be transmitted to the document | |
| | | | |

| 5840* | IEEE 802.11 |
|-------|--|
| | Channel MAX |
| 006 | Sets the maximum range of the bandwidth for the wireless LAN. This bandwidth setting varies for different countries. |
| | [1 to 14 / 11 (NA), 13 (EU), 14 (JPN) / 1] |
| | JPN: 1 to 14, NA: 1 to 11, EU: 1 to 13 |

| | Channel MIN | | |
|-----|--|--|--|
| 007 | Sets the minimum range of the bandwidth for operation of the wireless LAN. This bandwidth setting varies for different countries. [1 to 14 / 1 / 1] JPN: 1 to 14, NA: 1 to 11, EU: 1 to 13 | | |
| | Transmission speed | [0 x 00 to 0 x FF / 0 x FF to Auto / -] | |
| | 0 x FF to Auto [Default] 0 x 11 - 55M Fix | 0 x 07 - 11M Fix | |
| | 0 x 10 - 48M Fix | 0 x 05 - 5.5M Fix | |
| 008 | 0 x 0F - 36M Fix | 0 x 08 - 1M Fix | |
| | 0 x 0E - 18M Fix | 0 x 13 - 0 x FE (reserved) | |
| | 0 x 0D - 12M Fix | 0 x 12 - 72M (reserved) | |
| | 0 x 0B - 9M Fix | 0 x 09 - 22M (reserved) | |
| | 0 x 0A - 6M Fix | | |
| | WEP Key Select | | |
| | Selects the WEP key. | | |
| 011 | Bit 1 and 0 | | |
| | 00: Key1, 01: Key2 (Reserved), | | |
| | 10: Key3 (Reserved), 11: Key4(Reserved) | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |
| | RTS/CTS Thresh | | |
| 013 | Adjusts the RTS/CTS threshold for the IEEE802.11 card. | | |
| 010 | [0 to 3000 / 2432 / 1] | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |
| | Fragment Thresh | | |
| 042 | Adjusts the fragment threshold for the IEEE802.11 card. | | |
| 042 | [256 to 2346 / 2346 / 1] | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |

| 043 | 11g CTS to Self |
|------|--|
| | Determines whether the CTS self function is turned on or off. |
| 0-10 | [0 to 1 / 1 / 1] 0: Off, 1: On |
| | This SP is displayed only when the IEEE802.11 card is installed. |
| | 1 1g Slot Time |
| 044 | Selects the slot time for IEEE802.11. |
| 044 | [0 to 1 $/$ 0 $/$ 1] 0: 20 μ m, 1: 9 μ m |
| | This SP is displayed only when the IEEE802.11 card is installed. |
| | WPA Debug Lvl |
| 045 | 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 | |
|-------|---|--|
| | Press the User Tools key. These names appear when the user presses the Inquiry button on the User Tools screen. | |
| 001 | Toner Name Setting: Black | |
| 007 | OrgStamp | |
| 011 | StapleStd 1 | |
| 012 | StapleStd2 | |
| 013 | StapleStd3 | |
| 014 | StapleStd4 | |
| 021 | StapleBind 1 | |
| 022 | StapleBind2 | |
| 023 | StapleBind3 | |

| 5844 | USB |
|------|-----|
| 1 | |

| | Transfer Rate |
|-----|---|
| | Sets the speed for USB data transmission. |
| 001 | [0 x 01 or 0 x 04 $/$ 0 x 04 $/$ -] |
| | 0 x 01 [Full Speed], 0 x 04 [Auto Change] |
| | Vendor ID |
| | Sets the vendor ID: |
| 002 | Initial Setting: 0x05A Ricoh Company |
| | [0x0000 to 0xFFFF/1] (DFU) |
| | Product ID |
| 003 | Sets the product ID. |
| | [0x0000 to 0xFFFF/1] (DFU) |
| | Device Release No. |
| | Sets the device release number of the BCD (binary coded decimal) display. |
| 004 | [0000 to 9999 / 100 / 1] (DFU) |
| | Enter as a decimal number. NCS converts the number to hexadecimal number recognized as the BCD. |
| 005 | Fixed USB Port |
| | This SP standardizes for common use the model name and serial number for USB PnP |
| | (Plug & Play). It determines whether the driver requires re-installation. |
| | [0 to 2 / 0 / 1] 0: OFF |
| | 1: Level 1 |
| | 2: Level 2 |
| 006 | PnP Model Name |
| | This SP sets the model name to be used by the USB PnP when "Function Enable (Level |
| | 2) is set so the USB Serial No. can have a common name (SP5844-5). |
| | Default: Laser Printer (up to 20 characters allowed). |
| 007 | PnP Serial Number |

This SP sets the serial number to be used by the USB PnP when "Function Enable (Level set so the USB Serial No. can have a common name (SP5844-5). Default: None (up to 12 characters allowed for entry). • Make sure that this entry is the same as the serial number in use. • At initialization the serial number generated from the model name is used, not the setting of this SP code. • At times other than initialization, the value set for this SP code is used. 100 Notify Unsupport This SP determines whether an alert message appears on the control panel when a USB device (unsupported device) that cannot use an A-connector is connected. [0 to 1 / 1 / 1] 0: Function enable 1: Function disable • An unsupported device is a device that cannot use the functions of the USB device. For example, a USB mouse cannot be used even if it connected. • If the PictBridge option is not mounted, even if a digital camera is connected it cannot be used because it is an unsupported device.

| 5845* | Delivery Server Setting |
|-------|---|
| 3643 | These are delivery server settings. |
| 001 | FTP Port No. |
| 001 | [0 to 65535 / 3670 / 1] |
| | IP Address (Primary) |
| 002 | Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be used with the initial system setting. |
| | [Range: 000.000.000.000 to 255.255.255.255] |
| | Delivery Error Display Time |
| 006 | Use this setting to set the length of time that the message is shown when a test error occurs during document transfer with the NetFile application and an external device. [0 to 999 / 300 / 1 sec] |

| | IP Address (Secondary) | | | |
|---|---|------------------------------|--|--|
| 008 | Sets the IP address that is given to the computer that is the secondary delivery server for Scan Router. This SP lets you set only the IP address, and does not refer to the DNS setting. | | | |
| | [Range: 000.000.000.000 to 255.255.25 | 55.255] | | |
| | Delivery Server Model | | | |
| | Lets you change the model of the delivery server that is registered by the I/O device. | | | |
| | [0 to 4 / 0 / 1 step] | | | |
| 009 | 0: Unknown | | | |
| | 1: SG1 Provided | | | |
| | 2: SG1 Package | | | |
| | 3: SG2 Provided | | | |
| | 4: SG2 Package | | | |
| | Delivery Svr. Capability | | | |
| | Changes the functions that the registered I/O device can do. | | | |
| | [0 to 255 / 0 / 1 step] | | | |
| | Bit7 = 1 Comment information exits | | | |
| | Bit6 = 1 Direct specification of mail address possible | | | |
| 010 | Bit5 = 1 Mail RX confirmation setting possible | | | |
| | Bit4 = 1 Address book automatic update function exists | | | |
| | Bit3 = 1 Fax RX delivery function exists | | | |
| | Bit2 = 1 Sender password function exists | | | |
| | Bit1 = 1 Function to link MK-1 user and Sender exists | | | |
| | BitO = 1 Sender specification required (if set to 1, Bit6 is set to "0") | | | |
| | Delivery Svr.Capability (Ext) | | | |
| 011 | These settings are for future use. They will let you increase the number of registered devices (in addition to those registered for SP5845 010). | | | |
| There are eight bits (Bit 0 to Bit 7). All are unused at this time. | | nused at this time. | | |
| 013 | Server Scheme (Primary) | | | |
| 014 | Server port Number (Primary) | [1 to 65535 / 80 / 1] | | |
| 015 | Server URL Path (Primary) | | | |

| 016 | Server Scheme (Secondary) | |
|-----------------------------------|--|--|
| 017 Server Port Number(Secondary) | | [1 to 65535 / 80 / 1] |
| 018 | Server URL Path (Secondary) | |
| 022 | Rapid Sending Control | [0 to 1 / 1 / -] 0: Disable, 1: Enable |
| | Enables or disables the prevention function for the continuous data sending error. | |

| 5846* | UCS Setting | |
|-------|---|--|
| | Machine ID (for Delivery Server) | |
| 001 | Displays the unique device ID in use by the delivery server directory. The value is only displayed and cannot be changed. | |
| | This ID is created from the NIC MAC or IEEE 1394 EUI. | |
| | The ID is displayed as either 6-byle or 8-byte binary. | |
| | Machine ID Clear (for Delivery Server) | |
| 002 | Clears the unique ID of the device used as the name in the file transfer directory. Execute this SP if the connection of the device to the delivery server is unstable. After clearing the ID, the ID will be established again automatically by cycling the machine off and on. | |
| | Maximum Entries | |
| 003 | Changes the maximum number of entries that UCS can handle. [2000 to 20000 / 2000 / 1 step] | |
| | If a value smaller than the present value is set, the UCS managed data is cleared, and the data (excluding user code information) is displayed. | |
| | Delivery Server Retry Timer | |
| 006 | Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book. | |
| | [0 to 255 / 0 / 1 step] | |
| | 0: No retries | |

| | Delivery Server Retry Times |
|-----|--|
| 007 | Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book. [0 to 255 / 0 / 1 step] |
| | Delivery Server Maximum Entries |
| 008 | Lets you set the maximum number of account entries and information about the users of the delivery server controlled by UCS. [2000 to 20000 / 2000 / 1 step] |
| | LDAP Search Timeout |
| 010 | Sets the length of the time-out for the search of the LDAP server. [1 to 255 / 60 / 1 step] |
| | WSD Maximum Entries |
| 020 | WSD (Web Services on Devices) is the Microsoft standard for connectivity to webservice enabled devices. [50 to 250 / 250 / 1] |
| | Folder Auth Change |
| | This SP determines whether the user login information (Login User name and Password) or address (destination setting in the address book for Scan-to-SMB) is used to permit folder access. The machine must be cycled off/on for this setting to take effect if it is changed. |
| 021 | [0 to 1 / 0 / 1] |
| | 0: Login User |
| | Uses operator login information (initial value of main machine) |
| | 1: Destination |
| | Uses address authorization information |
| 022 | Initial Value of Upper Limit Count |
| UZZ | [0 to 999999 / 500 / 1] |

Addr Book Migration (USB -> HDD)

This SP moves the address book data from the SD card or flash ROM on the controller board to the HDD. You must cycle the machine off and on after executing this SP.

- 1. Turn the machine off.
- 2. Install the HDD.
- 3. Turn the machine on.
- 4. Do SP5846 040.

040 5. Turn the machine off/on.



- Executing this SP overwrites any address book data already on the HDD with the data from the flash ROM on the controller board.
- We recommend that you back up all directory information to an SD card with SP5846-051 before you execute this SP.
- After the address book data is copied to HDD, all the address book data is deleted from the flash ROM. If the operation fails, the data is not erased from the flash ROM.

041 Fill Addr Acl Info.

This SP must be executed immediately after installation of an HDD unit in a basic machine that previously had no HDD. The first time the machine is powered on with the new HDD installed, the system automatically takes the address book from the NVRAM and writes it onto the new HDD. However, the new address book on the HDD can be accessed only by the system administrator at this stage. Executing this SP by the service technician immediately after power on grants full address book access to all users.

Procedure

- 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. However, at this point the address book can be accessed by only the system administrator or key operator.
- 5. Enter the SP mode and do SP5846 041. After this SP executes successfully, any user can access the address book.

| | Addr Book Media | | |
|----------------------|--|-----------------------------------|--|
| | Displays the slot number where an address book data is in. | | |
| | [0 to 30 / - /1] | | |
| 043 | 0: Unconfirmed | | |
| | 1: SD Slot 1 | 20: HDD | |
| | 2: SD Slot 2 | 30: Nothing | |
| | 4: USB Flash ROM | | |
| 046 | Initialize All Setting & Addr Book | | |
| 040 | Initializes all settings and the address book. | | |
| | Initialize Local Address Book | | |
| 047 | Clears all of the address information from th managed with UCS. | e local address book of a machine | |
| | Initialize Delivery Addr Book | | |
| 048 | Push [Execute] to delete all items (this does not include user codes) in the delivery address book that is controlled by UCS. | | |
| | Initialize LDAP Addr Book | | |
| 049 | Push [Execute] to delete all items (this does not include user codes) in the LDAP address book that is controlled by UCS. | | |
| | Initialize All Addr Book | | |
| 050 | Clears everything (including users codes) in the directory information managed by UCS. However, the accounts and passwords of the system administrators are not deleted. | | |
| Backup All Addr Book | | | |
| 051 | Copies all directory information to the SD card. Do this SP before replacing the controller board or HDD. The operation may not succeed if the controller board or HDD is damaged. | | |
| | Restore All Addr Book | | |
| 052 | Copies back all directory information from the SD card to the flash ROM or HDD. Upload the address book from the old flash ROM or HDD with SP5846-51 before removing it. Do SP5846 52 after installing the new HDD. | | |

| | Clear | Backup Info | | | |
|-----|--|--|--|--|--|
| 053 | Deletes the address book uploaded from the SD card in the slot 2. Deletes only the files uploaded for that machine. This feature does not work if the card is write-protected. | | | | |
| | | : After you do this SP, go out of the SP mode, turn the power off. Do not remove D card until the Power LED stops flashing. | | | |
| | Searc | ch Option | | | |
| | This S | P uses bit switches to set up the fuzzy search options for the UCS local address | | | |
| | Bit | Bit Meaning | | | |
| | 0 | Checks both upper/lower case characters | | | |
| | 1 | | | | |
| 060 | 2 | Japan Only | | | |
| | 3 | | | | |
| | 4 | Not Used | | | |
| | 5 | Not Used | | | |
| | 6 | Not Used | | | |
| | 7 | Not Used | | | |
| | Comp | plexity Option 1 | | | |
| | Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to upper case and sets the length of the password. | | | | |
| 062 | | | | | |
| | 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. | | | |

Complexity Option 2

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to lower case and defines the length of the password.

063 [0 to 32 / **0** / 1step]



- 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.

Complexity Option 3

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to numbers and defines the length of the password.

064 [0 to 32 / **0** / 1step]



- 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.

Complexity Option 4

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to symbols and defines the length of the password.

065 [0 to 32 / **0** / 1step]



091

- 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.

FTP Auth Port Setting

Sets the FTP port to get the delivery server address book that is used in the individual authorization mode.

[0 to 65535 / **3671** / 1step]

| | | Encryption Start | |
|--|-----|---|--|
| | 094 | Shows the status of the encryption function of the address book on the LDAP server. | |
| | | [0 to 255 / 1] No default | |

| | Rep Resolution Reduction | | | |
|-------|---|-------------------------|---|--|
| 5847* | 5847-2 through 5847-6 changes the default settings of image data sent externally by the Net File page reference function. | | | |
| 3047 | 5847-21 sets the default for JPEG | image quality of im | age files controlled by NetFile. | |
| | "NetFile" refers to jobs to be printed from the document server with a PC and the DeskTopBinder software. | | | |
| 002 | Rate for Copy B&W Text | [0 to 6 / 0 / 1] | 0: 1x | |
| 003 | Rate for Copy B&W Other | [0 to 6 / 0 / 1] | 1: 1/2x | |
| 005 | Rate for Printer B&W | [0 to 6 / 0 / 1] | 2: 1/3x | |
| 007 | Rate for Printer B&W 1200dpi | [0 to 6 / 1 / 1] | 3: 1/4x 4: 1/5x 5: 1/8x 6: 2/3x1 | |
| | Network Quality Default for JPEG | | | |
| 021 | Sets the default value for the quality of JPEG images sent as NetFile pages. This function is available only with the MLB (Media Link Board) option installed. [5 to 95 / 50 / 1 step] | | | |

| | Web Service | | |
|-------|--|--|--|
| 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 images that can be downloaded. The default is equal to 1 gigabyte. | | |
| 002 | Acc. Ctrl.: Repository (only Lower 4 Bits) | 0000: No access control 0001: Denies access to DeskTop Binder. | |

| 003 | Acc. Ctrl.: Doc. Svr. Print (Lower 4 Bits) | | |
|------|---|---|--|
| 004 | Acc. Ctrl.: User Directory (Lower 4 Bits) | | |
| 007 | Acc. Ctrl Comm. Log Fax (Lower 4 Bits) | | |
| 009 | Acc. Ctrl.: Job Control (Lower 4 Bits) | Switches access control on and off. | |
| 011 | Acc. Ctrl: Device Management (Lower 4 Bits) | 0000: OFF, 0001: ON | |
| 021 | Acc. Ctrl: Delivery (Lower 4 Bits) | | |
| 022 | Acc. Ctrl: User Administration (Lower 4 Bits) | | |
| 099 | Repository: Download Image Setting | | |
| 100 | Repository: Download Image Max. Size | Specified the max size of the image data that the machine can download/ | |
| | | [1 to 2048 / 2048 / 1 MB] | |
| 210 | Setting: Log Type: Job 1 | | |
| | No information is available at this time. | | |
| 211 | Setting: Log Type: Job 2 | | |
| 211 | No information is available at this time. | | |
| 212 | Setting: Log Type: Access | | |
| 212 | No information is available at this time. | | |
| 213 | Setting: Primary Srv | | |
| 213 | No information is available at this time. | | |
| 01.4 | Setting: Secondary Srv | | |
| 214 | No information is available at this time. | | |
| 215 | Setting: Start Time | | |
| 213 | No information is available at this time. | | |
| 01.4 | Setting: Interval Time | | |
| 216 | No information is available at this time. | | |
| | | | |

| 017 | Setting: Timing | | |
|-----|-----------------|---|--|
| | 217 | No information is available at this time. | |

| 5849 | Installation Date | |
|------|--------------------------|--|
| 3649 | Displays or prints the i | nstallation date of the machine. |
| 001 | Display | The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date". |
| | | Determines whether the installation date is printed on the printout for the total counter. |
| 002 | 002 Switch to Print | [0 to 1 / 1 / -] |
| | | 0: OFF (No Print) |
| | | 1: ON (Print) |
| 003 | Total Counter | When the total number of pages that are made reaches this value, the current date becomes the 'official' installation date for this machine. |
| | | [0 to 99999999 / 0 / 1] |

| 5850* | Address Book Function Japan Only |
|-------|--|
| | Replacement of Circuit Classification |
| 003 | The machine is sold ready to use with a G3 line. This SP allows you to switch all at once to convert to G4 after you add a G4 line. Conversely, if for some reason the G4 line becomes unusable, you can easily switch back to G3. |

| | | Bluetooth |
|-------|---|----------------------------|
| 5851* | Sets the operation mode for the Bluetooth Unit. Press either key. | |
| | | [O: Public] / [1: Private] |

| | | Stamp Data Download | |
|------|--|---------------------|--|
| 5853 | Push [Execute] to download the fixed stamp data from the machine ROM onto the hard disk. Then these stamps can be used by the system. If this is not done, the user will not have access to the fixed stamps ("Confidential", "Secret", etc.). | | |
| | You must always execute this SP after replacing the HDD or after formatting the HDD. Always switch the machine off and on after executing this SP. | | |

| 5856 | Remote ROM Update | |
|------|---|--|
| | When set to "1" allows reception of firmware data via the local port (IEEE 1284) during a remote ROM update. This setting is reset to zero after the machine is cycled off and on. Allows the technician to upgrade the firmware using a parallel cable | |
| 002 | [0 to 1 / 0 / 1 step] 0: Not allowed | |
| | 0: Not allowed | |
| | 1: Allowed | |

| 5857 | Save Debug Log |
|------|---|
| | On/Off (1:ON 0:OFF) |
| 001 | Switches on the debug log feature. The debug log cannot be captured until this feature is switched on. |
| | [0 to 1 / 0 / 1] |
| | 0: OFF, 1: ON |
| | Target (2: HDD 3: SD) |
| 002 | Selects the destination where the debugging information generated by the event selected by SP5858 will be stored if an error is generated |
| | [2 to 3 / 2 / 1] |
| | 2: HDD, 3: SD Card |
| 005 | Save to HDD |
| 003 | Specifies the decimal key number of the log to be written to the hard disk. |
| 006 | Save to SD Card |
| 008 | Specifies the decimal key number of the log to be written to the SD Card. |

| | Copy HDD to SD Card (Latest 4 MB) |
|-----|--|
| 009 | Takes the most recent 4 MB of the log written to the hard disk and copies them to the SD Card. |
| | A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. |
| | Copy HDD to SD Card Latest 4 MB Any Key) |
| 010 | Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. |
| 010 | A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. |
| 011 | Erase HDD Debug Data |
| 011 | Erases all debug logs on the HDD |
| | Erase SD Card Debug Data |
| 012 | Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. |
| | To enable this SP, the machine must be cycled off and on. |
| 013 | Free Space on SD Card |
| 013 | Displays the amount of space available on the SD card. |
| | Copy SD to SD (Latest 4MB) |
| 014 | Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. |
| | Copy SD to SD (Latest 4MB Any Key) |
| 015 | 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. |
| 016 | Make HDD Debug |
| 016 | This SP creates a 32 MB file to store a log on the HDD. |

| 017 | Make SD Debug | |
|-----|---|--|
| 017 | This SP creates a 4 MB file to store a log on an SD card. | |

| | l . | |
|-------|---|--|
| | Debug Save When | |
| 5858* | These SPs select the content of the debt destination selected by SP5857-002. SP5858-003 stores one SC specified | |
| | ' | , |
| 001* | Engine SC Error (0:OFF 1:ON) | Stores SC codes generated by copier engine errors. |
| 002* | Controller SC Error (0:OFF 1:ON) | Stores SC codes generated by GW controller errors. |
| 003* | Any SC Error | [0 to 65535 / 0 / 1 step] |
| 004* | Jam (0:OFF 1:ON) | Stores jam errors. |

| 5859* | Debug Save k | Key No. |
|-------|--------------|--|
| 001 | Key 1 | |
| 002 | Key 2 | |
| 003 | Key 3 | |
| 004 | Key 4 | |
| 005 | Key 5 | These SPs allow you to set up to 10 keys for log files for functions that use common memory on the controller board. [0 to 9999999 / 0 / 1] |
| 006 | Key 6 | |
| 007 | Key 7 | |
| 008 | Key 8 | |
| 009 | Key 9 | |
| 010 | Key 10 | |

| 5860* | SMTP/POP3/IMAP4 |
|-------|-----------------|
|-------|-----------------|

| | Partial Mail Receive Timeout |
|-----|---|
| 000 | [1 to 168 / 72 / 1 hour] |
| 020 | Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time. |
| | MDN Response RFC2298 Compliance |
| 021 | Determines whether RFC2298 compliance is switched on for MDN reply mail. [0 to 1 / 1 / 1] 0: No, 1: Yes |
| | SMTP Auth. From Field Replacement |
| 022 | Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. |
| 022 | [0 to 1 / 0 / 1] |
| | 0: No. "From" item not switched. |
| | 1: Yes. "From" item switched. |
| | SMTP Auth Direct Sending |
| | Select the authentication method for SMPT. |
| | Bit 0: LOGIN |
| | Bit 1: PLAIN |
| 025 | Bit 2: CRAM_MD5 |
| | Bit 3: DIGEST_MD5 |
| | Bit 4 to Bit 7: Not Used |
| | Note |
| | This SP is activated only when SMTP authentication is enabled by UP mode. |
| | S/MIME: MIME Header Setting |
| | Selects the MIME header type of an E-mail sent by S/MIME. |
| 026 | [0 to 2 / 0 / 1] |
| | 0: Microsoft Outlook Express standard |
| | 1: Internet Draft standard |
| | 2: RFC standard |

| 028 | S/MIME: Authentication Check |
|-----|--|
| | When sending S/MIME mail, specifies whether to check the destination authentication. |
| | [0 to 1 / 0 / 1] |
| | 0: Not checked |
| | 1: Checked |

| 5870 | Common Key Info Writing | |
|------|-------------------------|---|
| 001 | Writing | Writes to flash ROM the common proof for validating the device for @Remote specifications. |
| 003 | Initialize | Initializes the data area of the common proof for validating. |
| 004 | Writing: 2048bit | Writes to flash ROM the common proof (2048-bit) for validating the device for @Remote specifications. |

| | | SD Card Appli I | Move |
|---|-----|--|--|
| 5 | 873 | Allows you to move applications from one SD card another. For more, see "SD Card Appli Move" in the chapter "System Maintenance (Main Chapters). | |
| | 001 | Move Exec Executes the move from one SD card to another. | |
| | 002 | Undo Exec | This is an undo function. It cancels the previous execution. |

| 5875 | SC Auto Reboot | |
|------|---|---|
| | This SP determines whether the machine reboots automatically when an SC error occurs. | |
| | Note The reboot does not occur for Type A SC codes. | |
| | | |
| 001 | Reboot Setting | [0 to 1/0/1] 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. |
| 002 | Reboot Type | [0 to 1 / 0 / 1] 0: Manual reboot, 1: Automatic reboot |

| 5878 | Option Setup | |
|------|-------------------------|--|
| 001 | Data Overwrite Security | Press [Execute] to initialize the Data Overwrite Security option for the copier. For more, see "DataOverwriteSecurity Unit" in the chapter "Installation". |

| 588 | E001 | Fixed Phase Block Erasing | |
|-----|------|---------------------------|--|
| | 3001 | Detects the Fixed phrase. | |

| 5885* | Set WIM Function | | |
|-------|---|---|--|
| | | Allows or disallows the functions of web image monitor. | |
| | | 0: OFF, 1: ON | |
| | | Bit: | |
| | | 0: Forbid all document server access | |
| | | 1: Forbid user mode access | |
| 020 | DocSvr Acc Ctrl | 2: Forbid print function | |
| | | 3: Forbid Fax | |
| | | 4: Forbid scan sending | |
| | | 5: Forbid download | |
| | | 6: Forbid delete | |
| | | 7: Forbid guest user | |
| | DocSvr Format | | |
| 50 | Selects the display type for the document box list. | | |
| 30 | [0 to 2 / 0 / 1] | | |
| | 0: Thumbnail, 1: Icon, 2: Details | | |
| | DocSvr Trans | | |
| 51 | Sets the number of docum [5 to 20 / 10 / 1] | ents to be displayed in the document box list. | |

| | Set Signature | |
|-----|---|----------|
| | [0 to 2 / 0 / 1/step] | |
| | 0: Signature for each e-mail | |
| 100 | 1: Signature for all e-mails | |
| | 2: No signature | |
| | Selects whether the signature is added to the scanned documents with the WIM when they are transmitted by an e-mail. | |
| | Set Encryption | |
| 101 | Determines whether the scanned documents with the WIM are encrypted when they are transmitted by an e-mail. $[0 \text{ to } 1 \ / \ 0 \ / \ 1]$ | |
| | 0: Not encrypted, 1:Encryption | |
| 200 | Detect Mem Leak | Not used |
| 201 | DocSvr Timeout | Not used |

| 5007 | SD Get Counter |
|------|---|
| 5887 | This SP determines whether the ROM can be updated. |
| 001 | 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. |
| | Insert the SD card in SD card Slot 2 (lower slot). Select SP5887 then touch [EXECUTE]. |
| | Touch [Execute] in the message when you are prompted. |

| | Personal Information Protect |
|-------|---|
| 5888* | 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 |
|------|--|
| 3093 | Displays the counter name of each SDK application. |
| 1 | SDK-1 |
| 2 | SDK-2 |
| 3 | SDK-3 |
| 4 | SDK-4 |
| 5 | SDK-5 |
| 6 | SDK-6 |

| | 5907 | Plug & Play Maker/Model Name |
|---|------|---|
| 5 | | 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 | [3 to 30 / 3 / 1 second step] |
| Sets the length of time to elapse before allowing another application to take a the display when the application currently controlling the display is not operate because a key has not been pressed. | | | |

| | Copy Server: Set Function | 0 : ON, 1: OFF |
|-------|---------------------------|---|
| 5967* | | his is a security measure that prevents image of the HDD. After changing this setting, you nable the new setting. |

| | Cherry Server |
|-------|--|
| 5974* | Selects which version of the Scan Router application program, "Light" or "Full" (Professional) is installed. |
| | [0 or 1 / 0 / -] 0: Light |
| | 1: Full |

| | Device Setting | |
|------|--|--|
| 5985 | The NIC and USB support features are built into the GW controller. Use this SP to enable and disable these features. In order to use the NIC and USB functions built into the controller board, these SP codes must be set to "1". | |
| | | [0 to 2 / 0 / 1 /step] 0: Disable, 1: Enable, 2: Function limitation |
| | On Board NIC | When the "Function limitation" is set, "On board NIC" is limited only for the NRS or LDAP/NT authentication. |
| 001 | | ↓ Note |
| | | Other network applications than @Remote 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] |
| 002 | | 0: Disable, 1: Enable |

| 5987* | Counter Falsification Prevention | |
|-------|---|--|
| | This SP detects that a mechanical counter device is removed. If it is detected, SC610 | |
| | occurs. [0 or 1 / 1 / 1/step] | |
| | 0: OFF. 1: ON | |

| 5990 | SP Print Mode |
|------|----------------------------|
| 3990 | 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 |
| 008 | Capture Log |
| 021 | Copier User Program |
| 022 | Scanner SP |
| 023 | Scanner User Program |
| 024 | SDK/J Summary |
| 025 | SDK/J Application Info |
| 026 | Print SP |
| | |

Main SP Tables-6

SP6-xxx: Peripherals

| | ADF Registration Adjust | |
|-------|--|--|
| 6006* | Adjusts the side-to-side and leading edge registration for simplex and duplex original feeding in ARDF mode. | |
| | SP6006-5 sets the maximum setting allowed for rear edge erase. | |
| 001 | Side-to-Side Regist: Front | [-3 to 3 / 0 / 0.1 mm / step] |
| 002 | Side-to-Side Regist: Rear | |
| 003 | Leading Edge Registration | [-5 to 5 / 0 / 0.1 mm / step] |
| 005 | Buckle: Duplex Front | [-3 to 3 / 0 / 0.1 mm / step] |
| 006 | Buckle: Duplex Rear | [-2.5 to 2.5 / 0 / 0.1 mm / step] |
| 007 | Rear Edge Erase | [-10 to 10 / 0 / 0.1 mm / step] |

| 6007 |
|------|
|------|

| 001 | Original Length 1 (B5 Detection Sensor) | |
|-----|---|---|
| 002 | Original Length 2 (A4 Detection Sensor) | |
| 003 | Original Length 3 (LG Detection Sensor) | |
| 004 | Original Width Sensor 1 | |
| 005 | Original Width Sensor 2 | |
| 006 | Original Width Sensor 3 | 0: Paper not detected |
| 007 | Original Width Sensor 4 | 1: Paper detected |
| 008 | Original Width Sensor 5 | |
| 009 | Original Set Sensor | |
| 010 | Separation Sensor | |
| 011 | Skew Correction Sensor | |
| 012 | Scan Entrance Sensor | |
| 013 | Registration Sensor | |
| 014 | Exit Sensor | |
| 015 | Feed Cover Sensor | 0: ADF cover closed 1: ADF cover open |
| 016 | Lift Up Sensor | 0: ADF closed 1: ADF open |
| 017 | Inverter Sensor | 0: Paper not detected 1: Paper detected |
| 018 | Pick-up Roller HP Sensor | 0: HP (Pick-up roller: Up) 1: Not HP (Pick-up roller: Down) |
| 019 | Original Set HP Sensor | 0: HP (Stopper: UP) 1: Not HP (Stopper: Down) |

| 6008 | ADF Output Check |
|------|------------------------|
| 001 | Pick-up Motor Forward |
| 002 | Pick-up Motor Reserve |
| 003 | Feed Motor Forward |
| 004 | Feed Motor Reserve |
| 005 | Relay Motor Forward |
| 007 | Inverter Motor Forward |
| 008 | Inverter Motor Reserve |
| 011 | Inverter Solenoid |
| 012 | Stamp |
| 013 | Fan Motor |

| | ADF FreeRun | |
|------|---|--|
| 6009 | Performs an ARDF free run in duplex mode. Press [ON] to start, press [OFF] to stop. | |
| | Note: This is a general free run controlled from the copier. | |
| 001 | Free Run: Simplex Motion | |
| 002 | Free Run: Duplex Motion | |
| 003 | Free Run: Stamp Motion | |

| 6010* | ADF Stamp Position Adjust. | [-5 to 5 / 0 / 0.1 mm step] |
|-------|--|------------------------------------|
| | Adjusts the horizontal position of the stamp on the scanned originals. | |

| | Original Size Detect Setting | | | |
|-------|---|---|-------|-------------------------------------|
| | Specifies the original size for a size detected by the original sensor, since original sensors cannot recognize all sizes. (7) 0000 0000 (0) | | | |
| | Different | bits are used for detection, de | pendi | ing on the location as shown below. |
| | Bit | Size | | Location |
| | 7 | A4 (L)/LT (L) | | |
| 6016* | 6 | 11" x 15"/DLT (L) | | Japan only |
| | 5 | DLT (L)/ 11" x 15" | | |
| | 4 | LT (S)/ US Exec (S) LT (L)/ 8" x 10" (L) | | NA only |
| | 3 | | | |
| | 2 | LG (L)/ F4 (L) | | |
| | 1 | A4 (L)/ 16K (L) | | FIL/AA I |
| | 0 | 8K (L)/ DLT (L) | | EU/AA only |
| | | | | |
| | DF Magnification Adj. [-3 | | [-5 | 5 to 5 / 0 / 0.1% step] |
| 6017* | Adjusts the magnification in the sub-scan direction for ADF mode. | | | |
| | Use the key to toggle between + and - before entering the value | | | |
| | | | | |
| | Skew Correction Moving Setting | | | |
| | Turns the original skew correction in the ARDF for all original sizes on or off. | | | |
| 6020* | [0 to 1 / 0 / 1] | | | |

| 6128 | Punch Position: Sub Scan | |
|------|--|--|
| | Adjusts the punching position in the sub scan direction. (For D636/D637) | |

0: Off (only for small original sizes)

1: On (for all original sizes)

| 001 | 2-Hole: DOM (Japan) | |
|-----|---------------------|-----------------------------------|
| 002 | 3-Hole: NA | |
| 003 | 4-Hole: EU | [-7.5 to 7.5 / 0 / 0.5 mm] |
| 004 | 5-Hole: SCAN | |
| 005 | 2-Hole: NA | |

| 6129 | Punch Position: Main Scan | | |
|------|---|-------------------------------|--|
| | Adjusts the punching position in the main scan direction. (For D636/D637) | | |
| 001 | 2-Hole: DOM (Japan) | | |
| 002 | 3-Hole: NA | | |
| 003 | 4-Hole: EU | [-2 to 2 / 0 / 0.4 mm] | |
| 004 | 4-Hole: SCAN | | |
| 005 | 2-Hole: NA | | |

| 6130* | Skew Correction: Buckle Adj. |
|-------|---|
| | Adjusts the paper buckle at the punch unit for each paper size. (For D636/D637) |

| 001 | A3 SEF | |
|-----|-----------|--------------------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [-5 to 5 / 0 / 0.25 mm] |
| 007 | DLT SEF | [-3 10 3 / 0 / 0.23 mm] |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| | 6131* | Skew Correction Control | |
|------|--|-------------------------|--|
| 0131 | Selects the skew correction control for each paper size. (For D636/D637) | | |

| 001 | A3 SEF | |
|-----|-----------|---------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [O to 1 / 1 / 1 mm] |
| 007 | DLT SEF | |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| | 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 D636/D637. The adjustment is done perpendicular to the direction of paper feed. | |

| 001 | A3 SEF | |
|-----|-----------|-----------------------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [-1.5 to 1.5 / 0 / 0.5 mm] |
| 007 | DLT SEF | [-1.5 to 1.5 / 0 / 0.5 mm] |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| | Staple Position Adjustment |
|-------|---|
| 6133* | Adjusts the staple position for each finisher (D636/D637). |
| 0133 | + Value: Moves the staple position to the rear side. - Value: Moves the staple position to the front side. |
| | [-3.5 to 3.5 / 0 / 0.5 mm] |

| | Saddle Stitch Position Adj. |
|-------|---|
| 6134* | Use this SP to adjust the stapling position of the booklet stapler when paper is stapled and folded in the Booklet Finisher (D637). |

| 001 | A3 SEF | |
|-----|-----------|--|
| 002 | B4 SEF | [-3 to 3 / 0 / 0.2 mm] |
| 003 | A4 SEF | + Value: Shifts staple position toward the crease. |
| 004 | B5 SEF | - Value: Shifts staple position away from the crease |
| 005 | DLT SEF | Feed Out |
| 006 | LG SEF | J |
| 007 | LT SEF | |
| 008 | 12" x 18" | $\bigoplus \longleftrightarrow \ominus$ |
| 009 | Other | |

| | Folder Position Adj. | |
|-------|------------------------------------|--|
| 6135* | This SP corrects th Finisher D637. | e folding position when paper is stapled and folded in the Booklet |
| 001 | A3 SEF | |
| 002 | B4 SEF | [-3 to 3 / 0 / 0.2 mm] |
| 003 | A4 SEF | + Value: Shifts staple position toward the crease. |
| 004 | B5 SEF | - Value: Shifts staple position away from the crease. |
| 005 | DLT SEF | Feed Out |
| 006 | LG SEF | |
| 007 | LT SEF | $\bigoplus \leftarrow \rightarrow \ominus$ |
| 008 | 12" x 18" | |
| 009 | Other | |

| | | Book Fold Repeat |
|---|--|---|
| Sets the number of times that folding is done in the Booklet Finisher D637. | | Sets the number of times that folding is done in the Booklet Finisher D637. |
| | | [2 to 30 / 2 / 1 time/step] |

| 6139 | Entrance Sensor | | |
|-------|---|-------------------------------------|--|
| | Display the signals received from sensors and switches of the (booklet) finisher. (D588) | | |
| | | | |
| | FIN (EUP) INPUT Check | | |
| 6140 | Display the signals received from sensors and switches of the (booklet) finisher. (D636/D637) ("Input Check Table" in "Main SP Tables-9") | | |
| | | | |
| | FIN (KIN) OUPUT Check | | |
| 6144 | Display the signals received from sensors and switches of the (booklet) finisher. (D588) | | |
| | | | |
| | FIN (EUP) OUPUT Check | | |
| 6145 | Display the signals received from sensors and switches of the (booklet) finisher. (D636/D637) (**Output Check Table" in "Main SP Tables-9") | | |
| | | | |
| | Max. Pre-Stack Sheet | [0 to 3 / 3 / 1 sheets step] | |
| | This SP sets the number of sheets sent to the pre-stack tray. | | |
| 6149* | Note | | |
| | You may need to adjust this setting or switch it off when feeding thick or slick paper. | | |

5

Main SP Tables-7

SP7-xxx: Data Log

| 7401* | Total SC Counter |
|-------|---|
| | SC Counter |
| 001 | Displays the total number of service calls that have occurred. This SC counter can be reset by executing SP7807 (SC/Jam Counter Reset). |
| | Total SC Counter |
| 002 | Displays the cumulative sum of service calls that have occurred. This SC counter cannot be reset by executing SP7807 (SC/Jam Counter Reset). |

| 7403* | SC History | |
|-------|------------|--|
| 001 | Latest | |
| 002 | Latest 1 | |
| 003 | Latest 2 | |
| 004 | Latest 3 | |
| 005 | Latest 4 | Displays the most recent 10 service calls. |
| 006 | Latest 5 | Displays the most recent to service calls. |
| 007 | Latest 6 | |
| 008 | Latest 7 | |
| 009 | Latest 8 | |
| 010 | Latest 9 | |

| 7502* | Total Paper Jam |
|-------|--|
| 001 | Jam Counter |
| | Displays the total number of paper jams. |

| 002 | Total Jam Counter |
|-----|--|
| 002 | Displays the cumulative sum of paper jams. |

| 7503* | Total Original Jam |
|-------|---|
| 001 | Original Jam Counter |
| | Displays the total number of original jams. |
| 002 | Total Original Counter |
| | Displays the cumulative sum of original jams. |

| 013 | Bank: Transport Sn 1: On |
|-------|---|
| | Total Jams Location |
| 7504* | These SPs display the total number of paper jams by location. A "Check-in" (paper late) error occurs when the paper fails to activate the sensor at the precise time. A "Checkout" ("paper lag") paper jam occurs when the paper remains at the sensor for longer than the prescribed time. |
| 001 | At power On |
| 003 | Tray 1: On |
| 004 | Tray 2: On |
| 005 | Tray 3: On |
| 006 | Tray 4: On |
| 007 | LCT: On |
| 008 | Bypass: On |
| 009 | Duplex: On |
| 011 | Vertical Transport 1: On |
| 012 | Vertical Transport 2: On |
| 014 | Bank: Transport Sn 2: On |
| 017 | Registration: On |
| 019 | Fusing Exit: On |

| 013 | Bank: Transport Sn 1: On |
|-----|-------------------------------|
| 020 | Paper Exit: On |
| 021 | Bridge Exit On |
| 022 | Bridge Transport: On |
| 024 | Junction Gate Sensor: On |
| 025 | Duplex Exit: On |
| 026 | Duplex Entrance: On (In) |
| 027 | Duplex Entrance: On (Out) |
| 051 | Vertical Transport 1: Off |
| 052 | Vertical Transport 2: Off |
| 053 | Bank Transport 1: Off |
| 054 | Bank Transport 2: Off |
| 057 | Registration Sensor: Off |
| 058 | LCT Feed Sensor: Off |
| 060 | Paper Exit: Off |
| 061 | Bridge: Exit: Off |
| 062 | Bridge: Transport: Off |
| 064 | Junction Gate Sensor: Off |
| 065 | Duplex Exit: Off |
| 066 | Duplex Entrance: Off (In) |
| 067 | Duplex Entrance: Off (Out) |
| 100 | Finisher Entrance: KIN |
| 101 | Finisher Shift Tray Exit: KIN |
| 102 | Finisher Staple: KIN |
| 103 | Finisher Exit: KIN |
| 105 | Finisher Tray Lift Motor: KIN |

| 013 | Bank: Transport Sn 1: On |
|-----|-----------------------------------|
| 106 | Finisher Jogger Motor: KIN |
| 107 | Finisher Shift Motor: KIN |
| 108 | Finisher Staple Motor: KIN |
| 109 | Finisher Exit Motor: KIN |
| 191 | Finisher Entrance: EUP |
| 192 | Finisher Proof Exit: EUP |
| 193 | Finisher Shift Tray Exit: EUP |
| 194 | Finisher Staple Exit: EUP |
| 195 | Finisher Exit: EUP |
| 198 | Finisher Folder: EUP |
| 199 | Finisher Tray Motor: EUP |
| 200 | Finisher Jogger Motor: EUP |
| 201 | Finisher Shift Motor: EUP |
| 202 | Finisher Staple Moving Motor: EUP |
| 203 | Finisher Staple Motor: EUP |
| 204 | Finisher Folder Motor: EUP |
| 206 | Finisher Punch Motor:EUP |

| | Original Jam Detection | | |
|------|--|--|--|
| 7505 | Displays the total number of original jams by location. These jams occur when the original does not activate the sensors. A Check-in ("paper late") error occurs when the paper fails to activate the sensor at the precise time. A Check-out ("paper lag") paper jam occurs when the paper remains at the sensor for longer than the prescribed time. | | |
| 001 | At Power: On | | |
| 003 | Separation Sensor: On | | |
| 004 | Skew Correction Sensor: On | | |

| 005 | Interval Sensor: On |
|-----|-----------------------------|
| 006 | Registration Sensor: On |
| 007 | Inverter Sensor: On |
| 008 | Original Exit Sensor: On |
| 053 | Separation Sensor: Off |
| 054 | Skew Correction Sensor: Off |
| 055 | Interval Sensor: Off |
| 056 | Registration Sensor: Off |
| 057 | Inverter Sensor: Off |
| 058 | Original Exit Sensor: Off |

| 7506* | Jam Count by 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 | Displays the total number of copy jams by paper size. |
| 141 | B4 SEF | |
| 142 | B5 SEF | |
| 160 | DLT SEF | |
| 164 | LG SEF | |
| 166 | LT SEF | |
| 172 | HLT SEF | |
| 255 | Others | |

| 7507* | Plotter Jam History |
|-------|---------------------|
|-------|---------------------|

| 001 | Last | D. 1 | | | , |
|---------|----------|---|--------------|------------------|------|
| 002 | Latest 1 | Displays the copy jam history (the most recent 10 jams) | | | |
| 003 | Latest 2 | Sample Display: | | | |
| | | CODE:007 | | | |
| 004 | Latest 3 | SIZE:05h | | | |
| 005 | Latest 4 | TOTAL:0000334 | | | |
| 006 | Latest 5 | DATE: Mon Mar | 15 11:44:50 | 0 2000 | |
| 000 | raiesi 3 | where: | | | |
| 007 | Latest 6 | CODE is the SP75 | 504-*** nu | mber (see above. | |
| 008 | Latest 7 | SIZE is the ASAP p | oaper size c | ode in hex. | |
| 009 | Latest 8 | TOTAL is the total jam error count (SP7502) | | | |
| | | DATE is the date the jams occurred. | | | |
| 010 | Latest 9 | | | | |
| Size | Code | Size | Code | Size | Code |
| A4 (S) | 05 | A3 (L) | 84 | DLT (L) | A0 |
| A5 (S) | 06 | A4 (L) | 85 | LG (L) | A4 |
| B5 (S) | OE | A5 (L) | 86 | LT (L) | A6 |
| LT (S) | 26 | B4 (L) | 8D | HLT (L) | AC |
| HLT (S) | 2C | B5 (L) | 8E | Others | FF |

| 7508* | Original Jam History |
|-------|----------------------|
|-------|----------------------|

| 001 | | | | | |
|---------|--------|--|---------------|----------------------------|------|
| 001 | Last | Displays the saising | aliam bista | un (the most recent 10 :- | mal |
| 002 | Last 1 | | iai jam nisto | ory (the most recent 10 ja | msj. |
| 003 | Last 2 | Sample Display: | | | |
| | | CODE:007 | | | |
| 004 | Last 3 | SIZE:05h | | | |
| 005 | Last 4 | TOTAL:0000334 | | | |
| 00/ | | DATE: Mon Mar | 15 11:44:5 | 0 2000 | |
| 006 | Last 5 | where: | | | |
| 007 | Last 6 | CODE is the SP75 | 05*** nur | nber (see above. | |
| 008 | Last 7 | SIZE is the ASAP p | oaper size c | ode in hex. | |
| 009 | Last 8 | TOTAL is the total jam error count (SP7503) DATE is the date the jams occurred. | | | |
| | | | | | |
| 010 | Last 9 | | | | |
| Size | Code | Size | Code | Size | Code |
| A4 (S) | 05 | A3 (L) | 84 | DLT (L) | A0 |
| A5 (S) | 06 | A4 (L) | 85 | LG (L) | A4 |
| B5 (S) | OE | A5 (L) | 86 | LT (L) | A6 |
| LT (S) | 26 | B4 (L) | 8D | HLT (L) | AC |
| HLT (S) | 2C | B5 (L) | 8E | Others | FF |

| | ROM No./Firmware Version |
|------|---|
| 7801 | This SP codes display the firmware versions of all ROMs in the system, including the mainframe, the ARDF, and peripheral devices. |

| 7803* | PM Counter Display | |
|-------|--|-----------------------------------|
| | Displays the PM counter since the last PM. | |
| 001 | Paper | [0 to 999999 / 0 / 1 page] |
| 001 | Displays the paper counter (pages) | |
| 002 | Page: PCD | [0 to 999999 / 0 / 1 page] |
| | Displays the PCD (Drum and Development unit) counter (pages) | |

| 000 | Page: Transfer | [0 to 999999 / 0 / 1 page] | |
|-----|--|-------------------------------------|--|
| 003 | Displays the transfer unit counter (pages). | | |
| 004 | Page: Fuser | [0 to 999999 / 0 / 1 page] | |
| 004 | Displays the fusing unit counter (page | es). | |
| 005 | Rotation: PCD | [0 to 999999999 / 0 / 1 mm] | |
| 003 | Displays the PCD rotation counter (di | stance). | |
| 006 | Rotation: Transfer | [0 to 999999999 / 0 / 1 mm] | |
| 008 | Displays the transfer unit rotation counter (distance). | | |
| 007 | Rotation: Fuser | [0 to 999999999 / 0 / 1 mm] | |
| 007 | Displays the fuser unit rotation counter (distance). | | |
| 008 | Rotation(%): PCD | [0 to 255 / 0 / 1 %] | |
| 008 | Displays the PCD (%) rotation counter (Distance/PM). | | |
| 009 | Rotation(%):Transfer | [0 to 255 / 0 / 1 %] | |
| 009 | Displays the transfer unit (%) rotation counter (distance/PM). | | |
| 010 | Rotation(%):Fuser | [0 to 255 / 0 / 1 %] | |
| 010 | Displays the fuser unit (%) rotation counter (distance/PM). | | |
| 011 | Rotation(%):Web | [0 to 255 / 0 / 1 %] | |
| 011 | Displays the web unit (%) rotation counter (distance/PM). | | |

| | PM Counter Reset |
|------|--|
| 7804 | Resets the PM counter. Touch [Execute] two times > "Completed" > [Exit] |
| 001 | Paper |
| | Resets the PM counter of the paper. |
| 002 | PCD |
| | Resets the PM counter of the PCD (Drum and Development unit except developer). |

| | Transfer |
|-----|---|
| 003 | Transier |
| | Resets the PM counter of the transfer unit. |
| 004 | Fuser |
| 004 | Resets the PM counter of the fuser unit. |
| 005 | Web |
| | Reset the PM counter of the web unit. |
| 006 | All Clear |
| | Resets all PM counter |

| | SC/Jam Counter Reset |
|--|---|
| 7807 | Resets the SC and jam counters. To reset, press Execute on the touch panel. |
| This SP does not reset the jam history counters: SP7507, SP7508. | |

| the keys in the display on the touch-par | | Self-Diagnose Result Display |
|--|--|--|
| | | Execute to open the "Self-Diagnostics Result Display" to view details about errors. Use the keys in the display on the touch-panel to scroll through all the information. If no errors have occurred, you will see the "No Error" message on the screen. |

| 7024 | Total Memory Size |
|-------|--|
| 7 630 | Displays the memory capacity of the controller system. |

| | DF Glass Dust Check | | |
|-------|------------------------------|--|--|
| 7852* | | number of occurrences (0 to 65,535) when dust was detected on the ass of the ADF or resets the dust detection counter. Counting is done only if (Dust Check) is switched on. | |
| 001 | Dust Detection Counter | [0 to 65535 / 0 / 1 /step] | |
| 002 | Dust Detection Clear Counter | [0 to 65535 / 0 / 1 /step] | |

| 7853 | Replacement Counter |
|------|---------------------|
|------|---------------------|

| 001 | PCD | [0 to 255 / 0 / 1] |
|------|--|----------------------------|
| | Displays the replacement counter of the PCD (Drum and Development unit). | |
| 0.00 | Transfer | [0 to 255 / 0 / 1] |
| 002 | Displays the replacement counter of the transfer unit. | |
| 003 | Fuser | [0 to 255 / 0 / 1] |
| | Displays the replacement counter of the fusing unit. | |
| 004 | Web | [0 to 255 / 0 / 1] |
| | Displays the replacement counter of the cleaning web. | |

| 7906 | Prev Counter | |
|-------|---|---|
| 001 | Page: PCD | [0 to 999999 / 0 / 1 page] |
| 001 | Displays the counter (pages) of the p | revious PCD |
| 002 | Page: Transfer | [0 to 999999 / 0 / 1 page] |
| 002 | Displays the previous counter (pages |) of the previous transfer unit. |
| 003 | Page: Fuser | [0 to 999999 / 0 / 1 page] |
| 003 | Displays the previous counter (pages) of the previous fusing unit. | |
| 004 | Rotation: PCD | [0 to 999999999 / 0 / 1 mm] |
| 004 | Displays the previous counter (rotations) of the previous PCD | |
| 0.0.5 | Rotation: Transfer | [0 to 999999999 / 0 / 1 mm] |
| 005 | Displays the previous counter (rotations) of the previous transfer unit. | |
| 004 | Rotation: Fuser | [0 to 999999999 / 0 / 1 mm] |
| 006 | Displays the previous counter (rotations/PM %) of the previous fusing unit. | |
| 007 | Rotation(%):PCD | [0 to 255 / 0 / 1 mm] |
| 007 | Displays the previous counter (rotations/PM %) of the previous PCD | |
| 000 | Rotation(%):Transfer | [0 to 255 / 0 / 1 mm] |
| 008 | Displays the previous counter (rotatio | ns/PM %) of the previous transfer unit. |

| | 009 | Rotation(%):Fuser | [0 to 255 / 0 / 1 mm] |
|--|-----|--|------------------------------|
| | | Displays the previous counter (rotations/PM %) of the previous fusing unit. | |
| | 010 | Rotation(%):Web | [0 to 255 / 0 / 1 %] |
| | | Displays the previous counter (rotations/PM %) of the previous cleaning web. | |

| 7950 | Replacement Date | |
|------|---|--|
| 001 | PCD | |
| 001 | Displays the replacement date of the PCD. | |
| 000 | Transfer | |
| 002 | Displays the replacement date of the transfer unit. | |
| 003 | Fuser | |
| 003 | Displays the replacement date of the fusing unit. | |
| 00.4 | Web | |
| 004 | Displays the replacement date of the web unit. | |

| 7951 | Remaining Counter | |
|------|--|----------------------------------|
| 001 | PCD(Page) | [0 to 255 / 255 / 1 days] |
| 001 | Displays the remaining counter (page | es) of the PCD. |
| 002 | Transfer(Page) | [0 to 255 / 255 / 1 days] |
| 002 | Displays the remaining counter (pages) of the transfer unit. | |
| 003 | Fuser(Page) | [0 to 255 / 255 / 1 days] |
| 003 | Displays the remaining counter (pages) of the fusing unit. | |
| 005 | PCD(Rotation) | [0 to 255 / 255 / 1 days] |
| 005 | Displays the remaining counter (rotations) of the PCD. | |
| 007 | Transfer(Rotation) | [0 to 255 / 255 / 1 days] |
| 006 | Displays the remaining counter (rotations) of the transfer unit. | |

| 007 | Fuser(Rotation) | [0 to 255 / 255 / 1 days] |
|-----|--|----------------------------------|
| | Displays the remaining counter (rotations) of the fusing unit. | |
| 009 | PCD (%) | [0 to 255 / 100 / 1 %] |
| 009 | Displays the remaining counter (%) of the PCD. | |
| 010 | Transfer (%) | [0 to 255 / 100 / 1 %] |
| 010 | Displays the remaining counter (%) of the transfer unit. | |
| 011 | Fuser (%) | [0 to 255 / 100 / 1 %] |
| | Displays the remaining counter (%) of the fusing unit. | |
| 013 | Web (%) | [0 to 255 / 100 / 1 %] |
| | Displays the remaining counter (%) of the cleaning web. | |

| 79.52 | PM Yield Setting | |
|-------|---|---|
| 7932 | Sets the each yield of the following. | |
| 001 | PCD(Page) | [0 to 99999999 / 160000 / 1 sheet] |
| 001 | Sets the PM yield of the PCD (Pages) | |
| 002 | Transfer(Page) | [0 to 9999999 / 160000 / 1 sheet] |
| 002 | Sets the PM yield of the transfer unit (Pages). | |
| 000 | Fuser(Page) | [0 to 9999999 / 160000 / 1 sheet] |
| 003 | Sets the PM yield of the fusing unit (Pages). | |
| 005 | PCD(Rotation) | C2b: [0 to 999999999 / 71990000 / 1 mm] C2c: [0 to 999999999 / 75500000 / 1 mm] |
| | Sets the PM yield of the PCD (Rotations). | |
| 006 | Transfer(Rotation) | C2b: [0 to 999999999 / 62770000 / 1 mm] C2c: [0 to 999999999 / 65420000 / 1 mm] |
| | Sets the PM yield of the transfer unit (Rotations). | |

| 007 | Fuser(Rotation) | C2b: [0 to 999999999 / 54880000 / 1 mm] C2b: [0 to 999999999 / 55800000 / 1 mm] |
|-----|---|---|
| | Sets the PM yield of the fusing unit (Rotations). | |
| 009 | Web (%) | [0 to 255 / 92 / 1 %] |
| 009 | Sets the PM yield (%) of the web unit. | |
| 021 | Day Threshold: PCD | [1 to 30 / 15 / 1 days] |
| 021 | Adjusts the threshold day for the near end for the PCD. | |
| 022 | Day Threshold: Transfer Unit | [1 to 30 / 15 / 1 days] |
| 022 | Adjusts the threshold day for the near end for the transfer unit. | |
| 000 | Day Threshold: Fusing Unit | [1 to 30 / 15 / 1 days] |
| 023 | Adjusts the threshold day for the near | end for the fusing unit. |

| 7953 | Operation Env Log | |
|------|---|-----------------------------------|
| 001 | T<10 | [0 to 99999999 / 0 / 1 mm] |
| 001 | Displays the PCU rotation distance in | the environment: T<10°C |
| 002 | 10<=T<=17 | [0 to 99999999 / 0 / 1 mm] |
| 002 | Displays the PCU rotation distance in the environment: 10°C<=T<=17°C | |
| 003 | 17 <t<23< td=""><td>[0 to 99999999 / 0 / 1 mm]</td></t<23<> | [0 to 99999999 / 0 / 1 mm] |
| 003 | Displays the PCU rotation distance in the environment: 17<=T<=23 | |
| 00.4 | 23<=T<=27 | [0 to 99999999 / 0 / 1 mm] |
| 004 | Displays the PCU rotation distance of the environment: 23<=T<=27 | |
| 005 | 27<=T<=32 | [0 to 99999999 / 0 / 1 mm] |
| 005 | Displays the PCU rotation distance of the environment: 27<=T<=32 | |
| 006 | 32 <t< td=""><td>[0 to 99999999 / 0 / 1 mm]</td></t<> | [0 to 99999999 / 0 / 1 mm] |
| | Displays the PCU rotation distance of the environment: 32 <t< td=""></t<> | |

| | - | - |
|---|---|---|
| ı | ٠ | |
| | ĸ | п |
| | , | |
| | | |

| 7051 | Env Log Clear |
|-------|---------------------------------------|
| / 754 | Resets the environment logs (SP7953). |

5

Main SP Tables-8

SP8-xxx: Data Log 2

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 8codes that when used in combination with others, can provide useful information.

| SP Numbers | What They Do |
|------------------|---|
| SP8211 to SP8216 | The number of pages scanned to the document server. |
| SP8401 to SP8406 | The number of pages printed from the document server. |
| SP8691 to SP8696 | The number of pages sent from the document server. |

Specifically, the following questions can be answered:

How is the document server actually being used?

What application is using the document server most frequently?

What data in the document server is being reused?

Most of the SPs in this group are prefixed with a letter that indicates the mode of operation (the mode of operation is referred to as an 'application'). Before reading the Group 8 Service Table, make sure that you understand what these prefixes mean.

| Prefixes | What It Means | |
|----------|-----------------------|--|
| T: | Total: (Grand Total). | Grand total of the items counted for all applications (C, F, P, etc.). |
| C: | Copy application. | Totals (pages, jobs, etc.) executed for each application when the job was not stored on the document server. |
| F: | Fax application. | |
| P: | Print application. | |
| S: | Scan application. | |

| L: | Local storage (document server) | Totals (jobs, pages, etc.) for the document server. The L: counters work differently case by case. Sometimes, they count jobs/pages stored on the document server; this can be in document server mode (from the document server window), or from another mode, such as from a printer driver or by pressing the Store File button in the Copy mode window. Sometimes, they include occasions when the user uses a file that is already on the document server. Each counter will be discussed case by case. | |
|----|--|--|--|
| O: | Other applications (external network applications, for example) | Refers to network applications such as Web Image Monitor. Utilities developed with the SDK (Software Development Kit) will also be counted with this group in the future. | |

The Group 8 SP codes are limited to 17 characters, forced by the necessity of displaying them on the small LCDs of printers and faxes that also use these SPs. Read over the list of abbreviations below and refer to it again if you see the name of an SP that you do not understand.

Key for Abbreviations

| Abbreviation | What It Means | |
|--------------|---|--|
| / | "By", e.g. "T:Jobs/Apl" = Total Jobs "by" Application | |
| > | More (2> "2 or more", 4> "4 or more" | |
| AddBook | Address Book | |
| Apl | Application | |
| B/W | Black & White | |
| Bk | Black | |
| С | Cyan | |
| ColCr | Color Create | |
| ColMode | Color Mode | |
| Comb | Combine | |
| Comp | Compression | |
| Deliv | Delivery | |

| Abbreviation | What It Means | |
|--------------|---|--|
| DesApl | Designated Application. The application (Copy, Fax, Scan, Print) used to store the job on the document server, for example. | |
| Dev Counter | Development Count, no. of pages developed. | |
| Dup, Duplex | Duplex, printing on both sides | |
| Emul | Emulation | |
| FC | Full Color | |
| FIN | Post-print processing, i.e. finishing (punching, stapling, etc.) | |
| Full Bleed | No Margins | |
| GenCopy | Generation Copy Mode | |
| GPC | Get Print Counter. For jobs 10 pages or less, this counter does not count up. For jobs larger than 10 pages, this counter counts up by the number that is in excess of 10 (e.g., for an 11-page job, the counter counts up 11-10=1) | |
| IFax | Internet Fax | |
| ImgEdt | Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc. | |
| K | Black (YMCK) | |
| LS | Local Storage. Refers to the document server. | |
| LSize | Large (paper) Size | |
| Mag | Magnification | |
| МС | One color (monochrome) | |
| NRS | New Remote Service, which allows a service center to monitor machines remotely. "NRS" is used overseas, "CSS" is used in Japan. | |
| Org | Original for scanning | |
| OrgJam | Original Jam | |

| Abbreviation | What It Means | |
|--------------|---|--|
| Palm 2 | Print Job Manager/Desk Top Editor: A pair of utilities that allows print jobs to be distributed evenly among the printers on the network, and allows files to moved around, combined, and converted to different formats. | |
| PC | Personal Computer | |
| PGS | Pages. A page is the total scanned surface of the original. Duplex pages count as two pages, and A3 simplex count as two pages if the A3/DLT counter SP is switched ON. | |
| PJob | Print Jobs | |
| Ppr | Paper | |
| PrtJam | Printer (plotter) Jam | |
| PrtPGS | Print Pages | |
| R | Red (Toner Remaining). Applies to the wide format model A2 only. This machine is under development and currently not available. | |
| Rez | Resolution | |
| SC | Service Code (Error SC code displayed) | |
| Scn | Scan | |
| Sim, Simplex | Simplex, printing on 1 side. | |
| S-to-Email | Scan-to-E-mail | |
| SMC | SMC report printed with SP5990. All of the Group 8counters are recorded in the SMC report. | |
| Svr | Server | |
| TonEnd | Toner End | |
| TonSave | Toner Save | |
| TXJob | Send, Transmission | |
| YMC | Yellow, Magenta, Cyan | |
| YMCK | Yellow, Magenta, Cyan, BlacK | |



• All of the Group 8 SPs are reset with SP5 801-1 Memory All Clear.

| 8001 | T:Total Jobs | These SPs count the number of times each application is |
|------|--------------|---|
| 8002 | C:Total Jobs | used to do a job. |
| 8003 | F:Total Jobs | [0 to 9999999 / 0 / 1] Note: The L: counter is the total number of times the other |
| 8004 | P:Total Jobs | applications are used to send a job to the document serv |
| 8005 | S:Total Jobs | plus the number of times a file already on the document server is used. |
| 8006 | L:Total Jobs | |

- These SPs reveal the number of times an application is used, not the number of pages processed.
- When an application is opened for image input or output, this counts as one job.
- Interrupted jobs (paper jams, etc.) are counted, even though they do not finish.
- Only jobs executed by the customer are counted. Jobs executed by the customer engineer using the SP modes are not counted.
- When using secure printing (when a password is required to start the print job), the job is counted at the time when either "Delete Data" or "Specify Output" is specified.
- A job is counted as a fax job when the job is stored for sending.
- When a fax is received to fax memory, the F: counter increments but the L: counter does not (the document server is not used).
- A fax broadcast counts as one job for the F: counter (the fax destinations in the broadcast are not counted separately).
- A fax broadcast is counted only after all the faxes have been sent to their destinations. If one
 transmission generates an error, then the broadcast will not be counted until the transmission has
 been completed.
- A printed fax report counts as one job for the F: counter.
- The F: counter does not distinguish between fax sending or receiving.
- When a copy job on the document server is printed, SP8022 also increments, and when a print job stored on the document server is printed, SP8024 also increments.
- When an original is both copied and stored on the document server, the C: and L: counters both increment.
- When a print job is stored on the document server, only the L: counter increments.
- When the user presses the Document Server button to store the job on the document server, only
 the L: counter increments.

- When the user enters document server mode and prints data stored on the document server, only the L: counter increments.
- When an image received from Palm 2 is received and stored, the L: counter increments.
- When the customer prints a report (user code list, for example), the O: counter increments.
 However, for fax reports and reports executed from the fax application, the F: counter increments.

| 8011 | T:Jobs/LS | |
|------|-----------|---|
| 8012 | C:Jobs/LS | These SPs count the number of jobs stored to the document server |
| 8013 | F:Jobs/LS | by each application, to reveal how local storage is being used for |
| 8014 | P:Jobs/LS | input. [0 to 9999999 / 0 / 1] The L: counter counts the number of jobs stored from within the |
| 8015 | S:Jobs/LS | |
| 8016 | L:Jobs/LS | document server mode screen at the operation panel. |
| 8017 | O:Jobs/LS | |

- 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.

| 8021 | T:Pjob/LS | |
|------|-----------|---|
| 8022 | C:Pjob/LS | |
| 8023 | F:Pjob/LS | These SPs reveal how files printed from the document server were stored on the document server originally. |
| 8024 | P:Pjob/LS | [0 to 9999999 / 0 / 1] |
| 8025 | S:Pjob/LS | The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. |
| 8026 | L:Pjob/LS | assession see, see meas see see and operation parion |
| 8027 | O:Pjob/LS | |

 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.

| 8031 | T:Pjob/DesApl | |
|------|---------------|--|
| 8032 | C:Pjob/DesApl | |
| 8033 | F:Pjob/DesApl | These SPs reveal what applications were used to output documents from the document server. |
| 8034 | P:Pjob/DesApl | [0 to 9999999 / 0 / 1] |
| 8035 | S:Pjob/DesApl | The L: counter counts the number of jobs printed from within document server mode screen at the operation panel. |
| 8036 | L:Pjob/DesApl | accomon con to mead colocin at the operation parion |
| 8037 | O:Pjob/DesApl | |

- 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.

| 8041 | T:TX Jobs/LS | |
|------|--------------|--|
| 8042 | C:TX Jobs/LS | These SPs count the applications that stored files on the document server that were later accessed for transmission over |
| 8043 | F:TX Jobs/LS | the telephone line or over a network (attached to an e-mail, or |
| 8044 | P:TX Jobs/LS | as a fax image by I-Fax). [0 to 9999999 / 0 / 1] Note: Jobs merged for sending are counted separately. |
| 8045 | S:TX Jobs/LS | |
| 8046 | L:TX Jobs/LS | The L: counter counts the number of jobs scanned from within the document server mode screen at the operation panel. |
| 8047 | O:TX Jobs/LS | |

- 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.

| 8051 | T:TX Jobs/DesApl | |
|------|------------------|--|
| 8052 | C:TX Jobs/DesApl | These SPs count the applications used to send files from |
| 8053 | F:TX Jobs/DesApl | the document server over the telephone line or over a network (attached to an e-mail, or as a fax image by I- |
| 8054 | P:TX Jobs/DesApl | Fax). Jobs merged for sending are counted separately. [0 to 9999999 / 0 / 1] The L: counter counts the number of jobs sent from within |
| 8055 | S:TX Jobs/DesApl | |
| 8056 | L:TX Jobs/DesApl | the document server mode screen at the operation panel. |
| 8057 | O:TX Jobs/DesApl | |

• If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

| | T:FIN Jobs | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 8061 | These SPs total the finishing methods. The finishing method is specified by the application. | | |
| 8062 | C:FIN Jobs | [0 to 9999999 / 0 / 1] | |
| | These SPs total finishing methods for copy jobs only. The finishing method is specified by the application. | | |

| | F:FIN Jobs | | [0 to 9999999 / 0 / 1] |
|--------|--|---|--|
| 8063 | These SPs total finishing methods for fax jobs only. The finishing method is specified by the application. | | |
| | Note: Finishing feature | es for fax jobs | are not available at this time. |
| | P:FIN Jobs | | [0 to 9999999 / 0 / 1] |
| 8064 | These SPs total finishin by the application. | g methods for | r print jobs only. The finishing method is specified |
| | S:FIN Jobs | | [0 to 9999999 / 0 / 1] |
| 8065 | by the application. | | r scan jobs only. The finishing method is specified as are not available at this time. |
| | L:FIN Jobs | | [0 to 9999999 / 0 / 1] |
| 8066 | 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 | | [0 to 9999999 / 0 / 1] |
| 8067 | These SPs total finishing methods for jobs executed by an external application the network. The finishing method is specified by the application. | | |
| 806x 1 | Sort | Number of jobs started in Sort mode. When a stored copy job is set for Sort and then stored on the document server, the L: counter increments. (See SP8066 1) | |
| 806x 2 | Stack | Number of j | obs started out of Sort mode. |
| 806x 3 | Staple | Number of jobs started in Staple mode. | |
| 806x 4 | Booklet | Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments. | |
| 806x 5 | Z-Fold | Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold). | |
| 806x 6 | Punch | Number of jobs started in Punch mode. When Punch is set for a print job, the P: counter increments. (See SP8064 6.) | |
| 806x 7 | Other | Reserved. N | lot used |

| 806x 8 | Inside-Fold | Number of jobs started In any mode other than the Booklet mode and set for folding (Inside-fold). |
|---------|----------------|---|
| 806x 9 | Three-IN-Fold | Letter Fold-in Not Used |
| 806x 10 | Three-OUT-Fold | Letter Fold-out Not Used |
| 806x 11 | Four-Fold | Double Parallel Fold Not Used |
| 806x 12 | KANNON-Fold | Gate Fold Not Used |
| 806x 13 | Perfect-Bind | Perfect Binder Not Used |
| 806x 14 | Ring-Bind | Ring Binder Not Used |

| 8071 | T:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
|------|---|-------------------------------|--|--|
| | These SPs count the number of jobs broken down by the number of pages in the job, regardless of which application was used. | | | |
| | C:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8072 | These SPs count and calculate the number of copy jobs by size based on the number of pages in the job. | | | |
| | F:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8073 | These SPs count and calculate the number of fax jobs by size based on the number of pages in the job. | | | |
| | P:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8074 | 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] | | |
| 8075 | These SPs count and calculate the number of scan jobs by size based on the number of pages in the job. | | | |
| | L:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8076 | 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 | [0 to 9999 | [0 to 9999999 / 0 / 1] | | |
|--------|--|------------|-------------------------------|--|--|
| 8077 | These SPs count and calculate the number of "Other" application Monitor, Palm 2, etc.) by size based on the number of pages in t | | | | |
| 807x 1 | 1 Page | 807x 8 | 21 to 50 Pages | | |
| 807x 2 | 2 Pages | 807x 9 | 51 to 100 Pages | | |
| 807x 3 | 3 Pages | 807x 10 | 101 to 300 Pages | | |
| 807x 4 | 4 Pages | 807x 11 | 301 to 500 Pages | | |
| 807x 5 | 5 Pages | 807x 12 | 501 to 700 Pages | | |
| 807x 6 | 6 to 10 Pages | 807x 13 | 701 to 1000 Pages | | |
| 807x 7 | 11 to 20 Pages | 807x 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 | [0 to 9999999 / 0 / 1] |
|------|--|----------|-------------------------------|
| 8111 | These SPs count the total number of jobs (color or black-and-white) sent by fax, either directly or using a file stored on the document server, on a telephone line. | | |
| | Note: Color fax sending is not available at this time. | | |
| 001 | B/W | Black TX | |

| | | F:FAX TX Jobs [0 to 9999999 / 0 / 1] | | |
|------|-----|---|--|--|
| 8113 | | These SPs count the total number of jobs (color or black-and-white) sent by fax directly on a telephone line. | | |
| | | Note: Col | Note: Color fax sending is not available at this time. | |
| | 001 | B/W | Black TX | |

- 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 (812x) also increments.
- The fax job is counted when the job is scanned for sending, not when the job is sent.

| | | T:IFAX TX Jobs | | [0 to 9999999 / 0 / 1] | |
|---|--|----------------|--|-------------------------------|--|
| These SPs count the total number of jobs (color or black-and-white) directly or using a file stored on the document server, as fax images | | | | | |
| | | Note: Co | Note: Color fax sending is not available at this time. | | |
| | 001 | B/W | Black TX | | |
| | | F:IFAX TX Jobs | | [0 to 9999999 / 0 / 1] | |
| 8123 | These SPs count the number of jobs (color or black-and-white) sent (not store document server), as fax images using I-Fax. Note: Color fax sending is not available at this time. | | | g I-Fax. | |
| | 001 | B/W | Black TX | | |

- 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 | | [0 to 9999999 / 0 / 1] |
|------|--|--|-------------------------------|
| 8131 | These SPs count the total number of jobs scanned and attached to an e-mail, regardless of whether the document server was used or not. | | |
| 001 | B/W Black TX | | |

| | 002 | Color | Color TX | | | |
|---|-----|-----------|-------------------|--|--|--|
| | 003 | ACS | Color TX | | | |
| | | S:S-to-Em | S:S-to-Email Jobs | | | |
| These SPs count the number of jobs scanned and attached to an e-mail, with storing the original on the document server. | | | • | | | |
| | 001 | B/W | B/W Black TX | | | |
| | 002 | Color | Color TX | | | |
| | 003 | ACS | Color TX | | | |

- These counters count jobs, not pages.
- If the job is stored on the document server, after the job is stored it is determined to be color or black-and-white then counted.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- If several jobs are combined for sending to the Scan Router, Scan-to-Email, or Scan-to-PC, or if one job is sent to more than one destination. each send is counted separately. For example, if the same document is sent by Scan-to-Email as well as Scan-to-PC, then it is counted twice (once for Scan-to-Email and once for Scan-to-PC).

| 8141 | | T:Deliv Jo | bs/Svr | [0 to 9999999 / 0 / 1] | |
|------|-----|--|-----------------|-------------------------------|--|
| | | These SPs count the total number of jobs scanned and sent to a Scan Router server. | | | |
| | 001 | B/W | B/W Black Deliv | | |
| | 002 | Color | Color Deliv | | |
| | 003 | ACS | Color Deliv | | |
| 0145 | | S:Deliv Jobs/Svr | | | |
| 8145 | | These SPs count the number of jobs scanned and sent to a Scan Router server. | | | |
| | 001 | B/W Black Deliv | | | |
| | 002 | Color | lor Color Deliv | | |
| | 003 | ACS | Color Deliv | | |

- 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 Jo | obs/PC [0 to 9999999 / 0 / 1] | | |
|------|-----|---|--------------------------------------|--|--|
| 8151 | | These SPs count the total number of jobs scanned and sent to a folder on a PC (Sto-PC). Note: At the present time, 8151 and 8155 perform identical counts. | | | |
| | | . , | p | | |
| | 001 | B/W | Black Deliv | | |
| | 002 | Color | Color Deliv | | |
| | 003 | ACS | Color Deliv | | |
| 0155 | | S:Deliv Jobs/PC | | | |
| 8155 | | These SPs count the total number of jobs scanned and sent with Scan-to-PC. | | | |
| | 001 | B/W | Black Deliv | | |
| | 002 | Color | Color Deliv | | |
| | 003 | ACS | Color Deliv | | |

- 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.

| 8161 | T:PCFAX TX Jobs | These SPs count the number of PC Fax transmission jobs. | |
|------|-----------------|---|--|
| 8163 | | A job is counted from when it is registered for sending, not when it is sent. | |
| | F:PCFAX TX Jobs | [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.

| 8171 | T:Deliv Jobs | s/WSD | These SPs count the pages scanned by WSD. | |
|------|--------------|-------------|---|--|
| 8175 | S:Deliv Jobs | s/WSD | [0 to 9999999 / 0 / 1] | |
| 001 | B/W | Black Deliv | | |
| 002 | Color | Color Deliv | | |
| 003 | ACS | Color Deliv | | |

| 8181 | T:Scan to Media Jobs | | These SPs count the pages scanned to media by the scanner application. [0 to 9999999 / 0 / 1] |
|------|----------------------|-------------|--|
| 8185 | S:Scan to Media Jobs | | |
| 001 | B/W | Black Deliv | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |

| 8191 | T:Total Scan PGS | |
|------|------------------|---|
| 8192 | C:Total Scan PGS | These SPs count the pages scanned by each application |
| 8193 | F:Total Scan PGS | that uses the scanner to scan images. |
| 8195 | S:Total Scan PGS | [0 to 9999999 / 0 / 1] |
| 8196 | L:Total Scan PGS | |

- SP 8191 to 8196 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.

| 8201 | T:LSize Scan PGS | [0 to 9999999 / 0 / 1] |
|------|--|-------------------------------|
| 8203 | F Lsize Scan PGS | [0 to 9999999 / 0 / 1] |
| | S:LSize Scan PGS | [0 to 9999999 / 0 / 1] |
| 8205 | These SP codes count the total number of large pages input with the scanner for jobs only. Large size paper (A3/DLT) scanned for fax transmission are not counter. These counters are displayed in the SMC Report, and in the User Tools of the scanner. | |

| 8211 | T:Scan PGS/LS | These SPs count the number of pages scanned into the | |
|------|---------------|--|--|
| 8212 | C:Scan PGS/LS | document server . [0 to 9999999 / 0 / 1] | |
| 8213 | F:Scan PGS/LS | The L: counter counts the number of pages stored from | |
| 8215 | S:Scan PGS/LS | within the document server mode screen at the operation panel, and with the Store File button from within the Copy | |
| 8216 | L:Scan PGS/LS | mode screen | |

- Reading user stamp data is not counted.
- If a job is cancelled, the pages output as far as the cancellation are counted.
- If the scanner application scans and stores 3 B5 sheets and 1 A4 sheet, the S: count is 4.
- If pages are copied but not stored on the document server, these counters do not change.
- If both sides of 3 A4 sheets are copied and stored to the document server, the C: count is 6 and the L: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

| | ADF Org Feeds | | [0 to 9999999 / 0 / 1] |
|---|---------------|--|--|
| These SPs count the number of pages fed through scanning. | | | nrough the ADF for front and back side |
| 001 | Front | Number of front sides fed for scanning: With an ADF that can scan both sides simultaneously, the Front side count is the same as the number of pages fed for either simplex or duplex scanning. With an ADF that cannot scan both sides simultaneously, the Front side count is the same as the number of pages fed for duplex front side scanning. (The front side is determined by which side the user loads face up.) | |
| 002 | Back | Number of rear sides fed for scanning: With an ADF that can scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex scanning. With an ADF that cannot scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex rear-side scanning. | |

- When 1 sheet is fed for duplex scanning the Front count is 1 and the Back count is 1.
- If a jam occurs during the job, recovery processing is not counted to avoid double counting. Also, the pages are not counted if the jam occurs before the first sheet is output.

| | Scan PGS/Mode | | [0 to 9999999 / 0 / 1] |
|---|---------------------|---|-------------------------------------|
| These SPs count the number of pages scanned by each ADF work load on the ADF. | | | d by each ADF mode to determine the |
| 001 | Large Volume | Selectable. Large copy jobs that cannot be loaded in the ADF at one time. | |
| 002 | SADF | Selectable. Feeding pages one by one through the ADF. | |
| 003 | Mixed Size | Selectable. Select "Mixed Sizes" on the operation panel. | |
| 004 | Custom Size | Selectable. Originals of non-standard size. | |
| 005 | Platen | Book mode. Raising the ADF and placing the original direct on the platen. | |
| 006 | Mixed 1 side/2 side | Selectable. Select "Simplex/Duplex" on the operation panel. | |

- 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 | [0 to 9999999 / 0 / 1] | | | | | |
|---|--|----------------------------------|----------|------------------------------|------------------------|--|------------------------------|
| These SPs count regardless of wh | | | | | pages by origi | nal type for all | jobs, |
| | C:Scan PGS/Or | g [0 to 9999999 / 0 / 1] | | | | | |
| 8242 | These SPs count | the numb | er of pa | iges scanne | d by original ty | pe for Copy jo | bs. |
| | F:Scan PGS/Org | g | [0 to 99 | 999999 / C |) / 1] | | |
| 8243 | These SPs count | the numb | er of pa | iges scanne | d by original ty | pe for Fax job | S. |
| | S:Scan PGS/Or | g | [0 to 99 | 999999 / C |) / 1] | | |
| 8245 | These SPs count | the numb | er of pa | iges scanne | d by original ty | pe for Scan jo | bs. |
| | L:Scan PGS/Org | g [0 to 9999999 / 0 / 1] | | | | | |
| | | | | | | | |
| 8246 | These SPs count server mode screethe Copy mode s | en at the | | - | | | |
| 8246 | server mode scre | en at the | operati | - | | | |
| 8246 824x 1: Te | server mode scre the Copy mode s | een at the screen | operati | ion panel, a | nd with the Sto | re File button f | rom within |
| | server mode scre the Copy mode s | een at the screen 824 | operati | 8242 | 8243 | re File button f | 8246 |
| 824x 1: Te | server mode screethe Copy mode sext | screen 824 Yes | operati | 8242 Yes | 8243 Yes | re File button f 8245 Yes | 8246 Yes |
| 824x 1: Te 824x 2: Te 824x 3: Ph | server mode screethe Copy mode sext | een at the screen 824 Yes Yes | operati | 8242 Yes Yes | 8243 Yes Yes | 8245 Yes Yes | 8246 Yes Yes |
| 824x 1: Te 824x 2: Te 824x 3: Ph | server mode scre the Copy mode s ext ext/Photo noto enCopy, Pale | 824 Yes Yes | operati | 8242 Yes Yes Yes | 8243 Yes Yes Yes | 8245 Yes Yes Yes | 8246 Yes Yes Yes |
| 824x 1: Te 824x 2: Te 824x 3: Ph 824x 4: G 824x 5: M | server mode scre the Copy mode s ext ext/Photo noto enCopy, Pale | 824 Yes Yes Yes | operati | 8242 Yes Yes Yes Yes | 8243 Yes Yes Yes No | 8245 Yes Yes Yes Yes Yes | 8246 Yes Yes Yes Yes |
| 824x 1: Te 824x 2: Te 824x 3: Ph 824x 4: G 824x 5: M 824x 6: N | server mode scre the Copy mode s ext ext/Photo noto enCopy, Pale | Yes Yes Yes Yes | operati | 8242 Yes Yes Yes Yes Yes Yes | 8243 Yes Yes Yes No No | Re File button f 8245 Yes Yes Yes Yes No | 8246 Yes Yes Yes Yes Yes Yes |

| 824x 9: Grayscale | Yes | No | No | Yes | No |
|-------------------|-----|-----|-----|-----|-----|
| 824x 10: Color | Yes | No | No | Yes | No |
| 824x 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.

| 8251 | T:Scan PGS/ImgEdt | These SPs show how many times Image Edit features have |
|------|-------------------|--|
| 8252 | C:Scan PGS/ImgEdt | been selected at the operation panel for each application. Some examples of these editing features are: |
| 8255 | S:Scan PGS/ImgEdt | Erase> Border |
| 8256 | L:Scan PGS/ImgEdt | Erase> Center |
| | - | Image Repeat |
| | | Centering |
| | | Positive/Negative |
| 8257 | O:Scan PGS/ImgEdt | [0 to 9999999 / 0 / 1] |
| | | Note: The count totals the number of times the edit features have been used. A detailed breakdown of exactly which features have been used is not given. |

The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen.

| 8281 | T:Scan PGS/TWAIN | These SPs count the number of pages scanned using a |
|------|------------------|---|
| | | TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. |
| 8285 | S:Scan PGS/TWAIN | [0 to 9999999 / 0 / 1] Note: At the present time, these counters perform identical counts. |

| 8291 | T:Scan PGS/Stamp | These SPs count the number of pages stamped with the |
|------|------------------|--|
| 8293 | F:Scan PGS/Stamp | stamp in the ADF unit. [0 to 9999999 / 0 / 1] |
| 8295 | S:Scan PGS/Stamp | 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 | [0 to 9999999 / 0 / 1] | |
|------|--|---|--|
| 8301 | , | e total number of pages scanned by all applications. Use ginal page size (scanning) and output (printing) page size | |
| | C:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8302 | , | e total number of pages scanned by the Copy application. e original page size (scanning) and output (printing) page | |
| | F:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8303 | These SPs count by size the total number of pages scanned by the Fax application. Use these totals to compare original page size (scanning) and output page size [SP 8-443]. | | |
| | S:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8305 | , | e total number of pages scanned by the Scan application. e original page size (scanning) and output page size [SP | |
| | L:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8306 | 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]. | | |

| 830x 1 | A3 |
|----------|------------------|
| 830x 2 | A4 |
| 830x 3 | A5 |
| 830x 4 | B4 |
| 830x 5 | B5 |
| 830x 6 | DLT |
| 830x 7 | LG |
| 830x 8 | LT |
| 830x 9 | HLT |
| 830x 10 | Full Bleed |
| 830x 254 | Other (Standard) |
| 830x 255 | Other (Custom) |

| | T:Scan PGS/Rez | [0 to 9999999 / 0 / 1] | |
|--------|---|-------------------------------|--|
| 8311 | These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. | | |
| | S:Scan PGS/Rez | [0 to 9999999 / 0 / 1] | |
| 8315 | These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. Note: At the present time, 8311 and 8315 perform identical counts. | | |
| 831x 1 | 1200dpi to | | |
| 831x 2 | 600dpito1199dpi | | |
| 831x 3 | 400dpito599dpi | | |
| 831x 4 | 200dpito399dpi | | |
| 831x 5 | to199dpi | | |

- 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.

| 8381 | T:Total PrtPGS | |
|------|----------------|---|
| 8382 | C:Total PrtPGS | These SPs count the number of pages printed by the customer. The counter for the application used for storing |
| 8383 | F:Total PrtPGS | the pages increments. |
| 8384 | P:Total PrtPGS | [0 to 9999999 / 0 / 1] The L: counter counts the number of pages stored from |
| 8385 | S:Total PrtPGS | within the document server mode screen at the operation |
| 8386 | L:Total PrtPGS | panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter. |
| 8387 | O:Total PrtPGS | |

- 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 | [0 to 9999999 / 0 / 1] |
|--|------------------------------|-------------------------------------|
| 8391 | These SPs count pages printe | d on paper sizes A3/DLT and larger. |
| Note: In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine. | | |

| 84 | 101 | T:PrtPGS/LS | |
|----|-----|-------------|---|
| 84 | 02 | C:PrtPGS/LS | These SPs count the number of pages printed from the |
| 84 | .03 | F:PrtPGS/LS | document server. The counter for the application used to print the pages is incremented. |
| 84 | 04 | P:PrtPGS/LS | The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. |
| 84 | 05 | S:PrtPGS/LS | [0 to 9999999 / 0 / 1] |
| 84 | 106 | L:PrtPGS/LS | |

- 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.

| 8411 | Prints/Duplex | This SP counts the amount of paper (front/back counted as 1 page) used for duplex printing. Last pages printed only on one side are not counted. [0 to 9999999 / 0 / 1] |
|------|---------------|--|
|------|---------------|--|

| | T:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 8421 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing. This is the total for all applications. | | |
| | C:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8422 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the copier application. | | |
| | F:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8423 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the fax application. | | |
| | P:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8424 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the printer application. | | |
| 8425 | S:PrtPGS/Dup Comb [0 to 9999999 / 0 / 1] | | |
| | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the scanner application. | | |

| | L:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] |
|---------|--|--|
| 8426 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing from within the document server mode window at the operation panel. | |
| | O:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] |
| 8427 | These SPs count by binding o | and combine, and n-Up settings the number of pages ner applications |
| 842x 1 | Simplex> Duplex | |
| 842x 2 | Duplex> Duplex | |
| 842x 3 | Book> Duplex | |
| 842x 4 | Simplex Combine | |
| 842x 5 | Duplex Combine | |
| 842x 6 | 2in1 | 2 pages on 1 side (2-Up) |
| 842x 7 | 4in1 | 4 pages on 1 side (4-Up) |
| 842x 8 | óin1 | 6 pages on 1 side (6-Up) |
| 842x 9 | 8in1 | 8pages on 1 side (8-Up) |
| 842x 10 | 9in1 | 9 pages on 1 side (9-Up) |
| 842x 11 | 16in1 | 16 pages on 1 side (16-Up) |
| 842x 12 | Booklet | |
| 842x 13 | Magazine | |
| 842x 14 | 2in1 + Booklet | |
| 842x 15 | 4in1 + Booklet | |
| 842x 16 | 6in1 + Booklet | |
| 842x 17 | 8in1 + Booklet | |
| 842x 18 | 9in1 + Booklet | |
| 842x 19 | 2in1 + Magazine | |
| 842x 20 | 4in1 + Magazine | |

| 842x 21 | 6in1 + Magazine | |
|---------|------------------|--|
| 842x 22 | 8in1 + Magazine | |
| 842x 23 | 9in1 + Magazine | |
| 842x 24 | 16in1 + Magazine | |

- These counts (SP8421 to SP8427) are especially useful for customers who need to improve their compliance with ISO standards for the reduction of paper consumption.
- Pages that are only partially printed with the n-Up functions are counted as 1 page.
- Here is a summary of how the counters work for Booklet and Magazine modes:

| Booklet | | Magazine | |
|----------------|-------|----------------|-------|
| Original Pages | Count | Original Pages | Count |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 2 | 3 | 2 |
| 4 | 2 | 4 | 2 |
| 5 | 3 | 5 | 4 |
| 6 | 4 | 6 | 4 |
| 7 | 4 | 7 | 4 |
| 8 | 4 | 8 | 4 |

| | T:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 8431 | These SPs count the total number of pages output with the three features below, regardless of which application was used. | | |
| | C:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
| 8432 | These SPs count the total number of pages output with the three features below with the copy application. | | |
| | P:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
| 8434 | These SPs count the total number of pages output with the three features below with the print application. | | |

| | L:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
|--|--|---|--|
| 8436 | These SPs count the total number of pages output from within the document server mode window at the operation panel with the three features below. | | |
| | O:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
| These SPs count the total number of pages outposts. Other applications. | | mber of pages output with the three features below with | |
| 843x 1 | Cover/Slip Sheet | Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2. | |
| 843x 2 | Series/Book | The number of pages printed in series (one side) or printed as a book with booklet right/left pagination. | |
| 843x 3 | User Stamp | The number of pages printed where stamps were applied, including page numbering and date stamping. | |

| 0.4.4.1 | T:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
|---------|---|-------------------------------|--|
| 8441 | These SPs count by print paper size the number of pages printed by all applications. | | |
| | C:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8442 | These SPs count by print paper size the number of pages printed by the copy application. | | |
| | F:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8443 | These SPs count by print paper size the number of pages printed by the fax application. | | |
| | P:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8444 | These SPs count by print paper size the number of pages printed by the printer application. | | |
| | S:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8445 | These SPs count by print paper size the number of pages printed by the scanner application. | | |
| 8446 | L:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| | These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel. | | |

| 0.4.47 | O:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] |
|----------|--|-------------------------------|
| 8447 | These SPs count by print paper size the number of pages printed by Other appli | |
| 844x 1 | A3 | |
| 844x 2 | A4 | |
| 844x 3 | A5 | |
| 844x 4 | B4 | |
| 844x 5 | B5 | |
| 844x 6 | DLT | |
| 844x 7 | LG | |
| 844x 8 | LT | |
| 844x 9 | HLT | |
| 844x 10 | Full Bleed | |
| 844x 254 | Other (Standard) | |
| 844x 255 | Other (Custom) | |

• These counters do not distinguish between LEF and SEF.

| 0.451 | PrtPGS/Ppr Tray | | [0 to 9999999 / 0 / 1] |
|-------|---------------------|--------------------------|---------------------------------|
| 8451 | These SPs count the | number of sheets fe | d from each paper feed station. |
| 001 | Bypass Tray | Bypass Tray | |
| 002 | Tray 1 | Copier | |
| 003 | Tray 2 | Copier | |
| 004 | Tray 3 | Paper Tray Unit (Option) | |
| 005 | Tray 4 | Paper Tray Unit (Option) | |
| 006 | Tray 5 | LCT (Option) | |
| 007 | Tray 6 | Currently not used. | |
| 008 | Tray 7 | Currently not used. | |

| 009 | Tray 8 | Currently not used. |
|-----|---------|---------------------|
| 010 | Tray 9 | Currently not used. |
| 011 | Tray 10 | Currently not used. |
| 012 | Tray 11 | Currently not used. |
| 013 | Tray 12 | Currently not used. |
| 014 | Tray 13 | Currently not used. |
| 015 | Tray 14 | Currently not used. |
| 016 | Tray 15 | Currently not used. |

| | T:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | |
|--------|---|---|--|
| | These SPs count by paper type the number pages printed by all applications. | | |
| 8461 | These counters are not the same as the PM counter. The PM counter is based on feed timing to accurately measure the service life of the feed rollers. However, these counts are based on output timing. | | |
| | Blank sheets (covers, chapter covers, slip | sheets) are also counted. | |
| | During duplex printing, pages printed or on one side counts as 1. | both sides count as 1, and a page printed | |
| 8462 | C:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | |
| 8402 | These SPs count by paper type the number pages printed by the copy application. | | |
| 8463 | F:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | |
| 6403 | These SPs count by paper type the number pages printed by the fax application. | | |
| 8464 | P:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | |
| 8404 | These SPs count by paper type the number pages printed by the printer application | | |
| | L:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | |
| 8466 | These SPs count by paper type the number pages printed from within the document server mode window at the operation panel. | | |
| 846x 1 | Normal | | |
| 846x 2 | Recycled | | |

| 846x 3 | Special |
|--------|---------------|
| 846x 4 | Thick |
| 846x 5 | Normal (Back) |
| 846x 6 | Thick (Back) |
| 846x 7 | OHP |
| 846x 8 | Other |

| 8471 | PrtPGS/Mag | [0 to 9999999 / 0 / 1] | |
|------|--|-------------------------------|--|
| 04/1 | These SPs count by magnification rate the number of pages printed. | | |
| 001 | to 49% | | |
| 002 | 50% to 99% | | |
| 003 | 100% | | |
| 004 | 101% to 200% | | |
| 005 | 201% to | | |

- 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%.

| 8481 | T:PrtPGS/TonSave |
|------|------------------|
| 8484 | P:PrtPGS/TonSave |

These SPs count the number of pages printed with the Toner Save feature switched on.

Note: These SPs return the same results as this SP is limited to the Print application.

[0 to 9999999 / 0 / 1]

| 8511 | T:PrtPGS/Emul | | [0 to 9999999 / 0 / 1] |
|------|--|------------------------|---|
| 0311 | These SPs count by printer emulation mode the total number of pages printed. | | |
| 8514 | P:PrtPGS/Emul | | [0 to 9999999 / 0 / 1] |
| 0314 | These SPs coun | t by printer emulation | mode the total number of pages printed. |
| 001 | RPCS | | |
| 002 | RPDL | | |
| 003 | PS3 | | |
| 004 | R98 | | |
| 005 | R16 | | |
| 006 | GL/GL2 | | |
| 007 | R55 | | |
| 008 | RTIFF | | |
| 009 | PDF | | |
| 010 | PCL5e/5c | | |
| 011 | PCL XL | | |
| 012 | IPDL-C | | |
| 013 | BM-Links | Japan Only | |
| 014 | Other | | |
| 015 | IPDS | | |

- SP8511 and SP8514 return the same results as they are both limited to the Print application.
- Print jobs output to the document server are not counted.

| | T:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
|--------|---|---------------------------------------|--|--|
| 8521 | These SPs count by finishing mode the total number of pages printed by all applications. | | | |
| | C:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8522 | These SPs count by finishing mode the total application. | I number of pages printed by the Copy | | |
| | F:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8523 | These SPs count by finishing mode the total number of pages printed by the Fax application. Note: Print finishing options for received faxes are currently not available. | | | |
| | P:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8524 | These SPs count by finishing mode the total number of pages printed by the Print application. | | | |
| | S:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8525 | These SPs count by finishing mode the total number of pages printed by the Scanner application. | | | |
| | L:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8526 | These SPs count by finishing mode the total number of pages printed from a document server mode window at the operation panel. | | | |
| 852x 1 | Sort | | | |
| 852x 2 | Stack | | | |
| 852x 3 | Staple | | | |
| 852x 4 | Booklet | | | |
| 852x 5 | Z-Fold | | | |
| 852x 6 | Punch | | | |
| 852x 7 | Other | | | |
| 852x 8 | Inside-Fold | | | |

| 852x 9 | Three-IN-Fold |
|---------|----------------|
| 852x 10 | Three-OUT-Fold |
| 852x 11 | Four-Fold |
| 852x 12 | KANNON-Fold |
| 852x 13 | Perfect-Bind |
| 852x 14 | Ring-Bind |



- 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.

| 8531 | Staples | This SP counts the amount of staples used by the machine. |
|------|---------|---|
| | | [0 to 9999999 / 0 / 1] |

| 8551 | T:PrtBooks/FIN | |
|------|----------------|----------|
| 8552 | C:PrtBooks/FIN | |
| 8554 | P:PrtBooks/FIN | |
| 8556 | L:PrtBooks/FIN | |
| 001 | Perfect-Bind | Not Used |
| 002 | Ring-Bind | Not Used |

| 8561 | T:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
|------|--------------------|-------------------------------|
| 8562 | C:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8563 | F:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8564 | P:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8566 | L:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |

| 8567 | O:A Sheet Of Paper | | [0 to 9999999 / 0 / 1] |
|------|--|--|-------------------------------|
| 6307 | These SPs count the totals number of duplex pages printed. | | |
| 001 | Total: Over A3/DLT | | |
| 002 | Total: Under A3/DLT | | |
| 003 | Duplex: Over A3/DLT | | |
| 004 | Duplex: Under A3/DLT | | |

| | T: Counter | [0 to 9999999 / 0 / 1] | | |
|------|--|-------------------------------|--|--|
| 8581 | 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. | | | |
| | Note: This SP is expanded for color MFP and color LP machines. For this machine, the count is done for black only. | | | |

| | O: Counter | | [0 to 9999999 / 0 / 1] |
|---|------------|--|-------------------------------|
| These SPs count the totals for A3/DLT paper use, number of duplex pages and the number of staples used. These totals are for Other (O:) application | | | |
| 001 | A3/DLT | | |
| 002 | Duplex | | |

| 8601 | | T:Coverage Counter | | | |
|------|-----|---|--|----------------------------------|--|
| | | These SPs count the total coverage for each color and printout pages. | | color and printout pages. | |
| | 001 | B/W [0 to 21474836 | | 7483647 / 0 / 1] | |
| | 011 | B/W Printing Pages [0 to 9999999 / | | (0/1] | |
| 0400 | | C:Coverage Counter | | [0 to 2147483647 / 0 / 1] | |
| 8602 | | These SPs count the total coverage for B/W. | | <i>I</i> . | |
| 8603 | | F:Coverage Counter [0 | | [0 to 2147483647 / 0 / 1] | |
| | | These SPs count the total coverage for B/W. | | | |

| 8604 | P:Coverage Counter | [0 to 2147483647 / 0 / 1] |
|------|---|----------------------------------|
| | These SPs count the total coverage for B/W. | |
| 8606 | L:Coverage Counter | [0 to 2147483647 / 0 / 1] |
| | These SPs count the total coverage for B/W. | |

| 8617 | SDK Apli Counter | | [0 to 9999999 / 0 / 1] |
|------|---|--|-------------------------------|
| 8017 | These SPs count the total printout pages for each SDK applicaion. | | each SDK applicaion. |
| 001 | SDK-1 | | |
| 002 | SDK-2 | | |
| 003 | SDK-3 | | |
| 004 | SDK-4 | | |
| 005 | SDK-5 | | |
| 006 | SDK-6 | | |

| | | T:FAX TX PGS | | [0 to 9999999 / 0 / 1] |
|------|-----|--|-------------|-------------------------------|
| 8631 | | These SPs count by color mode the number of pages sent by fax to a telephone number. | | |
| | 001 | B/W | /W Black TX | |
| | | F:FAX TX PGS [0 to 999999 / 0 / 1] | | [0 to 999999 / 0 / 1] |
| 8633 | | These SPs count by color mode the number of pages sent by fax to a telephone number. | | |
| | 001 | B/W Black TX | | |

- 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:FAX TX PGS | | [0 to 9999999 / 0 / 1] |
|------|-----|---|---|-------------------------------|
| 8641 | | These SPs count by color mode the number of pages sent by fax to as fax images using I-Fax. | | |
| | 001 | B/W | /W Black TX | |
| | | F:FAX TX | F:FAX TX PGS [0 o 9999999 / 0 / 1] | |
| 8643 | | These SPs count by color mode the number of pages sent by Fax as fax images usin I-Fax. | | |
| | 001 | B/W Black TX | | |

- 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 | [0 to 9999999 / 0 / 1] | |
|------|---|---|---|--|
| 8651 | | These SPs count by color mode the total number of pages attached to an e-mail for both the Scan and document server applications. | | |
| | 001 | B/W | | |
| | 002 | Color | | |
| | | S:S-to-Email PGS | [0 to 9999999 / 0 / 1] | |
| 8655 | These SPs count by color mode the total number of pages attached to an the Scan application only. | | number of pages attached to an e-mail for | |
| | 001 | B/W | | |
| | 002 | 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).

| 8661 | | T:Deliv PGS/Svr | [0 to 9999999 / 0 / 1] | |
|--|-----|--|--|--|
| | | These SPs count by color mode the total number of pages sent to a Scan Router server by both Scan and LS applications. | | |
| | 001 | B/W | | |
| | 002 | Color | | |
| | | S:Deliv PGS/Svr | [0 to 9999999 / 0 / 1] | |
| These SPs count by color mode the total number of passerver by the Scan application. | | , | al number of pages sent to a Scan Router | |
| | 001 | B/W | | |
| | 002 | Color | | |



- 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 [0 to 9999999 / 0 / 1] | |
|------|--|--|
| 8671 | These SPs count by color mode the total number of pages sent to a folder on a PC (Scan-to-PC) with the Scan and LS applications. | |
| 001 | B/W | |

| | 002 | Color | | |
|---|-----|---|--|--|
| S: Deliv PGS/PC [0 to 9999999 / 0 / 1] These SPs count by color mode the total number of pages sent with Scanthe Scan application. | | [0 to 9999999 / 0 / 1] | | |
| | | tal number of pages sent with Scan-to-PC with | | |
| | 001 | B/W | | |
| | 002 | Color | | |

| 8681 | T:PCFAX TXPGS | These SPs count the number of pages sent by PC Fax. |
|------|---------------|--|
| 8683 | F:PCFAX TXPGS | These SPs are provided for the Fax application only, so the counts for SP8681 and SP8683 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.)

| 8691 | T:TX PGS/LS | These SPs count the number of pages sent from the document |
|------|-------------|--|
| 8692 | C:TX PGS/LS | server. The counter for the application that was used to store the pages is incremented. |
| 8693 | F:TX PGS/LS | [0 to 9999999 / 0 / 1] |
| 8694 | P:TX PGS/LS | The L: counter counts the number of pages stored from within the document server mode screen at the operation panel. Pages stored with the Store File button from within the Copy |
| 8695 | S:TX PGS/LS | |
| 8696 | L:TX PGS/LS | mode screen go to the C: counter. |



- Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.
- If several documents are merged for sending, the number of pages stored are counted for the application that stored them.
- When several documents are sent by a Fax broadcast, the F: count is done for the number of pages sent to each destination.

| | TX PGS/Port | | [0 to 9999999 / 0 / 1] |
|------|--|--|-------------------------------|
| 8701 | These SPs count the number of pages sent by the physical port used to send them. For example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for ISDN (G3, G4) is 12. | | |
| 001 | PSTN-1 | | |
| 002 | PSTN-2 | | |
| 003 | PSTN-3 | | |
| 004 | ISDN (G3,G4) | | |
| 005 | Network | | |

| T:Scan PGS/Comp [0 to 9999999 / These SPs count the number of compressed pages scanned into t counted by the formats listed below. | | | [0 to 9999999 / 0 / 1] |
|--|---------------------|--|-------------------------------|
| | | ages scanned into the document server, | |
| 001 | JPEG/JPEG2000 | | |
| 002 | TIFF (Multi/Single) | | |
| 003 | PDF | | |
| 004 | Other | | |
| 005 | PDF/Comp | | |
| 006 | PDF/A | | |

| | S:Scan PGS/Comp | | [0 to 9999999 / 0 / 1] |
|---|-------------------------|---------------------------------------|-------------------------------|
| These SPs count the number of compressed pages scanned by the scan approximately counted by the formats listed below. | | ages scanned by the scan application, | |
| 001 | JPEG/JPEG2000 | | |
| 002 | 002 TIFF (Multi/Single) | | |
| 003 | PDF | | |
| 004 | 004 Other | | |
| 005 | 005 PDF/Comp | | |

| 006 | PDF/A | |
|-----|-------|--|
| | | |

| 8721 | T:Deliv PGS/WSD | | [0 to 9999999 / 0 / 1] |
|------|---|--|-------------------------------|
| 0705 | S:Deliv PGS/WSD | | [0 to 9999999 / 0 / 1] |
| 8725 | These SPs count the number of pages scanned | | d by each scanner mode. |
| 001 | B/W | | |
| 002 | Color | | |

| 8731 | T:Scan PGS/Media | | [0 to 9999999 / 0 / 1] |
|------------------|--|-------------------------------|---------------------------------------|
| S:Scan PGS/Media | | [0 to 9999999 / 0 / 1] | |
| 8735 | These SPs count the number of pages scanne mode. | | d and saved in a meia by each scanner |
| 001 | B/W | | |
| 002 | Color | | |

| | RX PGS/Port | | [0to9999999/ 0 / 1] |
|--|--------------|--|----------------------------|
| These SPs count the number of pages received by the physithem. | | red by the physical port used to receive | |
| 001 | PSTN-1 | | |
| 002 | PSTN-2 | | |
| 003 | PSTN-3 | | |
| 004 | ISDN (G3,G4) | | |
| 005 | Network | | |

| | | Dev Counter | [0to9999999/ 0 / 1] |
|--|--|---|---|
| These SPs count the frequency of use (number of rotation for black and other color toners. Note: For machines that do not support color, the Black Total count. | | . , | mber of rotations of the development rollers) |
| | | • | color, the Black toner count is the same as the |

| | Toner_Botol_Info. |
|------|---|
| 8781 | This SP displays the number of toner bottles used. The count is done based on the equivalent of 1,000 pages per bottle. |

| | Toner Remain | [0 to 100 / 0 / 1] | | |
|------|---|--|--|--|
| | . , . | This SP displays the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time. | | |
| 8801 | Note: | | | |
| | This precise method of measuring remaining toner supply (1% steps) is better than other machines in the market that can only measure in increments of 10 (10% steps). | | | |
| | This SP is expanded for color MFP and color LP machines. For this machine, the count is done for black only. | | | |

| 8811 | Eco Counter | | |
|--|---|-------------------------------|--|
| 001 | Eco Total | [0 to 9999999 / | /0/1] |
| 001 | Displays the number of p | ages reduced by ι | using the duplex and the combine function. |
| 004 | Duplex | [0 to 9999999 / | /0/1] |
| 004 | Displays the number of p | ages reduced by t | using the duplex function. |
| 005 | Combine | [0 to 9999999 / 0 / 1] | |
| 003 | Displays the number of pages reduced by using the combine function. | | |
| 008 | Duplex(%) | [0 to 100 / 0 / 1] | |
| 008 | Displays the utilization ratio of the duplex function. | | |
| 009 | Combine(%) | [0 to 100 / 0 / 1] | |
| Displays the utilization ratio of the duplex function. | | unction. | |
| 010 | Paper Cut(%) | [0 to 100 / 0 / 1] | |
| 010 | Displays the paper reduction ratio. | | |

| 8851 | Cvr Cnt:0-10% | [0 to 9999999 / 0 / 1] |
|------|--|-------------------------------------|
| 0031 | These SPs count the percentage of dot cove | erage for black other color toners. |
| 011 | 11 O to 2%: BK | |
| 021 | 021 3 to 4%: BK | |
| 031 | 5 to 7%: BK | |
| 041 | 41 8 to 10%: BK | |

| 8861 | Cvr C | Cnt:11-20% | [0 to 9999999 / 0 / 1] |
|------|----------------|--|-------------------------------|
| 0001 | These | These SPs count the percentage of dot coverage for black other color toners. | |
| 001 | BK Black toner | | |

| ٥ | 1871 | Cvr C | Int:21-30% | [0 to 9999999 / 0 / 1] | |
|--------------------|--------|-------|--|-------------------------------|--|
| | 1007 1 | These | These SPs count the percentage of dot coverage for black other color toners. | | |
| 001 BK Black toner | | | | | |

| | 8881 | Cvr C | Cnt:31%- | [0 to 9999999 / 0 / 1] | | | |
|--------------------|------|-------|--|-------------------------------|--|--|--|
| | 0001 | These | These SPs count the percentage of dot coverage for black other color toners. | | | | |
| 001 BK Black toner | | | | | | | |

| | 8891 | Page, | Page/Toner Bottle [0 to 9999999 / 0 / 1] | |
|--------------------|------|-------|--|--|
| | 0071 | These | These SPs display the amount of the remaining current toner. | |
| 001 BK Black toner | | | | |

| 8901 | Page, | Page/Toner_Prev1 [0 to 9999999 / 0 / 1] | | |
|------|---|--|--|--|
| 0901 | These SPs display the amount of the remaining previous toner. | | | |
| 001 | 1 BK Black toner | | | |

| 8911 | Page, | /Toner_Prev2 | [0 to 9999999 / 0 / 1] |
|------|-------|---|-------------------------------|
| 0911 | These | These SPs display the amount of the remaining 2nd previous toner. | |
| 001 | BK | Black toner | |

| 8921 | Cvr Cnt/Total | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 0921 | Displays the total coverage and total printout number for each color. | | |
| 001 | Coverage (%) BK | | |
| 011 | Coverage/P:BK | | |

| | Machine Status | | [0 to 9999999 / 0 / 1] |
|------|--------------------|--|--|
| 8941 | | e machine spends in each operation mode. o need to investigate machine operation for ISO Standards. | |
| 001 | Operation Time | Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating). | |
| 002 | Standby Time | data to HDD | perating. Includes time while controller saves Does not include time spent in Energy Save, or Off modes. |
| 003 | Energy Save Time | Includes time while the machine is performing backgro | |
| 004 | Low Power Time | | e in Energy Save mode with Engine on. Includes achine is performing background printing. |
| 005 | Off Mode Time | printing. Doe | e while machine is performing background es not include time machine remains powered power switches. |
| 006 | SC | Total down t | ime due to SC errors. |
| 007 | PrtJam | Total down t | ime due to paper jams during printing. |
| 008 | OrgJam | Total down t | ime due to original jams during scanning. |
| 009 | Supply PM Unit End | Total down t | ime due to supply unit end. |

| 8951 | AddBook Register | | | | | |
|------|--|--|-------------------------------|--|--|--|
| 0931 | These SPs count the number of events when the machine manages data registration. | | | | | |
| 001 | User Code /User ID | User code registrations. | | | | |
| 002 | Mail Address | Mail address registrations. | | | | |
| 003 | Fax Destination | Fax destination registrations. | [0 to 9999999 / 0 / 1] | | | |
| 004 | Group | Group destination registrations. | [0 10 9999999 0 1] | | | |
| 005 | Transfer Request Fax relay destination registrations for relay TX. | | | | | |
| 006 | F-Code | F-Code box registrations. | | | | |
| 007 | Copy Program | Copy application registrations with the Program (job settings) feature. | | | | |
| 008 | Fax Program | Fax application registrations with the Program (job settings) feature. | [0 255 / 0 / 255] | | | |
| 009 | Printer Program | Printer application registrations with the Program (job settings) feature. | [0 to 255 / 0 / 255] | | | |
| 010 | Scanner Program | Scanner application registrations with the Program (job settings) feature. | | | | |

| 8999 | Adomin. Counter List | [0 to 9999999 / 0 / 1] | |
|------|--|-------------------------------|--|
| 0777 | Display the total coverage and total printout number for each color. | | |
| 001 | Total | | |
| 003 | Copy: BW | | |
| 007 | Printer: BW | | |
| 010 | | | |
| 012 | | | |

| 013 | Duplex |
|-----|-----------------------------|
| 023 | Copy: BW (%) |
| 027 | Printer: BW (%) |
| 030 | Fax Print: BW (%) |
| 101 | Transmission Total: Color |
| 102 | Transmission Total: BW |
| 103 | Fax Transmission |
| 104 | Scanner Transmission: Color |
| 105 | Scanner Transmission: BW |

Main SP Tables-9

Input Check Table

When entering the Input Check mode, 8 digits display the result for a section. Each digit corresponds to a different device as shown in the table.

| Bit No. | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| Result | 0 or 1 |

Copier

Input Check 5803 Reading Description 0 1 001 Tray 1: Paper Size Sensor See the table 1 following this table. 002 Tray 1: Tray Set Sensor Set Not set 003 Tray 1: Paper Lift Sensor Not upper limit Upper limit 004 Tray 1: Paper End Sensor No paper Paper remaining Tray 1: 005 Paper Height Sensor 1 See the table 2 following this table. Tray 1: 006 Paper Height Sensor 2 007 Tray 2: Paper Size Sensor See the table 1 following this table. 800 Set Tray 2: Tray Set Sensor Not set 009 Tray 2: Paper Lift Sensor Not upper limit Upper limit 010 Tray 2: Paper End Sensor No paper Paper remaining

5

| 011 | Tray 2: Paper Height Sensor 1 | See the table 2 following | this table | |
|-----|----------------------------------|---------------------------------------|-------------------|--|
| 012 | Tray 2: Paper Height Sensor 2 | | | |
| 013 | Tray 1: Paper Feed Sensor | Paper detected | No paper detected | |
| 014 | Tray 2: Paper Feed Sensor | Paper detected | No paper detected | |
| 015 | Tray 3: Paper Feed Sensor | Paper detected | No paper detected | |
| 016 | Tray 4: Paper Feed Sensor | Paper detected | No paper detected | |
| 017 | LCT: Paper Feed Sensor | No paper detected | Paper detected | |
| 018 | Relay Sensor 1 | Paper detected | No paper detected | |
| 019 | Relay Sensor 2 | Paper detected | No paper detected | |
| 020 | Relay Sensor 3 | No paper detected | Paper detected | |
| 021 | Relay Sensor 4 | No paper detected | Paper detected | |
| 022 | Relay Sensor: LCT | No paper detected | Paper detected | |
| 023 | By-pass: Paper End Sensor | Not end | Paper end | |
| 024 | By-pass: Paper Size Sensor | See the table 3 following this table. | | |
| 025 | Registration Sensor | Paper detected | No paper detected | |
| 026 | Fusing Exit Sensor | No paper detected | Paper detected | |
| 027 | Fusing Entrance Sensor | Paper detected | No paper detected | |
| 028 | Junction Gate Relay Sensor | Paper detected | No paper detected | |
| 029 | Exit Sensor | Paper detected | No paper detected | |
| 030 | Paper Overflow Sensor | Not full | Full | |
| 031 | Right Cover Open/Close | Close | Open | |
| 032 | Duplex Unit Open/Close | Open | Close | |
| 033 | Duplex Entrance Sensor | Paper detected | No paper detected | |
| 034 | Duplex Exit Sensor | Paper detected | No paper detected | |

| 035 Bank Right Cover Open/Close Close Open 036 Tray Cover Open/Close Close Open 037 LCT Set Set Not set 038 Bridge/Exit Tray: Exit Sensor Paper detected No paper detected 039 Bridge/Exit Tray: Relay Sensor Paper detected No paper detected 040 Bridge/Exit Tray: Left Guide Open/Close Close Open 041 Bridge/Exit Tray: Right Guide Open/Close Close Open 043 Transfer Belt Unit HP Sensor Not HP HP 044 Fusing Unit Set Set (Bit1) Not set (Bit1) 047 Toner Overflow Sensor Not full Full 048 Interlock Detection 1 Right or front door is open. Close 049 Interlock Detection 2 Right or front door is open. Right or front door is close. 050 Key Card Set Set Not set 051 Key Counter Set Set Not set 052 Mechanical Counter Set Not set set 053 1-Bin Unit: Paper Set Paper detected No paper detected 054 1-Bin Unit: Paper Set Paper detected Paper detected 060 Shift Sensor No pape | | | | |
|--|-----|------------------------------------|-------------------|-------------------|
| O37 LCT Set Set Not set O38 Bridge/Exit Tray: Exit Sensor Paper detected No paper detected O39 Bridge/Exit Tray: Relay Sensor Paper detected No paper detected O40 Bridge/Exit Tray: Relay Sensor Paper detected No paper detected O40 Bridge/Exit Tray: Left Guide Open/Close Open O41 Close Open O42 Bridge/Exit Tray: Right Guide Open/Close Open O43 Transfer Belt Unit HP Sensor Not HP HP O44 Fusing Unit Set Set (Bit1) Not set (Bit1) O47 Toner Overflow Sensor Not full Full O48 Interlock Detection 1 Right or front door is open. O49 Interlock Detection 2 Right or front door is open. O50 Key Card Set Set Not set O51 Key Counter Set Set Not set O52 Mechanical Counter Set Not set O53 1-Bin Unit Set Set Not set O54 1-Bin Unit: Paper Set Paper detected O57 Cleaning Web End No paper detected O64 Shift Tray Sensor Stay at trear Stay at front | 035 | Bank Right Cover Open/Close | Close | Open |
| 038 Bridge/Exit Tray: Exit Sensor Paper detected No paper detected 039 Bridge/Exit Tray: Relay Sensor Paper detected No paper detected 040 Bridge/Exit/Shift: Set Detection Set Not set 041 Bridge/Exit Tray: Left Guide Open/Close Close Open 042 Bridge/Exit Tray: Right Guide Open/Close Close Open 043 Transfer Belt Unit HP Sensor Not HP HP 046 Fusing Unit Set Set (Bit1) Not set (Bit1) 047 Toner Overflow Sensor Not full Full 048 Interlock Detection 1 Right or front door is open. Right or front door is close. 049 Interlock Detection 2 Right or front door is open. Right or front door is close. 050 Key Card Set Set Not set 051 Key Counter Set Set Not set 052 Mechanical Counter Set Not set set 053 1-Bin Unit Set Set Not set 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End | 036 | Tray Cover Open/Close | Close | Open |
| 039 Bridge/Exit Tray: Relay Sensor Paper detected No paper detected 040 Bridge/Exit/Shift: Set Detection Set Not set 041 Bridge/Exit Tray: Left Guide Open/Close Close Open 042 Bridge/Exit Tray: Right Guide Open/Close Close Open 043 Transfer Belt Unit HP Sensor Not HP HP 046 Fusing Unit Set Set (Bit1) Not set (Bit1) 047 Toner Overflow Sensor Not full Full 048 Interlock Detection 1 Right or front door is open. Right or front door is close. 049 Interlock Detection 2 Right or front door is open. Right or front door is close. 050 Key Card Set Set Not set 051 Key Counter Set Set Not set 052 Mechanical Counter Set Not set set Not set 053 1-Bin Unit Set Set Not set Not set 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End No paper detected Paper detected 060 | 037 | LCT Set | Set | Not set |
| 040 Bridge/Exit/Shift: Set Detection Set Not set 041 Bridge/Exit Tray: Left Guide Open/Close Close Open 042 Bridge/Exit Tray: Right Guide Open/Close Close Open 043 Transfer Belt Unit HP Sensor Not HP HP 046 Fusing Unit Set Set (Bit1) Not set (Bit1) 047 Toner Overflow Sensor Not full Full 048 Interlock Detection 1 Right or front door is open. Right or front door is close. 049 Interlock Detection 2 Right or front door is open. Right or front door is close. 050 Key Card Set Set Not set 051 Key Counter Set Set Not set 052 Mechanical Counter Set Not set set Not set 053 1-Bin Unit Set Set Not set No paper detected No paper detected 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Sensor Stay at rear Stay at front | 038 | Bridge/Exit Tray: Exit Sensor | Paper detected | No paper detected |
| Description | 039 | Bridge/Exit Tray: Relay Sensor | Paper detected | No paper detected |
| Close Open Otal Close Bridge/Exit Tray: Right Guide Open/Close Open Open Open Otal Transfer Belt Unit HP Sensor Not HP HP Otal Fusing Unit Set Set (Bit1) Not set (Bit1) Otal Toner Overflow Sensor Not full Right or front door is open. Otal Interlock Detection 1 Otal Interlock Detection 2 Right or front door is open. Otal Set Not set Set Not set Not set Otal Key Card Set Set Not set Otal Telin Unit Set Set Not set Otal 1-Bin Unit: Paper Set Otal Shift Sensor No paper detected Paper detected Otal Stay at rear Stay at front Stay at front Set Open Otal Set Not set Not set Otal Ot | 040 | Bridge/Exit/Shift: Set Detection | Set | Not set |
| Open/Close | 041 | , , | Close | Open |
| O46 Fusing Unit Set Set (Bit1) Not set (Bit1) O47 Toner Overflow Sensor Not full Full O48 Interlock Detection 1 Right or front door is open. Right or front door is close. O49 Interlock Detection 2 Right or front door is open. Right or front door is close. O50 Key Card Set Set Not set O51 Key Counter Set Set Not set O52 Mechanical Counter Set Not set set O53 1-Bin Unit Set Set Not set O54 1-Bin Unit: Paper Set Paper detected No paper detected O57 Cleaning Web End Not end End O60 Shift Sensor No paper detected Paper detected O64 Shift Tray Sensor Stay at rear Stay at front | 042 | , , | Close | Open |
| 047Toner Overflow SensorNot fullFull048Interlock Detection 1Right or front door is open.Right or front door is close.049Interlock Detection 2Right or front door is open.Right or front door is close.050Key Card SetSetNot set051Key Counter SetSetNot set052Mechanical Counter SetNot setset0531-Bin Unit SetSetNot set0541-Bin Unit: Paper SetPaper detectedNo paper detected057Cleaning Web EndNot endEnd060Shift SensorNo paper detectedPaper detected064Shift Tray SensorStay at rearStay at front | 043 | Transfer Belt Unit HP Sensor | Not HP | HP |
| 048Interlock Detection 1Right or front door is open.Right or front door is close.049Interlock Detection 2Right or front door is open.Right or front door is close.050Key Card SetSetNot set051Key Counter SetSetNot set052Mechanical Counter SetNot setset0531-Bin Unit SetSetNot set0541-Bin Unit: Paper SetPaper detectedNo paper detected057Cleaning Web EndNot endEnd060Shift SensorNo paper detectedPaper detected064Shift Tray SensorStay at rearStay at front | 046 | Fusing Unit Set | Set (Bit1) | Not set (Bit1) |
| Interlock Detection 1 open. close. O49 Interlock Detection 2 Right or front door is open. close. O50 Key Card Set Set Not set O51 Key Counter Set Set Not set O52 Mechanical Counter Set Not set O53 1-Bin Unit Set Set Not set O54 1-Bin Unit: Paper Set Paper detected O57 Cleaning Web End Not end End O60 Shift Sensor Stay at rear Stay at front | 047 | Toner Overflow Sensor | Not full | Full |
| O49 Interlock Detection 2 Open. close. O50 Key Card Set Set Not set O51 Key Counter Set Set Not set O52 Mechanical Counter Set Not set O53 1-Bin Unit Set Set Not set O54 1-Bin Unit: Paper Set Paper detected No paper detected O57 Cleaning Web End Not end End O60 Shift Sensor No paper detected O64 Shift Tray Sensor Stay at rear Stay at front | 048 | Interlock Detection 1 | _ | |
| 051 Key Counter Set Set Not set 052 Mechanical Counter Set Not set set 053 1-Bin Unit Set Set Not set 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 049 | Interlock Detection 2 | _ | |
| 052 Mechanical Counter Set Not set set 053 1-Bin Unit Set Set Not set 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 050 | Key Card Set | Set | Not set |
| 053 1-Bin Unit Set Set Not set 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 051 | Key Counter Set | Set | Not set |
| 054 1-Bin Unit: Paper Set Paper detected No paper detected 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 052 | Mechanical Counter Set | Not set | set |
| 057 Cleaning Web End Not end End 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 053 | 1-Bin Unit Set | Set | Not set |
| 060 Shift Sensor No paper detected Paper detected 064 Shift Tray Sensor Stay at rear Stay at front | 054 | 1-Bin Unit: Paper Set | Paper detected | No paper detected |
| 064 Shift Tray Sensor Stay at rear Stay at front | 057 | Cleaning Web End | Not end | End |
| | 060 | Shift Sensor | No paper detected | Paper detected |
| 065 Bypass Tray Paper Length Detection Paper detected No paper detected | 064 | Shift Tray Sensor | Stay at rear | Stay at front |
| | 065 | Bypass Tray Paper Length Detection | Paper detected | No paper detected |
| 200 Scanner HP Sensor Not HP HP | 200 | Scanner HP Sensor | Not HP | HP |

| 201 Platen Cover Sensor | Open | Close | |
|-------------------------|------|-------|--|
|-------------------------|------|-------|--|

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

Switch 1 is used for the tray set detection.

0: Pushed, 1: Not pushed

| Мо | Models | | | on |
|---------------------------------|---------------------------------|---|---|----|
| North America | Europe/Asia | 4 | 3 | 2 |
| 11" x 17" SEF*1 (A3 SEF) | A3 SEF*1 (11" x 17" SEF) | 0 | 0 | 1 |
| 8.5" x 14" SEF *2 (B4 SEF) | B4 SEF *2 (8.5" x 14" SEF) | 0 | 0 | 0 |
| A4 SEF | A4 SEF | 1 | 1 | 0 |
| 8.5" x 11" SEF | 8.5" x 11" SEF | 1 | 1 | 1 |
| B5 SEF | B5 SEF | 0 | 1 | 1 |
| 11" x 81/2" LEF*3 (A4 LEF) | A4 LEF*3 (11" x 81/2" LEF) | 1 | 0 | 0 |
| 10.5" x 7.25" LEF*4 (B5 LEF) | B5 LEF*4 (10.5" x 7.25" LEF) | 0 | 1 | 0 |
| A5 LEF | A5 LEF | 1 | 0 | 1 |

- * 1: The machine detects either 11" x 17" SEF or A3 SEF, depending on the setting of SP 5-181-002 (Tray 1) or -006 (Tray 2).
- * 2: The machine detects either 8.5" x 14" SEF or B4 SEF, depending on the setting of SP 5-181-003 (Tray 1) or -007 (Tray 2).
- *3: The machine detects either 11" x 81/2" LEF or A4 LEF, depending on the setting of SP 5-181-001 (Tray 1) or -005 (Tray 2).
- *4: The machine detects either B5 LEF or 10.5" x 7.25" LEF, depending on the setting of SP 5-181-004 (Tray 1) or -008 (Tray 2)..

Table 3: Paper Size (By-pass Table)

0: Pushed, 1: Not pushed

| Models | Bit No. | | | | |
|--|-----------------------|---|---|---|---|
| North America | Europe/Asia | 3 | 2 | 1 | 0 |
| 11" x 17" SEF*1 (11" x 8.5" LEF) | A3 SEF*1 (A4 LEF) | 1 | 1 | 1 | 0 |
| 11" x 17" SEF*1 (11" x 8.5" LEF) | A3 SEF* 1 (A4 LEF) | 1 | 1 | 0 | 0 |
| 8.5" x 11" SEF*1 (8.5" x 11" SEF*2) | A4 SEF* 1 (A5 LEF) | 1 | 1 | 0 | 1 |
| 8.5" x 11" SEF*1 (8.5" x 11" SEF*2) | A4 SEF* 1 (B5 LEF) | 1 | 0 | 0 | 1 |
| 5.5" x 8.5" SEF | A5 SEF | 1 | 0 | 1 | 1 |
| 5.5" x 8.5" SEF | A5 SEF | 0 | 0 | 1 | 1 |
| 5.5" x 8.5" SEF | A6 SEF | 0 | 1 | 1 | 1 |
| 5.5" x 8.5" SEF | A6 SEF | 1 | 1 | 1 | 1 |



• *1: When the machine determines that the paper feed direction is "LEF", it considers that the paper size is bracketed size.

5

APS Original Size Detection

| Original S | Ler | Length Sensor | | Width Sensor | | SP4-301 | |
|---|-----------------------------|---------------|----|-----------------|----|--------------|----------|
| Metric version | Inch version | L3 | L2 | L1 | W1 | W1 W2 displa | |
| A3 | 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 | Х | Х | 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 |

3000/2000-Sheet (Booklet) Finisher (D636/D637)

| 6140 | Bit | Dir. D | Reading | | |
|------|------------------------|-------------------------|------------------------|-------------------|--|
| 0140 | DIT | Description | 0 | 1 | |
| 001 | Entro | ince Sensor | No paper detected | Paper detected | |
| 002 | Proo | f Exit Sensor | No paper detected | Paper detected | |
| 003 | Proo | f Full Detection Sensor | Not Full | Full | |
| 004 | Upper Tray Exit Sensor | | No paper detected*1 | Paper detected* 1 | |
| 005 | Stap | le Exit Sensor | No paper detected | Paper detected | |
| 006 | Shift | Roller HP Sensor | Not HP | HP | |

| | | | Read | ing |
|------|-------------------|----------------------------|--------------------|-----------------|
| 6140 | Bit | Description | 0 | 1 |
| 007 | Shift Exit Sensor | | No paper detected | Paper detected |
| 008 | Exit (| Guide Plate HP Sensor | Not HP | HP |
| 009 | Lowe | er Tray Height Sensor | No paper detected | Paper detected |
| 010 | Uppe | er Tray Height Sensor | No paper detected | Paper detected |
| 011 | Uppe | er Tray Full Sensor | Not Full | Full |
| 012 | Stack | c Roller HP Sensor | Not HP | HP |
| 013 | Jogg | er HP Sensor | Not HP | HP |
| 014 | Feed | Out Belt HP Sensor | НР | Not HP |
| 015 | Stapl | ling Tray Paper Sensor | No paper detected | Paper detected |
| 016 | Corn | er Stapler HP Sensor | Not HP | HP |
| 017 | Stapl | er Rotation HP Sensor | Not HP | HP |
| 018 | Uppe | er Tray Limit SW | Not Limit | Limit |
| 019 | Door | Switch | Closed | Open |
| 020 | Corn | er Stapler Operation | Not HP | HP |
| 021 | Stapl | le Detection | No staple detected | Staple detected |
| 022 | Stapl | le Dip Detection | No staple detected | Staple detected |
| 023 | Punc | h Movement HP Sensor | Not HP | HP |
| 024 | Pape | r Position Slide HP Sensor | Not HP | HP |
| 025 | Pape | r Position Sensor | No paper detected | Paper detected |
| 026 | Punc | h Full Sensor | Not Full | Full |
| 027 | Punc | h HP Sensor | Not HP | HP |
| 028 | Punc | h DIP SW 1 | See * 1 | |
| 029 | Punc | h DIP SW 2 | See | * 1 |
| 030 | Stack | Junction Gate HP Sensor | Not HP | HP |

| | | | Read | ing |
|------|-------------------------------------|--|------------------------|------------------|
| 6140 | Bit | Description | 0 | 1 |
| 031 | Stack | CPresent Sensor | No paper detected | Paper detected |
| 032 | Clar | np Roller HP Sensor | Not HP | HP |
| 033 | Fold | Entrance Sensor | No paper detected | Paper detected |
| 034 | Botto | m Fence HP Sensor | Not HP | HP |
| 035 | Fold | Cam HP Sensor | Not HP | HP |
| 036 | Fold | Plate HP Sensor | Not HP | HP |
| 037 | Fold | Unit Exit Sensor | No paper detected | Paper detected |
| 038 | Lowe | er Tray Full Sensor: Front | No paper detected*2 | Paper detected*2 |
| 039 | Lowe | er Tray Full Sensor: Rear | No paper detected*2 | Paper detected*2 |
| 040 | Book Front | elet Stapler 1: Operation (Rotation/ | Not HP | HP |
| 041 | Book | let Stapler 1: Staple In (Front) | No staple detected | Staple detected |
| 042 | | elet Stapler 1: Staple In (Leading e/Front) | No staple detected | Staple detected |
| 043 | Book Rear | let Stapler 1: Operation (Rotation/ | Not HP | HP |
| 044 | Booklet Stapler 1: Staple In (Rear) | | No staple detected | Staple detected |
| 045 | | elet Stapler 1: Staple In (Leading e/Rear) | No staple detected | Staple detected |
| 046 | Uppe | er Tray Full Sensor: 3000 | Not Full | Full |

* 1: Combination of DIP SW 1 and SW 2

| ı | 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 (D637 Only)" in the Service Manual for the "3000/2000-Sheet (Booklet) Finisher ".

1000-Sheet Finisher (D588)

| 4120 | 6139 Bit Description | | Read | ling |
|------|--|--|-------------------|--------------------|
| 0139 | DIT | Description | 0 | 1 |
| 001 | Entra | ince Sensor | Paper detected | No paper detected |
| 002 | | Exit Sensor er Tray Exit Sensor) | No paper detected | Paper detected |
| 003 | | le Entrance Sensor bler Tray Entrance Sensor) | Paper detected | No paper detected |
| 004 | Staple Moving HP Sensor (Stapler HP Sensor) | | Not HP | НР |
| 005 | Jogger HP Sensor (Jogger Fence HP Sensor) | | Not HP | НР |
| 006 | Stack | k Feed-out Belt HP Sensor | HP | Not HP |
| 007 | Stap | le Tray Paper Sensor | No paper detected | Paper detected |
| 008 | | le Rotation Sensor ble Rotation HP Sensor) | Not HP | НР |
| 009 | Stap | le Sensor | Staple detected | No staple detected |
| 010 | Staple READY Detection | | Staple detected | No staple detected |
| 011 | Exit Guide Plate HP (Exit Guide Plate HP Sensor) | | Not HP | НР |
| 012 | Shift | HP Sensor | Not HP | HP |

| 6139 | Bit Description | Reading | | |
|------|-----------------|---|----------------------------|-------------------------|
| | | 0 | 1 | |
| 013 | | er Sensor ek Height Sensor) | No output tray detected | Output tray detected |
| 014 | | Lower Sensor er Tray Lower Limit Sensor) | Lower limit | Not lower limit |
| 015 | | f Full Sensor er Limit Sensor) | Not full | Full |

Output Check Table

Copier

| 5804 | Output Check | |
|------|-----------------|------------------------------|
| 001 | Exit Motor: 350 | Paper exit motor (Mainframe) |
| 002 | Exit Motor: 175 | |
| 003 | Exit Motor: 230 | |
| 004 | Exit Motor: 180 | |
| 005 | Exit Motor: 154 | |
| 006 | Exit Motor: 90 | |
| 007 | Feed Motor: 300 | |
| 008 | Feed Motor: 255 | |
| 009 | Feed Motor: 230 | |
| 010 | Feed Motor: 215 | Paper feed motor (Mainframe) |
| 011 | Feed Motor: 180 | |
| 012 | Feed Motor: 154 | |
| 013 | Feed Motor: 90 | |

| 5804 | Output Check | |
|------|---------------------------|---|
| 014 | Bank: Feed Motor: 300 | |
| 015 | Bank: Feed Motor: 255 | Paper feed motor (Optional paper feed unit) |
| 016 | Bank: Feed Motor: 230 | |
| 017 | Bank: Feed Motor: 215 | |
| 018 | Bank: Feed Motor: 180 | |
| 019 | Bank: Feed Motor: 154 | |
| 020 | Bank: Feed Motor: 90 | |
| 021 | LCT: Feed Motor: 300 | |
| 022 | LCT: Feed Motor: 255 | |
| 023 | LCT: Feed Motor: 230 | |
| 024 | LCT: Feed Motor: 215 | Paper feed motor (Optional LCT) |
| 025 | LCT: Feed Motor: 180 | |
| 026 | LCT: Feed Motor: 154 | |
| 027 | LCT: Feed Motor: 90 | |
| 028 | Paper Feed Clutch 1 | Paper feed clutch 1/2 (Mainframe) |
| 029 | Paper Feed Clutch 2 | raper leed cluich 1/2 (Maintraine) |
| 030 | Bank: Paper Feed Clutch 3 | Paper feed clutch 3/4 (Optional paper |
| 031 | Bank: Paper Feed Clutch 4 | feed unit) |
| 032 | LCT: Paper Feed Clutch | Paper feed clutch (Optional LCT) |
| 033 | Pick-up Solenoid 1 | Disk on Salamaid 1/2/Adminformal |
| 034 | Pick-up Solenoid 2 | Pick-up Solenoid 1/2 (Mainframe) |
| 035 | Bank: Pick-up Solenoid 3 | Pick-up Solenoid 3/4 (Optional paper |
| 036 | Bank: Pick-up Solenoid 4 | feed unit) |
| 037 | LCT: Pick-up Solenoid | Pick-up Solenoid (LCT) |

| 5804 | Output Check | |
|------|---------------------------------|---|
| 038 | Tray Lift Motor 1: Up | |
| 039 | Tray Lift Motor 1: Down | |
| 040 | Tray Lift Motor 2: Up | - |
| 041 | Tray Lift Motor 2: Down | |
| 042 | Paper Tray Lock Solenoid | Not used |
| 043 | Bank: Paper Tray Lock Solenoid | Tray lock solenoid (Optional paper feed unit) |
| 044 | Registration Motor: 230 | |
| 045 | Registration Motor: 180 | |
| 046 | Registration Motor: 154 | - |
| 047 | Registration Motor: 90 | |
| 048 | Exit: Junction Gate Solenoid | Junction gate 1 solenoid |
| 049 | Duplex: Inverter Gate Solenoid | Not used |
| 050 | Duplex Inverter Motor: Fwd: 230 | |
| 051 | Duplex Inverter Motor: Fwd: 180 | |
| 052 | Duplex Inverter Motor: Fwd: 154 | |
| 053 | Duplex Inverter Motor: Fwd: 90 | |
| 054 | Duplex Inverter Motor: Rev: 230 | - |
| 055 | Duplex Inverter Motor: Rev: 180 | |
| 056 | Duplex Inverter Motor: Rev: 154 | |
| 057 | Duplex Inverter Motor: Rev: 90 | |

| 5804 | Output Check | |
|------|--|--------------------------------------|
| 058 | Duplex/By-pass Motor: Fwd: 230 | |
| 059 | Duplex/By-pass Motor: Fwd: 180 | |
| 060 | Duplex/By-pass Motor: Fwd: 154 | |
| 061 | Duplex/By-pass Motor: Fwd: 90 | |
| 062 | Duplex/By-pass Motor: Rev: 230 | - |
| 063 | Duplex/By-pass Motor: Rev: 180 | |
| 064 | Duplex/By-pass Motor: Rev: 154 | |
| 065 | Duplex/By-pass Motor: Rev: 90 | |
| 066 | By-pass Feed Clutch | - |
| 067 | By-pass Pick-up Solenoid | - |
| 068 | Bridge/Exit Tray: Drive Motor: 230 | |
| 069 | Bridge/Exit Tray: Drive Motor: 180 | |
| 070 | Bridge/Exit Tray: Drive Motor: 154 | - Drive motor (Bridge unit) |
| 071 | Bridge/Exit Tray: Drive Motor: 90 | |
| 072 | Bridge/Exit Tray: Junction Gate Solenoid | Junction Gate Solenoid (Bridge unit) |
| 073 | Bridge/Exit Tray: Drive Motor: Reset | - |
| 074 | Bridge/Exit Tray: Drive Motor: Enable | - |
| 075 | Bridge: Cooling Fan Motor | Not used |
| 076 | Transfer Belt Contact Motor | - |
| 077 | OPC Motor: 230 | |
| 078 | OPC Motor: 180 | D |
| 079 | OPC Motor: 154 | Drum motor |
| 080 | OPC Motor: 90 | |

| 5804 | Output Check | |
|------|---------------------------------|---------------------------------------|
| 081 | Transfer/Development Motor: 230 | |
| 082 | Transfer/Development Motor: 180 | |
| 083 | Transfer/Development Motor: 154 |] - |
| 084 | Transfer/Development Motor: 90 | |
| 085 | Fusing Motor: 230 | |
| 086 | Fusing Motor: 180 | |
| 087 | Fusing Motor: 154 | - |
| 088 | Fusing Motor: 90 | |
| 089 | Development Paddle Motor | - |
| 090 | PTL Control | - |
| 091 | Fusing Fan Motor: High | Eurin a sub austi fan ar sta |
| 092 | Fusing Fan Motor: Low | Fusing exhaust fan motor |
| 093 | Exhaust Fan Motor: High | Exhaust fan motor |
| 094 | Exhaust Fan Motor: Low | Exnaust ran motor |
| 095 | Duct Fan Motor | Cooling fan motor |
| 096 | Exit Fan Motor: High | D |
| 097 | Exit Fan Motor: Low | Paper exit cooling fan motor |
| 098 | PSU Fan Motor | - |
| 099 | 1-Bin Junction Gate Solenoid | Junction gate 2 solenoid (1-bin unit) |
| 100 | Polygon Motor: 230 | |
| 101 | Polygon Motor: 180 | |
| 102 | Polygon Motor: 154 | - |
| 103 | Polygon Motor: 90 | |
| 104 | LD 1 | |
| 105 | LD 2 | - |

| 5804 | Output Check | |
|------|-------------------------|--------------------|
| 106 | Toner Bottle Motor: Fwd | Toner supply motor |
| 107 | Quenching Lamp | - |
| 108 | Charge Bias | - |
| 109 | Development Bias | - |
| 110 | Transfer Belt Voltage | - |
| 111 | ID Sensor LED | - |
| 115 | Cleaning Web Motor | Web motor |
| 116 | Shift Tray Motor | Not used |
| 117 | CTL Cooling FAN | Controller fan |
| 202 | Scanner Lamp | - |

1000-Sheet Finisher (D588)

| 4144 | Output Check | | |
|------|--------------------------------|-----------------------------|--|
| 6144 | Display | Description | |
| 001 | Upper Relay Motor | Upper Transport Motor | |
| 002 | Lower Relay Motor | Lower Transport Motor | |
| 003 | Exit Motor | - | |
| 004 | Proof Junction Gate SOL | Tray Junction Gate Solenoid | |
| 005 | Lower Tray Lift Motor | - | |
| 006 | Jogger Fence Motor | - | |
| 007 | Stapler Motor | - | |
| 008 | Stapler Hammer | - | |
| 009 | Stapler Junction Gate Solenoid | - | |
| 010 | Positioning Roller Solenoid | - | |

| 011 | Stack Feed-out Motor | - |
|-----|------------------------|---|
| 012 | Shift Motor | - |
| 013 | Exit Guide Plate Motor | - |

3000 /2000-Sheet (Booklet) Finisher (D636/D637)

| 6145 | Output | |
|------|---------------------------------------|-------------|
| 0143 | Display | Description |
| 001 | Entrance Motor | - |
| 002 | Upper Transport Motor | - |
| 003 | Lower Transport Motor | - |
| 004 | Upper/Proof Tray Exit Motor | - |
| 005 | Clamp Roller Retraction Motor | - |
| 006 | Shift Roller Motor | - |
| 007 | Exit Guide Plate Motor | - |
| 008 | Upper Tray Lift Motor | - |
| 009 | Stacking Sponge Roller Motor | - |
| 010 | Jogger Fence Motor | - |
| 011 | Feed Out Belt Motor | - |
| 012 | Corner Stapler Movement Motor | - |
| 013 | Corner Stapler Rotation Motor | - |
| 014 | Corner Stapler | - |
| 015 | Proof Junction Gate Solenoid | - |
| 016 | Stapling Tray Junction Gate Solenoid | - |
| 017 | Stapling Edge Pressure Plate Solenoid | - |
| 018 | Positioning Roller Solenoid | - |

| 019 | Booklet Pressure Roller Solenoid | - |
|-----|-----------------------------------|---|
| 020 | Stack Junction Gate Motor | - |
| 021 | Fold Unit Bottom Fence Lift Motor | - |
| 022 | Booklet Stapler: Front | - |
| 023 | Booklet Stapler: Rear | - |
| 024 | Fold Plate Motor | - |
| 025 | Fold Roller Motor | - |
| 026 | Positioning Roller Motor | - |
| 027 | Punch Drive Motor | - |
| 028 | Punch Movement Motor | - |
| 029 | Paper Position Sensor Slide Motor | - |
| | | |

Printer Service Tables

SP1-XXX (Service Mode)

| | 1001 | Dir C. in I | |
|-----|------|-------------|---|
| | 1001 | Bit Switch | |
| - 1 | | | 1 |

| | 1 | | | |
|-----|---------|---|-----------------|------------------|
| 001 | Bit Swi | tch 1 | 0 | 1 |
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | DFU | - | - |
| | bit 3 | No I/O Timeout | 0: Disable | 1: Enable |
| | | Enable: The MFP I/O Timeout setting will have no effect. I/O Timeouts will never occur. | | |
| | bit 4 | SD Card Save Mode | 0: Disable | 1: Enable |
| | | Enable: Print jobs will be saved to an SD Card in the | GW SD slot. | |
| | bit 5 | DFU | - | - |
| | bit 6 | DFU | - | - |
| | bit 7 | [RPCS,PCL]: Printable area frame border | 0: Disable | 1: Enable |
| | | Enable: The machine prints all RPCS and PCL jobs w printable area. | ith a border on | the edges of the |

| 1001 | Bit Switch |
|------|------------|
|------|------------|

| 002 | Bit Swit | tch 2 | 0 | 1 |
|-----|----------|--|---------------|----------------|
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | Applying a collation Type | Shift Collate | Normal Collate |
| | | A collation type (shift or normal) will be applied to all jobs that do not already have a 'Collate Type' configured. | | |
| | | ↓ Note | | |
| | | • If #5-0 is enabled, this Bit Switch has no effect. | | |
| | bit 3 | [PCL5e/c,PS]: PDL Auto Switching | 0: Enable | 1: Disable |
| | | Disable: The MFPs ability to change the PDL process | or mid-job. | |
| | | Some host systems submit jobs that contain both PS of switching is disabled, these jobs will not be printed p | | f Auto PDL |
| | bit 4 | DFU | - | - |
| | bit 5 | DFU | - | - |
| | bit 6 | DFU | - | - |
| | bit 7 | DFU | - | - |

| 1001 | Bit Switch |
|------|------------|
|------|------------|

| 003 | Bit Swit | ch 3 | 0 | 1 |
|-----|----------|---|------------|-----------|
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | [PCL5e/c]: Legacy HP compatibility | 0: Disable | 1: Enable |
| | | Enable: Uses the same left margin as older HP models such as HP4000/HP8000. In other words, the left margin defined in the job (usually " <esc>*r0A") will be changed to "<esc>*r1A"</esc></esc> | | |
| | bit 3 | DFU | - | - |
| | bit 4 | DFU | - | - |
| | bit 5 | DFU | - | - |
| | bit 6 | DFU | - | - |
| | bit 7 | DFU | - | - |

| 1001 | Bit Swit | Bit Switch | | | | | |
|------|--------------|--|----------------|------------------|--|--|--|
| 004 | Bit Switch 4 | | 0 | 1 | | | |
| | bit 0 | DFU | - | - | | | |
| | bit 1 | DFU | - | - | | | |
| | bit 2 | DFU | - | - | | | |
| | bit 3 | IPDS print-side reversal | 0: Disable | 1: Enable | | | |
| | | Enable: Increases printing speed but simplex pages of the sheet. | may be printed | on the back side | | | |
| | bit 4 | DFU | - | - | | | |
| | bit 5 | DFU | - | - | | | |
| | bit 6 | DFU | - | - | | | |
| | bit 7 | DFU | - | - | | | |

| 1001 | Bit Switch | | | |
|------|--------------|---|---|--|
| 005 | Bit Switch 5 | 0 | 1 | |

| | | Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel. | Disable | Enable |
|---------------------------|---|---|--------------------------------|------------------------------|
| | bit 0 | If enabled, users will be able to configure a Collate Type from the operation panel. The available types of configured options. After enabling the function, the settings will appear to the configured options. | will depend on | • |
| | | "User Tools > Printer Features > System" | | |
| | bit 1 | Multiple copies if a paper size or type mismatch occurs | 0: Disable (Single copy) | 1: Enable (Multiple copy) |
| | If a paper size or type mismatch occurs during the printing of multiple copi single copy is output by default. Using this Bit Switch, the device can be co to print all copies even if a paper mismatch occurs. | | | |
| | bit 2 | DFU | - | - |
| | bit 3 | [PS] PS Criteria | Pattern3 | Pattern 1 |
| | | Change the number of PS criterion used by the PS interpreter to determine whether a job is PS data or not. | | |
| | | Pattern3: includes most PS commands. | | |
| | | Pattern 1: A small number of PS tags and headers | | |
| | bit 4 | Increase max number of the stored jobs to 1000 jobs. | Disable (100) | Enable (1000) |
| | | Enable: Changes the maximum number of jobs that Job Type settings to 1000. The default is 100. | t can be store | d on the HDD via |
| | bit 5 | DFU | - | - |
| | bit 6 | Method for determining the image rotation for the edge to bind on. | 0: Disable | 1: Enable |
| | If enabled, the image rotation will be performed as they were in the speci older models for the binding of pages of mixed orientation jobs. | | | |
| The old models are below: | | | | |
| | | - PCL: Pre-04A models | | |
| | | - PS/PDF/RPCS:Pre-05S models | | |

| bit 7 | Letterhead mode printing | 0: Disable | 1: Enable (Duplex) |
|-------|---|------------|-----------------------|
| | Routes all pages through the duplex unit. If this is disabled, simplex pages or the last page of not routed through the duplex unit. This could result printed pages. Only affects pages specified as Letterhead paper. | | |

| 1001 | Bit Switch | | |
|------|-------------------------|---|---|
| 006 | Bit Switch 6 DFU | - | - |

| 1001 | Bit Swi | Bit Switch | | | | | |
|------|--|------------------|------------|-----------|--|--|--|
| 007 | Bit Swi | Bit Switch 7 0 1 | | | | | |
| | | Print path | 0: Disable | 1: Enable | | | |
| | bit 0 If enabled, simplex pages (in mixed simplex/duplex PS/PCL5 jobs only page of an odd paged duplex job (PS, PCL5, PCL6), are always routed duplex unit. Not having to switch paper paths increases the print speed simplex. | | | | | | |
| | bit 1 to 7 | DFU | - | - | | | |

| 1001 | Bit Switch | | | |
|------|-------------------------|---|---|--|
| 800 | Bit Switch 8 DFU | - | - | |

| 1001 | Bit Swi | Bit Switch | | | | |
|------|---------|--|---------------------------------|---------------------------|--|--|
| 009 | Bit Swi | Bit Switch 9 | | 1 | | |
| | bit 0 | PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284). | "Disabled (Immediatel y)" | "Enabled (10 seconds)" | | |
| | | To be used if PDL auto-detection fails. A failure of PD necessarily mean that the job can't be printed. This be to time-out immediately (default) upon failure or to v | it switch tells th | e device whether | | |
| | bit 1 | DFU | - | - | | |

| bi | oit 2 | Job Cancel | Disabled (Not cancelled) | Enabled (Cancelled) |
|----|--|--|--------------------------------|------------------------|
| | If this bit switch, all jobs will be cancelled after a jam occurs. | | | |
| | Note: If this bitsw is enabled, printing under the following conditions might result problems: | | | s might result in |
| | | - Job submission via USB or Parallel Port | | |
| | | - Spool printing (WIM >Configuration > Device Setti | ngs > System) | |
| bi | it 3 | PCL/PS bypass tray paper rotation (SEF/LEF) | 0: Disable | 1: Enable |
| | | This bitsw causes the device to revert to the behavior of previous generations. It only takes effect if "Bypass Tray Setting Priority" = "Driver/Command". | | |
| | | Previous spec (bitsw=1): If a standard sized paper mismatch occurred in the bypass tray, the MFP always prompted for SEF paper. | | |
| | | If this bitsw=0 (default) then in the event of a standard sized paper mismatch, the MFP will always prompt for paper of the rotation (SEF/LEF) determined by the MFP bypass tray paper setting or by the bypass tray sensor. | | |
| bi | it 4 | Response to PJL USTATUS when multiple collated copies are printed | 0: Disable | 1: Enable |
| | | When enabled, if multiple collated copies are printed, the device no longer responds to PJL USTATUS with the number of pages in the current copy. Instead the device will return the total number of pages for all copies. | | |
| - | it 5 5 7 | DFU | - | - |

| 1001 | Bit Swit | Bit Switch | | | | |
|------|---------------|---|------------|-----------|--|--|
| 010 | Bit Swit | rch 10 | 0 | 1 | | |
| | bit 0 to 4 | DFU | - | - | | |
| | bit 5 | List / Test Print Lock | 0: Disable | 1: Enable | | |
| | | If enabled, you can lock or unlock the [List/Test Print] items under the Pinter Features menu when the Store and Skip Errored Job Function is on. | | | | |

| Bit 6 | Optional charge machines | - | - |
|-------|--|------------|-----------|
| | If enabled, you can use the optional charge machines when the Store and Skip Errored Job Function is on. | 0: Disable | 1: Enable |
| Bit 7 | DFU | - | - |

| 1001 | Bit Swit | Bit Switch | | | | |
|------|------------------------------|--|-------------------|----------------------|--|--|
| 011 | Bit Swit | Bit Switch 11 | | 1 | | |
| | bit 0 List / Test Print menu | | 0: Disable | 1: Enable | | |
| | | When enabled, [Multiple Lists] menu is displayed in Features menu. | [List / Test Prin | t] under the Printer | | |
| | bit 1 | Interrupt printing | 0: Job | 1: Page | | |
| | | Selects the interrupt unit for the interrupt printing fund When you select "0," you can interrupt the printing of When you select "1," you can interrupt the printing of | of a job while b | | | |
| | Bit 2 to 7 | DFU | - | - | | |

| 1001 | Bit Swit | Bit Switch | | | | |
|------|---------------|---------------|---|---|--|--|
| 012 | Bit Swit | Bit Switch 12 | | 1 | | |
| | bit 0 to 7 | DFU | - | - | | |

| 1003 | [Clear Setting] |
|----------|---|
| 1002 001 | Initialize Printer System |
| 1003 001 | Initializes settings in the "System" menu of the user mode. |
| 1003 003 | Delete Program |

| 1004 |
|------|
|------|

| 1004 001 | Print Printer Summary | | | | |
|----------|--|--|--|--|--|
| 1004 001 | Prints the service summary sheet (a summary of all the controller settings). | | | | |
| 1006 | 1006 [Sample/Locked Print] *CTL 0: Linked, 1: On | | | | |
| 1006 001 | Enables and disables the document server. When you select "0," the document server is enabled or disabled in accordance with Copy Service Mode SP5-967. When you | | | | |

select "1," the document server is enabled regardless of Copy Service Mode SP5-967.

Scanner Service Tables

SP1-xxx (System and Others)

| | [Erase margin (Remote Scan)] | | | |
|--------|--|------|----------------------------------|--|
| 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. | | | |

| 1010 | [Non Display Clear Light PDF] | *CTL | [0 or 1 / 0 / -] 0: Display, 1: Non display |
|--------|--------------------------------|------|---|
| 1010 1 | Enable or disable remote scan. | | |

SP2-XXX (Scanning-image quality)

| | [Compression Level (Gray-scale)] |
|------|--|
| 2021 | Selects the compression ratio for grayscale processing mode (JPEG) for the three settings that can be selected at the operation panel. |

| 2021 1 | Comp1: 5-95 | | [5 to 95 / 20 / 1 /step] |
|--------|-------------|------|----------------------------------|
| 2021 2 | Comp2: 5-95 | | [5 to 95 / 40 / 1 /step] |
| 2021 3 | Comp3: 5-95 | *CTL | [5 to 95 / 65 / 1 /step] |
| 2021 4 | Comp4: 5-95 | | [5 to 95 / 80 / 1 /step] |
| 2021 5 | Comp5: 5-95 | | [5 to 95 / 95 / 1 /step] |

| | [Compression ratio of ClearLight PDF] | | |
|--------|--|------|----------------------------------|
| 2024 | Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel. | | |
| 2024 1 | Compression Ratio (Normal) | | [5 to 95 / 25 / 1 /step] |
| 2024 2 | Compression Ratio (High comp | *CTL | [5 to 95 / 20 / 1 /step] |

Updating the Firmware

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

Before You Begin

An SD card is a precision device. Always observe the following precautions when you handle SD cards:

- Always switch the machine off before you insert an SD card. Never insert the SD card into the slot with the power on.
- Do not remove the SD card from the service slot after the power has been switched on.
- Never switch the machine off while the firmware is downloading from the SD card.
- Keep SD cards in a safe location where they are not exposed to high temperature, high humidity, or exposure to direct sunlight.
- Always handle SD cards with care. Do not bend or scratch them. Do not let the SD card get exposed to shock or vibration.
- Make sure that the write protection of an SD card is unlocked when you download an application
 to it. If not, downloading fails and a download error (e.g. Error Code 44) occurs during a firmware
 upgrade.

Keep the following points in mind when you use the firmware update software:

- "Upload" means to send data from the machine to the SD card. "Download" means to send data from the SD card to the machine.
- To select an item on the LCD, touch the appropriate button on the soft touch-screen of the LCD, or, press the appropriate number key on the 10-key pad of the operation panel. For example, when "Exit (0)" shows on the screen you can touch the Exit button on the screen, or, press the "0" button on the operation panel of the copier.
- Make sure that the machine is disconnected from the network to prevent a print job for arriving
 while the firmware update is in progress before you start the firmware update procedure.

Updating Firmware

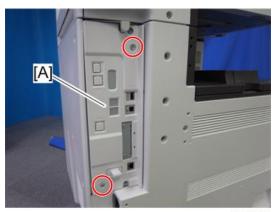
Preparation

- 1. If the SD card is blank, copy the entire "romdata" folder onto the SD card.
- 2. If the card already contains the "romdata" folder, copy the "D129" folder onto the card.

5

Updating Procedure

1. Turn the main power switch off.



d641i113

2. Remove the controller cover (Fx 2).



d641i115

- 3. Insert the SD card into SD Card Slot 2 (Lower Slot) [A]. Make sure the label on the SD card faces the rear side of the machine.
- 4. Slowly push the SD card into the slot so it locks in place. You will hear it click. Make sure the SD card locks in place.



- 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.



- While downloading is in progress, the LCD will display "Loading". When downloading has been completed, the panel will display "update done".
- For operation panel software, the Start key lights red while downloading is in progress, and then lights green again after downloading is completed.
- 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.

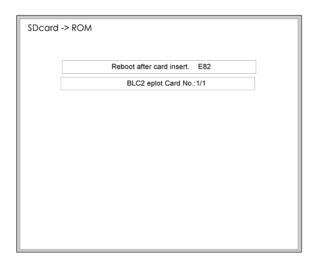
Error Messages

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.

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 installed correctly, or use a different SD card. |
| 21 | Cannot access memory | HDD connection incorrect or replace HDD. |
| 22 | Cannot decompress compressed data | Incorrect ROM data on the SD card, or data is damaged. |

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

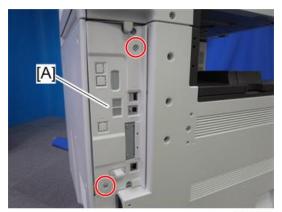
5

Uploading/Downloading NVRAM Data

The content of the NVRAM can be uploaded to and downloaded from an SD card.

Uploading NVRAM Data (SP5-824)

1. Turn off the main switch.



d641i113

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



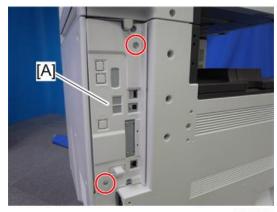
d641i115

- 3. Insert the SD card into SD card slot 2 (Lower Slot) [A].
- 4. Turn on the main switch.
- 5. Execute SP5-824.
- 6. Press "1" to start uploading the NVRAM data.

Downloading NVRAM Data (SP5-825)

The following data are not downloaded from the SD card:

- Total counter
- C/O, P/O Counter
- Duplex, A3/DLT/Over 420 mm, Staple and Scanner application scanning counters (system settings).
- Engine SP data
- 1. Turn off the main switch.



d641i113

2. Remove the controller cover [A] (\mathscr{F} x 2).





d641i115

- 3. Plug the SD card into SD card slot 2 (Lower Slot) [A].
- 4. Turn on the main switch.
- 5. Execute SP5-825.
- 6. Press "1" to start downloading the NVRAM data.

Note that the following errors could occur during downloading:

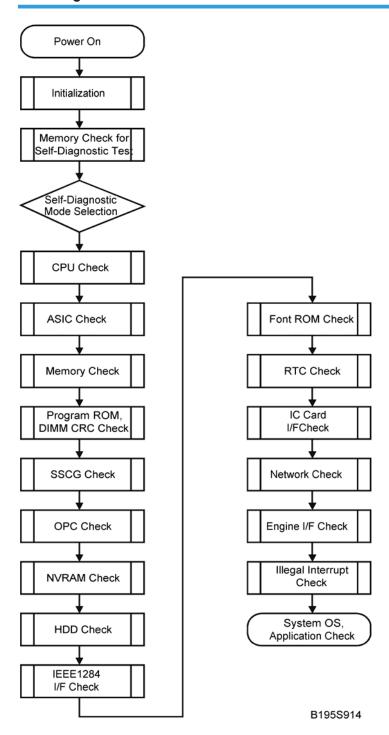
- If a card is not installed in the card slot and a message tells you that downloading cannot proceed, you cannot execute downloading, even by pressing "1".
- If the correct card for the NVRAM data is not inserted in the card slot, after you press "1" a message will tell you that downloading cannot proceed because the card is abnormal and the execution will halt.

Self-Diagnostic Mode

Self-Diagnostic Mode at Power On

As soon as the main machine is powered on, the controller waits for the initial settings of the copy engine to take effect and then starts an independent self-diagnostic test program. The self-diagnostic test follows the path of the flow chart shown below and checks the CPU, memory, HDD, and so on. An SC code is displayed in the touch panel if the self-diagnostic program detects any malfunction or abnormal condition.

Self-Diagnostic Test Flow



Detailed Self-Diagnostic Mode

In addition to the self-diagnostic test initiated every time the main machine is powered on, you can set the machine in a more detailed diagnostic mode manually in order to test other components or conditions that are not tested during self-diagnosis after power on. The following device is required in order to put the machine in the detailed self-diagnosis mode.

| No. | Name |
|-----------|-----------------------------|
| G02119350 | Parallel Loopback Connector |

Executing Detailed Self-Diagnosis

Follow this procedure to execute detailed self-diagnosis.

- 1. Switch off the machine, and connect the parallel loopback device to the Centronics I/F port.
- 2. Hold down , press and hold down , and then while pressing both keys at the same time, switch on the machine.

You will see "Now Loading" on the touch-panel, and then you will see the results of the test.

A report is printed every time a detailed self-diagnostic test is executed, whether errors were detected or not.

Using the Debug Log

Overview

This machine provides a Save Debug Log feature that allows the Customer Engineer to save and retrieve error information for analysis.

Every time an error occurs, debug information is recorded in volatile memory but this information is lost when the machine is switched off and on.

To capture this debug information, the Save Debug Log feature provides two main features:

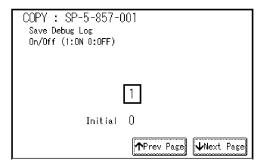
- Switching on the debug feature so error information is saved directly to the HDD for later retrieval.
- Copying the error information from the HDD to an SD card.

When a user is experiencing problems with the machine, follow the procedure below to set up the machine so the error information is saved automatically to the HDD. Then ask the user to reproduce the problem.

Switching On And Setting Up Save Debug Log

The debug information cannot be saved the until the "Save Debug Log" function has been switched on and a target has been selected.

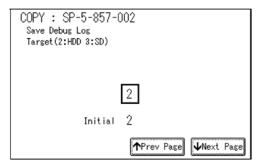
- 1. Enter the SP mode.
- 2. Under "5857 Save Debug Log", press "1".



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. Next, 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 Slot 2 (Lower Slot).
- 5. Now touch "5858" and specify the events that you want to record in the debug log. SP5858 (Debug Save When) provides the following items for selection.

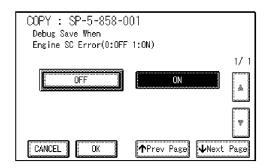
| 1 | Engine SC Error | Saves data when an engine-related SC code is generated. |
|-----------------------|-----------------|---|
| 2 Controller SC Error | | Saves debug data when a controller-related SC Code is generated. |
| 3 Any SC Error | | Saves data only for the SC code that you specify by entering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



• More than one event can be selected.

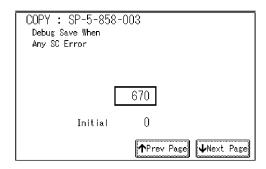
Example 1: To Select Items 1, 2, 4

Touch the appropriate items(s). Press "ON" for each selection. This example shows "Engine SC Error" selected.



Example 2: To Specify an SC Code

Touch "3 Any SC Error", enter the 3-digit SC code number with the control panel number keys, then press . This example shows an entry for SC670.





- For details about SC code numbers, please refer to the SC tables in Section "4.
 Troubleshooting"
- Next, select the one or more memory modules for reading and recording debug information. Touch "5859".

Under "5859" press the appropriate 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

Web Key No. Сору Printer Scanner 1 2222 (SCS) 2 2223 (SRM) 3 256 (IMH) 4 1000 (ECS) 5 1025 (MCS) 6 5375 (Scan) 5682 (NFA) 4848(COPY) 4400 (GPS) 7 2224 (BCU) 4500 (PDL) 5682 (NFA) 6600 (WebDB) 8 3000 (NCS) 4600 (GPS-PM) 3300 (PTS) 9 2000 (NCS) 2000 (NCS) 6666 (WebSys) 10 2000 (NCS) 2224 (BCU)

U Note

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

Key to Acronyms

| Acronym | Meaning | Acronym | Meaning |
|---------|---------|-----------|---------|
| ,, | 9 | 7 10.01.7 | 1,1009 |

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

The machine is now set to record the debugging information automatically on the HDD (the target selected with SP5-857-002) for the events that you selected SP5-858 and the memory modules selected with SP5-859.

Please keep the following important points in mind when you are doing this setting:

- Note that the number entries for Keys 1 to 5 are the same for the Copy, Printer, Scanner, and Web memory modules.
- The initial settings are all zero.
- These settings remain in effect until you change them. Be sure to check all the settings, especially the settings for Keys 6 to 10. To switch off a key setting, enter a zero for that key.
- You can select any number of keys from 1 to 10 (or all) by entering the corresponding 4-digit numbers from the table.
- You cannot mix settings for the groups (COPY, PRINTER, etc.) for 006to010. 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

- 1. Insert the SD card into Slot 2 (Lower Slot).
- 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.



- The SD card can hold up to 4MB of data. If the debugging data is larger than 4MB, you can switch to another SD card.
- 3. Use a card reader to copy the file and send it for analysis to your local Ricoh representative by email, or just send the SD card by mail.

Since only SC errors and jams are recorded to the debug log automatically, for any other errors that occur while the customer engineer is not on site, please instruct customers to perform the following immediately after occurrence to save the debug data. Such problems would include a controller or panel freeze.



- In order to use this feature, the customer engineer must have previously switched on the Save Debug Feature (SP5857-001) and selected the hard disk as the save destination (SP5857-002).
- 1. When the error occurs, on the operation panel, press @ (Reset Key).
- 2. On the control panel, enter "01" then hold down for at least 3 sec. until the machine beeps then release. 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 so the service representatives can retrieve it on their next visit by copying it from the HDD to an SD card.

6. Troubleshooting

Service Call Conditions

Summary

There are 4 levels of service call conditions.

| Level | Definition | Reset Procedure |
|-------|--|--|
| A | To prevent damage to the machine, the main machine cannot be operated until the SC has been reset by a service representative (see the note below). | Enter SP mode, use SP 5810, touch [Execute], and then turn the main power switch off and on. |
| В | SCs that disable only the features that use the defective item. Although these SCs are not shown to the user under normal conditions, they are displayed on the operation panel only when the defective feature is selected. | Turn the operation switch or main switch off and on. |
| С | The SC history is updated. The machine can be operated as usual. | The SC will not be displayed. Only the SC history is updated. |
| D | Turning the main switch off then on resets SCs displayed on the operation panel. These are re-displayed if the error occurs again. | Turn the operation switch off and on. Also see below. |

When a Level "D" SC code occurs

When a Level D SC occurs, a screen opens on the operation panel to tell the operator:

- An error occurred
- The job in progress will be erased
- The machine will reboot automatically after approximately 30 seconds.

The operator can wait until the machine reboots automatically or touch "Reset" on the screen to reset the machine immediately and go back to the copy screen.

If the operator does not touch "Reset"

The next message tells the operator that the machine will reset automatically and that the previous job was lost and must be started again. After reading the message, the operator touches "Confirm" on the screen. The next screen shows the number and title of the SC code, and stops until the operator turns the machine off and on.

If the operator touches "Reset"

6

If the operator touches "Reset" to bypass the 30-second interval for the machine to reboot, the machine reboots immediately and the operation panel displays the copy screen.



- Do not try to use the operation panel during an automatic reboot.
- If the Remote Service System is in use, the SC code is sent immediately to the Service Center.

SC Code Descriptions



- If a problem concerns a circuit board, disconnect and reconnect the connectors and then test the
 machine. Often a loose or disconnected harness is the cause of the problem. Always do this before
 you decide to replace the PCB.
- If a motor lock error occurs, check the mechanical load before you decide to replace the motor or sensors.
- When a Level "A" or "B" SC occurs while in an SP mode, the machine cannot display the SC number. If this occurs, check the SC number after leaving the SP mode.
- The machine reboots automatically when the machine issues a Level "D" SC code. This is done for Level "D" SC codes only.

ACAUTION

Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the
hard disk or memory, press the operation switch to switch the power off, wait for the power LED to
go off, and then switch the main power switch off.



• The main power LED lights or flashes while the platen cover or ARDF is open, while the main machine is communicating with a facsimile or the network server, or while the machine is accessing the hard disk or memory for reading or writing data.

SC Tables: SC1xx

| | | Exposure lamp error | |
|-----|---|--|--|
| | | -001: Shading at AGC | |
| | | -002: Shading at scanning | |
| | D | The standard white level was not detected properly when scanning the white plate | |
| | | Exposure lamp defective | |
| | | Lamp stabilizer defective | |
| 101 | | Exposure lamp connector defective | |
| | | Standard white plate dirty | |
| | | Scanner mirror or scanner lens out of position or dirty | |
| | | SBU defective | |
| | | BCU defective | |
| | | The peak white level is less than 64/255 digits (8 bits) when scanning the shading plate. (The shading data peak does not reach the specified threshold) | |

Scanner home position error 1 The scanner home position sensor does not detect the "OFF" condition during initialization or copying. • SIB (B/W), SIB (Color) or scanner drive motor defective • Scanner motor defective • Harness between SIB and scanner drive motor disconnected • Harness between SIB and scanner drive motor power source disconnected • Scanner HP sensor defective • Harness between SIB and HP sensor disconnected • Scanner wire, timing belt, pulley, or carriage defective • BCU defective

141

D

Scanner home position error 2 The scanner home position sensor does not detect the "ON" condition during initialization or copying. • SIB (B/W), SIB (Color) or scanner motor drive board defective • Scanner motor defective • Harness between SIB and scanner drive motor disconnected • Harness between SIB and scanner drive motor power source disconnected • Scanner HP sensor defective • Harness between SIB and scanner HP sensor disconnected • Scanner wire, timing belt, pulley, or carriage defective • BCU defective

Black level detection error

Defective SBU
 BCU defective

| | | Bed delictive |
|-----|---|--|
| | | |
| | D | White level detection error |
| | | The white level cannot be adjusted within the target during auto gain control. |
| | | Dirty exposure glass or optics section |
| 142 | | SBU board defective |
| | | Exposure lamp defective |
| | | Lamp stabilizer defective |
| | | BCU defective |

The black level cannot be adjusted within the target value during the zero clamp.

SBU connection error The SBU connection cannot be detected at power on or recovery from the energy save mode. • Defective SBU • Defective harness • Defective detection port on the BCU

| 161 | D . | IPU error |
|-----|-----|---|
| | | The error result of self-diagnostic by the ASIC on the IPU is detected. |
| | | Defective IPU |
| | | Defective connection between IPU and SBU |

| 162 | D | IPU PCIE Communication error |
|-----|---|---|
| | | The link up interrupt did not proceed from the LYRA when the main switch was turned on or when recovering from the energy saver mode. |
| | | Defective IPU |
| | | Defective BCU |

| | D | Copy Data Security Unit error |
|-----|---|---|
| 165 | | 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 to "ON" with the initial setting. |
| | | Incorrect installation of the copy data security board |
| | | Defective copy data security board |

SC Tables: SC2xx

| 202 | D | Polygon motor error 1: ON timeout |
|-----|---|--|
| | | The polygon mirror motor does not reach the targeted operating speed within 10 sec. after turning on or changing speed |
| 203 | D | Polygon motor error 2: OFF timeout |
| | | The polygon mirror motor does not leave the READY status within 3 sec. after the polygon motor switched off. |

| 204 | D | Polygon motor error 3: XSCRDY signal error |
|-----|---|---|
| | | The SCRDY_N signal remains HIGH for 200 ms while the LD unit is firing. |
| | | Polygon motor/driver board harness loose or broken |
| | | Polygon motor/driver board defective |
| | | Laser optics unit defective |
| | | IPU defective |

220 D Laser synchronizing detection error: start position LD0 The laser synchronizing detection signal for the start position of the LDB is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally • The Copy Data Security Unit card not installed • The Copy Data Security Unit card is installed, but it is not the correct type for the machine.

| 221 | D | Laser synchronizing detection error: start position LD1 |
|-----|---|--|
| | | The laser synchronizing detection signal for the start position of the LDB is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally. |
| | | The Copy Data Security Unit card not installed The Copy Data Security Unit card is installed, but it is not the correct type for the machine. |

| 230 | D | FGATE ON error |
|-----|---|---|
| | | The FGATE signal does not assert within the prescribed time. (The IPU generates the FGATE signal and sends it to the LD unit when the registration sensor switches on.) |
| | D | FGATE OFF error |
| 231 | | The FGATE signal does not assert within the prescribed time. (The IPU generates the FGATE signal and sends it to the LD unit when the registration sensor switches on.) |
| | | IPU defective |
| | | IPU, Controller board harness loose or broken Controller board defective. |
| | | |

240 C LD error The IPU detected a problem at the LD unit. Worn-out LD Disconnected or broken harness of the LD.

GAVD communication error 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. Loose connection Defective IPU Defective LD controller board

SC Tables: SC3xx

| 302 | D | Charge roller bias leak |
|-----|---|--|
| | | A charge roller bias leak signal was detected. |
| | | Charge roller damaged |
| | | High voltage supply board defective |
| | | PCDU harness defective or disconnected |

| 304 | D | Charge roller bias correction leak |
|-----|---|--|
| | | The charge roller bias correction is performed twice even if the maximum charge roller bias (-2000V) is applied to the roller. |
| | | ID sensor defective |
| | | Worn charge roller |
| | | Charge roller damaged |

6

SC324 RTB 55

ID sensor Vsg test error When the ID sensor was checked, the ID sensor output voltage is 5.0V while the LED current value is 0. ID sensor defective or dirty ID sensor connector defective Poor ID sensor connection I/O board (IOB) defective Scanning system defective High voltage supply board defective Defect at the ID sensor pattern writing area of the drum

| 355 | С | Grayscale measurement error |
|-----|---|---|
| | | When the grayscale control result is the maximum and it does not operate correctly and these cases are detected 15 times. |
| | | ID sensor defective or dirty |
| | | The life of ID sensor or photo conductor |
| | | Shield glass dirty |

| | | TD sensor (Vt) error 1 |
|-----|---|---|
| 360 | D | The following condition occurs thirty times consecutively during printing. Vt is less than 0.5V or 4.8V or more |
| 360 | | TD sensor disconnected |
| | | Harness between TD sensor and PCDU defective |
| | | Defective TD sensor. |

| | D | TD sensor adjustment error |
|-----|---|--|
| | | Vts is less than 1.8V or 4.8V or more during TD sensor initialization. |
| 372 | | 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 |

Drum motor error

The machine detects a lock signal error from the drum motor for 2 seconds after the drum motor turned on.

Overload on the motor
Defective drum motor
Defective harness
Defective IOB

SC Tables: SC4xx

D

400

Vsg adjustment error

Defective harness

• Disconnected connector

• Dirty or defective ID sensor

| | | Defective ID sensor shutter |
|-----|---|---|
| | | |
| | | Transfer belt bias error |
| | | The feed back bias from the transfer belt is more than 4V for 60 msec while the transfer belt bias is output. |
| 140 | | The A/D conversion level is 20 or less for 60 msec. |
| 440 | D | The PWM duty is 24% or more for 60 msec. |
| | | Power pack broken |

Vsg is more than 4.2V or 3.8V or less when the machine adjusts Vsg value.

Transfer/Development motor error

The machine detects a lock signal error from the transfer/development motor for a continuous 20 times after the transfer/development motor turned on.

Overload on the motor
Defective transfer/development motor
Defective harness
Defective IOB

Transfer belt contact motor error

The transfer belt HP sensor detects incorrect movement of the transfer belt after the transfer belt contact motor has turned on.

442

D

- Dirty transfer belt HP sensor
- Defective transfer belt contact motor
- Disconnected connector of the transfer belt HP sensor or motor
- Disconnected cable
- Defective IOB

SC Tables: SC5xx

1st tray lift malfunction

The tray lift sensor is not activated after the tray lift motor has been on for 10 seconds. If the main power switch is turned on when the paper is already at the feed height, the paper height position is detected again. At this time, the tray lift sensor should deactivate within 1.5 sec after the paper bottom plate starts to drop. If it does not deactivate within 1.5 sec., a message will prompt the user to reset Tray 1. After two attempts to release the error by re-setting the paper tray, if this does not solve the problem then this SC is displayed.

501

В

- An obstruction (jammed paper, paper scraps, etc.) has blocked the motor drive and caused an overload.
- Tray lift sensor connection loose, disconnected, or damaged
- Tray lift sensor defective
- Tray lift motor connection loose, disconnected, or damaged
- Tray lift motor defective

2nd tray lift malfunction The tray lift sensor is not activated after the tray lift motor has been on for 10 seconds. If the main power switch is turned on when the paper is already at the feed height, the paper height position is detected again. At this time, the tray lift sensor should deactivate within 1.5 sec. after the paper bottom plate starts to drop. If it does not deactivate within 1.5 sec., a message will prompt the user to reset Tray 2. After two attempts to re-set the paper tray, if this does not solve the problem then this SC is displayed. 502 В • An obstruction (jammed paper, paper scraps, etc.) has blocked the motor drive and caused an overload. • Tray lift sensor connection loose, disconnected, or damaged • Tray lift sensor defective Tray lift motor connection loose, disconnected, or damaged • Tray lift motor defective

503 В 3rd tray lift malfunction (optional paper feed unit or LCT) For the paper feed unit: • SC 503-01 occurs if the lift sensor does not turn on within 10 seconds after the tray lift motor has turned on. For the LCT: • SC 503-01 occurs if the lift sensor does not turn on or turn off within 8 seconds after the tray lift motor has turned on to lift or lower the tray. For the paper feed unit: • Defective tray lift motor or connector disconnection -01 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

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:

- When the main switch is turned on or when the LCT is set, if the end fence is not in its position (home position sensor ON), the tray lift motor stops.
- 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.

-02

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

504

В

4th tray lift malfunction (optional paper feed unit or LCT)

For the two-tray paper feed unit:

- When the tray lift motor is turned on, the upper limit is not detected within 15 seconds. If this condition occurs three consecutive times, the SC is generated.
- When the tray lowers, the tray lift sensor does not go off within 1.5 sec.

For the LCT:

- After the job is finished, if the end fence is not in the home position (home position sensor ON), the tray lift motor stops.
- When the main switch is turned on or when the paper feed unit is set, if the end
 fence is not in the home position (home position sensor ON), the tray lift motor
 stops. If this condition occurs three consecutive times, the SC is generated.
- 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.
- When the tray lowers, the tray lift sensor does not go off within 1.5 sec.

For the paper feed unit:

- Defective tray lift motor or connector disconnection
- Defective lift sensor or connector disconnection

For the LCT:

- Defective tray lift motor or connector disconnection
- Defective lift sensor or connector disconnection

5th tray lift malfunction (optional LCT)

For the two-tray paper feed unit:

- If the upper limit of the LCT 1200-sheet is not detected within 8 seconds when the tray lift motor is turned on to lift up the tray.
- When the tray lowers, the tray lift sensor does not go off within 1.5 sec.

For the LCT:

505 B

- If the upper limit of the LCT 1200-sheet is not detected within 8 seconds when the tray lift motor is turned on to lift up or lower the tray.
- The tray lift sensor of the LCT 1200-sheet does not go off within 1.5 seconds when the tray lowers. If this condition occurs three consecutive times, the SC is generated.
- · Tray lift motor defective or disconnected
- · Upper limit sensor defective or disconnected

| 530 | D | Fusing exhaust fan motor error |
|-----|---|--|
| | | The IOB does not receive the lock signal for 10 seconds after turning on the fusing exhaust fan. |
| | | Defective fusing exhaust fan motor or connector disconnection Defective IOB Disconnected harness |

| 531 | D | Exhaust fan motor error |
|-----|---|---|
| | | The IOB does not receive the lock signal for 10 seconds after turning on the exhaust fan motor. |
| | | Defective exhaust fan motor or connector disconnection. |
| | | Defective IOB |
| | | Disconnected harness |

| 532 | D | Cooling fan motor error |
|-----|---|--|
| | | The machine does not detect the fan motor lock signal for 10 seconds after turning on the cooling fan motor. |
| | | Defective cooling fan motor or connector disconnection. |
| | | Disconnected harness |
| | | Defective IOB |

| 533 | D | Paper exit cooling fan motor error |
|-----|---|---|
| | | The machine does not detect the fan motor lock signal for 10 seconds after turning on the paper exit cooling fan motor. |
| | | Defective paper exit cooling fan motor or connector disconnection. |
| | | Defective IOB |
| | | Disconnected harness |



Fusing overheat error 1 (hardware detection) A fusing temperature (at the center) over 250°C is detected by the fusing temperature monitor circuit in the BCU board. I/O board (IOB) defective BCU defective

Fusing lamp consecutive full power 1 After warm-up the fusing lamp remains at full power for 15 seconds without the hot roller rotating. Disconnected or defective thermistors (center) Defective fusing lamp

| | 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 2 seconds even though the heater relay is on after turning on the main power or closing the front door. |
| 547 | | The detection error occurs twice or more in the 11 zero cross signal detections. This error is defined when the detected zero cross signal is less than 45. |
| | | Defective fusing lamp relay |
| | | Defective fusing lamp relay circuit |
| | | Unstable power supply |

| 551 | | Fusing thermistor open (end) |
|-----|---|---|
| | Δ | The thermistor (end) detects 0°C or less for 5 sec. |
| | | Fusing thermistor (end) disconnected Fusing thermistor (end) connector defective |

| | | Fusing temperature warm-up error (end) |
|-----|---|---|
| | | This SC is generated if the following condition occurs: |
| 552 | A | • The thermistor (end) does not detect an 8°C increment in the fusing temperature for 1.5 sec. just after the fusing temperature reached 45°C. |
| | | • The temperature of the end thermistor does not reach the target temperature for 31 seconds after the fusing lamps turned on. |
| | | Thermistor warped or broken |
| | | |
| | | Fusing overheat error 1 (software detection) |
| | | A fusing temperature (at the end) of over 230°C (446°F) is detected for 1 second by the fusing thermistors at the center or at either end of the fusing roller. |
| 553 | Α | Power supply unit defective |
| | | I/O board (IOB) defective |
| | | BCU defective |
| | | TRIAC short on PSU (PSU defective) |
| | | |
| | | Fusing overheat error 1 (hardware detection) |
| 554 | A | A fusing temperature (at the end) over 250°C is detected by the fusing temperature monitor circuit in the BCU board. |
| | | I/O board (IOB) defective |
| | | BCU defective |
| | | |
| | | Fusing lamp consecutive full power 1 |
| 555 | A | After warm-up, the fusing lamp remains at full power for 40 seconds without the hot roller rotating. |

• Disconnected or defective thermistors (ends)

• Defective fusing lamp

| | 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) |

Fusing unit jam

The fusing sensor detected a fusing unit paper late jam three times. The paper was late and the fusing exit sensor could not detect the paper three times.

Remove the paper that is stopped in the fusing unit.

Check that the fusing unit is clean and has no obstacles in the paper feed path.

If the error persists, replace the fusing unit.

Mportant (

- SC559 does not operate until SP1159 has been set to "1" (ON). This sets the machine to count the number of occurrences of paper late jams in the fusing unit. The default setting is "0" (OFF).
- SC559 is issued after the third occurrence of a paper late jam in the fusing unit. Once this SC has been issued, the machine cannot be used until the service technician removes the cause of the jam and restores it to normal operation.
- The jam counter is reset after a sheet of paper successfully passes the fusing exit sensor after the cause of the jam has been removed.

SC Tables: SC6xx

| 610 | D | Mechanical counter error: BK |
|-----|---|---|
| | | This SC is only for NA models. The machine detects the mechanical counter error when SP5987-001 is set to "1". |
| | | Disconnected mechanical counter Defective mechanical counter |

| 620 | D | ADF communication error |
|-----|---|-------------------------|
|-----|---|-------------------------|

| | - | Communication error between machine and ADF |
|-----|---|--|
| | | Communication error between machine and ADF with ASAP is detected. |
| -01 | | Disconnected cable |
| | | ARDF defective |
| | | IPU board defective |
| | | External noise |
| | - | Communication error between IPU and ADF |
| | | After the ARDF is detected, the break signal occurs or communication timeout occurs. |
| -02 | | Incorrect installation of ARDF |
| | | ARDF defective |
| | | IPU board defective |
| | | External noise |

| | D | Communication timeout error between IOB and finisher or mailbox |
|-----|---|--|
| | | A break (low) signal is received from the finisher or the mailbox. |
| 621 | | Disconnected cable |
| | | Defective IOB |
| | | Defective main board in the peripherals |

| | D | Paper feed unit communication error |
|-----|---|--|
| | | While the IOB communicates with a peripheral, an SC code is displayed if one of following conditions occurs. |
| 622 | | The IOB receives the break signal which is generated by the peripheral only just after the main switch is turned on. |
| | | The IOB receives the break signal which is generated by URAT. |
| | | Defective main control board of the peripheral |
| | | Defective BCU or IOB |
| | | Disconnected peripheral |

| | | 2nd Paper Bank communication error |
|-----|---|---|
| 623 | D | 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 connector |
| | | CSS communication error |
| 630 | С | A communication error occurred during communication with the CSS. |
| | | Communication line error |
| | | MF accounting device error 1 |
| 632 | В | The controller sends data to the accounting device, but the device does not respond. This occurs three times. |
| | | Loose connection between the controller and the accounting device |
| | В | MF accounting device error 2 |
| 633 | | After communication is established, the controller receives the brake signal from the accounting device. |
| | | Loose connection between the controller and the accounting device |
| | В | MF accounting device error 3 |
| 634 | | The accounting device sends the controller the report that indicates a backup RAM error has occurred. |
| | | Defective controller of the MF accounting device Battery error |
| | | |
| | | MF accounting device error 4 |
| 635 | В | The accounting device sends the controller the report that indicates the battery voltage error has occurred. |
| | | Defective controller of the MF accounting device Battery error |

| 636 | D | IC Card Error |
|-----|---|---|
| | D | External authentication module error |
| -01 | | This SC is generated if the external authentication is enabled and following condition occurs: |
| | | No external authentication module |
| | | SD card error or external authentication module broken |
| | | No DESS module |
| | D | Version error |
| -02 | | The version of the external authentication module is not correct. |
| | | Incorrect module version |
| | D | OSM User Code File Error |
| -11 | | The correct "usercode" file could not be found in the root folder of the SD card because the file is not present, or the existing file is corrupted or the wrong type file. |
| | | Make sure the eccm.mod file is in the root folder of the SD card. |
| | | Note: Check the eccm.mod file is in the root folder of the SD card. |
| | D | Management area error |
| -99 | | The management number of the external authentication module exceeds the maximum limit. |
| | | Software error |

| 637 | D | Tracking Information Notice Error |
|-----|---|---|
| | D | Tracking Application Error |
| | | When the tracking information is lost, this SC is issued. |
| -01 | | The machine failed to give notice the tracking information to the tracking SDK application. |
| | | Tracking information is lost, and the machine cannot count correctly. |

| -02 | D | Tracking Information Notice Error |
|-----|---|--|
| | | When the tracking information is lost, this SC is issued. |
| | | The machine failed to give notice the tracking information to the management server. |
| | | Tracking information is lost, and the machine cannot count correctly. |

| 641 | D | BCU communication error |
|-----|---|--|
| | | The BCU does not respond to the frame transmitted from the controller. |
| | | Defective controller |
| | | Detective BCU |

| 650 | - | Communication error of the remote service modem (Embedded RCG-M) |
|------|---|---|
| | | Authentication error |
| | | The authentication for the Embedded RCG-M fails at a dial up connection. |
| -001 | - | Incorrect SP settings |
| | | Disconnected telephone line |
| | | Disconnected modem board |
| | | 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 |
| | | Check and set the correct AT command (SP5816-160). |
| | - | Communication line error |
| -005 | | The supplied voltage is not sufficient due to a defective communication line or defective connection. |
| | | • Same as -001 |
| | | Consult with the user's local telephone company. |

| | - | Modem board error 1 |
|------|---|---|
| | | The modem board does not work properly even though the setting of the modem board is installed with a dial up connection. |
| -013 | | • Same as -001 |
| | | 1. Install the modem board. |
| | | 2. Check and reset the modem board setting with SP5816. |
| | | 3. Replace the modem board. |
| | - | Modem board error 2 |
| -014 | | The modem board is installed even though the RCG-N is installed. |
| 014 | | 1. Uninstall the modem board, if it is installed. |
| | | 2. Check that the Wireless LAN or Ethernet LAN is working properly. |
| | | |

| 651 | С | Incorrect dial up connection |
|-----|---|--|
| | | -001: Program parameter error |
| | | -002: Program execution error |
| | | An unexpected error occurs when the modem (Embedded RCG-M) tries to call the center with a dial up connection. |
| | | Caused by a software bug |

| | D | ID2 mismatching |
|-----|---|--|
| | | ID2 for @Remote certification is mismatching between the controller board and NVRAM. |
| | | Used controller board installed |
| 652 | | Used NVRAM installed |
| | | An unexpected error occurs when the modem (Embedded RCG-M) tries to call the center with a dial up connection. |
| | | Install the correct controller board or new controller board. |
| | | 2. Install the correct NVRAM or new NVRAM. |

| | D | ID2 error |
|-----|---|--|
| | | ID2 stored in the NVRAM is incorrect. |
| 653 | | Used NVRAM installed |
| | | An unexpected error occurs when the modem (Embedded RCG-M) tries to call the center with a dial up connection. |
| | | Clear the ID2 in the NVRAM, and then input a correct ID2. |

| 669 | |
|-----|--|
|-----|--|

| [1] | Open communication error: ID error |
|----------|---|
| [2] | Open communication error: Channel error |
| [3] | Open communication error: Device error |
| [4] | Open communication error: Communication failed error |
| [5] | Open communication error: Communication time error |
| [6] | Open communication error: Communication suspended error |
| [7] | Open communication error: Buffer full error |
| [8] | Close communication error: No error code |
| [9] | Close communication error: ID error |
| [10] | Close communication error: No error code |
| [11] | Data write error: ID error |
| [12] | Data write error: Channel error |
| [13] | Data write error: Device error |
| [14] | Data write error: Communication suspended error |
| [15] | Data write error: Communication time over error |
| [16] | Data write error: Communication suspended error |
| [17] | Data write error: Buffer full error |
| [18] | Data write error: No error code |
| [19] | Data read error: ID error |
| [20] | Data read error: Channel error |
| [21] | Data read error: Device error |
| [22] | Data read error: Communication failed error |
| [23] | Data read error: Communication time over error |
| | |

| [24] | Data read error: Communication suspended error |
|----------|--|
| [25] | Data read error: Buffer full error |
| [26] | Data read error: No error code |
| [27] | Device detection error: ID error |
| [28] | Device detection error: Channel error |
| [29] | Device detection error: Device error |
| [30] | Device detection error: Communication failed error |
| [31] | Device detection error: Communication time over error |
| [32] | Device detection error: Communication suspended error |
| [33] | Device detection error: Buffer full error |
| [34] | Device detection error: No error code |
| 1 | of EEPROM communication fails three times after the machine has detected the DM error. |
| • C | aused by noise |

| 670 | D | Engine startup error |
|-----|---|--|
| | | The BCU fails to respond with the prescribed time when the machine is turned on. |
| | | Connections between BCU and controller board are loose, disconnected, or damaged |
| | | 1. Replace the BCU |
| | | 2. Replace the controller board |

| | D | Controller-to-operation panel communication error at startup |
|-----|---|---|
| | | After the machine is powered on, the communication between the controller and the operation panel is not established, or communication with controller is interrupted after a normal startup. |
| | | After startup reset of the operation panel, the attention code or the attention acknowledge code is not sent from the controller within 30 seconds. |
| 672 | | After the controller issues a command to check the communication line with the controller at 30-second intervals, the controller fails to respond twice. |
| | | Controller stalled |
| | | Controller board installed incorrectly |
| | | Controller board defective |
| | | Operation panel connector loose or defective |
| | | The controller is not completely shutdown when you turn the main switch off. |
| | | Check the setting of SP5875-001. If the setting is set to "1 (OFF)", change it to "0 (ON)". |
| | | |
| | D | Transmission error in controller board |
| 674 | | Video transmission error is detected in the controller board. |
| | | Defective Controller Board |
| | | |
| | | Memory address (PER) command error |
| | | The BCU does not receive a memory address command from the controller for the |

SC Tables: SC7xx

D

687

| 700 D Scanner feeding error 1 | 700 | |
|-------------------------------|-----|--|
|-------------------------------|-----|--|

prescribed time after the paper has reached the registration sensor.

Harness Disconnection at BCUController board loose or broken

• Defective Controller Board

Defective BCU

| 01 | - | Pick-up roller HP error |
|----|---|---|
| | | 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. |
| | | Defective pick-up roller HP sensor Defective pick-up motor Defective DF drive board |
| | - | Original stopper HP error |
| 02 | | When the pick-up motor turns on clockwise, the original stopper HP sensor does not detect the home position of the original stopper. |
| | | Defective original stopper HP sensor Defective pick-up motor Defective DF drive board |
| | - | DF fan motor 1 error |
| 12 | | DF fan motor lock signal is detected after the original transportation has finished. |
| | | Turn the main switch off and on. |

| 701 | D | Scanner feeding error 2 |
|-----|---|--|
| | _ | Pick-up motor driver error |
| | | The error flag of the pick-up motor driver IC is asserted when the jam error is issued. |
| 02 | | Pick-up motor driver detected an error. |
| | | Turn the main switch off and on. |
| | _ | Paper feed motor error |
| 0.2 | | The error flag of the paper feed motor driver IC is asserted when the jam error is issued. |
| 03 | | Pick-up motor driver detected an error. |
| | | Turn the main switch off and on. |

| 720 | В | 2000/3000-Sheet (booklet) Finisher Error |
|-----|---|--|
|-----|---|--|

| | Finisher exit guide plate motor error |
|---|---|
| | After moving away from the guide plate position sensor, the exit guide is not detected at the home position within the prescribed time. |
| - | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | Guide plate motor disconnected, defective |
| | Guide plate motor overloaded due to obstruction |
| | Guide plate position sensor disconnected, defective |
| - | Finisher punch motor error |
| | The punch HP sensor is not activated within the specified time after the punch motor turned on. |
| | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | Punch HP sensor disconnected, defective |
| | Punch motor disconnected or defective |
| | Punch motor overload due to obstruction |
| - | Finisher jogger motor error |
| | The jogger fences move out of the home position but the HP sensor output does not change within the specified number of pulses. |
| | The 1st failure issues an original jam message, and the 2nd failure issues this SC code. |
| | Jogger HP sensor disconnected, defective |
| | Jogger motor disconnected, defective |
| | Jogger motor overloaded due to obstruction |
| | Finisher main board and jogger motor |
| | - |

| -41 | - | Stack feed-out motor error |
|-----|---|--|
| | | The stack feed-out HP sensor does not detect the home position of the stack feed-out belt 3000ms after the stack feed-out belt has moved to its home position. |
| | | The stack feed-out HP sensor does not turn off 200 ms after the stack feed-out belt has moved from its home position. |
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | 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 |
| | - | Finisher stapler movement motor error |
| | | Staple movement is not finished within a certain time. |
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| -42 | | Motor overload |
| | | Loose connection of the stapler home position sensor |
| | | Loose connection of the stapler movement motor |
| | | Defective stapler home position sensor |
| | | Defective stapler movement motor |
| | - | Finisher corner stapler rotation motor error |
| | | The stapler does not return to its home position within the specified time after stapling. |
| -43 | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | Defective stapler rotation motor |
| | | Overload on the stapler rotation motor |
| | | Defective stapler rotation HP sensor |

| -44 | - | Finisher corner stapler motor error |
|-----|---|---|
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. 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 |
| | | Finisher folder plate motor error |
| -52 | - | The folder plate moves but is not detected at the home position within the specified time. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| 02 | | Folder plate HP sensor disconnected, defective |
| | | Folder plate motor disconnected, defective Folder plate motor overloaded due to obstruction. |
| | - | Folding unit bottom fence lift motor |
| -53 | | The folding unit bottom fence movement is not finished within a certain time. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | Motor harness loose, broken Motor drive obstructed Motor defective |
| | - | Clamp roller retraction motor error |
| -55 | | The clamp roller movement is not finished within a certain time. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | Motor harness loose, broken Motor drive obstructed Motor defective |

| -57 | | Stack junction gate motor error |
|-----|---|--|
| | | The stack junction gate motor moves but the stack junction gate is not detected at its |
| | | position within a specific time. |
| | - | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | Motor broken |
| | | Motor connection loose |
| | | Motor overloaded |
| | | Booklet stapler motor error 1 |
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| -60 | | The front stapler unit saddle-stitch motor does not start operation within the specified time. |
| -00 | _ | Motor overload |
| | | Loose connection of the front stapler motor |
| | | Defective front stapler motor |
| | | · |
| | | Booklet staple motor error 2 |
| | - | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| -61 | | 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 |
| | - | Tray lift motor error |
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | The upper tray paper height sensor does not change its status with the specified time |
| -70 | | after the tray raises or lowers. |
| | | Motor overload |
| | | Loose connection of the tray lift motor |
| | | Defective tray lift motor |
| | | |

| | ::-:-bT11 |
|---------|--|
| | Finisher Tray 1 shift motor error |
| | The shift roller HP sensor of the upper tray does not activate within the prescribed time after the shift tray starts to move toward or away from the home position. |
| | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | Shift tray HP sensor of the upper tray disconnected, defective |
| | Shift tray motor of the upper tray disconnected, defective |
| | Shift tray motor of the upper tray overloaded due to obstruction |
| S | Shift jogger motor 1 error |
| | The side fence does not retract within the prescribed time after the shift jogger motor 1 witches on. |
| -72 - T | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | Shift jogger motor 1 disconnected, defective |
| | Shift jogger motor 1 overloaded due to obstruction |
| | Shift jogger 1 HP sensor disconnected, defective |
| S | Shift jogger motor 2 error |
| | The side fence does not retract within the prescribed time after the shift jogger motor 2 witches on. |
| -73 - T | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | Shift jogger motor 2 disconnected, defective |
| | Shift jogger motor 2 overloaded due to obstruction |
| | Shift jogger 2 HP sensor disconnected, defective |
| S | Shift jogger retraction motor error |
| | The side fences do not retract within the prescribed time after the retraction motor switches on. |
| -74 - T | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| -/4 - | Shift jogger retraction motor broken |
| | Shift jogger retraction motor connection loose |
| | Shift jogger retraction motor overloaded |
| | Defective shift jogger retraction HP sensor |

| -75 | - | 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 |
| -80 | - | Punch movement motor error |
| | | The punch unit moves but is not detected at the home position within the specified time. |
| | | The 1st detection failure causes a jam error, and the 2nd failure causes this SC code. |
| | | Motor harness disconnected, loose, defective |
| | | Defective motor |
| -81 | - | 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 causes a jam error, and the 2nd failure causes this SC code. |
| | | Motor harness disconnected, loose, defective |
| | | Defective motor |

| 722 | В | 1000-Sheet Finisher Error |
|-----|---|--|
| -10 | - | Upper transport motor error |
| | | The upper transport motor in the finisher is not operating. |
| | | Upper transport motor drive is obstructed (jammed paper, paper scraps, etc.) |
| | | The motor harness is loose or broken |
| | | Upper transport motor defective |
| | - | Lower transport motor error |
| | | The lower transport motor in the finisher is not operating. |
| -14 | | Lower transport motor drive is obstructed (jammed paper, paper scraps, etc.) |
| | | The motor harness is loose or broken |
| | | Lower transport motor defective |

| -17 | - | Exit motor error |
|-----|---|---|
| | | The exit motor in the finisher is not operating. |
| | | Exit motor drive is obstructed (jammed paper, paper scraps, etc.) The motor harness is loose or broken |
| | | Exit motor defective |
| | - | Finisher exit guide plate motor error |
| | | The exit guide plate HP sensor did not activate within the prescribed time after the exit guide plate motor turned on. |
| -24 | | Finisher exit guide plate motor drive is obstructed (jammed paper, paper scraps, etc.) |
| | | Exit guide plate motor harness loose, broken |
| | | Exit guide plate HP sensor harness loose, broken |
| | | Exit guide plate motor defective |
| | | Exit guide plate HP sensor defective |
| | - | Front fence motor error |
| | | The jogger fence motor in the finisher is not operating. |
| -30 | | Jogger motor drive is obstructed (jammed paper, paper scraps, etc.) |
| | | The motor harness is loose or broken |
| | | Jogger fence HP sensor dirty, loose, defective |
| | | Jogger fence motor defective |
| | - | Feed-out belt motor error |
| -41 | | The feed-out belt did not return to the home position within the prescribed time. |
| | | Feed-out belt motor drive is obstructed (jammed paper, paper scraps, etc.) |
| | | Motor harness loose or broken |
| | | Feed-out belt HP sensor dirty, disconnected, broken |
| | | Motor defective |

| -42 | - | Stapler movement motor |
|-----|---|--|
| | | The 1st detection failure issues a jam error, and the 2nd failure causes this SC code. |
| | | The stapler HP sensor is not activated within the specified time after the stapler motor turned on. |
| | | Stapler or motor drive is blocked by obstruction |
| | | Motor harness loose or broken |
| | | Stapler HP sensor harness loose, broken |
| | | Motor defective |
| | | Stapler HP sensor defective |
| | | Corner stapler motor error |
| -44 | | The 1st detection failure issues a jam error, and the 2nd failure causes this SC code. |
| | - | 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 |
| | | Number of sheets in stack exceeds allowed number of sheets for stapling |
| | | Stapler motor obstructed |
| | | Stapler motor defective |
| | - | Tray lift motor error |
| | | The tray lift motor is not operating. |
| | | Motor harness loose, broken |
| -70 | | Motor drive obstructed |
| | | Stack height sensor dirty, harness loose, broken |
| | | Motor defective |
| | | Stack height sensor defective |

Shift tray motor error

SC Tables: SC8xx

| | | Energy save I/O sub-system error |
|-----|---|--|
| 816 | D | Energy saver sub-system detects an error. |
| | | Defective controller board |
| | | |
| | | Monitor Error |
| 817 | D | This is a file detection and electronic file signature check error when the boot loader attempts to read the self-diagnostic module, system kernel, or root system files from the OS Flash ROM, or the items on the SD card in the controller slot are false or corrupted. |
| | | OS Flash ROM data defective; change the controller firmware SD card data defective; use another SD card |
| | | |
| | | |

Watchdog timer error The watchdog timer detect the error even if system processing normally. • System program defective • Controller board defective • Optional board defective

| | С | Fatal kernel error | |
|-----|---|---|--|
| | | Due to a control error, a RAM overflow occurred during system processing. One of the following messages was displayed on the operation panel. | |
| | | 0x6261 | 6261 6420 6469 7200 00 -> "bad dir" |
| | | 0x696e | 0x69742064 -> "init died" |
| | | 0x766d | 0x5f706167 -> "vm_pageout: VM is full" |
| 819 | | 554C | UL (USB error) |
| | | | Error in the OS |
| | | | "init died", "vm_pageout: VM is full", "Cache Error" |
| | | System program defective | |
| | | Controller board defective | |
| | | Optional board defective | |
| | | Replace controller firmware | |



• For more details about this SC code error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel.

| 820 CTL Self-diagnostics error: CPU D [XXXX]: Detailed error code | Self-diagnostics error: CPU | | |
|---|-----------------------------|-----------------------------|--|
| 820 | D | [XXXX]: Detailed error code | |

CPU error During the self-diagnostic, the controller CPU detects an error. There are 47 types of error code (0001 to 4005) depending on the cause of the error. The CPU detects an error and displays the specific error code with the program address where the error occurs. • System firmware problem • Defective controller [0001] to [06FF] 1. Turn the main switch off and on. [0801] to 2. Reinstall the controller system firmware. [4005] 3. Replace the controller. When the problem cannot be fixed with the above procedure, the following information displayed on the screen needs to be fed back to a technical support center. SC code • Detailed error code • Program address CPU/Memory Error • System firmware problem Defective RAM-DIMM [0701] to Defective controller [070A] 1. Reinstall the controller system software. 2. Replace the RAM-DIMM. 3. Replace the controller.

| 821 | D | Self-diagnostics error: ASIC [XXXX]: Detailed error code |
|-------|---|--|
| | | ASIC error |
| [OBOO | 1 | The write-&-verify check error has occurred in the ASIC. |
| LODGO | 1 | Defective ASIC device |
| | | Replace the controller board. |

| 821 | D | Self-diagnostics error: ASIC [XXXX]: Detailed error code |
|-------|------------|--|
| | | Self-diagnosis error: ASIC |
| | | The CPU checks if the ASIC timer works correctly compared with the CPU timer. If the ASIC timer does not function in the specified range, this SC code is displayed. |
| [0D05 | 5] | System firmware problem |
| | | Defective RAM-DIMM |
| | | Defective controller |
| | | Replace the controller board. |
| | | Video bridge device (ASIC) error 1 |
| [50A1 |] | The CPU does not detect the video bridge device. |
| | | Defective I/F between the video bridge device and controller |
| | | Video bridge device (ASIC) register error 1 |
| [50A2 | <u>!</u>] | The CPU detects the video bridge device, but detects error data from the video bridge device. |
| | | Defective I/F between the video bridge device and controller |

U Note

• For more details about this SC code error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel.

| 822 | В | Self-diagnostic error: HDD |
|-------|---|---|
| [3003 |] | Check performed only when HDD is installed: HDD device busy for over 31 s. After a diagnostic command is set for the HDD, but the device remains busy for over 6 s. HDD defective HDD harness disconnected, defective Controller board defective |
| [3004 |] | No response to the self-diagnostic command from the ASIC to the HDDs. • HDD defective |

| 823 | В | Self-diagnostic error: NIB [XXXX]: Detailed error code |
|--------|---|--|
| [6101 |] | MAC address check sum error The result of the MAC address check sum does not match the check sum stored in ROM. |
| [6104] | | PHY IC error The PHY IC on the controller cannot be correctly recognized. |
| | | PHY IC loop-back error An error occurred during the loop-back test for the PHY IC on the controller. |

| | D | Self-diagnostic error : NVRAM |
|-----|---|--|
| | | NVRAM device does not exist, NVRAM device is damaged, or NVRAM socket damaged. |
| 824 | | NVRAM defective |
| | | Controller board defective |
| | | NVRAM backup battery exhausted |
| | | NVRAM socket damaged |

| 826 | D | Self-diagnostic Error: RTC/optional NVRAM |
|--------|---|--|
| [1501] |] | The one second counted by the RTC is different from the one second counted by the CPU on the controller. |
| | | Defective RTC device |
| | | The RTC device is not detected. |
| [15FF] | | Defective RTC device |
| | | NVRAM without RTC installed |
| | | Discharged backup battery |

| 827 | D | Self-diagnostic error: Standard SDRAM DIMM |
|-----|---|--|
| 027 | | [XXXX]: Detailed error code |

| | Verification error |
|--------|--|
| | Error detected during a write/verify check for the standard RAM (SDRAM DIMM). |
| [0201] | Loose connection Defective SDRAM DIMM Defective controller |
| | Resident memory error |
| | The SPD values in all RAM DIMM are incorrect or unreadable. |
| [0202] | Defective RAM DIMM Defective SPD ROM on RAM DIMM Defective 12C bus |
| | Replace the RAM DIMM. |

| 828 | D | Self-diagnostic error: ROM [XXXX]: Detailed error code |
|--------|---|---|
| [0101] | | The boot monitor and OS program stored in the ROM DIMM is checked. If the check sum of the program is incorrect, this SC code is displayed. |
| | | 1. Replace the controller board. |

| 829 | D | Self-diagnostic error: Optional RAM |
|-------|---|---|
| | | [XXXX]: Detailed error code |
| | | Verification error |
| | | Error detected during a write/verify check for the optional RAM (SDRAM DIMM). |
| | | Loose connection |
| [0301 | 1 | Defective SDRAM DIMM |
| | • | Defective controller |
| | | Turn the main switch off and on. |
| | | Replace the SDRAM DIMM. |
| | | Replace the controller. |

| | Memory structure data error |
|--------|---|
| | The memory structure data error for the optional RAM (SDRAM DIMM) is detected when the self-diagnostic is executed. |
| [0302] | Defective RAM DIMM |
| | Defective SPD ROM on RAM DIMM |
| | Defective 12C bus |
| | Replace the RAM DIMM. |

| 833 | С | 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] | 31] | Replace the IPU. |
| [0F41] |] | 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 IPU. |
| | 1] | Could not initialize or read the bus connection. |
| [50B1 | | Check for loose connections at the mother board. |
| | | Replace the IPU. |
| | | Value of the SSCG register is incorrect. |
| [50B2 |] | Check for loose connections at the mother board. |
| | | Replace the IPU. |

| 835 | С | Self-diagnostic error: Centronic device |
|--------|---|--|
| | | Loopback connector is connected but check results in an error. |
| [1102] | | IEEE1284 connector error |
| [52] | | Centronic loopback connector defective |
| | | Replace the controller board. |

| | Loopback connector is connected but check results in an error. |
|--------|--|
| | ASIC device error |
| [110C] | IEEE1284 connector error |
| | Centronic loopback connector defective |
| | Replace the controller board. |
| | Centronic loopback connector is not connected for detailed self-diagnostic test. |
| | Centronic loopback connector not connected correctly |
| [1120] | Centronic loopback connector defective |
| | ASIC device defective |
| | Replace the controller board. |

| 838 | В | Self-diagnostic Error: Clock Generator |
|--------|---|--|
| | | A verify error occurred when setting data was read from the clock generator via the I2C bus. |
| [2701] | | Defective clock generator |
| [2/01] | | Defective I2C bus |
| | | Defective I2C port on the CPU |
| | | Replace the controller board. |

| 839 | С | USB NAND Flash ROM error |
|-----|------|--|
| 100 | 001] | USB NAND Flash ROM cannot be read. |
| [9] | | Defective controller board |
| 0.1 | 101] | The ID of the USB NAND Flash ROM cannot be read. |
| [9 | | Defective controller board |
| 0] | 1101 | The USB NAND Flash ROM controller is disconnected. |
| [4 | 110] | Defective controller board |

| | | EEPROM error 1: EEPROM access |
|-----|---|---|
| 840 | В | During the I/O processing, a reading error occurred. The 3rd reading failure causes this SC code. |
| | | During the I/O processing, a writing error occurred. |
| | | Defective EEPROM |
| | | EEPROM error 2: EEPROM read/write error |
| 841 | В | Mirrored data of the EEPROM is different from the original data in EEPROM. |
| | | Data in the EEPROM is overwritten for some reason. |
| | | Flash ROM verification error |
| 842 | В | Verification error of the flash ROM on the controller board occurs. Note This SC is logged at 1st error detection. SC819 is issued at 2nd error detection. SC819 is issued at 2nd error detection. |
| | | Defective flash ROM (controller board) |
| | | |
| | В | IEEE 1394 I/F error |
| | | Driver setting incorrect and cannot be used by the 1394 I/F. |
| 851 | | Not supported by this machine NIB (PHY), LINK module defective; change the Interface Board Controller board defective |
| | | |
| | В | Wireless LAN Error 1 |
| 853 | | During machine operation, the Wireless LAN device (Bluetooth) is inserted into the controller board. |
| | | During machine operation, the Wireless LAN device (Bluetooth) is inserted into the controller board. |

| | В | Wireless LAN Error 2 |
|-----|---|---|
| 854 | | During machine operation, the Wireless LAN device (Bluetooth) is pulled out from the controller board. |
| | | During machine operation, the Wireless LAN device (Bluetooth) is pulled out from the controller board. |

| | 855 | В | Wireless LAN error 3 |
|--|-----|---|---|
| | | | An error is detected on the wireless LAN card (802.11a/g, g). |
| | | | Wireless LAN card defective |
| | | | Wireless LAN card connection incorrect |

| | 857 | В . | USB I/F Error |
|--|-----|-----|---|
| | | | The USB driver is not stable and caused an error. |
| | | | Bad USB card connection |
| | | | Replace the controller board |

| | | 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. |
| -00 | - | Encryption key acquisition error: The controller fails to get a new encryption key. • Defective controller board Replace the controller board. |
| -01 | - | Encryption key setting for HDD error: The controller fails to copy a new encryption key to the HDD. • Defective SATA chip on the controller board Replace the controller board. |

| -02 - | NVRAM data encryption error 1: An error occurs while the NVRAM data is encrypted. |
|-------|---|
| -02 | Defective NVRAM on the controller board Replace the NVRAM. |
| -30 | NVRAM data encryption error 2: An error occurs before the NVRAM data is encrypted. |
| -30 | Defective controller board Replace the controller board. |
| -31 | Other error: A serious error occurs while the data is encrypted. Same as SC991 |

| 859 | | 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. |
| | | HDD check error: The HDD is not correctly installed. |
| -08 | - | No HDD installed Unformatted HDD The encryption key on the controller is different from the one on the HDD Install the HDD correctly. Initialize the HDD. |
| -09 | _ | Power failure during the data encryption: The data encryption (NVRAM and HDD) has not been completed. • Power failure during the data encryption |
| | | Initialize the HDD. |
| -10 | - | Data read/write error: The DMAC error is detected twice or more. |
| | | Same as SC863 |

| 860 | В | HDD startup error at main power on |
|-----|---|---|
| | | HDD is connected but a driver error is detected. The driver does not respond with the HDD within 30 s. |
| | | HDD is not initialized |
| | | Label data is corrupted Defective HDD |
| | | Initialize the HDD with SP5832-001. |

| | D | HDD re-try failure | |
|-----|---|---|--|
| | | At power on, the HDD is detected. Power supply to the HDD is interrupted after the system has entered the energy save mode, but after the HDD has been awakened fro the energy save mode, it does not return to the ready status within 30 sec. | |
| 861 | | Harness between HDD and controller board disconnected, defective | |
| | | HDD power connector disconnected | |
| | | HDD defective | |
| | | Controller board defective | |

| 862 | D | Bad sector number error |
|-----|---|---|
| | | The number of bad sectors in the HDD (image data area) goes over 101. |
| | | Defective HDD |
| | | Format the HDD with SP5-832-002. |
| | | Replace the HDD. |

| 863 | D | HDD data read failure |
|-----|---|-----------------------|
|-----|---|-----------------------|

| | The data written to the HDD cannot be read normally, due to bad sectors generated during operation. | | | |
|------|---|--|--|--|
| | Note: [001] to [017] indicate the type of partition where the error occurred. Enable display of these numbers with SP7902. | | | |
| [C | 001] | An area which does not belong to a partition | | |
| [0 | 002] | a partition | | |
| [0 | 003] | b partition | | |
| [C | 004] | c partition | | |
| [C | 005] | d partition | | |
| [C | 006] | e partition | | |
| [C | 007] | fpartition | | |
| [C | [800 | g partition | | |
| _ [C | 009] | h partition | | |
| [C | 010] | i partition | | |
| [C | 011] | j partition | | |
| [C | 012] | k partition | | |
| [C | 013] | partition | | |
| [C | 014] | m partition | | |
| [C | 015] | n partition | | |
| [C | 016] | o partition | | |
| [C | 017] | p partition | | |
| [C | 018] | q partition | | |
| [0 | 019] | r partition | | |
| | d d d d d d d d d d | during op Note: [00 | | |

| - | - | [020] | s partition |
|---|---|---|-------------|
| | | [021] | q partition |
| | | [022] | t partition |
| | | [023] | u partition |
| | | • HD[|) defective |
| | | Note: If the bad sectors are generated at the image partition, the bad sector information is written to NVRAM, and the next time the HDD is accessed, these bad sectors will not be accessed for read/write operation. | |

| 864 | D | HDD data CRC error |
|-----|---|--------------------|
|-----|---|--------------------|

| _ | HDD operation, the HDD cannot respond to a CRC error query. Data transfer t execute normally while data is being written to the HDD. |
|----------|--|
| Note: [0 | 001] to [017] indicate the type of partition where the error occurred. Enable of these numbers with SP7902. |
| [001] | An area which does not belong to a partition |
| [002] | a partition |
| [003] | b partition |
| [004] | c partition |
| [005] | d partition |
| [006] | e partition |
| [007] | f partition |
| [800] | g partition |
| [009] | h partition |
| [010] | i partition |
| [011] | j partition |
| [012] | k partition |
| [013] | I partition |
| [014] | m partition |
| [015] | n partition |
| [016] | o partition |
| [017] | p partition |
| [018] | q partition |
| [019] | r partition |
| | Note: [0] display of [001] [002] [003] [004] [005] [006] [007] [008] [009] [010] [011] [012] [013] [014] [015] [016] [017] |

| | | [020] | s partition |
|---|---|-------|-------------|
| | | [021] | q partition |
| - | - | [022] | t partition |
| | | [023] | u partition |
| | | • HDI | O defective |

|--|--|

| | i | |
|---|---------|---|
| | HDD res | sponded to an error during operation for a condition other than those for 864. |
| | | 001] to [017] indicate the type of partition where the error occurred. Enable of these numbers with SP7902. |
| | [001] | An area which does not belong to a partition |
| | [002] | a partition |
| | [003] | b partition |
| | [004] | c partition |
| | [005] | d partition |
| | [006] | e partition |
| | [007] | fpartition |
| | [008] | g partition |
| - | [009] | h partition |
| | [010] | i partition |
| | [011] | j partition |
| | [012] | k partition |
| | [013] | I partition |
| | [014] | m partition |
| | [015] | n partition |
| | [016] | o partition |
| | [017] | p partition |
| | [018] | q partition |
| | [019] | r partition |

| | | [020] | s partition |
|---|---|-------|--------------|
| | | [021] | q partition |
| - | - | [022] | t partition |
| | | [023] | u partition |
| | | • HDI | O defective. |

SD card error 1: Confirmation The machine detects an electronic license error in the application on the SD card in the controller slot immediately after the machine is turned on. The program on the SD card contains electronic confirmation license data. If the program does not contain this license data, or if the result of the check shows that the license data in the program on the SD card is incorrect, then the checked program cannot execute and this SC code is displayed. • Program missing from the SD card • Download the correct program for the machine to the SD card

| | | SD card error 2: SD card removed |
|-----|---|---|
| 867 | D | The SD card in the slot is removed while the machine is on. |
| | | Insert the SD card, then turn the machine off and on. |

| | | SD card error 3: SC card access |
|-----|---|---|
| | | An error occurs while an SD card is used. |
| 868 | D | SD card not inserted correctly |
| | | SD card defective |
| | | Controller board defective |
| | | Note: If you want to try to reformat the SC card, use SD Formatter Ver 1.1. |

Address book data error

The address book data cannot be read from the HDD, SD card or flash ROM on the controller where it is stored, or the data read from the media is defective.

• Software defective:

870 B

Turn the machine off/on. If this is not the solution for the problem, then replace the controller firmware.

HDD defective.

More Details

- Do SP5846-046 (Initialize All Setting & Addr Book) to reset all address book
- Reset the user information with SP5832-006 (HDD Formatting- User Information).
- Replace the HDDs.

HDD mail receive data error

872

В

• The machine detects that the HDD is not operating correctly at power on.

 The machine detects that the HDD is not operating correctly (can neither read nor write) while processing incoming email.

- · HDD defective
- The machine is turned off while the HDD is being accessed.

Do SP5832-008 to format the mail RX data on the HDD.

HDD mail send data error

873

В

An error is detected on the HDD immediately after the machine has been turned on, or power has been turned off while the machine has used the HDD.

- 1. Do SP5832-008 (Format HDD Mail TX Data) to initialize the HDD.
- 2. Replace the HDD

Delete All error 1: HDD A data error is detected for the HDD/NVRAM after the Delete All option has been used. Note: The source of this error is the DataOverwriteSecurity Unit running from an SD card. 1. Turn the main switch off/on and try the operation again. 2. Install the DataOverwriteSecurity Unit again. For more, see "Installation". 3. HDD defective

| | | Delete All | error 2: Data area |
|-----|---|------------|--|
| | | ' | occurs while the machine deletes data from the HDD. source of this error is the DataOverwriteSecurity Unit (D362) running from d. |
| 875 | D | -001 | An error occurs in hddchack-i. |
| | | -002 | Failed to delete data from the HDD. |
| | | -003 | |
| | | Turn the m | ain switch off/on and try the operation again |

| | | Log Data Error |
|-----|---|--|
| 876 | D | An error is detected in the handling of the log data at power on or during machine operation. This can be caused by switching the machine off while it is operating. |
| | | Log Data Error 1 |
| -01 | - | Damaged log data file in the HDD |
| | | Initialize the HDD with SP5832-004. |
| | | Log Data Error 2 |
| | | HDD encryption unit not installed |
| -02 | - | Ask the customer's administrator to disable the HDD encryption setting with a user tool. |
| | | 2. Install the HDD encryption unit. |

| | | Log Data Error 3 |
|-----|---|--|
| | | Invalid log encryption key due to defective NVRAM data |
| -03 | - | 1. Initialize the HDD with SP5832-004. |
| | | Ask the customer's administrator to disable the HDD encryption setting with a user tool. |
| | | Log Data Error 4 |
| -04 | - | Unusual HDD encryption function due to defective NVRAM data |
| | | Initialize the HDD with SP5832-004. |
| | | Log Data Error 5 |
| -05 | _ | Installed a NVRAM or HDD which was used in another machine |
| | | Reinstall the previous NVRAM or HDD. |
| | | 2. Initialize the HDD with SP5832-004. |
| | | Log Data Error 99 |
| -99 | - | Other than the above causes |
| | | Ask your supervisor. |

| | | HDD DataOverwriteSecurity SD card error |
|-----|---|---|
| | | The 'all delete' function cannot be executed but the DataOverwriteSecurity Unit is installed and activated. |
| 877 | В | Defective SD card |
| | | SD card not installed |
| | | 1. Replace the NVRAM and then install the new SD card. |
| | | 2. Check and reinstall the SD card. |

| | | TPM system authentication error |
|-----|---|---|
| | | The system firmware is not authenticated by TPM (security chip). |
| -00 | - | Incorrect updating for the system firmware |
| | | Defective flash ROM on the controller board |
| | | Replace the controller board. |
| | | USB Flash Error |
| | | File system in the USB flash device is defective. |
| -01 | - | Cannot mount partition 3 in the USB flash device. |
| | | Encryption key does not exist. |
| | | Cannot find the file for KMMD to be operated. |
| | | Replace the controller board. |
| | | TPM Error |
| -02 | | An error occurred in TPM or in TPM driver. |
| -02 | _ | TPM defective |
| | | Replace the controller board. |
| | | TCSD Error |
| -03 | | An error occurred in TPM or in TPM driver. |
| -03 | _ | TPM defective |
| | | Replace the controller board. |
| | | File Fermant Constant (AALD) arrang |
| | | File Format Converter (MLB) error |
| 880 | В | A request to get access to the MLB is not answered within the specified time. |
| | | MLB defective, replace the MLB |
| | | Authentication area error |
| 881 | D | Authentication application error is detected. |
| | | Error data in an authentication application reaches the management limit. |

6

SC899 RTB 28

| | | Software performance error |
|-----|---|--|
| 899 | D | If the processing program shows abnormal performance and the program is abnormally ended, this SC is issued. |
| | | Controller board defective |
| | | Software defective |

SC Tables: SC9xx

| | | Electrical total counter error |
|-----|---|--|
| | | The total counter contains something that is not a number. |
| 900 | D | NVRAM incorrect type |
| | | NVRAM defective |
| | | NVRAM data scrambled |
| | | Unexpected error from external source |

| 920 | В | Printer error | |
|-----|---------------------|--|--|
| -01 | | Timeout error during the PM operation | |
| -02 | | Working memory error | |
| -03 | - | Cannot start-up the filtering process | |
| -04 | | Abnormal exit from the filtering process | |
| | | An internal application error was detected and operation cannot continue. | |
| - | - | Software defective; turn the machine off/on, or change the controller firmware | |
| | Insufficient memory | | |

| 921 | D | Printer font error | |
|-----|---|----------------------------|--|
| -01 | - | desident font is not found | |
| -02 | - | Option font is not found | |

| 925 | В | Net File function error | |
|-----|---|--|--|
| -00 | - | HDD is defective | |
| -01 | - | NetFile management file is broken | |
| - | - | The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue. The HDDs are defective and they cannot be debugged or partitioned, so the Scan Router functions (delivery of received faxes, document capture, etc.), Web services, and other network functions cannot be used. HDD status codes are displayed below the SC code. • Refer to the four procedures below (Recovery from SC 925). | |

Here is a list of HDD status codes:

| Display | Meaning | | |
|---------|---|--|--|
| (-1) | HDD not connected | | |
| (-2) | HDD not ready | | |
| (-3) | No label | | |
| (-4) | Partition type incorrect | | |
| (-5) | Error returned during label read or check | | |
| (-6) | Error returned during label read or check | | |
| (-7) | "filesystem" repair failed | | |
| (-8) | "filesystem" mount failed | | |
| (-9) | Drive does not answer command | | |
| (-10) | Internal kernel error | | |
| (-11) | Size of drive is too small | | |

| Display | Meaning | | |
|---------|------------------------------------|--|--|
| (-12) | Specified partition does not exist | | |
| (-13) | Device file does not exist | | |

Recovery from SC 925

Procedure 1

If the machine shows SC codes for HDD errors (SC860 to SC865) with SC 925, do the recovery procedures for SC860 to SC865.

Procedure 2

If the machine does not show one of the five HDD errors (SC860 to SC865), turn the machine power off and on. If this is not the solution for the problem, then initialize the NetFile partition on the HDD with SP5832-011 (HDD Formatting – Ridoc I/F).

NetFiles: Jobs printed from the document server using a PC and DeskTopBinder

- Before you initialize the NetFile partition on the HDD, tell the customer that:
- · Received faxes on the delivery server will be erased
- All captured documents will be erased
- DeskTopBinder/Print Job Manager/Desk Top Editor job history will be erased
- Documents on the document server, and scanned documents, will not be erased.
- The first time that the network gets access to the machine, the management information must be configured again (this will use a lot of time).

Before you initialize the Netfile partition with SP5832-011, do these steps:

- 1. Go into the User Tools mode and do "Delivery Settings" to print all received fax documents that are scheduled for delivery. Then erase them.
- 2. In the User Tools mode, do Document Management> Batch Delete Transfer Documents.
- 3. Do SP5832-011, then turn the machine power off and on.

Procedure 3

If "Procedure 2" is not the solution for the problem, do SP5832-001 (HDD Formatting – All), then turn the machine power off and on.

SP5832-001 erases all document and address book data on the hard disks. Ask the customer before you do this SP code.

Procedure 4

If "Procedure 3" is not the solution for the problem, replace the HDD.

| 7 | • | × |
|---|---|---|
| 1 | A | |
| L | ۳ | u |
| | | |
| | | |

| | | Software error 1 | | |
|-----|---|--|--|--|
| 990 | D | The software performs an unexpected function and the program cannot continue. | | |
| | | Software defective, re-boot | | |
| 991 | | Software error 2 | | |
| | С | The software performs an unexpected function. However, unlike SC990, recovery processing allows the program to continue. | | |
| | | Software defective, re-boot | | |

In order to get more details about SC990 and SC991:

- 1) Execute SP7403 or print an SMC Report (SP5990) to read the history of the 10 most recent logged errors
- 2) If you press the zero key on the operation panel with the SP selection menu displayed, you will see detailed information about the recently logged SC990 or SC991, including the software file name, line number, and so on.



• 1) is the recommended method, because another SC could write over the information for the previous SC.

| | D | Undefined error | | |
|-----|---|--|--|--|
| 992 | | Defective software program | | |
| | | An error undetectable by any other SC code occurred | | |
| | | | | |
| | С | Application Item Error | | |
| 994 | | The number of executed application items on the operation panel reach the maximum limit for the operation panel structure. | | |
| | | Too much executed application items | | |
| | | | | |
| 995 | D | CPM setting error | | |

| -01 | - | Defective BCUNVRAM Replacement error |
|-----|---|---|
| | | Install the previous NVRAM. Input the serial number with SP5811-003, and turn the main power switch off/on. |
| -02 | - | Defective NVRAM Defective controller |
| | | Update the controller firmware. Install a new NVRAM, and turn off and on the main power switch after SC995-002 has occurred. |
| -03 | 1 | Incorrect type controller installed Defective controller |
| | | 1. Replace the controller with the correct type. |
| -04 | - | Incorrect model controller installed. |
| -04 | | 1. Replace the controller with the correct model. |

| 997 | В | Software Error 3: Cannot select application function | | | |
|-----|---|--|--|--|--|
| | | An application does not start after the user pushed the correct key on the operation panel. | | | |
| | D | Software bug A RAM or DIMM option necessary for the application is not installed or not installed correctly. | | | |

| 998 | D | Software Error 4: Application cannot start | | |
|-----|---|--|--|--|
| | | Register processing does not operate for an application within 60 s after the machine power is turned on. No applications start correctly, and all end abnormally. | | |
| | | Software bug A RAM or DIMM option necessary for the application is not installed or not installed correctly. | | |

Electrical Component Defects

Sensors

| Component (Symbol) | CN | Condition | Symptom |
|-----------------------|----------------------|-----------|--|
| By-pass Paper Length | 236-2 | Open | Paper size error |
| Sensor | (IOB) | Shorted | |
| Duplex Entrance | 217-A8 (IOB) | Open | Jam Z |
| Duplex Entrance | 217-A6 (IOB) | Shorted | Jam Z |
| Durales Cassas | 217-A11 | Open | "Open Cover" is displayed. |
| Duplex Cover | (IOB) | Shorted | "Open cover" cannot be detected. |
| Donald Fait | 217-A14 | Open | Jam Z |
| Duplex Exit | (IOB) | Shorted | am Z (Jam 1) |
| | | Open | The Paper End indicator lights even if paper is placed on the by-pass tray. |
| By-pass Paper End | 217-B3 (IOB) | Shorted | The Paper End indicator does not light even if there is no paper on the by-pass tray. |
| | 217-B9, | | |
| By-pass Paper Size | B10,B12,B13 (IOB) | Shorted | Paper size error |
| Toner Overflow | 217-B15 | Open | CPU cannot detect the toner overflow even the waste toner in the transfer belt unit is full. |
| Toner Overnow | (IOB) | Shorted | CPU detects the toner overflow even the waste toner in the transfer belt unit is not full. |

6

| Component (Symbol) | CN | Condition | Symptom | |
|-----------------------|------------------|------------------|--|--|
| Paper Feed 1 | 216-A4 (IOB) | Open/Shorted | No symptom, but this may cause Jam A, and some pieces of paper are remaining at the paper feed unit when tray 1 is opened. | |
| Relay 1 | 01/ 47/100 | Open | Jam A | |
| Keldy I | 216-A7 (IOB) | Shorted | Jam A, B | |
| | 216-A10 | Open | The Paper End indicator lights even if paper is placed in the paper tray 1. | |
| Paper End 1 | (IOB) | Shorted | The Paper End indicator does not light even if there is no paper in the paper tray 1. | |
| Tray Lift 1 | 216-A13 (IOB) | Open/ Shorted | SC501 is displayed. | |
| Paper Feed 2 | 216-B4 (IOB) | Open/ Shorted | No symptom, but this may cause Jam A and some pieces of paper are remaining at the paper feed unit when tray 2 is opened. | |
| Relay 2 216-B7 (IOB) | | Open | Jam A | |
| | | Shorted | Jam A, B | |
| | 216-B10 (IOB) | Open | The Paper End indicator lights even if paper is placed in the paper tray 2. | |
| Paper End 2 | | Shorted | The Paper End indicator does not light even if there is no paper in the paper tray 2. | |
| Tray Lift 2 | 216-B13 (IOB) | Open/ Shorted | SC502 is displayed. | |
| Registration | 209-2 (IOB) | Open | Jam A (Jam 8, 17) | |
| regisiration | 207-2 (IOD) | Shorted | Jam A, B (Jam 1) | |

| Component (Symbol) | CN | Condition | Symptom | |
|-----------------------|----------------------------|------------------|---|--|
| Paper Size 1 | 209-4, 5, 5, 8 (IOB) | Open/ Shorted | Paper size error in tray 1 | |
| Paper Size 2 | 209-9, 10, 11, 13 (IOB) | Open/ Shorted | Paper size error in tray 2 | |
| Lower Paper Height 1 | 210-4 (IOB) | Open/ Shorted | Remaining paper volume in tray 2 on | |
| Lower Paper Height 2 | 210-7 (IOB) | Open/ Shorted | the LCD is wrong. | |
| Upper Paper Height 1 | 210-12 (IOB) | Open/ Shorted | Remaining paper volume in tray 1 on | |
| Upper Paper Height 2 | 210-15 (IOB) | Open/ Shorted | the LCD is wrong. | |
| Junction Jam | 221-A10 (IOB) | Open/ Shorted | Jam C | |
| Danas Evit | 221-B2 (IOB) | Open | Jam C | |
| Paper Exit | | Shorted | Jam C | |
| Fusing Exit | 221-B5 (IOB) | Open | Jam C | |
| Toshing Exh | | Shorted | Jam C | |
| Pernas Quarflaus | 221-B8 (IOB) | Open | Paper overflow message is not displayed when a paper overflow condition exists. | |
| Paper Overflow | | Shorted | Paper overflow message is displayed when a paper overflow condition does not exist. | |
| TD (Toner Density) | 213-14 (IOB) | Open | The add toner indicator blinks even if there is toner in the development unit. | |
| | | Shorted | SC390 is displayed. | |

| Component (Symbol) | CN | Condition | Symptom |
|-----------------------|----------------|------------------|--|
| Web End | 208-16 (IOB) | Open | CPU detects the web end even the web is not used up. |
| Web End | | Shorted | CPU cannot detect the web end even the web is used up. |
| ID (Image Density) | 208-11 (IOB) | Open | SC350 is displayed after copying. |
| (Image Densily) | 200-11 (IOB) | Shorted | SC351 is displayed after copying. |
| Fusing Entrance | 208-8 (IOB) | Open | CPU cannot detect paper even a sheet of paper remains at the fusing unit. |
| | | Shorted | CPU detects paper even a sheet of paper does not remain at the fusing unit. |
| Scanner Home Position | 318-2 (SIO) | Open | SC121 is displayed. |
| Scanner Home Position | | Shorted | SC120 is displayed. |
| Platen Cover | 318-5 (SIO) | Open | APS and ARE do not function properly. |
| ridien Cover | | Shorted | No symptom. |
| Original Length 1 | 313-2 (SIO) | Open/ Shorted | CPU cannot detect the original size properly. APS and ARE do not function correctly. |
| Original Length 2 | 313-8 (SIO) | Open/ Shorted | CPU cannot detect the original size properly. APS and ARE do not function correctly. |

| Component (Symbol) | CN | Condition | Symptom |
|-----------------------|------------------|-----------|---|
| Dight Door | 221-B10 (IOB) | Open | "Open Cover" is displayed even if the right door is closed. |
| Right Door | | Shorted | The LCD goes blank when the right door is opened. |
| Main Power | 903-1,2 (PSU) | Open | The machine does not turn on. |
| | | Shorted | The machine does not turn off. |
| Interlock | 913-1,2 (PSU) | Open | "Doors/Covers Open" is displayed even if the front or right door is closed. |
| | | Shorted | The LCD goes blank when the front or right door is opened. |

Blown Fuse Conditions

ACAUTION

• Use a correct rating fuse for the fuse replacement. Never use a wrong rating fuse. If do so, the machine may be damaged.

| Fuse Rating 115V 210 to 230V | | | S | |
|------------------------------|-------------|-------------|--|--|
| | | 210 to 230V | Symptom at power on | |
| Power Sup | ply Board | | | |
| FU21 | 6.3A / 250V | 6.3A / 250V | SC 533 (Power to IOB) | |
| FU22 | 6.3A / 250V | 6.3A / 250V | SC 144-02 (Power to SIO) | |
| FU23 | 10A / 250V | 10A / 250V | "Open Cover" is displayed. (Power to Interlock Switch) | |
| FU24 | 10A / 250V | 10A / 250V | "Open Cover" is displayed. (Power to Interlock Switch) | |
| FU25 | 6.3A / 250V | 6.3A / 250V | Alert LED turns on and operation panel does not turn on. (Power to MB) | |
| FU26 | 6.3A / 250V | 6.3A / 250V | Stack paper in the optional paper feed unit or LCT is not detected. SC 503 is issued after opening and closing the tray 3 or 4. (Power to optional PFU or LCT) | |
| FU27 | 6.3A / 250V | 6.3 A/ 250V | The machine does not detect a finisher. (Power to optional Finisher) | |
| FU101 | 15A / 250V | 8A / 250V | No response | |
| FU102 | 12A / 250V | 4A / 250V | No response | |

Fuses

| Fuse Address | Part No. | Q'ty |
|----------------------|----------|------|
| FU11 | 11071229 | 1 |
| FU21, 22, 25, 26, 27 | 11071295 | 5 |
| FU23, 24 | 11071216 | 2 |
| FU101 | 11071252 | 1 |
| FU102 | 11071320 | 1 |
| FU103, 12, 14 | 11071225 | 3 |



Model AL-C2 Machine Code: D129/D130

Appendices

TABLE OF CONTENTS

| 1. / | Append | lix: Ger | neral Sp | ecification |
|------|--------|----------|----------|-------------|
| | | | | |

| General Specifications | 5 |
|---|----|
| General | 5 |
| Power Consumption | 7 |
| Printer Controller | 8 |
| Scanner Specifications | 9 |
| Optional Equipment | 11 |
| ARDF (D630) | 11 |
| Two-tray Paper Feed Unit (D580) | 11 |
| LCT 2000-sheet (D581) | 12 |
| LCT 1200-sheet (D631) | 12 |
| 1-bin Tray Unit (D632) | 13 |
| Side Tray (D635) | 13 |
| Internal Shift Tray (D633) | 14 |
| Bridge Unit (D634) | 14 |
| 1000-Sheet Finisher (D588) | 14 |
| Upper Tray | 14 |
| Lower Tray | 15 |
| 3000-Sheet Finisher (D636) | 16 |
| 2000-Sheet Booklet Finisher (D637) | 17 |
| Punch Unit for 2000/3000-Sheet (Booklet) Finisher | 20 |
| 2. Appendix: PM Tables | |
| PM Tables | |
| Mainframe | 21 |
| Options | 25 |
| ARDF | 25 |
| PFU | 25 |
| LCT | 26 |
| SR5020 | 26 |
| 2000/3000-Sheet (Booklet) Finisher | 26 |
| Bridge Unit | 27 |
| 1-Bin Tray Unit | 27 |

3. Appendix: Service Program Mode Tables

| System SP Table-1 | 29 |
|--|-----|
| SP1-xxx: Feed | 29 |
| System SP Tables-2 | 45 |
| SP2-xxx: Drum | 45 |
| System SP Table-3 | 66 |
| SP3-xxx: Process | 66 |
| System SP Tables-4 | 69 |
| SP4-xxx: Scanner | 69 |
| System SP Tables-5 | 97 |
| SP5-xxx: Mode | 97 |
| System SP Tables-6 | 170 |
| SP6-xxx: Peripherals | 170 |
| System SP Tables-7 | 181 |
| SP7-xxx: Data Log | 181 |
| System SP Tables-8 | 199 |
| SP8-xxx: Data Log 2 | 199 |
| Input Check | 243 |
| Copier | 243 |
| Table 1: Paper Height Sensor | 245 |
| Table 2: Paper Size Switch | 246 |
| Table 3: Paper Size (By-pass Table) | 247 |
| APS Original Size Detection | 248 |
| Options | 248 |
| 3000/2000-Sheet (Booklet) Finisher (D636/D637) | 248 |
| 1000-Sheet Finisher (D588) | 251 |
| Output Check | 253 |
| Copier | 253 |
| 1000-Sheet Finisher (D588) | 258 |
| 3000 / 2000-Sheet (Booklet) Finisher (D636/D637) | 258 |
| Printer Service Tables. | 260 |
| SP1-xxx (Service Mode) | 260 |
| Scanner Service Table | 268 |

| CD. | les. | 0/ | 0 |
|-----|------|----|----|
| 3P | les | ZC | ıσ |

1. Appendix: General Specifications

General Specifications

General

| Configuration | Desktop | | | | |
|-------------------|-------------------|--|--|--|--|
| Copy Process | Dry electrostatic | transfer system | | | |
| Original | Sheet, book, thre | Sheet, book, three-dimensional object | | | |
| Original Size | Maximum A3/1 | Maximum A3/11" x 17" | | | |
| | Paper trays: | A3/11" x 17" - A5 LEF Non-standard sizes: Width: 182 - 297 mm (7.2" - 11.7") Length: 148 mm - 432 mm (5.8" - 17") | | | |
| Copy Paper Size | By-pass tray: | 12" x 18"/305 x 457.2 mm, A3/11" x 17" - A6 SEF Non-standard sizes: Width: 90 - 305 mm (3.6" - 12") Length: 148 - 600 mm (5.8" - 23.6") | | | |
| | Duplex: | A3/11" x 17" - A6 SEF Non-standard sizes: Width: 90 - 297 mm (3.6" - 11.7") Length: 148 - 432 mm (5.8" - 17") | | | |
| | Paper trays: | 60 - 216 g/m² (16 lb. Bond - 80 lb. Cover) | | | |
| Copy Paper Weight | By-pass: | 52 - 220 g/m² (14 lb. Bond - 80 lb. Cover) | | | |
| | Duplex: | 60 - 169 g/m² (16 lb. Bond - 90 lb. Index) | | | |

| Reproduction Ratios | 7R5E: 82, | | Metric version (%): 400, 200, 141, 122, 115, 93, 32, 75, 71, 65, 50, 25 nch version (%): 400, 200, 155, 129, 121, 93, 35, 78, 73, 65, 50, 25 | |
|-------------------------------|---|-------|---|--|
| | Zoom: 25 | | to 400% in 1% steps | |
| | D129 | 40 | cpm A4, 81/2" x 11" LEF, 1-to-1 (ADF) | |
| Copying Speed | D130 | 50 | cpm, A4, 81/2" x 11" LEF, 1-to-1 (ADF) | |
| First Courties | Basic | 4.1 | s, 1st Tray, A4/81/2" x 11" LEF | |
| First Copy Time | SP | 3.5 | s, 1st Tray, A4/81/2" x 11" LEF | |
| \A/ Ti | Basic | Les | s than 14.7s | |
| Warm-up Time | SP | Les | s than 19 s | |
| Continuous Copy | 1 to 999 (operation | n par | nel entry) | |
| Paper Capacity (without | 1,200 sheets | | | |
| options) | (550 sheets/tray x 2 with 100 sheets in the by-pass tray) | | | |
| Paper Capacity (with options) | 4,400 sheets (550 sheets/tray x 2 with 100 sheets in the by-pass tray, 1200-sheet LCT and 2000-sheet LCT) | | | |
| Paper Output | A4, 81/2" x 11" and smaller: | | 500 sheets | |
| | B4 and larger: | | 250 sheets | |
| | North America: | | 120 – 127V/60 Hz, 12 A | |
| Power Source | Europe/Asia: | | 220 – 240 V/50, 60 Hz, 7 A | |
| | Taiwan | | 110V/60Hz, 14 A | |
| Dimensional LLI | Without ADF | | 670 mm x 682 mm x 760 mm (26.4" x 26.9" x 30.0") | |
| Dimensions (w x d x h) | With ADF | | 670 mm x 682 mm x 895 mm (26.3" x 26.9" x 35.3") | |
| | EU | | Less than 85 kg (187.4 lb.) | |
| Weight | NA | | Less than 97 kg (213.9 lb.) | |

| Resolution | 600 dpi (Scanning and Printing) | | | | | |
|--------------------------|--|------------------|-------------|--|--|--|
| Gradation | 256 levels (Scanning and Printing) | | | | | |
| Original Archive | More than 2,500 A4 pages for document server (ITU-T No. 4 Chart) | | | | | |
| Toner Replenishment | Cartridge exchange (630 g) | | | | | |
| Total Counter | Electric counter | Electric counter | | | | |
| | | Mainframe Only | Full System | | | |
| Noise Emission: Copying | D129 | 64.6 dB(A) | 71.1 dB(A) | | | |
| Copying | D130 | 66.4 dB(A) | 71.6 dB(A) | | | |
| _ | | Mainframe Only | Full System | | | |
| Noise Emission: Stand-by | D129 | 33.8 dB(A) | 34.0 dB(A) | | | |
| Sidild by | D130 | 32.6 dB(A) | 33.6 dB(A) | | | |

Power Consumption

| Basic | D129 | | D130 | |
|-----------|----------|--------|----------|--------|
| D | NA | 156 W | NA | 165 W |
| Ready | EU, Asia | 157 W | EU, Asia | 166 W |
| 0 | NA | 745 W | NA | 835 W |
| Operating | EU, Asia | 742 W | EU, Asia | 849 W |
| Maximum | NA | 1490 W | NA | 1490 W |
| Maximum | EU, Asia | 1460W | EU, Asia | 1460 W |

| SP | D129 | | D130 | |
|-----------|----------|-------|----------|-------|
| Pardy | NA | 160 W | NA | 167 W |
| Ready | EU, Asia | 159 W | EU, Asia | 172 W |
| O | NA | 736 W | NA | 828 W |
| Operating | EU, Asia | 754 W | EU, Asia | 864 W |

| SP | D129 | | | D130 | |
|----------|----------|--------|----------|--------|--|
| Marrimum | NA | 1490 W | NA | 1490 W | |
| Maximum | EU, Asia | 1460W | EU, Asia | 1460 W | |

| Full System | D129 | | D130 | |
|-------------|----------|--------|----------|--------|
| A 4i | NA | 1584 W | NA | 1584 W |
| Maximum | EU, Asia | 1550 W | EU, Asia | 1550 W |



- The above measurements were made in accordance with ISO 7779.
- In the above "Panel Off" condition, the polygonal mirror motor is not rotating.

Printer Controller

| Printer Languages: | PCL 6/5e PDF Direct Adobe PostScript 3 (optional) IPDS (optional) MediaPrint: JPEG/TIFF |
|------------------------------|---|
| Resolution and Gradation: | PCL 5e: 300 x 300 dpi 600 x 600 dpi : Fast (1-bit) PCL 6: 600 x 600 dpi : Fast (1-bit) PDF Direct: 300 x 300 dpi/600 x 600 dpi PS3: 300 x 300 dpi/600 x 600 dpi XPS: 600 x 600 dpi : Fast (1-bit) IPDS: 300 x 300 dpi/600 x 600 dpi |

| Printing speed: | D129: Maximum 40 ppm (A4/LT LEF) D130: Maximum 50 ppm (A4/LT LEF) |
|--------------------|---|
| Resident Fonts: | PCL 6/5e (Standard): 45 Compatible fonts, 13 International fonts, 6 Bitmap fonts PDF Direct: 136 fonts IPDS (Optional): 108 fonts |
| Host Interfaces: | USB2.0 Type A and Type B: Standard Ethernet (100 Base-TX/10 Base-T): Standard Gigabit Ethernet (1000 Base-T): Optional IEEE1284 parallel x 1: Optional IEEE802.11a/b/g (Wireless LAN): Optional Bluetooth (USB type): Optional |
| Network Protocols: | TCP/IP (IPv4, IPv6), IPX/SPX |
| RAM: | Maximum Basic model: 512 MB SP model: 1024 MB (Resident 512 MB + Additional 512) Note Additional 512 MB is required for all printer/scanner unit and printer units. |

Scanner Specifications

| Standard Scanner Resolution: | Main scan/Sub scan 100 to 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): | BW: 61 ipm (A4LEF / BW Text/ Photo / 200dpi / Compression: On (MH)) FC: 31 ipm (A4LEF / FC Text / Photo / 200dpi / Compression: Standard) |
|----------------------------------|--|
| Interface: | Ethernet 10Base-T / 100Base-TX, Gigabit Ethernet (1000Base-T), Wireless LAN (IEEE 802.11a/b/g) |
| Compression Method: | B&W: TIFF (MH, MR, MMR, JBIG2) Gray Scale/Full Color: JPEG |
| Video Memory Capacity: | 109.41 MB (A4, Full Color, 600dpi) |
| Image Storage Capacity: | Number of originals per file: Maximum 1,000 pages Maximum of files: 3,000 files Storage on Doc.Server: Maximum 9,000 pages (B&W (ITU-T No.1/200 dpi MMR) |

Г

Optional Equipment

ARDF (D630)

| D. C. AM. I. | Simplex Duplex | Size | A3 to A5, DLT to HLT |
|---------------------------------|---|--------|---|
| | | Weight | 40 to 128 g/m ² (11 to 34 lb.) |
| Paper Size/Weight: | | Size | A3 to A5, DLT to HLT |
| | | Weight | 52 to 128 g/m² (14 to 34 lb.) |
| Table Capacity: | 100 sheets (81.4 g/m², 22 lb) | | |
| Original Standard Position: | Rear left corner | | |
| Separation: | Feed belt and separation roller | | |
| Original Transport: | Roller transport | | |
| Original Feed Order: | From the top original | | |
| Supported Magnification Ratios: | 32 to 200 % | | |
| Power Source: | DC 24V, 5V from the scanner unit | | |
| Power Consumption: | Less than 70W | | |
| Dimensions (W x D x H): | 570 mm x 520 mm x 135 mm (22.4"x20.5"x5.3") | | |
| Weight: | Less than 12kg (26.5 lb.) | | |

Two-tray Paper Feed Unit (D580)

| Paper Feed System: | FRR |
|-------------------------|---|
| Paper Height Detection: | 5 steps (100%, 70%, 30%, 10% (Near end), and Empty) |
| Capacity: | 550 sheets x 2 trays |
| Paper Weight: | 60 to 216 g/m² (16 to 80 lb. Cover) |
| Paper Size: | A3 SEF to A5, DLT SEF to HLT |
| Power Source: | DC 24V, 5V (from the main frame) |

Ш

| Power Consumption: | Less than 40 W (Max.)/ Less than 25 W (Ave,) |
|-------------------------|--|
| Dimensions (W x D x H): | 580 mm x 629 mm x 260 mm (22.8" x 24.8" x 10.2") |
| Weight: | 26 kg (57.3 lb.) |

LCT 2000-sheet (D581)

| Paper Size: | A4 LEF/LT LEF |
|----------------------------|--|
| Paper Weight: | 60 g/m ² to 216 g/m ² , 16 lb. Bond to 80 lb. Cover |
| Tray Capacity: | 2,000 sheets (80 g/m², 20 lb. Bond) |
| 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: | 45 W (Max.)/27 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 1200-sheet (D631)

| Paper Size: | A4 LEF/ LT LEF/ B5 LEF |
|----------------------------|---|
| Paper Weight: | 60 g/m ² to 216 g/m ² , 16 lb. Bond to 80 lb. Cover |
| Tray Capacity: | 1200 sheets (80 g/m², 20lb. Bond) |
| Remaining Paper Detection: | 5 steps (100%, 75%, 30%, 10%, End) |
| Power Source: | DC 24 V, 5 V (from copier/printer) |
| Power Consumption: | 55 W (Max)/ 25 W (Ave.) |
| Dimensions (W x D x H): | 348 mm x 540 mm x 290 mm (13.7" x 21.3" x 11.4") |
| Weight: | 14 kg (30.8 lb.) |

1-bin Tray Unit (D632)

| Paper Size: | Standard Size: A3 /DLT to A6/ HLT SEF |
|-------------------------|--|
| Paper Weight: | 60 to 169 g/m ² , 16 to 45 lb. Bond |
| Tray Capacity: | 125 sheets (80 g/m², 20 lb. Bond, A4) |
| Power Source: | DC 24 V, 5 V (from the copier) |
| Power Consumption: | 12 W or less |
| Dimensions (W x D x H): | 565 mm x 410 mm x 115 mm (22.3"x16.2"x4.6") |
| Weight: | 2 .5 kg (5.6 lb.) |

Side Tray (D635)

| Paper Size: | Standard Size: A3 /DLT to A6/ HLT SEF |
|-------------------------|--|
| Paper Weight: | 52 to 300 g/m ² , 14 lb. Bond to 110 lb. Cover |
| Tray Capacity: | Internal tray: 250 sheets (80 g/m², 20 lb. Bond, A4/LT or smaller) 125 sheets (80 g/m², 20 lb. Bond, B4, LG or larger) |
| | External tray: 125 sheets (80 g/m ² , 20 lb. Bond) |
| Power Source: | DC 24 V, 5 V (from the copier) |
| Power Consumption: | 20 W or less |
| Dimensions (W x D x H): | 780 mm x 412 mm x 138 mm (30.8"x16.3"x5.5") |
| Weight: | 4.5 kg (10.0 lb.) |

Internal Shift Tray (D633)

| Paper Size: | Standard Size: A3 /DLT to A6/ HLT SEF |
|-------------------------|--|
| Paper Weight: | 52 to 160 g/m ² , 14 lb. Bond to 60 lb. Cover |
| Tray Capacity: | 250 sheets (80 g/m ² , 20 lb. Bond, A4/LT or smaller) 125 sheets (80 g/m ² , 20 lb. Bond, B4, LG or larger) |
| Power Source: | DC 24 V, 5 V (from the copier) |
| Power Consumption: | 10 W or less |
| Dimensions (W x D x H): | 432 mm x 468 mm x 114 mm (16.7"x18.5"x4.5") |
| Weight: | 2 kg (4.5 lb.) |

Bridge Unit (D634)

| Paper Weight: | 52 g/m ² to 256 g/m ² , 16 lb. Bond to 68 lb. Bond |
|-------------------------|--|
| Tray Capacity: | 250 sheets (80 g/m ² , 20 lb. Bond, A4/LT or smaller) 125 sheets (80 g/m ² , 20 lb. Bond, B4, LG or larger) |
| Power Source: | DC 24 V, 5 V (form the copier/printer) |
| Power Consumption: | 20 W or less |
| Dimensions (W x D x H): | 415 mm x 412 mm x 111 mm (16.3" x 16.2" x 4.4") |
| Weight | 4 kg (8.9 lb.) |

1000-Sheet Finisher (D588)

Upper Tray

| Paper Size: | 12" x 18"/305 x 457.2 mm, A3 to A6, 11" x 17" to 5.5" x 8.5" |
|---------------|--|
| Paper Weight: | 52 to 256 g/m ² (14 to 68 lb. Bond) |

| Dan an Camariba | 250 sheets (A4, LT or smaller) |
|-----------------|--------------------------------|
| Paper Capacity: | 50 sheets (B4, LG or larger) |

Lower Tray

| Paper Size: | No staple mode: 12" x 18"/305 x 457.2 mm, A3 to B5, DLT to HLT Staple mode: 12" x 18"/305 x 457.2 mm, A3, B4, A4, B5, DLT to LT | | | | |
|-----------------------|--|---|-----------|--|--|
| Paper Weight: | | No staple mode: 52 to 160 g/m² (14 lb. Bond to 60 lb. Cover) Staple mode: 64 to 90 g/m² (17 to 24 lb. Bond) | | | |
| Stapler Capacity: | 50 sheets (A4, B5, LT) 30 sheets (A3, B4, DLT, | 50 sheets (A4, B5, LT) 30 sheets (A3, B4, DLT, LG) | | | |
| | 500 sheets (B4 /LG or le | No staple mode: 1,000 sheets (A4/LT or smaller: 80 g/m², 20 lb.) 500 sheets (B4 /LG or larger: 80 g/m², 20 lb.) Staple mode: (80 g/m², 20 lb., number of sets) | | | |
| | Paper Size | Sheets | Sets | | |
| Paper Capacity: | A4,/LT LEF, B5 LEF | 2 to 9 | 100 | | |
| | A4,/LT LEF, | 10 to 50 | 100 to 20 | | |
| | A4,/LT LEF, B5 LEF | 10 to 50 | 50 to 10 | | |
| | A3, B4, DLT, LG | 2 to 9 | 50 | | |
| | A3, B4, DLT, LG | 10 to 30 | 50 to 10 | | |
| Staple positions: | Top, Bottom, 2 Staples | ' | | | |
| 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): | 520 x 520 x 790 mm (20.5" x 20.5" x 31.2") |
|-------------------------|--|
|-------------------------|--|

3000-Sheet Finisher (D636)

| Finisher | | | | | | |
|--|--------------|---------------------------|--|--|--|--|
| Dimension (w x d x h) | | 657 mm x 613 | 657 mm x 613 mm x 960 mm (25.9" x 24.2" x 37.8") | | | |
| Weight | | Less than 54 kg | Less than 54 kg (119 lb.) (no punch unit) | | | |
| v v oigin | | Less than 56 kg | (123.5 lb.) (with punch unit) | | | |
| Power Consu | mption | Less than 96 W | | | | |
| Noise | | Less than 75 db | | | | |
| Configuration | 1 | Console type at | ttached base-unit | | | |
| Power Source | 9 | From base-unit | | | | |
| Stack Capacity Proof Tray Paper Size | | | , 8.5" x 11" or smaller 3.5" x 14 or larger | | | |
| | | | A6 SEF, B6 SEF, A5-A3 SEF, 5.5" x 8.5"-11" x 17" SEF, 12" x 18" SEF | | | |
| | Paper Weight | 52 g/m ² - 160 | 52 g/m ² - 160 g/m ² (14 lb. Bond - 60 lb. Cover) | | | |
| | | 3,000 sheets | A4 LEF, 8.5" x 11" LEF | | | |
| Stack Capacity | | 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 | | | |
| Shift Tray | | 500 sheets | A5 LEF | | | |
| Silli Huy | | 100 sheets | A5 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"- 11" x 17" SEF, 12" x 18" SEF | | | |
| | Paper Weight | 52 g/m ² - 256 | g/m² (14 lb. Bond - 68 lb. Bond) | | | |
| Staples | | 1 | | | | |

٦

| Paper Size | | B5 - A3 8.5" x 11" - 11" x 17", 12" x 18" | | |
|--|------------------|--|--|--|
| Paper Weight 64 g/m² - 90 g/m² (17 lb. Bond - 20 lb. Bond) | | | g/m² (17 lb. Bond - 20 lb. Bond) | |
| Staple Position | | Top, Bottom, 2 Staple, Top-slant | | |
| Same Paper Size Stapling | | 50 sheets | A4, 8.5" x 11" or smaller | |
| | | 30 sheets | B4, 8.5" x 14" or larger | |
| Capacity | Mixed Paper Size | 30 sheets | A4 LEF + A3 SEF, B5 LEF + B4 SEF, 8.5" x11" LEF + 11" x 17" SEF | |

| Staple Replenishment | Cartridge exchange / 5000 pins per cartridge | | | |
|---|--|---------------|---------------|--|
| | Paper Size | Pages/Set | Sets | |
| | A4 LEF, 8.5" x 11" LEF | 20 - 50 pages | 150 - 60 sets | |
| | A4 LEF, 6.5 X TT LEF | 2 - 19 pages | 150 sets | |
| Stapled Stack Capacity (same size) | A A CEE D | 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 (D637)

| Finisher | |
|---------------------|---|
| Dimension W x D x H | 657 mm x 613 mm x 960 mm (25.9 x 24.2 x 37.8") |
| Weight | Less than 63 kg (138.6 lb.) (no punch unit) Less than 65 kg (143 lb.) (with punch unit) |
| Power Consumption | Less than 96 W |

| Noise Le | | Le | Less than 75 db | | | |
|-----------------|----------------|--|---|---|--|--|
| Configuration | | С | Console type attached base-unit | | | |
| Power Source | | Fr | om base-un | it | | |
| | Stack Capacity | | 50 sheets: A4, 8.5" x 11" or smaller 0 sheets: B4, 8.5" x 14 or larger | | | |
| Proof Tray | Paper Size | | A6 SEF, B6 SEF, A5-A3 SEF, 5.5" x 8.5"-11" x 17" SEF, 12" x 18" SEF | | | |
| | Paper Weight | 5 | 2 g/m² - 16 | 60 g/m² (14 lb. Bond - 60 lb. Cover) | | |
| | Stack Capacity | | ,000 neets | A4 LEF, 8.5" x 11" LEF | | |
| | | 1,000 sheets | | A3 SEF, A4 SEF, B4 SEF, B5 11" x 17" SEF, 8.5" x 14" SEF, 8.5" x 11" SEF, 12"x18" SEF | | |
| Shift Tray | | 500 sheets | | A5 LEF | | |
| | | 100 sheets | | A5 SEF, B6 SEF, A6 SEF, 5.5" x 8.5" SEF | | |
| | Paper Size | | | A6 SEF, B6 SEF 11" x 17" SEF, 12" x 18" SEF | | |
| Paper Weight 5: | | 52 g/m² - 256 g/m² (14 lb. Bond - 68 lb. Bond) | | | | |
| 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 | | | |

| Staples Capacity | Same Paper Size | 50 sheets | A4, 8.5" x 11" or smaller |
|------------------|------------------|-----------|--|
| | | 30 sheets | B4, 8.5" x 14" or larger |
| | Mixed Paper Size | 30 sheets | A4 LEF & A3 SEF, B5 LEF & B4 SEF, 8.5" x 11" LEF & 11" x 17" SEF |
| | Booklet Stapling | 15 sheets | A4 SEF, A3 SEF, B5 SEF, B4 SEF, 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 |
| | | A A LEE 0. 5" 1.1" LEE | 13 - 50 pages |
| | | A4 LEF, 8.5" x 11" LEF | 2 - 12 pages |
| | C C: | A A CEE DE O EU 110 CEE | 10 - 50 pages |
| Camara Standla | 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 for 2000/3000-Sheet (Booklet) Finisher

| Available Punch Units | | NA | | 2/3 holes switchable |
|-----------------------|---------------------|---------|---------------------------------------|-------------------------|
| | | EU | | 2/4 holes switchable |
| | | Scandin | avia | 4 holes |
| | | NA 2-h | oles | Up to 5,000 sheets |
| | | NA 3-h | oles | Up to 5,000 sheets |
| Punch Waste R | eplenishment | EU 2-hc | bles | Up to 14,000 sheets |
| | | EU 4-hc | oles | Up to 7,000 sheets |
| | | Scandin | avia 4-holes | Up to 7,000 sheets |
| Paper Weight | Paper Weight | | ² - 163 g/m ² , | 14 lb Bond - 43 lb Bond |
| | NIA O L.L. | SEF | A5 to A3, 5.5" x 8.5" to 11" x 17" | |
| | NA 2-holes | LEF | A5 to A4, 5.5 | 5" x 8.5" , 8.5" x 11" |
| | NIA 2 L.L. | SEF | A3, B4, 11" x 17" | |
| | NA 3-holes | LEF | A4, B5, 8.5" x 11" | |
| D C'. | FILO bala | 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" | |
| | FILA L.L. | SEF | A3, B4, 11"x17" | |
| | EU 4-holes | LEF | A4, B5, 8.5" x 11" | |
| | Sagndings: 4 Lale | SEF | A5 to A3, 5.5 | " x 8.5" to 11" x 17" |
| | Scandinavia 4-holes | | A5 to A4, 5.5" x 8.5", 8.5" x 11" | |

2. Appendix: PM Tables

PM Tables

Amounts mentioned as the PM interval indicate the number of prints.

Mainframe

Symbol key: C: Clean, R: Replace, L: Lubricate, I: Inspect

| | EM | 160K | 320K | 800K | Note |
|----------------------------------|----|------|------|------|----------------------|
| Scanner/Optics | | | | | |
| Reflector | | С | | | Optics cloth |
| 1 st Mirror | | С | | | Optics cloth |
| 2nd Mirror | | С | | | Optics cloth |
| 3rd Mirror | | С | | | Optics cloth |
| Scanner Guide Rails | | С | | | Do not use alcohol. |
| Exposure Glass | С | С | | | Cleaner |
| Toner Shield Glass | С | С | | | Dry cloth or cleaner |
| APS Sensor | | С | | | Dry cloth |
| Exposure Glass (Sheet through) | С | С | | | Cleaner |
| Drum (OPC) Area | | | | | |
| OPC Drum | I | R | | | |
| Charge Roller | | R | | | |
| Charge Roller Cleaning Roller | | R | | | |
| Drum Cleaning Blade 1 | | R | | | |
| Quenching Lamp | С | | С | | Dry cloth |

RTB 36 Component added to PM table 2

RTB 36 Table modified

RTB 36 Components deleted from PM table

RTB 36 Table modified

RTB 36 Components added to PM table

| | | EM | 160K | 320K | 800K | Note |
|----|--------------------------------|----|------|------|------|---|
| | Pick-off Pawls | | R | | | |
| | Spurs | С | С | | | Dry cloth |
| | ID Sensor | С | С | | | Perform SP3-001-2 after blower brush cleaning. |
| | Cleaning Entrance Seal | | С | | | Blower brush. Replace if required. |
| ed | Side Seal | | I | | | |
| | Development Unit | | | | | |
| | Development Drive Gears | | | | С | Dry cloth |
| | Development Filter | | R | | | |
| | Development filter: front | | R | | | |
| | Development filter: rear | | R | | | |
| | Developer I at EM, not at 160k | | I | R | | |
| d | Entrance Seal | | I | | | |
| | Side Seal | | I | | | |
| | Development Roller | | С | | | Dry cloth |
| | Paper Feed | | | | | |
| | Registration Roller | I | С | | | Water |
| | Idle Roller Dust Blade | I | С | | | Detach and tap gently on flat surface to empty. Blower brush. |
| | Registration Roller Dust Blade | I | С | | | Blower brush. |
| | Feed Rollers | I | С | | | Water |
| | Pick-up Rollers | I | С | | | Water |
| | Separation Rollers | I | С | | | Water |

ΕM 160K 320K 800K Note By-pass Feed Roller I С Water Ī By-pass Pick-up Roller С Water С By-pass Separation Roller Ī Water Paper Feed Guides С Dry cloth **Relay Rollers** С Water Bottom Plate Pad Ι С Water Bottom Plate Pad (By-pass С Water Ι feed) Registration Sensor I С Blower brush By-pass Feed Roller Gear Ι L Silicone Grease G-501 Ī С Blower Brush **Relay Sensors** Paper Feed Sensors Ī С Blower Brush **Duplex Unit** Inverter Rollers С Water С Transport Rollers Water Entrance Sensor С Water Exit Sensor С Water Transfer Belt Unit Dry cloth. To prevent damage to the Transfer Belt С R cleaning blade, always replace these items together. Transfer Belt Cleaning Blade R Transfer Belt Rollers С Dry cloth Entrance Seal С Dry cloth

RTB 36 Table modified RTB 36 Component added

2

| | EM | 160K | 320K | 800K | Note | | |
|---------------------------|----|------|------|------|----------------|--|--|
| Transfer Entrance Guide | С | С | | | Dry cloth | | |
| Used Toner Tank | I | С | | | Empty the tank | | |
| Paper Exit | | | | | | | |
| Paper Exit Sensor | I | I | | | Blower brush | | |
| Junction Gate Jam sensor | I | С | | | Blower brush | | |
| Fusing Exit Sensor | I | I | | | Blower brush | | |
| Paper Exit Rollers | I | I | | | Water | | |
| Junction Transport Roller | I | I | | | Water | | |
| Paper Exit Guide | I | I | | | Water | | |



- Due to their durability and extended service life, the feed rollers, separation rollers, and pick-up rollers of the mainframe, optional paper trays, and LCT are not replaced at PM.
- *1: Lubricate the by-pass feed clutch gear with Silicone Grease G501 every P.M.

| | EM | 160K | 320K | 800K | Note |
|--|----|------|------|------|----------------------------|
| Fusing Unit and Paper Exit | | | | | |
| Fusing Entrance and Exit Guide Plates | | С | | | Water or alcohol |
| Hot Roller | | R | | | |
| Pressure Roller | | R | | | |
| Fusing Thermistors | | R | | | |
| Cleaning Roller Bushings | | L | | | Grease: Barrierta JFE 55/2 |
| Hot Roller Strippers | | | R | | |
| Paper Exit Guide Ribs | | С | | | Water or alcohol |
| Web Supply Roller | | R | | | |
| Web Holder Roller | | | R | | |

RTB 36 Table modified and one component deleted

| | EM | 160K | 320K | 800K | Note |
|-----------|----|------|------|------|------|
| Brake Pad | | | R | | |

Options

Amounts mentioned as the PM interval indicate the number of prints/ originals.

Symbol key: C: Clean, R: Replace, L: Lubricate, I: Inspect

ARDF

RTB 36 Table modified

| B802 | EM | 120K (Originals) | Note |
|----------------------|----|---------------------|--|
| ARDF (for originals) | | | |
| Pick-up Roller | | R | Damp cloth; alcohol |
| Feed Belt | | R | Damp cloth; alcohol |
| Separation Roller | | R | Damp cloth; alcohol |
| 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 |
| Transport Roller | С | | Damp cloth; alcohol |
| Exit Roller | С | | Damp cloth; alcohol |
| Inverter Roller | С | | Damp cloth; alcohol |
| Idle Rollers | С | | Damp cloth; alcohol |

PFU

RTB 36 Table modified

| D351 | EM | 150K | 300K | 450K | Note |
|-----------------|----|------|------|------|------|
| Paper Feed Unit | | | | | |

RTB 36 Table modified

| D351 | EM | 150K | 300K | 450K | Note |
|------------------|----|------|------|------|-------------------|
| Relay Rollers | | С | | | Dry or damp cloth |
| Bottom Plate Pad | | С | | | Dry or damp cloth |

2

LCT

RTB 36 Table modified

| D352 | EM | 150K | 300K | 450K | Note |
|------------------|----|------|------|------|-------------------|
| LCT 2000-sheet | | | | | |
| Bottom Plate Pad | | С | | | Dry or damp cloth |

RTB 36 Table modified

SR5020

| B408 | EM | 150K | 300K | 450K | Note |
|---------------------|----|------|------|------|----------------------|
| 1000-Sheet Finisher | | | | | |
| Rollers | С | | | | Water or alcohol. |
| Discharge Brush | С | С | | | Dry cloth |
| Sensors | С | | | | Blower brush |
| Jogger Fences | I | I | | | Replace if required. |

2000/3000-Sheet (Booklet) Finisher

RTB 36 Table modified

| B804/B805 | EM | Note | | | | |
|------------------------------------|----|----------------------|--|--|--|--|
| 2000/3000-Sheet (Booklet) Finisher | | | | | | |
| Rollers | С | Water or alcohol. | | | | |
| Discharge Brush | С | Dry cloth | | | | |
| Sensors | С | Blower brush | | | | |
| Jogger Fences | I | Replace if required. | | | | |
| | | | | | | |
| Punch Unit | | | | | | |

| B804/B805 | EM | Note |
|-------------|----|----------------|
| Punch Chads | С | Discard chads. |
| | | |

Bridge Unit

RTB 36 Table modified

| D386 | EM | Note |
|-------------|----|-------------------|
| Bridge Unit | | |
| Rollers | С | Dry or damp cloth |
| Copy Tray | С | Dry or damp cloth |
| Sensors | С | Blower brush |

1-Bin Tray Unit

RTB 36 Table modified

| D389 | EM | Note |
|-----------------|----|-------------------|
| 1-Bin Tray Unit | | |
| Rollers | С | Dry or damp cloth |
| Copy Tray | С | Dry or damp cloth |
| Sensors | С | Blower brush |

RTB 36 Side tray and shift tray added

3. Appendix: Service Program Mode Tables

System SP Table-1

SP1-xxx: Feed

| | Leading Edge Registration: Adjusts the leading edge registration by changing the registration clutch operation timing. | | |
|-------|---|-----------------------------------|--|
| 1001* | | | |
| 001 | Tray: Plain | | |
| 002 | Tray: Thick 1 | | |
| 003 | Tray: Thick 2 | | |
| 004 | By-pass: Plain | [-9 to 9/ 0 / 0.1 mm step] | |
| 005 | By-pass: Thick 1 | | |
| 006 | By-pass: Thick 2 | | |
| 007 | Duplex: Plain | | |
| 008 | Duplex: Thick 1 | | |

| | Side-to-Side Registration | |
|-------|---|--|
| 1002* | Adjusts the side to side registration by changing the laser main scan start position for each mode. | |

| 001 | By-pass | |
|-----|---------|-------------------------|
| 002 | Tray 1 | |
| 003 | Tray 2 | |
| 004 | Tray 3 | [-4 to 4/0/0.1 mm step] |
| 005 | Tray 4 | |
| 006 | LCT | |
| 007 | Duplex | |

| | Registration Buckle Adjustment Adjusts the paper feed motor timing. Paper feed motor timing determines the amount of paper buckle at Registration. (A "+" setting causes more buckling.) | | |
|-------|---|-----------------------------------|--|
| 1003* | | | |
| 001 | Tray 1: Plain | | |
| 002 | Tray 1: Thick 1 | | |
| 003 | Tray 1: Thick 2 | | |
| 004 | Tray 2, 3, 4: Plain | [-9 to 5 / -4 / 1 mm step] | |
| 005 | Tray 2, 3, 4: Thick1 | | |
| 006 | Tray 2, 3, 4: Thick2 | | |
| 007 | By-pass: Plain | | |
| 008 | By-pass: Thick 1 | [-9 to 5 / -2 / 1 mm step] | |
| 009 | By-pass: Thick 2 | | |
| 010 | Duplex: Plain | [-9 to 5 / -4 / 1 mm step] | |
| 011 | Duplex: Thick 1 | [-9 to 5 / -3 / 1 mm step] | |
| 012 | LCT: Plain | | |
| 013 | LCT: Thick 1 | [-9 to 5 / -4 / 1 mm step] | |
| 014 | LCT: Thick2 | | |

| By-pass Paper Size Detection Controls paper size detection for the by-pass feed table. | |
|---|---|
| | |
| LG Detection | [0 to 1 / 0 / 1] 0: LT SEF, 1: LG |
| _ | Controls paper size detection f |

| | Fusing Idling Switches fusing idling on/off. When on, printing will not start until enough time has elapsed so the hot roller can reach optimum temperature. This ensures even heat on the hot roller. | |
|-------|---|---|
| 1103* | | |
| | Switch on if fusing on the 1st and 2nd copies is incomplete (this may occur if the room is cold.). You must switch SP1103-1 ON before you set the fusing interval with SP1103-2. | |
| 001 | Enable Fusing Idling | 0 = Off, 1 = On |
| 002 | Interval | [0 to 60 / 30 / 1 sec.] |
| 003 | Idling Time at Every Job | Sets the machine to fusing idling only for 30 sec. for every job (when the original is set on the ARDF, when the ARDF cover is opened, etc.) and the fusing unit has reached the reload temperature (optimum temperature for operation). [0 to 30 / 0 / 1 sec.] 0: No idling done before a job. |

Fusing Temperature Control

On-Off/Phase

Selects the fusing temperature control method. After changing this setting, be sure to turn the machine off and on again with the main power switch to enable the new setting.

[0 to 1 / 0 / 1]

0: Normal (ON/OFF control). Allows full application from ac power supply to bring the hot roller up to the target fusing temperature then shuts off. Determines the on-time from the present temperature (detected by the thermistor on the hot roller) and the temperature of 1 cycle before.

1104*

1: Phase (hysterisis) control. Sets the upper and lower limits for the temperature; at the lower temperature the fusing lamp is on and at the higher temperature the fusing lamp is off.

Change this setting to "0" only if the user has excessive electrical noise or interference on the power supply line. Such interference can cause voltage to drop when power is applied using the ON/OFF control method.

Interference can be caused by the general poor quality of the power supply lines, or if the machine is sharing a power supply with other electrical devices such as fluorescent lights. Before changing this setting, make sure that the machine is connected to a power supply not shared by other electrical equipment.



 Selecting Phase control ("1") could cause the fusing temperature control board to emit low pitched noise

| | Fusing Temperature Adjustment | | |
|---|--|--|--|
| Allows adjustment of the hot roller temperature at the center and ends of quality or thickness of the paper. The hot roller in this machine has two full heats the center of the roller, the other heats both ends. Each fusing lamp separately. The "re-load temperature" is the "print ready temperature". When the fuse exceeds this setting, the machine can operate. Do not set up a re-load temperature. The load Temp. = Fusing. Temp - SP Value.) that is higher than the SP1-105- | | e hot roller in this machine has two fusing lamps: one | |
| | | n operate. Do not set up a re-load temperature (Re- | |
| 001 | O01 Roller Center C1c/C1.5b: [100 to 170 / 140 / 1 of C1c/C1.5c: [100 to 170 / 150 / 1 of C1c/C1.5c: [| | |
| | | | |

| 002 | Roller Ends | | 100 to 170 / 145 / 1 deg] |
|---------------|--|---|--|
| | Adjusts the fusing temperature at the ends of the hot roller. | | |
| | Re-load Temp. Minus: Roller Center | | [0 to 60 / 0 / 1 deg] |
| | Sets the reload temperature for the catarget temperature. | center of the hot | roller. This setting depends on the |
| 003 | Reload temp. = Target Temp - This | SP Setting | |
| | Note Do not set a temperature that is Trays) | s higher than the | setting for SP1105 1 (Roller Center: |
| | Re-load Temp. Minus: Roller Ends | | [0 to 60 / 0 / 1 deg] |
| | Sets the reload temperature for the etarget temperature. | | oller. This setting depends on the |
| 004 | Reload temp. = Target Temp – This | SP Setting | |
| | Note Do not set a temperature that is higher than the setting for SP1105 2 (Roller Ends: Trays) | | |
| 005 to 022 | 3 1 | | |
| 005 | Roller Center: M-Thick | | .5b: [100 to 170 / 145 / 1 deg] .5c: [100 to 170 / 155 / 1 deg] |
| 006 | Roller Ends: M-Thick | C1b/C1.5b: [100 to 170 / 150 / 1 deg] C1c/C1.5c: [100 to 170 / 160 / 1 deg] | |
| 007 | Roller Center: Thick 1 | [100 170 /100 /1] | |
| 800 | Roller Ends: Thick 1 | [100 to 1 | 70 / 130 / 1 deg] |
| 009 | Roller Center: Thick 2 | [100 to 170 / 150 / 1 deg] | |
| 010 | Roller Ends: Thick 2 | [10010] | 707 130/ Tuegj |
| 011 | Roller Center: Thin | ' | .5b: [100 to 170 / 130 / 1 deg] .5c: [100 to 170 / 140 / 1 deg] |

| 012 | Roller Ends: Thin | C1b/C1.5b: [100 to 170 / 135 / 1 deg] C1c/C1.5c: [100 to 170 / 145 / 1 deg] |
|-----|---------------------------|---|
| 013 | Roller Center: OHP: Plain | [100 to 170 / 150 / 1 deg] |
| 014 | Roller Ends: OHP: Plain | [100, 170 /166/1 1 |
| 015 | Roller Center: OHP: Thick | [100 to 170 / 155 / 1 deg] |
| 016 | Roller Ends: OHP: Thick | [100 to 170 / 160 / 1 deg] |
| 017 | Roller Center: Special 1 | C1b/C1.5b: [100 to 170 / 140 / 1 deg] C1c/C1.5c: [100 to 170 / 150 / 1 deg] |
| 018 | Roller Ends: Special 1 | C1b/C1.5b: [100 to 170 / 145 / 1 deg] C1c/C1.5c: [100 to 170 / 155 / 1 deg] |
| 019 | Roller Center: Special 2 | C1b/C1.5b: [100 to 170 / 140 / 1 deg] C1c/C1.5c: [100 to 170 / 150 / 1 deg] |
| 020 | Roller Ends: Special 2 | C1b/C1.5b: [100 to 170 / 145 / 1 deg] C1c/C1.5c: [100 to 170 / 155 / 1 deg] |
| 021 | Roller Center: Special 3 | C1b/C1.5b: [100 to 170 / 140 / 1 deg] C1c/C1.5c: [100 to 170 / 150 / 1 deg] |
| 022 | Roller Ends: Special 3 | C1b/C1.5b: [100 to 170 / 145 / 1 deg] C1c/C1.5c: [100 to 170 / 155 / 1 deg] |
| 023 | Feed Waiting: Plain | Turns the feed waiting mode on or off for each |
| 024 | Feed Waiting: M-Thick | paper type. [0 to 1 / 0 / 1] |
| 025 | Feed Waiting: Thick 1 | 0=Off, 1=On |
| 026 | Feed Waiting: Thick 2 | The paper waits at the registration roller until |
| 027 | Feed Waiting: Thin | the fusing temperature reaches the prescribed temperature (adjustable with SP1105-028 to -37). If you enable this feature, also set SP 1105-38 to a convenient value for the |
| | | customer. |

| 028 | Feed Wait: Center Minus: Plain | |
|--------------------------------|---|--|
| 029 | Feed Wait: Ends Minus: Plain | |
| 030 | Feed Wait: Center Minus: M-Thick | |
| 031 | Feed Wait: Ends Minus: M-Thick | |
| 032 | Feed Wait: Center Minus: Thick 1 | Adjusts the offset value for each re-load temperature to exit the feed waiting mode. |
| 033 | Feed Wait: Ends Minus: Thick 1 | [0 to 60 / 0 / 1 deg] |
| 034 | Feed Wait: Center Minus: Thick 2 | |
| 035 | Feed Wait: Ends Minus: Thick 2 | |
| 036 | Feed Wait: Center Minus: Thin | |
| 037 | Feed Wait: Ends Minus: Thin | |
| | | Sets the maximum feed waiting time. |
| | | [0 to 30 / 0 / 1 sec] |
| 038 Feed Waiting: Maximum Time | The paper is fed when the time specified with this SP has passed even though the fusing temperature has not reached the prescribed temperature. | |
| | | 0: Disabled. |

| 1106 | Fusing Temperature Display | |
|------|----------------------------|--|
| 001 | Roller Center | Displays the temperature of the fusing unit. |
| 002 | Roller Ends | [-20 to 250 / 0 / 1 deg] |
| 003 | Machine Inside at Power On | Displays the temperature inside the machine. |
| 004 | Machine Inside | [-20 to 250 / 0 / 1 deg] |

| 1109* | 100* | Fusing Nip Band Check | |
|-------|------|-----------------------------|--|
| | 109 | Checks the fusing nip band. | |
| | 001 | Execution | |

| | 002 | Idling Rotation Time | [0 to 120 / 60 / 1 sec] |
|--|-----|---|--------------------------------|
| | 002 | Specifies the fusing rotation time before executing SP1109-001. | |
| | 002 | Pre-Idling Time | [5 to 30 / 10 / 1 sec] |
| | 003 | Specifies the time that the paper stops in the fusing unit for measuring the nip. | |

| | T |
|------|---|
| 1159 | Fusing Jam Detection |
| 1139 | SC Code Display |
| | [0 to 1 / 0 / 1] 0:OFF, 1:ON |
| | This SP setting determines whether SC559 is issued after three paper late jams occur in the fusing unit. After this SP code is turned on, a counter monitors the number of paper late jams that occur in the fusing unit. After the 3rd occurrence of a fusing jam, SC559 is issued and the machine cannot be used until the service technician releases the error. |
| | Note |
| | Switching the machine off/on does not reset this jam counter. The counter is reset after the cause of the jam has been removed and a sheet of paper successfully passes the fusing exit sensor. |

| | Motor Speed Adjustment | |
|-------|--|-----------------------------------|
| | Adjusts the speeds of each motor. Each step decreases or increases motor speed in 0.05% increments | |
| | Regist: Registration motor, Feed: Feed motor, | |
| 1801* | Duplex: Duplex/By-pass motor, Inverter: Duplex inverter motor, | |
| | Exit: Paper exit motor, Bridge: Bridge unit drive motor, | |
| | OpcMot: Drum motor, TransferMot: Transfer/Development Motor, | |
| | FusingMot: Fusing motor, | |
| | DevPuddleMot: Development Paddle motor | |
| 001 | Regist: 90: Thick 2 | |
| 002 | Regist: 154: Thick 1 | [-2 to 2 / 0.4 / 0.05 %] |
| 003 | Regist: 180: Plain | [-2 10 2 / 0.4 / 0.03 //s] |
| 004 | Regist: 230: Plain | |

| 005 | Feed: 90: Thick 2 | [0.0/04/005%] |
|-----|--------------------------|----------------------------------|
| 006 | Feed: 154: Thick 1 | [-2 to 2 / -0.4 / 0.05 %] |
| 007 | Feed: 180: Plain | [-2 to 2 / -1 / 0.05 %] |
| 008 | Feed: 230: Plain | [-2 10 2 / -1 / 0.03 %] |
| 009 | Duplex_CW: 90: Thick 2 | [-4 to 4 / 0.4 / 0.1 %] |
| 010 | Duplex_CW: 154: Thick 1 | [-410 4 / 0.4 / 0.1 %] |
| 011 | Duplex_CW: 180: Plain | [-4 to 4 / -2.3 / 0.1 %] |
| 012 | Duplex_CW: 230: Plain | [-4104/-2.3/0.1/6] |
| 013 | Duplex_CCW: 90: Thick 2 | [-4 to 4 / 0.4 / 0.1 %] |
| 014 | Duplex_CCW: 154: Thick 1 | [-410 4 / 0.4 / 0.1 %] |
| 015 | Duplex_CCW: 180: Plain | [-4 to 4 / -2.3 / 0.1 %] |
| 016 | Duplex_CCW: 230: Plain | [-4 10 4 / -2.3 / 0.1 /o] |

| 017 | Inverter_CW: 90: Thick 2 | |
|-----|----------------------------|------------------------------|
| 018 | Inverter_CW: 154: Thick 1 | |
| 019 | Inverter_CW: 180: Plain | |
| 020 | Inverter_CW: 230: Plain | |
| 021 | Inverter_CCW: 90: Thick 2 | |
| 022 | Inverter_CCW: 154: Thick 1 | |
| 023 | Inverter_CCW: 180: Plain | |
| 024 | Inverter_CCW: 230: Plain | [-4 to 4 / 0 / 0.1 %] |
| 025 | Exit_CW: 90: Thick 2 | [-4104/0/0.1%] |
| 026 | Exit_CW: 154: Thick 1 | |
| 027 | Exit_CW: 180: Plain | |
| 028 | Exit_CW: 230: Plain | |
| 029 | Bridge: 90: Thick 2 | |
| 030 | Bridge: 154: Thick 1 | |
| 031 | Bridge: 180: Plain | |
| 032 | Bridge: 230: Plain | |

| 033 | OpcMot:90 | |
|-----|------------------|--|
| 034 | OpcMot:154 | |
| 035 | OpcMot:180 | |
| 036 | OpcMot:230 | |
| 037 | TransferMot:90 | |
| 038 | TransferMot: 154 | [-4 to 4 / 0 / 0.01 %] |
| 039 | TransferMot: 180 | [-4104/ 0 /0.01/ ₀] |
| 040 | TransferMot:230 | |
| 041 | FusingMot:90 | |
| 042 | FusingMot:154 | |
| 043 | FusingMot: 180 | |
| 044 | FusingMot:230 | |
| 045 | DevPuddleMot | [-4 to 4 / 0 / 0.1 %] |

| 1902 | Cleaning Web Setting | | |
|------|--|---|--|
| 001 | Web Consumption | [0 to 120 / 0 / 1 %] | |
| 001 | Displays the consumed amount of the | Displays the consumed amount of the web roll. | |
| | Web Motor Interval | C1b/C1.5b: [3 to 130 / 8.4 / 0.1 sec] | |
| 002 | Web Mofor Interval | C1c/C1.5c: [3 to 130 / 6.7 / 0.1 sec] | |
| | Adjusts the interval for web motor rotation. | | |
| 003 | Web Motor Time | [0.3 to 10 / 4.2 / 0.1 sec] | |
| 003 | Adjusts the rotation time of the web motor. | | |
| | | C1b/C1.5b: EU [0 to 100 / 90 / 1 %] | |
| | Web Near End Setting | C1b/C1.5b: ASIA/NA [0 to 100 / 92 / 1 %] | |
| 004 | | C1c/C1.5c: EU [0 to 100 / 90 / 1 %] | |
| | | C1c/C1.5c: ASIA/NA [0 to 100 / 92 / 1 %] | |
| | Adjusts the threshold for web near end. | | |

| 005 | Web Motor Interval: Thick 1 | [3 to | 130 / 11.2 / 0.1 sec] |
|--|--|-------------------------------|--------------------------------|
| 003 | Adjusts the interval for web motor rotation (thick 1). | | |
| 006 | Web Motor Interval: Thick 2 | [3 to | 130 / 16.8 / 0.1 sec] |
| 008 | Adjusts the interval for web motor rote | ation (| thick 2). |
| | Paper Interval Time | [0 to 10 / 5 / 1 sec] | |
| 007 | Adjusts the threshold for paper feeding. When the time between trailing edge detection and leading edge detection is within the value of this setting, the machine determines that the paper is still being fed. | | |
| 008 | Web Motor Setting: Web End | [0 to 60 / 27 / 1 sec] | |
| 008 | Adjusts the motor rotation time after the web end. | | |
| 009 | Web Motor Rotation: Power On |] | [0 to 10 / 2 / 1 times] |
| 009 | Adjusts the number of web motor rotations at the re-load state. | | |
| 010 | Web Motor Interval: Pre-idle |] | [0 to 30 / 5 / 1 sec] |
| Adjusts the motor waiting time after the fusing motor idling | | ng motor idling. | |
| 0.3.3 | Web Motor Rotation: Pre-idle | [| [0 to 10 / 2 / 1 times] |
| 011 | Adjusts the number of web motor rotations at the fusing idling state. | | |

| 1903 | Cleaning Web Setting | |
|------|--|-------------------------------------|
| 001 | Total Paper Counter | [0 to 999999999 / 0 / 1 sec] |
| 001 | Displays the total paper feeding time. | |
| 000 | Total Web Motor Drive Time | [0 to 999999999 / 0 / 1 sec] |
| 002 | Displays the total time of web motor rotation. | |

| 1907 | Paper Feed Timing Adj. (DFU) | |
|------|------------------------------|---------------------------------|
| 001 | Feed Solenoid ON: Plain | [104-40/0/25] |
| 002 | Feed Solenoid ON: Thick | [-10 to 40 / 0 / 2.5 mm] |

| 1908 | Paper Bank Feed Timing Adj (DFU) | |
|------|----------------------------------|-------------------------------|
| 001 | Feed Clutch ON: Plain | [10, 10 / 0 / 1] |
| 002 | Feed Clutch ON: Thick | [-10 to 10 / 0 / 1 mm] |

| | CPM Down Setting |
|------|--|
| 1916 | When this machine gets a sequence of coping/printing jobs, the machine uses CPM down mode to prevent the fusing temperature from becoming too low. |

| 001 | Temp.: Plain | |
|-----|-------------------------------|---|
| 002 | Temp.: M-Thick | Adjusts the thresholds for each environmental condition (between Low and Medium). |
| 003 | Temp.: Thick 1 | |
| 004 | Temp.: Thick 2 | [10 to 23 / 17 / 1 deg] |
| 005 | Temp.: Thin | |
| 006 | ON/OFF: Low: Plain | |
| 007 | ON/OFF: Low: M-Thick | |
| 008 | ON/OFF: Low: Thick 1 | |
| 009 | ON/OFF: Low: Thick 2 | Turns on or off the CPM down setting for |
| 010 | ON/OFF: Low: Thin | each paper type and ambient temperature. |
| 011 | ON/OFF: Medium: Plain | [0 to 1 / 0 / 1] |
| 012 | ON/OFF: Medium: M-Thick | 0= Off, 1= On |
| 013 | ON/OFF: Medium:: Thick 1 | |
| 014 | ON/OFF: Medium: Thick 2 | |
| 015 | ON/OFF: Medium: Thin | |
| 016 | Waiting Time: Low: Plain | |
| 017 | Waiting Time: Low: M-Thick | |
| 018 | Waiting Time: Low: Thick 1 | |
| 019 | Waiting Time: Low: Thick 2 | Adjusts the threshold time to enter the CPM down mode. |
| 020 | Waiting Time: Low: Thin | [0 to 180 / 60 / 1 sec] |
| 021 | Waiting Time: Medium: Plain | The machine determines whether the CPM |
| 022 | Waiting Time: Medium: M-Thick | down mode is activated or not after the time specified with these SPs has passed. |
| 023 | Waiting Time: Medium: Thick 1 | |
| 024 | Waiting Time: Medium: Thick 2 | |
| 025 | Waiting Time: Medium: Thin | |

| 026 | Temp.: Low: Plain | |
|-----|------------------------|---|
| 027 | Temp.: Low: Plain | |
| 028 | Temp.: Low: Thick 1 | |
| 029 | Temp.: Low: Thick 2 | Adjusts the threshold temperature of the fusing unit to enter the CPM down mode. |
| 030 | Temp.: Low: Thin | [100 to 200 / 120 / 1 deg] |
| 031 | Temp.: Medium: Plain | If the temperature of the fusing unit is less than the temperature specified with these |
| 032 | Temp.: Medium: M-Thick | SPs, the machine changes the CPM |
| 033 | Temp.: Medium: Thick 1 | (adjustable with SP1916-36 to -45). |
| 034 | Temp.: Medium: Thick 2 | |
| 035 | Temp.: Medium: Thin | |
| 036 | CPM: Low: Plain | Adjusts the CPM in the CPM down mode. C1b/C1.5b: [20 to 35 / 35 / 5 cpm] C1c/C1.5c: [20 to 45 / 45 / 5 cpm] |
| 037 | CPM: Low: M-Thick | Adjusts the CPM in the CPM down mode. C1b/C1.5b: [20 to 35 / 35 / 5 cpm] C1c/C1.5c: [20 to 45 / 45 / 5 cpm] |
| 038 | CPM: Low: Thick 1 | Adjusts the CPM in the CPM down mode. C1b/C1.5b: [5 to 15 / 15 / 5 cpm] C1c/C1.5c: [5 to 25 / 25 / 5 cpm] |
| 039 | CPM: Low: Thick 2 | Adjusts the CPM in the CPM down mode. [5 to 15 / 15 / 5 cpm] |
| 040 | CPM: Low: Thin | Adjusts the CPM in the CPM down mode. |
| 041 | CPM: Medium: Plain | C1b/C1.5b: [20 to 35 / 35 / 5 cpm] |
| 042 | CPM: Medium: M-Thick | C1c/C1.5c: [30 to 45 / 45 / 5 cpm] |
| 043 | CPM: Medium: Thick 1 | Adjusts the CPM in the CPM down mode. C1b/C1.5b: [5 to 15 / 15 / 5 cpm] C1c/C1.5c: [5 to 25 / 25 / 5 cpm] |

| 044 | CPM: Medium: Thick 2 | Adjusts the CPM in the CPM down mode. [5 to 15 / 15 / 5 cpm] |
|-----|----------------------|---|
| 045 | CPM: Medium: Thin | Adjusts the CPM in the CPM down mode. C1b/C1.5b: [20 to 35 / 35 / 5 cpm] |
| 043 | CFM. Medium. Thin | C1c/C1.5c: [30 to 45 / 45 / 5 cpm] |

| 1930 | OnOff Time Adjust | |
|------|--|----------------------------------|
| | On Time Adjust | [0 to 100 / 40 / 10 msec] |
| 001 | Adjusts the Off-On interval of the transfer belt contact motor. ("On" means that the transfer belt is in contact with the drum.) | |
| | Off Time Adjust | [0 to 100 / 20 / 10 msec] |
| 002 | Adjusts the On-Off interval of the transfer belt contact motor. ("Off" means that the transfer belt is away from the drum.) | |

| 1950 | Tray Lock at Jam | [0 or 1 / 0 / 1] 0= OFF, 1= ON |
|------|------------------|---------------------------------|
| 1930 | Not used | |

System SP Tables-2

SP2-xxx: Drum

| 2001* | Charge Bias | |
|-------|--|-------------------------------------|
| 001 | Setting (Copying) | [1000 to 2000 / 1500 / 10 V] |
| 001 | Adjusts the voltage applied to the charge roller for copying. | |
| | Setting (P Pattern) | [0 to 700 / 250 / 10 V] |
| 002 | Adjusts the voltage applied to the charge roller when making the VSDP ID sensor pattern (for charge roller voltage correction). The actual charge roller voltage is this value plus the value of SP2001-1. | |

| 2005* | Bias Control | |
|-------|--|---------------------------------------|
| | Bias Correction 1 | [0.1 to 1 / 0.85 / 0.05 step] |
| 001 | Adjusts the lower threshold value for the charge roller correction. When the value of VSDP/VSG is greater than this value, the charge roller voltage increases by 30 V (e.g., from -500 to -530). | |
| | Bias Correction 2 [0.1 to 1 / 0.9 / 0.05 step] | |
| 002 | Adjusts the upper threshold value for the charge roller correction. When the value of VSDP/VSG is greater than this value, the charge roller voltage decreases by 30 V (absolute value). | |
| | Bias Adjustment 1 | [1000 to 2000 / 1500 / 10 vol] |
| 003 | Adjusts the lower limit value for charge roller voltage correction. | |
| 004 | Bias Adjustment 2 | [1000 to 2000 / 2000 / 10 vol] |
| 004 | Adjusts the upper limit value for charge roller voltage correction. | |
| 005 | Bias Adjustment 3 | [0 to 100 / 30 / 10 vol] |
| 003 | Adjusts the correction voltage adjustment step size. | |

| | Magnification Adjustment | |
|--|--------------------------|---|
| 2102* | Main Scan | [-2 to 2 / 0 / 0.1 %] |
| Adjusts the magnification in the main scan direction for copy mode and p | | direction for copy mode and printer mode. |

| | Erase Margin Adjustment | |
|---|---|----------------------------------|
| | Adjusts the erase margin by deleting image data at the margins. | |
| 2103* L Size: 297.1 mm or more (length) | | |
| | M Size: 216.1 to 297 mm (length) | |
| | S Size: 216 mm or less (length) | |
| 001 | Leading Edge | [0 to 9 / 3 / 0.1 mm] |
| 002 | Trailing Edge | [0 10 7 / 3 / 0.1111111] |
| 003 | Left | [0 to 9 / 2 / 0.1 mm] |
| 004 | Right | [01077270.111111] |
| 005 | Duplex Trail.: L Size: Plain | [0 to 4 / 1 / 0.1 mm] |
| 006 | Duplex Trail.: M Size: Plain | [0 to 4 / 0.8 / 0.1 mm] |
| 007 | Duplex Trail.: S Size: Plain | [0 to 4 / 0.6 / 0.1 mm] |
| 008 | Duplex Left: Plain | [0 to 1.5 / 0.3 / 0.1 mm] |
| 009 | Duplex Right: Plain | [0.10.1.3 / 0.3 / 0.111111] |
| 010 | Duplex Trail.: L Size: Thick | [0 to 4 / 0.8 / 0.1 mm] |
| 011 | Duplex Trail.: M Size: Thick | [0 to 4 / 0.6 / 0.1 mm] |
| 012 | Duplex Trail.: S Size: Thick | [0 to 4 / 0.4 / 0.1 mm] |
| 013 | Duplex Left: Thick | [0 to 1.5 / 0.1 / 0.1 mm] |
| 014 | Duplex Right: Thick | [0 10 1.0 / 0.1 / 0.111111] |

| | LD Power Adjustment(DFU) | |
|-------|--|--|
| 2105* | Adjusts the LD power for each mode. | |
| | Each LD power setting is decided by the process control. | |

| 001 | LD1: Copy | [50 to 70 / 24 (COL) 5 (COL) /1] |
|-----|------------------|--|
| 002 | LD2: Copy | [-50 to 79 / -24 (C2b), 5 (C2c) /1] |
| 003 | LD1: Printer/Fax | [50 to 70 / 44 (COL) 25 (CO.) / 1] |
| 004 | LD2: Printer/Fax | [-50 to 79 / -44 (C2b), -25 (C2c) /1] |

| 2106* | POL REV TIME (Polygon motor rotation time) | |
|-------|---|-------------------------------|
| | PRE TIME | [0 to 60 / 10 / 1 sec] |
| 001 | Adjusts the time of polygon motor rotation before a job. If this is set to "0", this SP is not activated. | |
| | POST TIME | [0 to 60 / 0 / 1 sec] |
| 002 | Adjusts the time of the polygon motor rotation after a job. If this is set to "O", the polygon motor never switches off in standby mode. However, if the machine enters the energy saver mode, the polygon motor will ignore the zero setting and switch itself off. | |

| 2109 | Test Pattern | | |
|------|--|--|--|
| 001 | Pattern Selection | [0 to 24 / 0 / 1] Test pattern of the GAVD | |
| | 0: None 1: Vertical Line (1 dot) 2: Vertical Line (2 dot) 3: Horizontal Line (1 dot) 4: Horizontal Line (2 dot) 5: Grid Vertical Line 6: Grid Horizontal Line 7: Grid pattern small 8: Grid Pattern Large 9: Argyle Pattern Small 10: Argyle Pattern Large 11: Independent pattern 12: Independent Pattern | 16: Hound's Tooth Check (Horizontal) 17: Black Band (Horizontal) 18: Black band (Vertical) 19: Checker Flag Pattern 20: Grayscale (Vertical Margin) 21: Grayscale (Horizontal Margin) 22: Two Beam Density Pattern 23: Full Dot Pattern 24:All white Pattern | |

| | | [0 to 15 / 15 / 1] |
|-----|---------|--|
| 002 | Density | Set the density of the test pattern which is output in SP2109-001. This SP is not used for the Grayscale patterns. |

| 2201* | Development Bias Adjustment | |
|-------|---|----------------------------------|
| | Development Bias | [200 to 700 / 560 / 10V] |
| 001 | Adjusts the development bias for copying. Use as a temporary measure to correct faint copies from an aging drum. | |
| 000 | ID Sensor Pattern | [200 to 700 / 400 / 10V] |
| 002 | Adjusts the development bias for the ID sensor pattern for VSP | |

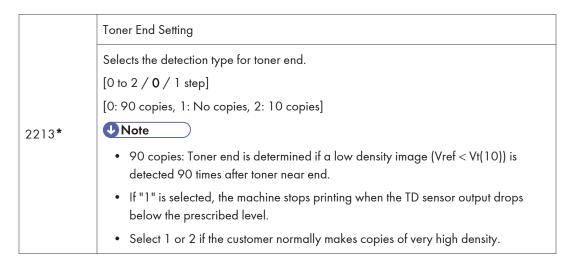
| | Forced Toner Supply |
|------|--|
| 2207 | Forces the toner bottle to supply toner at 1-second intervals for up to 30 seconds. To start, press [EXECUTE]. |

| | Toner Supply Mode | [0 : Sensor, 1: pixel] |
|-------|-------------------|--|
| 2208* | ' | ? should be set to its default value. Use image pixel ary measure if the ID or TD sensor is defective. |
| | | |

| | 2209* | Toner Supply Rate | |
|--|-------|--|-------------------------------------|
| | 001 | Toner Rate | [10 to 800 / 60 mg/s / 5 mg] |
| | | Sets the amount of toner supplied every second by the toner supply motor. The length of time the motor remains on is determined by the data read by the TD sensor and ID sensor. | |
| | | Increasing this value reduces the toner supply clutch on time. Use a lower value if the user tends to make lots of copies that have a high proportion of black. | |

| 002 | Correction Data | [25 to 300 / 300 / 25] |
|-----|---|--------------------------------|
| | Displays the toner supply correction coefficient (K). It can also be used to adjust K, but the value is changed again when VT is measured for the next copy. | |
| | The toner supply rate depends on the amount of toner in the toner bottle. This change is corrected using this coefficient. This SP can be used to check the toner supply condition. The lower the value of K, the lower the toner density | |

| 2210* | P Pattern Cycle | |
|---|---|-----------------------------------|
| | Sets the interval between ID sensor pattern prints. | |
| | Job Page Count | [0 to 200 / 10 / 1 sheet] |
| Sets the interval between ID sensor pattern printing. For users that do no copies daily, set a smaller interval to compensate for the effects of seaso weather changes. | | , , , |
| | Forced Page Count | [2 to 999 / 100 / 1 sheet] |
| 002* | Sets the interval between ID sensor pattern printing. | |
| | Forces creation of the ID sensor pattern to prevent low density copies for customers who use the copier for long copy jobs. | |



| | Vref Setting |
|---------------------|---|
| | Adjusts the TD sensor reference voltage (Vref). Change this value after replacing the development unit with another development unit that contains toner. |
| [1 to 5 / 4 / 0.01] | |
| 2220* | Check the value of SP2-220 in both the machine containing the test unit and the machine that you are going to move it to. |
| | Install the test development unit, and then input the VREF for this unit into SP2-220. |
| | After the test, put back the old development unit, and change SP2-220 back to the original value. |

| | | Reverse Interval Drum, Transfer | [0 to 2000 / 0 / 1 sheets] |
|--|-------|--|---|
| | 2221* | Adjusts the threshold for the reverse rotation motors. This helps the drum and transfer be will interrupt a multiple printing job. | on of the drum and development/transfer elt cleaning operations. This reverse rotation |

| 2223* | Vt Display | | |
|-------|--|----------------------------------|--|
| 001 | Current | [0 to 5 / 4 / 0.01] | |
| 001 | Displays the TD sensor output voltage for the immediately previous copy. | | |
| | Average 10 copies | [0 to 5 / 4 / 0.01] | |
| 002 | Displays the average of the most recent TD sensor outputs (from the previous 10 copies). | | |
| 003 | Rate of Change | [-10000 to 10000 / 0 / 1] | |
| 003 | Displays the rate of change in the TD sensor output. | | |
| 004 | GAIN | [0 to 255 / 0 / 1] | |
| 004 | Displays the GAIN value used to calculate the on time for the toner supply motor. | | |
| 005 | Image Pixel Count | [0 to 255 / 0 / 1] | |
| 005 | Displays the image pixel count. | | |

| | | Developer Lot |
|-----|-----|---|
| 222 | 28* | Displays the lot number of the developer. (The lot number is embossed on the top edge of the developer pack.) |

| | Transfer Current Adjustment | |
|-------|---|--|
| 2301* | * If the transfer current of image area is set highly than normal, the print image is eccome out. If the leading transfer current is set as same, the black line is come out of exfoliation leave. | |
| 001 | Image Area: 1st Side | C2b: [10 to 100 / 35 / 1 µA] C2c: [10 to 100 / 45 / 1 µA] |
| | Adjusts the transfer current for pr | inting the first side of the paper |
| 002 | Image Area: 2nd Side | C2b: [10 to 100 / 35 / 1 µA] C2c: [10 to 100 / 40 / 1 µA] |
| | Adjusts the transfer current for printing the second side of the paper | |
| | Leading Edge: 1st Side | [10 to 100 / 20 / 1 µA] |
| 003 | Adjusts the transfer current for copying at leading edge the first side of the paper. Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| | Leading Edge: 2nd Side | [10 to 100 / 20 / 1 µA] |
| 004 | Adjusts the transfer current for copying at leading edge the second side of the paper. Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| 005 | By-pass: Image Area | C2b: [10 to 100 / 35 / 1 µA] C2c: [10 to 100 / 45 / 1 µA] |
| 003 | Adjusts the transfer current for copying from the by-pass tray. If the user normally feeds thicker paper from the bypass tray, use a higher setting. | |

| 006 | By-pass: Leading Edge | [10 to 100 / 20 / 1 µA] |
|-----|---|---------------------------------|
| | Adjusts the transfer current for copying at the leading edge of paper fed from the bypass tray. | |
| | Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| 008 | No Image Area (SSP) | [10 to 100 / 15 / 1 µA] |
| | Adjusts the transfer current for copying. | |

| 2309* | Current: Paper Size Correction (SSP) | |
|-------|---|-----------------------------------|
| 001 | Paper Lower Width (a) | [1 to 150 / 150 / 1 mm] |
| | Adjusts the lower paper width threshold for the transfer current, charge voltage, and development bias corrections. | |
| | Use this SP when an image problem (e.g., insufficient toner transfer) occurs with a small width paper. If the paper width is smaller than this value, the transfer current will be multiplied by the factor in SP2-309-3 (paper tray) or SP2-309-5 (by-pass). | |
| | Paper Upper Width (a) | [151 to 296 / 216 / 1 mm] |
| 002 | Adjusts the upper paper width threshold for the transfer current, charge voltage, and development bias corrections. As for SP2-309-1, but the factors are in SP2-309-4 (paper tray) and SP2-309-6 (bypass). | |
| | Paper Tray: Plain (alpha) | [1 to 3 / 1 / 0.1] |
| 003 | Adjusts the transfer current correction coefficient used if the paper width is less than the setting of SP2-309-1. | |
| | Paper Tray: Plain (beta) | [1 to 3 / 1 / 0.1] |
| 004 | Adjusts the transfer current correction coefficient used if the paper width is less than the setting of SP2-309-2. | |
| | By-pass: Plain (gamma) | [1 to 3 / 1.1 / 0.1] |
| 005 | Adjusts the transfer current correction coefficient used if the paper width is less than the setting of SP2-309-1. | |

| | By-pass: Plain (delta) | [1 to 3 / 1.1 / 0.1] |
|-----|--|-----------------------|
| 006 | Adjusts the transfer current correction coefficient used if the paper width is less than the setting of SP2-309-2. | |
| 007 | Paper Tray: Thick 1 (alpha) | [1 to 3 / 1 / 0.1] |
| 008 | Paper Tray: Thick 1 (beta) | [1103/1/0.1] |
| 009 | By-pass: Thick 1 (gamma) | [] 2 / 1 1 / 0 1] |
| 010 | By-pass: Thick 1 (delta) | [1 to 3 / 1.1 / 0.1] |
| 011 | Paper Tray: Thick 2 (alpha) | [] - 2 / 1 1 / 0 1] |
| 012 | Paper Tray: Thick 2 (beta) | [1 to 3 / 1.1 / 0.1] |
| 013 | By-pass: Thick 2 (gamma) | [] 2 / 1 5 / 0 1] |
| 014 | By-pass: Thick 2 (delta) | [1 to 3 / 1.5 / 0.1] |
| 015 | Paper Tray: M-Thick (alpha) | [] +- 2 /1 /0] |
| 016 | Paper Tray: M-Thick (beta) | [1 to 3 / 1 / 0.1] |
| 017 | By-pass: M-Thick (gamma) | [] +- 2 / 1 1 / 0 1] |
| 018 | By-pass: M-Thick (delta) | [1 to 3 / 1.1 / 0.1] |
| 019 | Paper Tray: Thin (alpha) | [] +- 2 /1 /0] |
| 020 | Paper Tray: Thin (beta) | [1 to 3 / 1 / 0.1] |
| 021 | By-pass: Thin (gamma) | [] +- 2 / 1 1 / 0 1] |
| 022 | By-pass: Thin (delta) | [1 to 3 / 1.1 / 0.1] |
| 023 | Paper Tray: Special 1 (alpha) | [] + 2 /1 /0 1] |
| 024 | Paper Tray: Special 1 (beta) | [1 to 3 / 1 / 0.1] |
| 025 | By-pass: Special 1 (gamma) | [] - 2 / 1 1 / 0 1] |
| 026 | By-pass: Special 1 (delta) | [1 to 3 / 1.1 / 0.1] |
| 027 | Paper Tray: Special 2 (alpha) | [] +- 2 /1 /0] |
| 028 | Paper Tray: Special 2 (beta) | [1 to 3 / 1 / 0.1] |

| 029 | By-pass: Special 2 (gamma) | [1 to 3 / 1.1 / 0.1] |
|-----|-------------------------------|------------------------------|
| 030 | By-pass: Special 2 (delta) | |
| 031 | Paper Tray: Special 3 (alpha) | [14-2/1/01] |
| 032 | Paper Tray: Special 3 (beta) | [1 to 3 / 1 / 0.1] |
| 033 | By-pass: Special 3 (gamma) | [1 to 3 / 1.1 / 0.1] |
| 034 | By-pass: Special 3 (delta) | |

| | Current: Paper Type Correction (SSP) | |
|--|--|--|
| 2310* | Adjust the transfer current for each paper type. If the transfer current of image area is set highly than normal, the print image is easily come out. If the leading transfer current is set as same, the black line is come out due to exfoliation leave. | |
| 001 | Image 1st Side: Thick 1 | [10 to 100 / 18 / 1 µA] |
| 001 | Adjusts the transfer current for printing the | first side of the paper (Thick 1). |
| | Leading Edge 1st Side: Thick 1 | [10 to 100 / 15 / 1 µA] |
| Adjusts the transfer current for copying at leading edge the first side of the part of the paper from the drum properly in high high temperature conditions (Thick 1). | | |
| 003 | Image 2nd Side: Thick 1 | [10 to 100 / 18 / 1 µA] |
| 003 | Adjusts the transfer current for printing the second side of the paper (Thick 1). | |
| | Leading Edge 2nd Side: Thick 1 | [10 to 100 / 15 / 1 µA] |
| Adjusts the transfer current for copying at leading edge the second side of (Thick 1). Increase the current to separate the paper from the drum proper humidity and high temperature conditions. | | the paper from the drum properly in high |
| 005 | Image: Thick 2 | [10 to 100 / 18 / 1 µA] |
| 005 | Adjusts the transfer current for printing (Thick 2). | |
| | Leading Edge: Thick 2 | [10 to 100 / 15 / 1 µA] |
| 006 | Adjusts the transfer current for copying at the leading edge of paper (Thick 2). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |

| 007 | Image: OHP | [10 to 100 / 20 / 1 µA] |
|---|--|--|
| 007 | Adjusts the transfer current for printing (O | HP). |
| | Leading Edge: OHP | [10 to 100 / 20 / 1 µA] |
| Adjusts the transfer current for copying at the leading edge of paper (OHP). the current to separate the paper from the drum properly in high humidity an temperature conditions. | | |
| 000 | Image: Envelope | [10 to 100 / 20 / 1 µA] |
| 009 | Adjusts the transfer current for printing (Er | nvelope). |
| | Leading Edge: Envelope | [10 to 100 / 20 / 1 µA] |
| 010 | Adjusts the transfer current for copying at the leading edge of paper (Envelope). Increase the current to separate the paper from the drum properly in high humidity high temperature conditions. | |
| | Image 1st Side: M-Thick | C2b: [10 to 100 / 24 / 1 µA] |
| 011 | Image 1st side. Wi-Trick | C2c: [10 to 100 / 32 / 1 µA] |
| | Adjusts the transfer current for printing the first side of the paper (M-Thick). | |
| | Leading Edge 1st Side: M-Thick | [10 to 100 / 20 / 1 µA] |
| 012 | Adjusts the transfer current for copying at leading edge the first side of the paper Thick). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| | Image 2nd Side, M. Thick | C2b: [10 to 100 / 24 / 1µA] |
| 013 | Image 2nd Side: M-Thick | C2c: [10 to 100 / 32 / 1 µA] |
| | Adjusts the transfer current for printing the second side of the paper (M-Thick). | |
| | Leading Edge 2nd Side: M-Thick | [10 to 100 / 20 / 1 µA] |
| 014 | Adjusts the transfer current for copying at leading edge the second side of the paper (M-Thick). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| 015 | Image 1st Side: Special 1 | C2b: [10 to 100 / 35 / 1 µA] C2c: [10 to 100 / 45 / 1 µA] |
| | Adjusts the transfer current for printing the | first side of the paper (Special 1). |
| | | |

| | Leading Edge 1st Side: Special 1 | [10 to 100 / 20 / 1 µA] | |
|-----|--|-------------------------------------|--|
| 016 | Adjusts the transfer current for copying at leading edge the first side of the paper (Special 1). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | | |
| | Image 2nd Side: Special 1 | C2b: [10 to 100 / 35 / 1µA] | |
| 017 | Adjusts the transfer current for printing the | C2c: [10 to 100 / 40 / 1 µA] | |
| | Adjusts the transfer current for printing the | | |
| | Leading Edge 2nd Side: Special 1 | [10 to 100 / 20 / 1 µA] | |
| 018 | Adjusts the transfer current for copying at leading edge the second side of the paper (Special 1). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | | |
| | | C2b: [10 to 100 / 24 / 1 µA] | |
| 019 | Image 1st Side: Special 2 | C2c: [10 to 100 / 32 / 1 µA] | |
| | Adjusts the transfer current for printing the first side of the paper (Special 2). | | |
| | Leading Edge 1st Side: Special 2 | C2b: [10 to 100 / 24 / 1 µA] | |
| | | C2c: [10 to 100 / 32 / 1µA] | |
| 020 | Adjusts the transfer current for copying at leading edge the first side of the paper (Special 2). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | | |
| | Image 2nd Side: Special 2 | C2b: [10 to 100 / 24 / 1 µA] | |
| 021 | | C2c: [10 to 100 / 32 / 1 µA] | |
| | Adjusts the transfer current for printing the second side of the paper (Special 2). | | |
| | | C2b: [10 to 100 / 24 / 1 µA] | |
| 022 | Leading Edge 2nd Side: Special 2 | C2c: [10 to 100 / 32 / 1 µA] | |
| | Adjusts the transfer current for copying at leading edge the second side of the paper (Special 2). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | | |
| | Image 1st Side: Special 3 | C2b: [10 to 100 / 24 / 1 µA] | |
| 023 | | C2c: [10 to 100 / 32 / 1 µA] | |
| | Adjusts the transfer current for printing the first side of the paper (Special 3). | | |
| 1 | 1 | | |

| 024 | Leading Edge 1st Side: Special 3 | C2b: [10 to 100 / 24 / 1 µA] C2c: [10 to 100 / 32 / 1 µA] |
|-----|--|--|
| | Adjusts the transfer current for copying at leading edge the first side of the paper (Special 3). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |
| 025 | Image 2nd Side: Special 3 | C2b: [10 to 100 / 24 / 1 µA] C2c: [10 to 100 / 32 / 1 µA] |
| | Adjusts the transfer current for printing the second side of the paper (Special 3). | |
| | Leading Edge 2nd Side: Special 3 | C2b: [10 to 100 / 24 / 1 µA] C2c: [10 to 100 / 32 / 1 µA] |
| 026 | Adjusts the transfer current for copying at leading edge the second side of the paper (Special 3). Increase the current to separate the paper from the drum properly in high humidity and high temperature conditions. | |

| | PTL Control (SSP) | |
|-------|---|-------------------------|
| 2602* | Use this SP when an image problem occurs caused by the pick-off paws. This SP is for the printing which target line speed is 230 or 180 mm/sec. Set the PTL control (SP2603-001) to "1: ON" after installing the PTL. If the PTL control is set to ON, the black line is come out due to exfoliation leave. Set SP2911-002 (or 005, 008, 011) to "20" when using the PTL. | |
| 001 | 1 st Side: OFF/ON | [0 to 1 / 0 / 1] |
| 001 | Sets the PTL control setting for printing the first side of the paper. | |
| | 1 st Side: OFF Timing | [-10 to 10 / 2 / 1] |
| 002 | Sets the PTL control time for printing the first side of the paper when SP2602-001 is set to "1". | |
| 003 | 2nd Side: OFF/ON | [0 to 1 / 0 / 1] |
| 003 | Sets the PTL control setting for printing the second side of the paper. | |
| 004 | 2nd Side: OFF Timing | [-10 to 10 / 2 / 1] |
| | Sets the PTL control time for printing the second side of the paper when SP2602-003 is set to "1". | |

| | PTL Control: 154 mm/s (SSP) | |
|-------|--|---|
| 2603* | the printing which target line speed is 154 to "1: ON" after installing the PTL. If the P | Irs caused by the pick-off paws. This SP is for 4 mm/sec. Set the PTL control (SP2603-001) TL control is set to ON, the black line is come .002 (or 005, 008, 011) to "20" when using |
| 001 | 1 st Side: OFF/ON | [0 to 1 / 0 / 1] |
| 001 | Sets the PTL control setting for printing the first side of the paper. | |
| | 1 st Side: OFF Timing | [-10 to 10 / 2 / 1] |
| 002 | Sets the PTL control time for printing the first side of the paper when SP2602-001 is set to "1". | |
| 003 | 2nd Side: OFF/ON | [0 to 1 / 0 / 1] |
| 003 | Sets the PTL control setting for printing the second side of the paper. | |
| | 2nd Side: OFF Timing | [-10 to 10 / 2 / 1] |
| 004 | Sets the PTL control time for printing the second side of the paper when SP2602-003 is set to "1". | |

| | PTL Control: 90 mm/s (SSP) | |
|--|---|--|
| Use this SP when an image problem occurs caused by the pick-off paws. Thi the printing which target line speed is 90 mm/sec. Set the PTL control (SP260 to "1: ON" after installing the PTL. If the PTL control is set to ON, the black line out due to exfoliation leave. Set SP2911-002 (or 005, 008, 011) to "20" with PTL. | | mm/sec. Set the PTL control (SP2603-001) TL control is set to ON, the black line is come |
| 001 | 1 st Side: OFF/ON | [0 to 1 / 0 / 1] |
| 001 | Sets the PTL control setting for printing the first side of the paper. | |
| | 1 st Side: OFF Timing | [-10 to 10 / 2 / 1] |
| 002 | Sets the PTL control time for printing the first side of the paper when SP2602-001 is set to "1". | |
| 003 | 2nd Side: OFF/ON | [0 to 1 / 0 / 1] |
| | Sets the PTL control setting for printing the second side of the paper. | |

| | 2nd Side: OFF Timing | [-10 to 10 / 2 / 1] |
|-----|--|---|
| 004 | Sets the PTL control time for printing the set to "1". | cond side of the paper when SP2602-003 is |

| | TD Sensor Initial Setting | Initialization |
|-------|---|---|
| 2801* | number of the developer. (The lot n package.) This SP mode controls th | g and allows the service technician to enter the lot number is embossed on the edge of the developer e voltage applied to the TD sensor to make the TD xecute" to start. After finishing this, the TD sensor |
| | Use this mode only after installing the machine, changing the TD sensor, or adding new developer. | |

| 2802* | TD Sensor Manual Setting | |
|-------|---|-----------------------------------|
| 2002 | Allows you to adjust the TD sensor output manually for the following. | |
| | VTS | [1 to 5 / 4.78 / 0.01vol] |
| 001 | Adjusts the TD sensor output (VT). Change this value after replacing the development unit with another one that already contains toner. For example, when using a development unit from another machine for test purposes. To adjust VT, use a similar procedure as for SP2-220. | |
| 002 | VTMAX | [1 to 5 / 4.78 / 0.01vol] |
| 002 | Adjusts the maximum value for SP2802 1. | |
| 003 | VTMIN | [1 to 5 / 1 / 0.01vol] |
| 003 | Adjusts the minimum value for SP2802 1. | |

| | Process Setting |
|------|---|
| 2805 | Performs the developer initialization. Press "Execute" to start. This SP should be performed after doing SP2801 at installation and after replacing the drum. |

| 2810 | 2010 | Grayscale Setting | |
|------|------|--|--|
| | | Initializes the LD power setting. This SP should be done after replacing the drum. | |

| 2812* | Drum Reverse Rotation (SSP) | |
|-------|---|---------------------------|
| 001 | Reverse time | [0 to 9 / 4 / 1] |
| 001 | Sets the reverse time of the drum motor after the end of a job. | |
| 002 | Interval time | [0 to 19 / 9 / 1] |
| | Sets the waiting time of the drum motor reverse after the end of a job. | |

| 2911* | Transfer Current On/Off Timing (SSP) | | |
|-------|---|--|--|
| 001 | La (On Timing) | [-20 to 20 / 0 / 1 mm] | |
| 001 | Adjust the timing to turn on the transfer current for the leading edge. | | |
| 002 | Lb (Switch Timing) | [0 to 30 / 10 / 1 mm] | |
| 002 | Adjust the timing to switch transfer curre | ent from the leading edge to the image area. | |
| 003 | Lc (Off Timing) | [-20 to 20 / -5 / 1 mm] | |
| 003 | Adjust the timing to turn off the transfer | current for the image area. | |
| 004 | La (On Timing): Special 1 | [-20 to 20 / 0 / 1 mm] | |
| 004 | Adjust the timing to turn on the transfer current for the leading edge (Special 1). | | |
| | Lb (Switch Timing): Special 1 | [0 to 30 / 1 0 / 1 mm] | |
| 005 | Adjust the timing to switch transfer current from the leading edge to the image area (Special 1). | | |
| 006 | Lc (Off Timing): Special 1 | [-20 to 20 / -5 / 1 mm] | |
| 008 | Adjust the timing to turn off the transfer current for the image area (Special 1). | | |
| 007 | La (On Timing): Special 2 | [-20 to 20 / 0 / 1 mm] | |
| 007 | Adjust the timing to turn on the transfer current for the leading edge (Special 2). | | |
| | Lb (Switch Timing): Special 2 | [0 to 30 / 10 / 1 mm] | |
| 008 | Adjust the timing to switch transfer current from the leading edge to the image area (Special 2). | | |
| 009 | Lc (Off Timing): Special 2 | [-20 to 20 / -5 / 1 mm] | |
| 009 | Adjust the timing to turn off the transfer | current for the image area (Special 2). | |

| 010 | La (On Timing): Special 3 | [-20 to 20 / 0 / 1 mm] |
|-----|---|--------------------------------|
| 010 | Adjust the timing to turn on the transfer current for the leading edge (Special 2). | |
| | Lb (Switch Timing): Special 3 | [0 to 30 / 10 / 1 mm] |
| 011 | Adjust the timing to switch transfer current from the leading edge to the image area (Special 2). | |
| 010 | Lc (Off Timing): Special 3 | [-20 to 20 / -5 / 1 mm] |
| 012 | Adjust the timing to turn off the transfer current for the image area (Special 2). | |

| 2912* | Transfer Reverse Rotation | |
|-------|---|-------------------|
| 002 | Interval | [0 to 10 / 3 / 1] |
| | Sets the reverse time of the transfer/development motor after the end of a job. | |

| 2914* | Paper Setting | |
|-------|---|--|
| | C-alpha | [0 to 400 / 150 / 10vol] |
| 001 | Adjusts the charge roller voltage used when paper with a small width is fed from the by-pass tray. The paper width below which the correction starts depends on the value of SP2-309-1. | |
| | Use this SP when an image problem (such as white spots at the center of black dots or breaks in thin black lines) occurs when paper with a small width is fed from the by-pass feed tray. | |
| | C-beta | [0 to 400 / 0 / 10vol] |
| 002 | Adjusts the charge roller voltage used when paper with a small width is fed from the by-pass tray. The paper width below which the correction starts depends on the value of SP2-309-2. | |
| | Use this SP when an image problem (see 2-914-1) occurs when paper with a small width is fed from the by-pass feed tray. | |
| | B-gamma | [0 to 300 / 200 / 10vol] |
| 003 | Adjusts the development bias used when paper with a small width is fed from the bypass tray. The paper width below which the correction starts depends on the value of SP2-309-1. | |
| | Use this SP when an image pro width is fed from the by-pass fe | oblem (see 2-914-1) occurs when paper with a small eed tray. |

| | 004 | B-delta | [0 to 300 / 50 / 10vol] |
|--|-----|---|---------------------------------|
| | | Adjusts the development bias used when paper with a small width is fed from the bypass tray. The paper width below which the correction starts depends on the value of SP2-309-2. | |
| | | Use this SP when an image problem (see 2-914-1) occurs when paper with a small width is fed from the by-pass feed tray. | |

| 2940* | Toner consump. (SSP) | |
|---|--|---|
| | [0: OFF 1: ON] | [0 to 1 / 1 / 1] |
| OO1 If this SP is set to ON, toner bottle consume Setting) is executed. This prevents the image | | ttle consumes toner when the SP2801 (TD Sensor Initial ints the image offset. |
| | Setting | [0 to 1 / 0.06 / 0.01] |
| 002 | Specifies the threshold value for the toner consumption mode if SP2940-001 is set to ON. | |

| | 2960* | Toner Overflow Sensor | [0 = OFF, 1= ON] |
|--|-------|--|---|
| | | Selects whether or not the toner overflo | ects whether or not the toner overflow sensor is activated. |

| Trans Cleaning Blade Forming (\$\$ | | ning (SSP) | |
|------------------------------------|--|---|--|
| 00/4* | Applies a pattern of toner to the transfer belt at a defined interval between sheets on the transfer belt in order to reduce friction between the belt surface and the cleaning blade. | | |
| 2964* | may reduce the amount of surface of the transfer belt. | r conditions of high temperature and high humidity, the density control feature educe the amount of toner, which also reduces the amount of toner on the se of the transfer belt. With less toner on the belt, the friction between the belt and ade increases, and could cause the blade to bend or scour the surface of the | |
| 001 | 0: OFF, 1: ON | [0 to 1 / 0 / 1] | |
| 002 | Pattern Interval | [1 to 100 / 15 / 1 sheet] | |
| 003 | Pattern Number | [1 to 3 / 1 / 1 line] | |
| 004 | Pattern LD Power | [0 to 15 / 2 / 1] | |

| Grayscale Limit (SSP) | | |
|-----------------------|---|--|
| 2972* | Controls the halftone density level to prevent deterioration of the OPC. The halftone density is detected by the ID sensor, and the machine adjusts the intensity of the Libeam according to the upper/lower limit setting. | |
| | Upper Limit [0 to 100 / 58 (C2b), 63 (C2c) / 1vol] Defines the upper limit for grayscale. A larger value allows a wider range of halftones at the pale end of the scale. If the image contains pale areas with fuzzy borders surrounded by dark areas, reduce this value to make the borders clearer. | |
| 001 | | |
| Lower Limit [0 to 100 | | [0 to 100 / 52 (C2b), 57 (C2c) / 1vol] |
| 002 | Defines the lower limit for grayscale. A smaller value allows a wider range of halftones at the dark end of the scale. | |

| | Grayscale Cycle (SSP) | [0 to 1000 / 100 / 10 sheets] |
|-------|-----------------------|--|
| 2973* | · | erval in order to prevent deterioration of the OPC. If the setting, at the end of the job, or if the door is opened is executed. |

| 2974* | Image Density | |
|-------|---|-------------------------|
| | Adjustment Mode | [1 to 5 / 3 / 1] |
| 001 | Adjusts image density. Changing this setting adjusts development bias and ID sensor output voltage that in turn raises or lowers image density. | |

| | Near End Setting | | |
|-------|--|----------------------------------|--|
| | Detection Time | [0 to 2000 / 0 / 10 sec] | |
| 2975* | Sets a time for toner supply motor rotation for issuing the toner near end warning on the operation panel. The time may need to be shorter for customers who run especially large print jobs (working at night, for example) to ensure earlier warning of the toner near end condition so toner out does not interrupt a long job. | | |

| | Bottle Motor Time | |
|---|---|--------------------------------------|
| Displays the total ON time of the toner supply motor, calculated from v bottle was replaced. Use this to check that the toner end count (SP297) properly. | | |
| 2976* | When SP2975 is set to any value other than "0", this value is displayed when it matches the setting of SP2975. When SP2975 is set to "0", SP2976 is disabled. SP2976 is automatically set to zero by toner end recovery.) | |
| Time [0 to 7,000,000 / 0 / 1 msec] | | [0 to 7,000,000 / 0 / 1 msec] |

| 2977* | Toner End Status | |
|--|--|--|
| 29// | Indicates the toner near end or end condition. | |
| | | [0 to 10 / 0 / 1] 0: Not detected |
| 001 | Near End | 1: Detected by SP2975-001 2: Vt (10) - Vref > 0.2 and Vsp > 0.6 3: Vt (10) - Vref > 0.45 |
| | | 4: 0.45 > Vt (10) - Vref > 0.2 and toner end counter > 300 5 to 10: Not used |
| [0 to 10 / 0 / 1] 0: Not detected 1: Vsp > 2.0 2: Toner end counter > 90 when SP22 3: Toner end counter < 90 and Vt (10 SP2213-001 is set to "0". 4: When SP2213-001 is set to "2" | | 0: Not detected 1: Vsp > 2.0 2: Toner end counter > 90 when SP2213-001 is set to "0". 3: Toner end counter < 90 and Vt (10) > (Vref + 0.3) when SP2213-001 is set to "0". 4: When SP2213-001 is set to "2" 5: Vsp > 0.9 when SP2213-001 is set to "2" 6: Special order |
| | | 7 to 10: Not used |

| | Charge Counter | [0 to 1000000 / 0 / 1 sheets] |
|--|----------------|--|
| Set the number of pages to print after toner and carrier initialization before input is increased to compensate for deterioration over time in the polarity carrier. The strength in the polarity of the carrier in the toner will eventually decrease cause lower charge output. Setting the charge output to increase after a sponumber of copies can compensate for this effect. | | , |
| | | out. Setting the charge output to increase after a specified |

System SP Table-3

SP3-xxx: Process

| 3001* | P Sensor Setting | | |
|-------|--|---|--|
| | Current | [0 to 43 / 13 / 0.1 mA] | |
| 001 | clearing NVRAM or replacing the N | o reset the PWM of the ID sensor LED to avoid a service call error after RAM or replacing the NVRAM. ata is stored by executing SP-3001-2. | |
| | ID Initialization | - | |
| 002 | Performs the ID sensor initial setting. ID sensor output for the bare drum (VSG) is adjusted automatically to $4.0\pm0.2~\text{V}$. | | |
| | Press "Execute" to start. Perform this setting after replacing or cleaning the ID sensor, replacing the drum, or clearing NVRAM. | | |

| 3045* | Toner End Setting, ON/OFF | DFU |
|-------|------------------------------|-----|
| | [0 to 1 / 0 / 1] 0=Off, 1=On | |

| P Sensor Output Displays the current VSG, VSP, VSDP, and grayscale control. | | |
|--|---|---------------------------|
| | | , and grayscale control. |
| 3103* | If the P sensor does not detect the P pattern, "VSP = 5.0 V/VSG = 5.0 V" is displayed and an SC code is generated. If the P sensor does not detect the bare area of the drum, "VSP = 0.0 V/VSG =0.0 V" is displayed and an SC code is generated. | |
| | | |
| 001 | Vsg | [0 to 5 / 0 / 0.1] |
| 002 | Vsp | [0 to 5 / 0 / 0.1] |
| 003 | Vsdp | [0 to 5 / 0 / 0.1] |
| 004 | Vsm/Vsg | [0 to 5 / 0 / 0.1] |

| 3902* | New PCU Detection (Not used) |
|-------|------------------------------|
|-------|------------------------------|

| 001 | On/OFF Setting | [0 to 1 / 0 / 1] 0: On, 1: Off |
|-----|--|--|
| | Turns on or off the new unit detection for the transfer belt unit and fusing unit. | |

| | Hot Roller Stripper Cleaning |
|-------|--|
| 3905* | "Cleaning A": 15 sec. off/on cycle for the fusing motor. |
| | "Cleaning B": Off (45 sec.) and On (15 sec.) cycle for the fusing motor. |
| | 1st Cleaning: Interval |
| 001 | Sets the threshold for the 1st cleaning mode. |
| | "Cleaning A" is done once. |
| | [0 to 5 / 5 / 1 sheets] |
| | 1st Cleaning: Mode Setting |
| 002 | Sets the number of additional execution times of the 1st cleaning mode. |
| | [0 to 5 / 0 / 1 times] |
| | 2nd Cleaning: Interval |
| 003 | Sets the threshold for the 2nd cleaning mode. |
| | "Cleaning A" is done twice. |
| | [6 to 49 / 30 / 1 sheets] |
| | 2nd Cleaning: Mode Setting |
| 004 | Sets the number of additional execution times of the 2nd cleaning mode. |
| | [0 to 5 / 0 / 1 times] |
| | 3rd Cleaning: Interval |
| | Sets the threshold for the 3rd cleaning mode. |
| 005 | "Cleaning A" is done twice and "Cleaning B" is done "N" times. |
| | "N" is specified with SP3905-006. |
| | [50 to 999 / 100 / 1 sheets] |

| | 3rd Cleaning: Mode Setting |
|-----|---|
| | Sets the number of execution times of the 3rd cleaning mode. |
| 006 | [0 to 5 / 0 / 1 times] |
| | U Note |
| | All fans remain on during cleaning and then switch off 60sec after the cleaning cycle ends. |
| | Cleaning Priority Setting |
| 007 | [0 to 1 / 0 / 1 sheets] |
| 007 | 0: Priority to printing (No job interruption) |
| | 1: Priority to cleaning (Job interruption) |
| | |

System SP Tables-4

SP4-xxx: Scanner

| | Sub Scan Mag. Adjustment |
|-------|---|
| 4008* | Adjusts the magnification of the sub scan direction during scanning. Changing this value changes the scanner motor speed. |
| | [-1 to 1 / 0 / 0.1%] |

| | | L-Edge Regist Adjustment |
|------|-------|---|
| | 4010* | Adjusts the leading edge registration for scanning. |
| 4010 | 4010 | [-2 to 2 / 0 / 0.1 mm] |
| | | As you enter a negative value, the image moves toward the leading edge. |

| | | S-to-S Regist Adjustment |
|--|--|---|
| | 4011* | Adjusts side-to-side registration for scanning. |
| | 4011* | [-2.5 to 2.5 / 0 / 0.1 mm] |
| | As you enter negative values, the image will disappear at the left, and as you enter positive values, the image will appear at the left. | |

| | Scanner Erase Margin: Scale | |
|-------|--|---|
| | Adjusts scanning margins for left edge (main scan). | the leading and trailing edges (sub scan) and right and |
| 4012* | Note | |
| | Do not adjust unless the customer desires a scanner margin greater than the printer margin. | |
| | These settings are adjusted to erase shadows caused by the gap between the original and the scale of the scanner unit. | |
| 001 | Book: Leading Edge | [0 to 3 / 1 / 0.1 mm] |
| 002 | Book: Trailing Edge | [0 to 3 / 0 / 0.1 mm] |
| 003 | Book: Left | [0 to 3 / 1 / 0.1 mm] |

| 004 | Book: Right | [0 to 3 / 0 / 0.1 mm] |
|-----|-------------------|------------------------------|
| 005 | ADF: Leading Edge | [0 to 3 / 0 / 0.1 mm] |
| 007 | ADF: Right | [0 to 3 / 0 / 0.1 mm] |
| 008 | ADF: Left | [0 to 3 / 0 / 0.1 mm] |

| 4013 | Scanner Free Run | |
|------|---|-------------------------|
| 4013 | Performs a scanner free run with the exposure lamp on or off. | |
| 001 | Lamp: OFF | [0 to 1 / 0 / 1] |
| 002 | Lamp: ON | 0=Off, 1=On |

| 4014 | Scan | |
|------|----------------------|---|
| 001 | HP Detection Enable | Scanner free run with HP sensor check. |
| 002 | HP Detection Disable | Scanner free run without HP sensor check. |

| | Dust Check |
|-------|---|
| 4020* | This function checks the narrow scanning glass of the ADF for dust that can cause black lines in copies. If dust is detected a system banner message is displayed, but processing does not stop. |
| | Dust Detect: On/Off |
| | Issues a warning if there is dust on the narrow scanning glass of the ADF when the original size is detected before a job starts. This function can detect dust on the white plate above the scanning glass, as well as dust on the glass. Sensitivity of the level of detection is adjusted with SP4020-2. |
| 001 | [0 to 1 / 1 / 1] |
| | 0: Off. No dust warning. |
| | 1: On. Dust warning. This warning does not stop the job. |
| | ↓ Note |
| | Before switching this setting on, clean the ADF scanning glass and the white plate above the scanning glass. |

| Dust Detect: Lvl |
|--|
| Adjusts the sensitivity for dust detection on the ADF scanning glass. This SP is available only after SP4020-1 is switched on. |
| [0 to 8 / 4 / 1] |
| If you see black streaks in copies when no warning has been issued, raise the setting to increase the level of sensitivity. If warnings are issued when you see not black streaks in copies, lower the setting. |
| Note |
| Dust that triggers a warning could move be removed from the glass by the originals in the feed path. If the dust is removed by passing originals, this is not detected and the warning remains on. |
| Dust Reject: Lvl |
| Selects the level of the sub scan line correction when using the ARDF. [0 to 4 / 0 / 1] 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. (***p.243 "Input Check") | |
| | | |
| | APS Min. Size | |
| | Determines whether an original of non-standard size is detected as A5/HLT size by the APS sensor. | |
| 4303 | 0: No original | |
| | 1: A5 - lengthwise (SEF) | |

If "0" is selected, "Cannot detect original size" will be displayed.

2: A5 - Sideways (LEF)

| 4305 | 8K/16K Detection | |
|------|--|--|
| | [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-Lenghtwise | |
| | 3: 8K 16K | |
| | | |

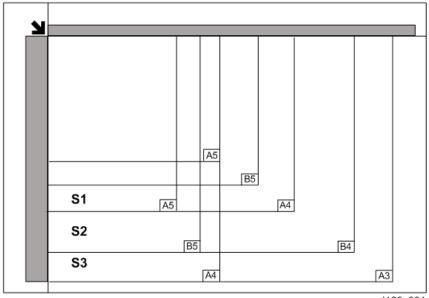
| 4308* | Scan Size Detection |
|-------|--|
| 001 | Detection ON/OFF |
| | Selects whether the machine detects the original size. |
| | [0 to 1 / 1 / 1 step] 0: OFF |
| | 0: OFF |
| | 1: ON |

| 4309* | Scan Size Detect: Setting |
|-------|---|
| 001 | Original Density Thresh |
| | Adjust the density for the scan size detection. [0 to 255 / 18 / 1 step] |
| | Detection Time |
| 002 | Adjust the detection time for scan size detection. [20 to 100 / 60 / 20 msec] |
| | Lamp ON: Delay Time |
| 003 | Adjust the timing when to lamp on for the scan size detection. [0 to 200 / 40 / 20 msec] |
| 004 | LED PWM Duty |
| | Adjust the light value for the scan size detection. [0 to 100 / 60 / 1 %] |

| 4210 | Scan Size Detect Value [0 to 255 / 0 / 1 digit] | |
|---|---|------------------|
| Displays the scanned data for the original width detection. | | ridth detection. |
| 001 | S1: R | |
| 002 | \$1: G | |
| 003 | S1: B | |
| 004 | S2: R | |
| 005 | S2: G | |
| 006 | S2: B | |
| 007 | S3: R | |
| 008 | \$3: G | |
| 009 | S3: B | |



• Each detection point (S1, S2, S3) in SP4310 is as follows.



d120s001

| 4400* | Scanner Erase Margin | |
|-------|---|------------------------------|
| 4400 | These SPs set the area to be masked during platen (book) mode scanning. | |
| 001 | Book: Leading Edge | |
| 002 | Book: Trailing Edge | |
| 003 | Book: Left | |
| 004 | Book: Right | [0 to 3 / 0 / 0.1 mm] |
| 005 | ADF: Leading Edge | |
| 007 | ADF: Right | |
| 008 | ADF: Left | |

| | IPU Test Pattern | | | |
|------|------------------|-------------------------------|----------------------------|--|
| | Selects the IP | Selects the IPU test Pattern. | | |
| | | [0 to 28 / 0 / 1] | | |
| | | 0: Scanned image | 15: Gray pattern (1) | |
| | | 1: Gradation main scan A | 16: Gray pattern (2) | |
| | | 2: Gradation main scan B | 17: Gray pattern (3) | |
| | | 3: Gradation main scan C | 18: Shading pattern | |
| | | 4: Gradation main scan D | 19: Thin line pattern | |
| 4417 | | 5: Gradation sub scan (1) | 20: Scanned + Grid pattern | |
| | Test Pattern | 6: Grid pattern (1) | 21: Scanned + Grid scale | |
| | restrailem | 7: Slant grid pattern | 22: Scanned + Color patch | |
| | | 8: Gradation K | 23: Scanned + Slant Grid C | |
| | | 9: Check pattern 16 | 24: Scanned + Slant Grid D | |
| | | 10: Gray patch 16 (1) | 25: Gray Scale 18 text | |
| | | 11: Gray patch 16 (2) | 26: Gray Scale 18 photo | |
| | | 12: Gray patch 64 | 27: Gray Scale 256 text | |
| | | 13: Grid pattern (2) | 28: Gray Scale 256 photo | |
| | | 14: Color patch K | | |

| 4429* | Select Copy Data Security | |
|-------|---------------------------|--|
| 001 | Copying | Adjusts the density of the embedded message with |
| 002 | Scanning | the copy data security unit. [0 to 3 / 3 / 1] |
| 003 | Fax Operation | 3: Darkest density |

| 4450 | Scan Image Path Selection |
|------|---------------------------|
|------|---------------------------|

| | 001 | Black Subtraction ON/OFF | [0 to 1 / 1 / 1] 0=OFF, 1=ON |
|--|-----|--|------------------------------|
| | | Uses or does not use the black reduction image path. | |
| | 002 | SH ON/OFF | [0 to 1 / 0 / 1] 0=OFF, 1=ON |
| | | Uses or does not use the shading image path. | |

| Digital AE | | | |
|------------|-------|--|--------------------------------------|
| | 4460* | Specifies the level of deleting the background in the ADS mode. You can adjust its level for each scanning method (platen, ADF). | |
| | 001 | Low Limit Value | [0 to 1023 / 364 / 1 digit] |
| | 002 | Background level | [512 to 1535 / 932 / 1 digit] |

| | Printer Vector Correction | | |
|---------|---|--|--|
| 4540* | This SP corrects the printer coverage of 12 hues (RY, YR, YG, etc. x 4 Colors [R, B, Option]) for a total of 48 parameters. | | |
| 001-004 | RY Phase: Option/R/G/B | | |
| 005-008 | YR Phase: Option/R/G/B | | |
| 009-012 | YG Phase: Option/R/G/B | | |
| 013-016 | GY Phase: Option/R/G/B | | |
| 017-020 | GC Phase: Option/R/G/B | Specifies the printer vector correction value. | |
| 021-024 | CG Phase: Option/R/G/B | | |
| 025-028 | CB Phase: Option/R/G/B | [0 to 255 / 0 / 1] | |
| 029-032 | BC Phase: Option/R/G/B | | |
| 033-036 | BM Phase: Option/R/G/B | | |
| 037-040 | MB Phase: Option/R/G/B | | |
| 041-044 | MR Phase: Option/R/G/B | | |
| 045-048 | RM Phase: Option/R/G/B | | |

| 4550* | Scan Apli:Txt/Print |
|-------|---------------------|
|-------|---------------------|

| 4551* | Scan Apli:Txt | |
|--|---|--------------------------------|
| 4552* | Scan Apli:Txt Dropout | |
| 4553* | Scan Apli:Txt/Photo | |
| 4554* | Scan Apli:Photo | |
| 4565* | Scan Apli:GrayScale | |
| 4570* | Scan Apli:Col Txt/Photo | |
| 4571* | Scan Apli:Col Gloss Photo | |
| 4572* | Scan Apli:AutoCol | |
| -005 | MTF: O(Off) 1-15 (Weak-Strong) | [0 to 15 / 8 / 1] 0: MTF OFF |
| | Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect. | |
| -006 | Smoothing: 0(x1) 1-7 (Weak-Strong) | [0 to 7 / 4 / 1] |
| -000 | Use to remove "jaggies" if they appear. S | et higher for smoother images. |
| -007 | Brightness: 1-255 | [1 to 255 / 128 / 1] |
| -007 | Set higher for darker, set lower for lighter | |
| 000 | Contrast: 1-255 | [1 to 255 / 128 / 1] |
| Set higher for more contrast, set lower for less contrast. | | less contrast. |
| | Ind Dot Erase: O(Off) 1-7 (Weak- Strong) | [0 to 7 / 0 / 1] |
| -009 | Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. | |
| | 0: Not activated | |

| 4580* | Fax Apli:Txt/Chart |
|-------|--------------------|
| 4581* | Fax Apli:Txt |
| 4582* | Fax Apli:Txt/Photo |
| 4583* | Fax Apli:Photo |

| 4584* | Fax Apli:Original 1 | | |
|-------|---|------------------------------|--|
| 4585* | Fax Apli:Original 2 | | |
| -005 | MTF: O(Off) 1-15 (Weak-Strong) | [0 to 15 / 8 / 1] 0: MTF OFF | |
| 003 | Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect. | | |
| -006 | Smoothing: 0(x1) 1-7 (Weak-Strong) | [0 to 7 / 4 / 1] | |
| -006 | Use to remove "jaggies" if they appear. Set higher for smoother images. | | |
| -007 | Brightness: 1-255 | [1 to 255 / 128 / 1] | |
| -007 | Set higher for darker, set lower for lighter. | | |
| -008 | Contrast: 1-255 | [1 to 255 / 128 / 1] | |
| -008 | Set higher for more contrast, set lower for less contrast. | | |
| | Ind Dot Erase: O(Off) 1-7 (Weak- Strong) | [0 to 7 / 0 / 1] | |
| -009 | Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. O: Not activated | | |
| | | [0+0 2 / 0 / 1] | |
| -010 | Texture Erase: 0 (Fix), 1-2 [0 to 2 / 0 / 1] | | |
| -010 | Sets the erasure level of textures. Set higher for stronger effect, lower for weaker effect. Note: This SP code exists for SP4580, SP4582 and SP4583 only. | | |

| 4600 | SBU Version | |
|------|-------------|---------------------------------|
| 001 | SBU ID | Displays the ID of the SBU. |
| 002 | GASBU-N ID | Displays the ID of the GASBU. |
| 003 | VSP5100 ID | Displays the ID of the VSP5100. |

| 4602 | Scanner Memory Access | |
|------|-----------------------|---|
| 001 | Scanner Memory Access | Enables the read and write check for the SBU registers. |

| 4603 | AGC Execution | |
|------|--|--|
| 001 | HP Detection Enable Executes the AGC with the scanner detection. | |
| 002 | HP Detection Disable | Executes the AGC with the scanner detection. |

| | FGATE Open/Close |
|------|--|
| 4604 | Opens or closes the FGATE signal. This SP automatically returns to the default status (close) after exiting this SP. |
| | [0 to 1 / 0 / 1] |
| | 0: OFF, 1: ON |

| 4609* | Gray Balance Set: R | |
|-------|---|--------------------------------------|
| 001 | Book Scan | [-384 to 255 / -46 / 1 digit] |
| | Displays the scanning level value (adjustment) for the red signal in Book Scan. | |
| 200 | DF Scan | [-384 to 255 / -46 / 1 digit] |
| 002 | Displays the scanning level value (adjustment) for the red signal in DF Scan. | |

| 4610* | Gray Balance Set: G | |
|-------|---|--------------------------------------|
| 001 | Book Scan | [-384 to 255 / -20 / 1 digit] |
| 001 | Displays the scanning level value (adjustment) for the green signal in Book Scan. | |
| 000 | DF Scan | [-384 to 255 / -20 / 1 digit] |
| 002 | Displays the scanning level value (adjustment) for the green signal in DF Scan. | |

| 4611* | Gray Balance Set: B | |
|-------|--|--------------------------------------|
| 001 | Book Scan | [-384 to 255 / -28 / 1 digit] |
| 001 | Displays the scanning level value (adjustment) for the blue signal in Book Scan. | |
| 000 | DF Scan | [-384 to 255 / -28 / 1 digit] |
| 002 | Displays the scanning level value (adjustment) for the blue signal in DF Scan. | |

| 4623 | Black Level Adj. Display |
|------|--------------------------|
|------|--------------------------|

| | Latest: RE Color | [0 to 16383 / 0 / 1 digit] |
|--|------------------|--|
| Displays the black offset value (rough adjustment) for the even red signal in the printing speed). | | ustment) for the even red signal in the SBU (color |
| | Latest: RO Color | [0 to 16383 / 0 / 1 digit] |
| Displays the black offset value (rough adjustment) for the odd red signal in the printing speed). | | ustment) for the odd red signal in the SBU (color |

U Note

• RE: Red Even signal, RO: Red Odd signal

| 4624 | Black Level Adj. Display |
|------|---|
| | Latest: GE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |
| | Latest: GO Color |
| 002 | [0 to 16383 / 0 / 1 digit] |
| | Displays the black offset value (rough adjustment) for the odd green signal in the SBU (color printing speed). |

Note

• GE: Green Even signal, GO: Green Odd signal

| 4625 | Black Level Adj. Display |
|------|---|
| | Latest: BE Color |
| 001 | [O to 16383 / O / 1 digit] Displays the black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). |
| | Latest: BO Color |
| 002 | [0 to 16383 / 0 / 1 digit] Displays the black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). |



• BE: Blue Even signal, BO: Blue Odd signal

| 4628 | Analog Gain Adjust Displays the gain value of the amplifiers on the controller for Red. Only for the color scanner | |
|------|--|---------------------------------|
| | | |
| 001 | Latest: R Color | [0 to 255 / 0 / 1 digit] |

| | Analog Gain Adjust | |
|------|--|-------------------------------|
| 4629 | Displays the gain value of the amplifiers on the controller for Green. | |
| | SP4629-003 and -004 are used only for the color scanner model. | |
| 001 | Latest: G Color | [0 to 7 / 0 / 1 digit] |

| 4420 | Analog Gain Adjust | |
|------|---|-------------------------------|
| 4630 | Displays the gain value of the amplifiers on the controller for Blue. | |
| 001 | Latest: B Color | [0 to 7 / 0 / 1 digit] |

| 4631 | Digital Gain Adjust | |
|------|---|----------------------------------|
| | Displays the gain value of the amplifiers on the controller for RE or RO. | |
| 001 | Latest: RE Color | [0 to 1023 / 0 / 1 digit] |
| 002 | Latest RO Color | [0 to 1023 / 0 / 1 digit] |

| 4632 | Digital Gain Adjust | |
|------|---|----------------------------------|
| | Displays the gain value of the amplifiers on the controller for GE or GO. | |
| 001 | Latest: GE Color | [0 to 1023 / 0 / 1 digit] |
| 002 | Latest: GO Color | [0 to 1023 / 0 / 1 digit] |

| | 4633 | Digital Gain Adjust | |
|--|------|---|----------------------------------|
| | | Displays the gain value of the amplifiers on the controller for BE or BO. | |
| | 001 | Latest: BE Color | [0 to 1023 / 0 / 1 digit] |

| 002 | Latest: BO Color | [0 to 1023 / 0 / 1 digit] |
|-------|------------------------------------|----------------------------------|
| | | |
| 4635* | SSCG Correction Set (DFU) | |
| 001 | Apply ON/OFF | [0 to 1 / 1 / 1 digit] |
| 002 | Calculation ON/OFF | [0 to 1 / 1 / 1 digit] |
| | | |
| 4636 | SSCG Correction Execution (DFU) | |
| 001 | SSCG Correction Execution | [0 to 1 / 1 / 1 digit] |
| 002 | SSCG Correction Error Flag | [0 to 2 / 0 / 1 digit] |
| 003 | SSCG Result Apply Execution 80H | [0 to 1 / 0 / 1 digit] |
| 004 | SSCG Result Apply Execution Last | [0 to 1 / 0 / 1 digit] |
| | | |
| 4637 | SSCG Correction Adj (DFU) | |
| 001 | Latest:RE | [0 to 225 / 128 / 1] |
| 002 | Latest:RO | [0 to 225 / 128 / 1] |
| 003 | Latest:GE | [0 to 225 / 128 / 1] |
| 004 | Latest:GO | [0 to 225 / 128 / 1] |
| 005 | Latest:BE | [0 to 225 / 128 / 1] |
| 006 | Latest:BO | [0 to 225 / 128 / 1] |
| | | |
| 4638* | SSCG Correction Adj (DFU) | |
| 001 | Last:RE | [0 to 225 / 128 / 1] |

| 002 | Last:RO | [0 to 225 / 128 / 1] |
|-----|---------|-----------------------------|
| | | |
| 003 | Last:GE | [0 to 225 / 128 / 1] |
| | | |
| 004 | Last:GO | [0 to 225 / 128 / 1] |
| | | |
| 005 | Last:BE | [0 to 225 / 128 / 1] |
| | | |
| 006 | Last:BO | [0 to 225 / 128 / 1] |
| | | |

| 4639* | SSCG Correction Adj (DFU) | |
|-------|---------------------------|-----------------------------|
| 001 | Factory Setting:RE | [0 to 225 / 128 / 1] |
| 002 | Factory Setting:RO | [0 to 225 / 128 / 1] |
| 003 | Factory Setting:GE | [0 to 225 / 128 / 1] |
| 004 | Factory Setting:GO | [0 to 225 / 128 / 1] |
| 005 | Factory Setting:BE | [0 to 225 / 128 / 1] |
| 006 | Factory Setting:BO | [0 to 225 / 128 / 1] |

| 4640 | SSCG Noise Size (DFU) | |
|------|-----------------------|-----------------------------|
| 001 | Before Adj: RE | [0 to 1023 / 0 / 1] |
| 002 | Before Adj: RO | [0 to 1023 / 0 / 1] |
| 003 | Before Adj: GE | [0 to 1023 / 0 / 1] |
| 004 | Before Adj: GO | [0 to 1023 / 0 / 1] |
| 005 | Before Adj: BE | [0 to 1023 / 0 / 1] |

| 006 | Before Adj: BO | [0 to 1023 / 0 / 1] |
|-----|----------------|-----------------------------|
| | | |
| 007 | After Adj: RE | [0 to 1023 / 0 / 1] |
| | | |
| 008 | After Adj: RO | [0 to 1023 / 0 / 1] |
| | | |
| 009 | After Adj: GE | [0 to 1023 / 0 / 1] |
| | | |
| 010 | After Adj: GO | [0 to 1023 / 0 / 1] |
| | | |
| 011 | After Adj: BE | [0 to 1023 / 0 / 1] |
| | | |
| 012 | After Adj: BO | [0 to 1023 / 0 / 1] |
| | | |

| 4645 | Scan Adjust Error | |
|------|--|-----------------------------------|
| 4045 | Displays the error value of the white level or black level adjustment. | |
| 001 | White level | [0 to 65535 / 0 / 1 digit] |
| 002 | Black level | [0 to 65535 / 0 / 1 digit] |

| | Scanner Hard Error | |
|------|----------------------------|--|
| | Displays the result of the | SBU connection check. |
| 4647 | | [0 to 35535 / 0 / 1] |
| | Power-ON | 0: OK, 1: SBU connection check failure |
| | | If the SBU connection check fails, SC144-001, -002 or -003 |
| | | occurs. |

| 4654* | Black Level Adj. Display |
|-------|--|
| | Latest Correct Value: RE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the previous black offset value (rough adjustment) for the even red signal in the SBU (color printing speed). |

Last Correct Value: RO Color

[0 to 16383 / 0 / 1 digit]

Displays the previous black offset value (rough adjustment) for the odd red signal in the SBU (color printing speed).

U Note

• RE: Red Even signal, RO: Red Odd signal

| 4655* | Black Level Adj. Display |
|-------|--|
| | Last Correct Value: GE Color |
| 001 | [0 to 16383 / 0 / 1 digit] |
| | Displays the previous black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |
| | Last Correct Value: GO Color |
| 002 | [0 to 16383 / 0 / 1 digit] |
| | Displays the previous black offset value (rough adjustment) for the even green signal in the SBU (color printing speed). |

U Note

• GE: Green Even signal, GO: Green Odd signal

| 4656* | Black Level Adj. Display | |
|-------|---|--|
| | Last Correct Value: BE Color | |
| 001 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the previous black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). | |
| | Last Correct Value: BO Color | |
| 002 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the previous black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). | |



• BE: Blue Even signal, BO: Blue Odd signal

| 4658* | Analog Gain Adjust | |
|-------|---|--------------------------------|
| | Displays the previous gain value of the amplifiers on the controller for Red. | |
| 001 | Last Correct Value: R Color | [0 to 7 / 0 / 1 digit] |

| | Analog Gain Adjust | |
|---------------------------------|---|--------------------------------|
| 4659* | Displays the previous gain value of the amplifiers on the controller for Green. | |
| | SP4659-003 and -004 are used only for the color scanner model. | |
| 001 Last Correct Value: G Color | | [0 to 7 / 0 / 1 digit] |

| | 4660* | Analog Gain Adjust | |
|--|-------|--|--------------------------------|
| | | Displays the previous gain value of the amplifiers on the controller for Blue. | |
| | 001 | Last Correct Value: B Color | [0 to 7 / 0 / 1 digit] |

| 4661* | Digital Gain Adjust |
|-------|---|
| | Last Correct Value: RE Color |
| 001 | [0 to 1023 / 0 / 1 digit] Displays the previous 2nd black offset value (rough adjustment) for the even red signal in the SBU (color printing speed). |
| | Last Correct Value: RO Color |
| 002 | [0 to 1023 / 0 / 1 digit] Displays the previous 2nd black offset value (rough adjustment) for the odd red signal in the SBU (color printing speed). |



• RE: Red Even signal, RO: Red Odd signal

| 4662* | Digital Gain Adjust |
|-------|---|
| | Last Correct Value: GE Color |
| 001 | [0 to 1023 / 0 / 1 digit] Displays the previous 2nd black offset value (rough adjustment) for the even green signal |
| | in the SBU (color printing speed). |

Last Correct Value: GO Color

[0 to 1023 / 0 / 1 digit]

Displays the previous 2nd black offset value (rough adjustment) for the odd green signal in the SBU (color printing speed).



• GE: Green Even signal, GO: Green Odd signal

| 4663* | Digital Gain Adjust | |
|-------|---|--|
| | Last Correct Value: BE Color | |
| 001 | [0 to 1023 / 0 / 1 digit] | |
| | Displays the previous 2nd black offset value (rough adjustment) for the even blue signal in the SBU (color printing speed). | |
| | Last Correct Value: BO Color | |
| 002 | [0 to 1023 / 0 / 1 digit] | |
| | Displays the previous 2nd black offset value (rough adjustment) for the odd blue signal in the SBU (color printing speed). | |



• BE: Blue Even signal, BO: Blue Odd signal

| 4673 | Black Level Adj. Display | |
|------|--|--|
| | Factory Setting: RE Color | |
| 001 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the factory setting value of the 2nd black offset level rough adjustment for the even red signal in the SBU (color printing speed). | |
| | Factory Setting: RO Color | |
| 002 | [0 to 16383 / 0 / 1 digit] | |
| | Displays the factory setting values of the 2nd black offset level rough adjustment for the odd red signal in the SBU (color printing speed). | |



• RE: Red Even signal, RO: Red Odd signal

| 4674 | Black Level Adj. Display | |
|------|--|--|
| | Factory Setting: GE Color | |
| 001 | [0 to 16383 / 0 / 1 digit] Displays the factory setting value of the 2nd black offset level rough adjustment for the even green signal in the SBU (color printing speed). | |
| | Factory Setting: GO Color | |
| 002 | [0 to 16383 / 0 / 1 digit] Displays the factory setting values of the 2nd black offset level rough adjustment for the odd green signal in the SBU (color printing speed). | |



• GE: Green Even signal, GO: Green Odd signal

| 4675 | Black Level Adj. Display | |
|------|--|--|
| | Factory Setting: BE Color | |
| 001 | [0 to 16383 / 0 / 1 digit] Displays the factory setting value of the 2nd black offset level rough adjustment for the even blue signal in the SBU (color printing speed). | |
| | Factory Setting: BO Color | |
| 002 | [0 to 16383 / 0 / 1 digit] Displays the factory setting values of the 2nd black offset level rough adjustment for the odd blue signal in the SBU (color printing speed). | |



• BE: Blue Even signal, BO: Blue Odd signal

| | Analog Gain Adjust | |
|------|---|--------------------------------|
| 4677 | Displays the factory setting values of the gain adjustment for Red. SP4677-003 and -004 are used only for the color scanner model. | |
| 001 | Factory Setting: R | [0 to 7 / 0 / 1 digit] |

| | Analog Gain Adjust | |
|------|---|--------------------------------|
| 4678 | Displays the factory setting values of the gain adjustment for Green. SP4678-003 and -004 are used only for the color scanner model. | |
| | , | |
| 001 | Factory Setting: G | [0 to 7 / 0 / 1 digit] |

| 4 | 4679 | Analog Gain Adjust | |
|---|------|--|--------------------------------|
| | 40/9 | Displays the factory setting values of the gain adjustment for Blue. | |
| | 001 | Factory Setting: B | [0 to 7 / 0 / 1 digit] |

| 4680* | Digital Gain Adjust |
|-------|--|
| | Factory Setting: RE Color |
| 001 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for Red. |
| | Factory Setting: RO Color |
| 002 | [0 to 1023 / 0 / 1 digit] Displays the gain value of the amplifiers on the controller for odd Red. |

| 4681* | Digital Gain Adjust |
|-------|--|
| | Factory Setting: GE Color |
| 001 | [0 to 1023 / 0 / 1 digit] |
| | Displays the gain value of the amplifiers on the controller for Green. |
| | Factory Setting: GO Color |
| 002 | [0 to 1023 / 0 / 1 digit] |
| | Displays the gain value of the amplifiers on the controller for odd Green. |

| 4682* Digital Gain Adjust | | Digital Gain Adjust |
|---|-----|---|
| Factory Setting: BE Color | | |
| | 001 | [0 to 1023 / 0 / 1 digit] |
| Displays the gain value of the amplifiers on the controller for Blue. | | Displays the gain value of the amplifiers on the controller for Blue. |

| 002 | Factory Setting: BO Color |
|-----|---|
| 002 | Displays the gain value of the amplifiers on the controller for odd Blue. |

| | Scan Image Density Adjustment |
|-------|---|
| 4688* | Adjusts the white shading parameter when scanning an image with the ARDF. |
| 4088 | Adjusts the density level if the ID of outputs made in the DF and Platen mode is different. |
| | [80 to 120 / 98 / 1 %] |

| 4690 | White Level Peak Read | |
|------|---|-----------------------------------|
| 4090 | Displays the peak level of the white leve | el scanning. |
| 001 | RE | [0.1.1002 / 0./1.15.31] |
| 002 | RO | [0 to 1023 / 0 / 1 digit] |

| | 4691 | White Level Peak Read | |
|--|--------|--|-----------------------------------|
| | | Displays the peak level of the white level scanning. | |
| | 001 GE | | [0., 1002 / 0 / 1 /:::1] |
| | 002 | GO | [0 to 1023 / 0 / 1 digit] |

| 4692 | White Level Peak Read | |
|------|---|-----------------------------------|
| 4092 | Displays the peak level of the white leve | el scanning. |
| 001 | BE | [0 1002 / 0 / 1 |
| 002 | ВО | [0 to 1023 / 0 / 1 digit] |

| 4693 | Black Level Peak Read | |
|------|--|----------------------------------|
| 4073 | Displays the peak level of the black level scanning. | |
| 001 | RE | [01022 / 0 / 1 dimit] |
| 002 | RO | [0 to 1023 / 0 / 1 digit] |

| 4694 | Black Level Peak Read | |
|---|-----------------------|----------------------------------|
| Display the peak level of the black level scanning. | | vel scanning. |
| 001 | GE | [01022 / 0 / 1] |
| 002 | GO | [0 to 1023 / 0 / 1 digit] |

| Black Level Peak Read Display the peak level of the black level scanning. | | Black Level Peak Read | |
|--|-----|-----------------------|-----------------------------------|
| | | vel scanning. | |
| | 001 | BE | [0 - 1022 / 0 / 1 - 1::1 |
| | 002 | ВО | [0 to 1023 / 0 / 1 digit] |

| 4802 | DF Shading FreeRun | |
|------|--------------------|---|
| 001 | Lamp OFF | [0 to 1 / 0 / 1] |
| | | Executes the scanner free run of the shading movement with exposure lamp on or off. |
| 002 | Lamp ON | Press "OFF" to stop this free run. Otherwise, the free run continues. |

| Moves the exposure lamp a short distance and immediately returns it to its home position. Touch [Execute] > "Completed" > [Exit] |
|---|
|---|

Carriage Save Moves the exposure lamp a short distance away from the home position and stops. Touch [Execute] > "Completed" > [Exit] Do SP4804 to return the exposure lamp to its home position. Note • This SP is done before shipping the machine to another location. • Cycling the machine power off/on also returns the exposure lamp to its home position.

| SBU Test Pattern Change | |
|------------------------------------|--|
| [0 to 255 / 0 / 1 /step] | |
| 1: Grid pattern | |
| 2: Gradation main scan | |
| 3: Gradation sub scan | |
| 4 to 250: Default (Scanning Image) | |

| | Factory Setting Input (DFU) | |
|-------|-----------------------------|-------------------------------|
| 4808* | Execution Flag | [0 to 1 / 0 / 1 /step] |
| | | |

| | Scanner Lamp Select |
|-------|--|
| | [0 to 1 / 1 / 1 / step] |
| 4809* | 0: Xenon Lamp |
| | 1: LED |
| | This SP switch the light value depends on the scanner lamp type. |

| 4810 | PWM (DFU) | |
|------|-----------------|----------------------------------|
| 001 | Latest | [0 to 8191 / 0 / 1 /step] |
| 002* | Factory Setting | [0 to 8191 / 0 / 1 /step] |

| 4811 | LED White Level Peak Read (DFU) | |
|------|---------------------------------|----------------------------------|
| 001 | Latest: RE | [0 to 1023 / 0 / 1 /step] |
| 002 | Latest: RO | [0 to 1023 / 0 / 1 /step] |
| 003 | Latest: GE | [0 to 1023 / 0 / 1 /step] |
| 004 | Latest: GO | [0 to 1023 / 0 / 1 /step] |
| 005 | Latest: BE | [0 to 1023 / 0 / 1 /step] |

| 006 | Latest: BO | [0 to 1023 / 0 / 1 /step] |
|-----|------------|----------------------------------|
| | | |

| 4812* | LED White Level Peak Read (DFU) | |
|-------|---------------------------------|----------------------------------|
| 001 | Factory Setting: RE | [0 to 1023 / 0 / 1 /step] |
| 002 | Factory Setting: RO | [0 to 1023 / 0 / 1 /step] |
| 003 | Factory Setting: GE | [0 to 1023 / 0 / 1 /step] |
| 004 | Factory Setting: GO | [0 to 1023 / 0 / 1 /step] |
| 005 | Factory Setting: BE | [0 to 1023 / 0 / 1 /step] |
| 006 | Factory Setting: BO | [0 to 1023 / 0 / 1 /step] |

| | Filter Setting | | |
|-------|---|-------------------------|--|
| | This SP code sets the threshold value for independent dot erase. | | |
| 4903* | These adjustments are effective only for the "Custom Setting" original type. | | |
| | The "O" setting disables independent dot erase. | | |
| | A higher setting detects more spurious dots for erasing. However, this could erase dots in images that contain areas filled by dithering. | | |
| 001 | Ind Dot Erase: Text | [0 to 7 / 0 / 1] | |
| 002 | Ind Dot Erase: Generation Copy | | |

| 4905* | Select Gradation Level | Changes the parameters for dithering. [0 to 255 / 0 / 1] |
|-------|------------------------|--|
|-------|------------------------|--|

| 4918 | Man Gamma Adj (DFU) |
|------|--|
| | Adjusts the offset data of the printer gamma for black in Photo mode or Letter mode. |
| | Touch [Change] to open the printer gamma screen. |
| | Enter the manual gamma adjustment screen. |

| 4954 | Read/Restore Std | |
|------|---|---------------------------|
| 001 | Read New Chart | |
| 001 | Execute the scanning of the A4 chart. | |
| 002 | Recall Prev Chart | |
| 002 | Clear the data of the scanned A4 chart. | |
| 003 | Read Std Chart | |
| 003 | Execute the scanning of the A4 standard | d chart. |
| 004 | Set Std Chart | |
| 004 | Overwrite the standard data. | |
| 005* | Read/Restore Std | [0 to 255 / 0 / 1] |
| | Adjusts chromaticity rank. When replacing the scanner lamp, select a number according to the barcode on the new scanner lamp. | |

| 4991 IPU Image Pass Selection DFU |
|--|
|--|

| | RGB Frame Memory | | | |
|-----|---|---|--|--|
| | Selects the image path. Enter the number to be selected using the 10-key pad. | | | |
| | [0 to | [0 to 11 / 2/1] | | |
| | 0 | Scanner input RGB images | | |
| | 1 | Scanner I/F RGB images | | |
| | 2 | RGB images done by Shading correction (Shading ON, Black offset ON) | | |
| | 3 | Shading data | | |
| 001 | 4 | Inner pattern data: Gray scale | | |
| | 5 | RGB images done by Line skipping correction | | |
| | 6 | RGB images done by Digital AE | | |
| | 7 | RGB images done by Vertical line correction | | |
| | 8 | RGB image done by Scanner gamma correction | | |
| | 9 | RGB image done by Filtering correction | | |
| | 10 | RGB images done by Full color ADS | | |
| | 11 | RGB image done by Color correction | | |

| 4993* | High Light Correction | |
|-------|-----------------------|---|
| 001 | Sensitivity Selection | Selects the Highlight correction level. [0 to 9 / 4 / 1 / step] 0: weakest sensitivity 9: strongest sensitivity |
| 002 | Range Selection | Selects the Highlight correction level. [0 to 9 / 4 / 1 / step] 0: weakest skew correction, 9: strongest skew correction |

| 4994* | Text/Photo Detect Level Adj. |
|-------|------------------------------|
|-------|------------------------------|

3

| 4996* | White Paper Level | |
|-------|---|--|
| 001 | Select the detection level for the white paper. | |
| | [0 to 6 / 3 / 1] | |

3

System SP Tables-5

SP5-xxx: Mode

| 5024* | mm/inch Display Selection | 0: Europe/Asia (mm) 1: North America (inch) |
|-------|---|---|
| | Selects the unit of measurement. After selection, turn the main power switch off and on. | |

| | Accounting counter |
|-------|--|
| | Selects whether the printer counter is displayed on the LCD. |
| 5045* | [0-1 / 0 / 1] |
| | 0: Displays the total counter only. |
| | 1: Displays both total counter and printer counter. |

| 5047* | Paper Display |
|---|--------------------------------|
| Turns on or off the printed paper display on the LCD. | |
| | [0 to 1 / 0 / 1] |
| | 0: Not displayed, 1: Displayed |

| 5052* | ReturnTimePriorityType |
|-------|---|
| | Select the priority to return to the stand-by mode. [0 to 1 / 0 / 1] |
| | 0: Energy Save has priority |
| | 1: Return time has priority |

| | Display IP Address | |
|-------|--|--|
| 5055* | Display or does not display the IP address on the LCD. | |
| | [0 to 1 / 0 / 1] | |
| | 0: OFF, 1: ON | |

| 5056* | Coverage Counter Display |
|-------|--|
| | Display or does not display the coverage counter on the LCD. |
| | [0 to 1 / 0 / 1] |
| | 0: Not displayed, 1: Displayed |

| 5061* | Toner Remaining Icon Display Change | |
|-------|--|--|
| | Display or does not display the remaining toner display icon on the LCD. | |
| | [0 to 1 / 0 / 1] | |
| | 0: Not display, 1: Display | |

| 5062 | Parts Replacement Alert Display |
|------|---|
| | Display or does not display the parts replacement alert on the LCD. |
| 001 | PCU_Bk [0 to 1 / 0 / 1] 0: Not displayed, 1: Display |
| 002 | Fuser [0 to 1 / 0 / 1] 0: Not displayed, 1: Display |
| 003 | Transfer Unit [0 to 1 / 0 / 1] 0: Not displayed, 1: Display |
| 004 | FuserCleaner [0 to 1 / 0 / 1] 0: Not displayed, 1: Display |

| 5071 | Set Bypass Paper Size Display |
|------|---|
| 001 | Turn on or off the paper size confirmation pop-up on the LED. This pop-up prevents mismatching between a paper size selected by the operation panel and the actual paper size on the by-pass tray. [0 or 1 / 0 / -] 0: Off, 1: On |

| 5074* | Home Screen Login |
|-------|---|
| | Sets the application that appears when the home key is pressed. |
| | Setting |
| 002 | [0 to 11111111 / 0 / 1] 0: OFF, 1: ON |
| | Home Key Customization |
| 091 | [0 to 2 / 0 / 1] 0: OFF (Function disable), 1: SDK, 2: Reserve (Legacy application) |
| | Product ID |
| 092 | Sets the Application product ID. [0x00 to 0xffff / 0x00 / 1] |
| | Application Screen ID |
| 093 | Sets the display category of the application that is specified in the SP5075-001. [0 to $255 / 0 / 1$] |

| 5075* | USB Keyboard |
|-------|-----------------------|
| | Function Setting |
| 001 | [0 to 1 / 0 / 1] |
| | 0: Disable, 1: Enable |

RTB 17h SP5-083-001 (f/w ver 2.05)

RTB 17j SP5104: Default changed (f/w ver 2.06)

| , | 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. |

| 5113* | Optional Counter Type |
|-------|-----------------------|
|-------|-----------------------|

| | Default Optional Counter Type |
|-----|---|
| | Selects the type of counter: |
| | 0: None |
| | 1: Key Card (RK3, 4) Japan only |
| 001 | 2: Key Card Down |
| | 3: Pre-paid Card |
| | 4: Coin Rack |
| | 5: MF Key Card |
| | 11: Exp. Key Card (Add) |
| | 12: Exp. Key Card (Deduct) |
| | External Optional Counter Type |
| | Enables the SDK application. This lets you select a number for the external device for user access control. |
| | Note: "SDK" refers to software on an SD card. |
| 002 | [0 to 3 / 0 / 1] |
| | 0: None |
| | 1: Expansion Device 1 |
| | 2: Expansion Device 2 |
| | 3: Expansion Device 3 |

| 5114* | Optional Counter I/F |
|-------|--|
| | MF Key Card Extension |
| 001 | Use this SP and change the setting to "1" only when the "5" (MF Key Card) is selected with SP5113-001. |
| | [0: Not installed/ 1: Installed (scanning accounting)] |

| | Disable Copying |
|-------|--|
| | Temporarily denies access to the machine. Japan Only |
| 5118* | [0 to 1 / 0 / 1] |
| | 0: Release for normal operation [Default] |
| | 1: Prohibit access to machine |

| | Mode Clear Opt. Counter Removal |
|-------|--|
| 5120* | Selects if mode clear is done for an optional counter when an optional counter is removed. |
| 5120" | 0: Yes. (Always mode clear) |
| | 1: StandBy. (Mode clear before/after a job) |
| | 2: No. (No mode clear) |

| 5121* | | Counter Up Timing | |
|-------|--|-------------------|--|
| | Determines whether the optional key counter counts up at paper feed-in or at paper exit. | | |
| | | [0 to 1 / 0 / 1] | |
| | | 0: Feed, 1: Exit | |

| 5126* | F Size Original Setting | |
|-------|----------------------------------|--|
| | Selects F size original setting. | |
| | [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) | |

| | | APS Mode |
|-------|---|---|
| 5127* | Selects whether the APS function is enabled or disabled with the contact of a pre-paid card or coin lock. | |
| | | 0: Disable (APS active) [Default], 1: Enable (APS not active) |

| | | Paper Size Type Selection |
|--|-------|--|
| | | Selects the paper size (type) for both originals and copy paper. |
| | 5131* | [0 to 2 / - / 1 step] |
| | | 0: Japan, 1: North America, 2: Europe |
| | | After changing the setting, turn the copier off and on. If the paper size of the archive files stored on the HDD is different, abnormal copies could result. |

| | Bypass Length Setting |
|------|--|
| | Sets up the by-pass tray for long paper. |
| 5150 | [0 to 1 / 0 / 1] |
| 0100 | 0: Off [Default] |
| | 1: On. Sets the tray for feeding paper up to 600 mm long. |
| | With this SP selected on, paper jams are not detected in the paper path. |

App. Switch Method

Determines whether the application screen is switched with a hardware switch or software switch.

O: Soft Key Set

1: Hard Key Set

5165*

Z-Fold Position

Not Used

Last Deleted Time
Displays the last delete time.

[0 to 4294967295 / 0 / 1]

Fax Printing Mode at Optional Counter Off

Enables or disables the automatic print out without an accounting device. This SP is used when the receiving fax is accounted for by an external accounting device.

O: Automatic printing

1: No automatic printing

| | CE Login |
|-------|---|
| 5169* | If you will change the printer bit switches, you must 'log in' to service mode with this SP before you go into the printer SP mode. |
| 3109 | [0 to 1 / 0 / 1] |
| | 0: Off. Printer bit switches cannot be adjusted. |
| | 1: On. Printer bit switches can be adjusted. |

| | By-pass Tray Paper Size Error | [0 to 1 / 0 / 1] 0= OFF, 1= ON |
|-------|---|---------------------------------|
| 5179* | This SP determines whether a paper size error prompt appears when the machine detects the wrong paper size for the job and during feed from the by-pass tray. | |

| £101* | Paper Size Setting | |
|-------|--|-----------------------|
| 5181* | Adjusts the paper size for each tray. [0 to 1 / - / 1] | |
| 001 | Tray 1: 1 | 0: A4 LEF, 1: LT LEF |
| 002 | Tray 1: 2 | 0: A3, 1: DLT |
| 003 | Tray 1: 3 | 0: B4, 1: LG |
| 004 | Tray 1: 4 | O: B5 LEF, 1: Exe LEF |
| 005 | Tray 2: 1 | 0: A4 LEF, 1: LT LEF |
| 006 | Tray 2: 2 | 0: A3, 1: DLT |
| 007 | Tray 2: 3 | 0: B4, 1: LG |
| 008 | Tray 2: 4 | O: B5 LEF, 1: Exe LEF |
| 009 | Tray 3: 1 (Tandem) | 0: A4 LEF, 1: LT LEF |
| 010 | Tray 3: 2 | 0: A3, 1: DLT |
| 011 | Tray 3: 3 | 0: B4, 1: LG |
| 012 | Tray 3: 4 | O: B5 LEF, 1: Exe LEF |
| 013 | Tray 4: 1 | 0: A4 LEF, 1: LT LEF |
| 014 | Tray 4: 2 | 0: A3, 1: DLT |
| 015 | Tray 4: 3 | 0: B4, 1: LG |

| 016 | Tray 4: 4 | 0: B5 LEF, 1: Exe LEF |
|-----|-----------|---|
| 017 | LCT | [0 to 2 / - / 1] 0: A4 LEF, 1: LT LEF, 2: B5 LEF |

| 5186 | | RK4: Setting (Japan only) | |
|------|------------------|--|--|
| | 5186 | Enable or distance the prevention for RK4 (Accounting device) Disconnection. If the RK4 is disconnected for 10 seconds when this SP is set to "1 (Enable)", the machine automatically jams a sheet of paper and stops. | |
| | [0 to 1 / 0 / 1] | | |

| 5188* | Copy Nv Version |
|-------|--|
| | Displays the NV version on the controller. |

| 5193 | External Controller Info. Settings |
|------|------------------------------------|
| 3193 | DFU |

| 5195* | Limitless SW | |
|-------|--------------|--|
| 3193 | DFU | |

| | Paper Exit After Staple End | |
|--|-----------------------------|--|
| | 5199 | This SP determines whether the machine can output paper if staple supply runs out. |
| | | [0 to 1 / 0 / 1] |
| | | 0: OFF. Paper cannot exit if no staples are available. |
| | | 1: ON. Paper can exit with no staples. |

| 5212* | Page Numbering | |
|-------|--|--|
| 003 | Duplex Printout Left/Right Position | Horizontally positions the page numbers printed on both sides during duplexing. [-10 to 10/0/1 mm] O is center, minus is left, + is right. |

| 004 | Duplex Printout High/Low Position | Vertically positions the page numbers printed on both sides during duplexing. [-10 to 10/0/1 mm] |
|-----|-----------------------------------|---|
| | Toshion | 0 is center, minus is down, + is up. |

| 5227* | Page Numbering | |
|-------|----------------------|--|
| 201 | Allow Page No. Entry | Sets the number of input digits for the job serial number of the starting page numbering. [2 to 9 / 9 / 1] |
| 202 | Zero Surplus Setting | Sets the zero surplus serial number of the starting page numbering. [0 to 1 / 0 / 1] 0: Disable, 1: Enable |

| 5302* | Set Time |
|-------|--|
| | Time Difference |
| | Sets the time clock for the local time. This setting is done at the factory before delivery. The setting is GMT expressed in minutes. |
| | [-1440 to 1440 / - / 1 min.] |
| | Japan: +540 (Tokyo) |
| 002 | NA: -300 (NY) |
| | EU: +60 (Paris) |
| | CH: +480 (Peking) |
| | TW: +480 (Taipei) |
| | AS: +480 (Hong Kong) |
| | KO: +540 (Korea) |

| 5307 Summer Time |
|------------------|
|------------------|

| | | [0 to 1 / 1 (NA/EU), 0 (ASIA) / 1 /step] |
|-----|---|--|
| | Setting | 0: Disabled |
| | | 1: Enabled |
| 001 | Enables or disables the su | mmer time mode. |
| | Note | |
| | Make sure that both activated even if this | SP5-307-3 and -4 are correctly set. Otherwise, this SP is not SP is set to "1". |
| | Rule Set (Start) | |
| | Specifies the start setting for | or the summer time mode. |
| | _ | P. For months 1 to 9, the "0" cannot be input in the first digit, or -2 or -3 becomes a seven-digit setting. |
| | 1st and 2nd digits: The mo | onth. [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] | |
| 003 | 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] | |
| | For example: 3500010 | |
| | The timer is advanced by | 1 hour at am 0:00 on the 5th Sunday in March. |
| | The digits are counted from the left. | |
| | Make sure that SP5-307- | l is set to "l". |
| | Rule Set (End) | |
| | Specifies the end setting fo | or the summer time mode. |
| | There are 8 digits in this S | Р. |
| | 1st and 2nd digits: The mo | onth. [1 to 12] |
| 004 | 3rd digit: The week of the | month. [0 to 5] |
| | 4th digit: The day of the w | reek. [0 to 7 = Sunday to Saturday] |
| | 5th and 6th digits: The ho | ur. [00 to 23] |
| | The 7th and 8 digits must | be set to "00". |
| | The digits are counted from | m the left. |
| | Make sure that SP5-307- | l is set to "l". |
| | | |

| F 40.1 * | Access Control (DFU) | | |
|----------|---|---|--|
| 5401* | This SP stores the settings that limit uses access to SDK application data. | | |
| | Default Document ACL | | |
| | Whenever a new login user is added to the address book in external certification mode (for Windows, LDAP, RDH), the default document ACL is updated according to this SP setting. | | |
| 102 | [0 to 3 / 0 / 1] | | |
| 103 | 0: View | | |
| | 1: Edit | | |
| | 2: Edit/Delete | | |
| | 3: Full control | | |
| | Note: This SP setting is ignored on a mo | achine that is not using document server. | |
| | | Specifies the timeout of the authentication. | |
| 104 | Authentication Time | [0 to 255 / 0 / 1 sec./step] | |
| 104 | | 0: 60 seconds | |
| | | 1 to 250 seconds | |
| 162 | Extend Certification Detail | Selects the log out type for the extend authentication device. Bit 0: Log-out without an IC card 0: Not allowed (default) | |
| | | 1: Allowed | |
| 200 | SDK1 Unique ID | | |
| 201 | SDK1 Certification Method | | |
| 210 | SDK2 Unique ID | "SDK" is the "Software Development Kit". This | |
| 211 | SDK2 Certification Method | data can be converted from SAS (VAS) when | |
| 220 | SDK3 Unique ID | installed or uninstalled. (DFU) | |
| 221 | SDK3 Certification Method | | |
| 230 | SDK certification device | | |

| 240 | Detail Option | Enables or disables the log out confirmation option. Bit 0: Log out confirmation option 0: Enable (default), 1: Disable Selects the automatic log out time. Bit 1 and 2: Automatic log out timer reduction 00: 60 seconds (default), 01: 10 seconds, | |
|-----|---------------|---|--|
| | - | | |

| 5402 | Access Control (DFU) |
|------------|--|
| 3402 | Sets limited uses for SDKJ application data. |
| 101 to 130 | SDKJ1 Limit Setting SDKJ30 Limit Setting |
| 141 to 170 | SDKJ1 Product ID SDKJ30 Product ID |

| 5404 | User Code Count Clear |
|------|--|
| | Clears the counts of the user codes assigned by the key operator to restrict the use of the machine. Press [Execute] to clear. |

| 5411* | LDAP-Certification | | |
|-------|-----------------------------|---|--|
| 004 | Simplified Certification | Turns simple authentication on or off for LDAP. [0 to 1 / 1 / 1] 0: OFF 1: ON | |
| 005 | Password Null Not Permit | This SP is enabled only when SP5411-4 is set to "1" (ON). [0 to 1 / 1 / 1] O: Password null is permitted. 1: Password null is not permitted. | |
| 006 | Detail Option | Determines whether LDAP option (anonymous certification) is turned on or off. [0 to 11111111 / 0 / 1] 0: OFF, 1: ON | |

| 5412 | Krb-Certification | |
|------|---|--|
| | Sets the level of Kerberos Certification. | |
| 100 | Encrypt Mode | [0x01:AES256-CTS-HMAC-SHA1-96 / 0x02:AES128- CTS-HMAC-SHA1-96 / 0x04:DES3-CBC-SHA / 0x08:RC4-HMAC / 0x10:DES-CBC-MD5 / 0xFF:ALL / 0xFF / 1bit] |

| 5413 | Lockout Setting | | |
|------|---|---|--|
| 001 | Lockout On/Off | [0 to 1 / 0 / 1] 0: OFF, 1:ON | |
| 001 | Turns on or off the account | Turns on or off the account lock for the local address book account. | |
| 002 | Lockout Threshold | [1 to 10 / 5 / 1] | |
| 002 | Sets the maximum trial times for accessing the address book account. | | |
| | Cancellation On/Off | [0 to 1 / 0 / 1] | |
| | | 0: OFF (Lockout is not cancelled.) | |
| 003 | | 1: ON (Lockout is cancelled if a user ID and password are correctly entered after the lockout function has been executed and a specific time has passed.) | |
| | Turns on or off the cancellation function of the account lockout. | | |
| | Cancellation Time | [1 to 9999 / 60 / 1 min] | |
| 004 | Sets the interval of the retry for accessing the local address book account after the lockout function has been executed. | | |
| | This setting is enabled only if SP5413-3 is set to "1" (ON). | | |

| 5414 | Access Mitigation |
|------|---|
| | Mitigation ON/OFF |
| 001 | Permits or does not permit consecutive access to the machine with the same ID and password. |
| 001 | [0 to 1 / 0 / 1] |
| | 0: OFF (Permitted) |
| | 1: ON (Not permitted) |

| | Mitigation Time |
|-----|--|
| 002 | Sets the prohibiting time for consecutive access to the machine with the same ID and password. |
| | [0 to 60 / 15 / 1 min] |

| 5415* | Password Attack | |
|-------|--|----------------------------------|
| | Permissible Number | [0 to 100 / 30 / 1 times] |
| 001 | Sets the threshold number of attempts to attack the system with random passwords to gain illegal access to the system. | |
| 002 | Detect Time | [0 to 10 / 5 / 1 sec] |
| | Sets a detection time to count a password attack. | |

| 5416* | Access Information | |
|---|---|---|
| | Access User Max Num | [50 to 200 / 200 / 1] |
| Sets the number of users for the access exclusion and password attack detection function. | | cess exclusion and password attack detection |
| Access Password Num [50 to 200 / 200 / 1] Sets the number of passwords for the access exclusion and password att function. | | [50 to 200 / 200 / 1] |
| | | ne access exclusion and password attack detection |
| 000 | Monitor interval | [1 to 10 / 3 / 1 sec] |
| 003 | Sets the interval of watching out for user information and passwords. | |

| 5417 | Access Attack | | |
|------|---|--------------------------------|--|
| 001 | Access Permissible number | [0 to 500 / 100 / 1] | |
| 001 | Sets a limit on access attempts to prevent password cracking. | | |
| 000 | Access Detect Time | [10 to 30 / 10 / 1 sec] | |
| 002 | Sets a detection time to count password cracking. | | |

| | Productivity Fall Weight | [0 to 9 / 3 / 1 sec] | |
|-----|--------------------------|--|--|
| 003 | , 0 | peed of certification when an excessive number of | |
| | Attack Max Num | [50 to 200 / 200 / 1] | |
| 004 | 1 | on the number of requests received for certification in order to slow down ion speed when an excessive number of access attempts have been | |

| | User Authentication | |
|-------|--|---|
| 5420* | These settings should be done with the System Administrator. • Note • These functions are enabled only after the user access feature has been enabled. | |
| 001 | Сору | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the copy application. |
| 011 | Document Server | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the document server. |
| 021 | Fax | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the fax application. |
| 031 | Scanner | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the scanner application. |
| 041 | Printer | [0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the printer application. |
| 051 | SDK1 | [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. |

| | | [0 or 1/0/1] 0: ON. 1: OFF |
|-----|---------|---|
| 081 | Browser | Determines whether certification is required before |
| | | a user can use the browser application. |

| 5430 | Auth Dialog Message Change | |
|------|----------------------------|---|
| 001 | Message Change On/Off | Turns on or off the displayed message change for the authentication. [0 or 1 / 0 / -] 0: Off, 1: On |
| 002 | Message Text Download | Executes the message download for the authentication. |
| 003 | Message Text ID | Inputs message text for the authentication. |

| 5431 | External Auth User Preset | | |
|------|---|---|--|
| 010 | Tag | [0 or 1 / 1 / -] 0: Not permit, 1: Permit | |
| | Turns on or off the tag copy permission for the external authentication. | | |
| 011 | Entry | [0 or 1 / 1 / -] 0: Not permit, 1: Permit | |
| | Turns on or off the copy permission of the entry information for the external authentication. | | |
| 012 | Group | [0 or 1 / 1 / -] 0: Not permit, 1: Permit | |
| 012 | Turns on or off the copy permission of the group information for the external authentication. | | |
| 020 | Mail | [0 or 1 / 1 / -] 0: Not permit, 1: Permit | |
| | Turns on or off the copy permission of the mail information for the external authentication. | | |

| 030 | Fax | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
|-----|---|---|
| 030 | Turns on or off the copy permission of the fax information for the external authentication. | |
| | FaxSub | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 031 | Turns on or off the copy permission of authentication. | the fax additional information for the external |
| 022 | Folder | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 032 | Turns on or off the copy permission of the folder information for the external authentication. | |
| 033 | ProtectCode | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 033 | Turns on or off the copy permission of the protection code information for the external authentication. | |
| 034 | SmtpAuth | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 034 | Turns on or off the copy permission of the SMTP information for the external authentication. | |
| 035 | LdapAuth | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 033 | Turns on or off the copy permission of the LDAP information for the external authentication. | |
| 036 | Smb Ftp Fldr Auth | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
| 030 | Turns on or off the copy permission of authentication. | the SMB/FTP information for the external |

| 037 | AcntAcl | [0 or 1 / 1 / -] 0: Not permit, 1: Permit |
|-----|--|---|
| 037 | Turns on or off the copy permission of the account ACL information for the external authentication. | |
| | DocumentAcl | [0 or 1 / 1 / -] |
| 038 | Documentaci | 0: Not permit, 1: Permit |
| | Turns on or off the copy permission of the document ACL information for the external authentication. | |
| | CertCrypt | [0 or 1 / 1 / -] |
| 040 | | 0: Not permit, 1: Permit |
| 040 | Turns on or off the copy permission of the authentication information for the external authentication. | |
| | UserLimitCount | [0 or 1 / 1 / -] |
| 050 | | 0: Not permit, 1: Permit |
| | Turns on or off the copy permission of authentication. | the maximum number information for the external |

| 5481 | Authentication Error Code | |
|------|---|--|
| 3401 | These SP codes determine how the authentication failures are displayed. | |
| 001 | System Log Disp | [0 or 1 / 0 / -] 0: OFF [Default], 1: ON Determines whether an error code appears in the system log after a user authentication failure occurs. |
| 002 | Panel Disp | [0 or 1 / 1 / 1] 0: OFF, 1: ON [Default] Determines whether an error code appears on the operation panel after a user authentication failure occurs. |

RTB 13g Can now be used outside Japan (f/w ver 1.12)

| | MF KeyCard (Japan only) |
|------|---|
| | Sets up operation of the machine with a keycard. |
| 5490 | [0 to 1 / 0 / 1] |
| | 0: Disabled. Cancels operation without a user code. |
| | 1: Enabled. Allows operation without a user code. |

| | Optional Counter |
|-------|--|
| 5491* | Determines whether to cancel the job when MK1 keycard is pulled out from the machine during job. |
| 5491" | [0 to 11111111 / 0 / 1] |
| | 0: On. Cancels the job. |
| | 1: Off. Allows operation if MK1 keycard is pulled out from the machine during the job. |

| 5501* | PM Alarm |
|-------|---|
| | PM Alarm Level |
| 001 | Sets the PM alarm level. |
| | [0 to 9999 / 0 / 1 k copies/step] |
| | 0: No PM alarm |
| | Original Count Alarm (DFU) |
| 002 | Selects whether the PM alarm for the number of scans is enabled or not. |
| | If this is "1", the PM alarm function is enabled. |
| | [0 = No / 1 = Yes] |

| | Jam Alarm |
|-------|---|
| | Sets the alarm to sound for the specified jam level (document misfeeds are not included). |
| 5504* | [0 to 3 / 3 / 1 step] |
| 3304 | 0: Zero (Off) |
| | 1: Low (2.5K jams) |
| | 2: Medium (3K jams) |
| | 3: High (6K jams) |

| | Error Alarm |
|-------|--|
| 5505* | Sets the number of sheets to clear the error alarm counter. |
| | The error alarm counter counts "1" when any SC is detected. However, the error alarm counter decreases by "1" when an SC is not detected during a set number of copied sheets (for example, default 5000 (C1b) or 10000 (C1c) sheets). The error alarm occurs when the SC error alarm counter reaches "5". |
| | [0 to 255 / 45 (C2b), 50 (C1b/C1.5b), 60 (C2c), 100 (C1c/C1.5c) / 100 copies / step] |

| 5507* | Supply Alarm | |
|-------|-------------------------------------|--|
| | Paper supply Alarm | Switches the control call on/off for the paper supply. (DFU) |
| | | 0: Off, 1: On |
| 001 | (0:Off 1:On) | 0: No alarm. |
| | (0.011 1.011) | 1: Sets the alarm to sound for the specified number transfer sheets for each paper size (A3, A4, B4, B5, DLT, LG, LT, HLT) |
| | Staple Supply Alarm (0:Off 1:On) | Switches the control call on/off for the stapler installed in the finisher. (DFU) |
| 002 | | 0: Off, 1: On |
| | | 0: No alarm |
| | | 1: Alarm goes off for every 1K of staples used. |
| | Toner Supply Alarm (0:Off 1:On) | Switches the control call on/off for the toner end. (DFU) 0: Off, 1: On |
| 003 | | If you select "1" the alarm will sound when the copier |
| | | detects toner end. |
| 0.55 | Toner Call Timing | Changes the timing of the "Toner Supply Call" via the @Remote, when the following conditions occur. |
| 080 | | 0: At replacement |
| | | 1: At near end |

| 128 | Interval: Others | |
|-----|------------------|--|
| 132 | Interval: A3 | |
| 133 | Interval: A4 | |
| 134 | Interval: A5 | |
| 141 | Interval: B4 | The "Paper Supply Call Level: nn" SPs specify the paper control call interval for the referenced paper sizes. (DFU) |
| 142 | Interval: B5 | [250 to 10000 / 1000 / 1 Step] |
| 160 | Interval: DLT | |
| 164 | Interval: LG | |
| 166 | Interval: LT | |
| 172 | Interval: HLT | |

| 5508 | CC Call | |
|------|--------------------------------|--|
| 001 | Jam Remains | Enables/disables initiating a call. |
| 002 | Continuous Jams | [0 to 1 / 1 / 1] |
| 003 | Continuous Door Open | 0: Disable 1: Enable |
| 011 | Jam Detection: Time Length | Sets the length of time to determine the length of an unattended paper jam. [3 to 30 / 10 / 1 minute] |
| 012 | Jam Detection Continuous Count | Sets the number of continuous paper jams required to initiate a call. [2 to 10 / 5 / 1 time] |
| 013 | Door Open: Time Length | Sets the length of time the remains opens to determine when to initiate a call. [3 to 30/10/1 minute] |

| | | SC/Alarm Setting |
|------|------------|--|
| 5515 | <u>,</u> * | With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs. |

| 001 | SC Call | |
|-----|-------------------------------------|-----------------------------------|
| 002 | Service Parts Near End Call | |
| 003 | Service Parts End Call | |
| 004 | User Call | |
| 006 | Communication Information Test Call | [0 or 1 / 1 / 1] 0: OFF |
| 007 | Machine Information Notice | 1: ON |
| 008 | Alarm Notice | |
| 010 | Supply Automatic Ordering Call | |
| 011 | Supply Management Report Call | |
| 012 | Jam/Door Open Call | |

| | Individual PM Part Alarm Call | |
|--|---|--|
| With @Remote in use, these SP codes can be set to issue an PM alarm call whe SP parts reaches its yield. | | be set to issue an PM alarm call when one of |
| 001 | Disable/Enable Setting (0: Not send, 1: Send) | [0 or 1 / 1 / -] 0: Not send, 1: Send |
| 004 | Percent yield for triggering PM alert | [1 to 255 / 75 / 1 %/step] |

| 5720 | Extend Function Setting | |
|------|-------------------------|--|
| 5730 | DFU | |

| 5734 | PDF Setting |
|------|------------------|
| | PDF/A Fixed |
| 001 | [0 or 1 / 0 / -] |
| 001 | 0: No Limit |
| | 1: Limited |

| 5741 | Node Authentication Timuout | |
|------|-----------------------------|--|
| 5741 | DFU | |

| 5743 | Network Security Level | |
|------|------------------------|--|
| 5/43 | DFU | |
| | | |
| E744 | Management | |
| 5744 | DFU | |
| | | |
| 5745 | EcoCountTime | |
| 3/43 | DFU | |

SP 5747 RTB 40

SP 5749 RTB 43

| 5749 | Input/Output |
|------|--------------|
| 3749 | DFU |

| 5792 | MCS Debug SW |
|------|--------------|
| 3/92 | DFU |

| 5793 | ECS Debug SW |
|------|--------------|
| 3/93 | DFU |

| | Memory Clear | |
|------|---|--|
| 5801 | Resets NVRAM data to the default settings. Before executing any of these SP codes, print an SMC Report. | |
| 001 | All Clear | Initializes items 2 to 15 below. |
| 002 | Engine | Initializes all registration settings for the engine and copy process 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 image file system. (IMH: Image Memory Handler) |

| 005 | MCS | Initializes the automatic delete time setting for stored documents. |
|-----|---------------------|--|
| | | (MCS: Memory Control Service) |
| 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 | Initializes the printer defaults, programs registered, the printer SP bit switches, and the printer CSS counter. |
| 009 | Scanner Application | Initializes the defaults for the scanner and all the scanner SP modes. |
| 010 | Web Service | Deletes the Netfile (NFA) management files and thumbnails, and initializes the Job login ID. |
| | Web dervice | Netfiles: Jobs to be printed from the document server using a PC and the DeskTopBinder software |
| 011 | NCS | Initializes the system defaults and interface settings (IP addresses also), the SmartDeviceMonitor for Admin settings, WebStatusMonitor settings, and the TELNET settings. (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 (Log Count Service) settings. |
| 020 | Web Uapli | Initializes the web user application settings. |
| 021 | ECS | Initializes ECS (Engine Control Service). |
| 023 | AICS | Initializes the AICS settings. |

| | FreeRun | |
|---|---|--|
| Performs a free run on the copier engine. The correct paper should be loaded in the 1st tray or 2nd tray, but paper is not | | uld be loaded in the 1st tray or 2nd tray, but paper is not fed. |
| | The main switch has to be turned off and on after using the free run mode for a test. | |
| 001 | TRAY1:A4LEF | - |
| 002 | TRAY2:A3 | - |
| 003 | TRAY2:A4SEF | - |

| 5803 | Input Check | |
|------|---|--|
| | Displays the signals received from sensors and switches. (p.243 "Input Check") | |
| | | |
| | Output Check | |

| | Output Check |
|------|--|
| 5804 | Turns on the electrical components individually for test purposes. (p.253 "Output Check") |

| | 5805 | Anti-Condensation Heater | |
|--|------|--------------------------|--|
| | | [0 or 1 / 0 / -] | |
| | | 0:OFF / 1:ON | |

| 5810 | SC Reset | |
|------|-----------------|---|
| 001 | Fusing SC Reset | Resets all level A service call conditions, such as fusing errors. To clear the service call, touch "Execute" on the LCD, then turn the main power switch off/on. |

| 5811 | MachineSerial | | |
|------|---------------|-------------------------------------|--|
| 002 | Display | Displays the machine serial number. | |
| 003 | BCU | Inputs the serial number. | |
| 005 | FRAM | Displays the FRAM serial number. | |

| 5812* | Service Tel. No. Setting |
|-------|--------------------------|
|-------|--------------------------|

| 001 | Service | Inputs the telephone number of the CE (displayed when a service call condition occurs.) | | |
|------------|-----------|---|--|--|
| 002 | Facsimile | Use this to input the fax number of the CE printed on the Counter Report (UP mode). | | |
| 003 Supply | | Inputs the telephone number of the supplier displayed on the user mode screen. | | |
| 004 | Operation | Allows the service center contact telephone number to be displayed on the user mode screen. | | |

| 5816 Remote Service | |
|---------------------|--|
| | I/F Setting |
| | Selects the remote service setting. |
| 001 | [0 to 2 / 2 / 1 /step] |
| | 0: Remote service off |
| | 1: CSS remote service on |
| | 2: @Remote service on |
| | CE Call |
| | Performs the CE Call at the start or end of the service. |
| 002 | [0 or 1 / 0 / 1 /step] |
| | 0: Start of the service |
| | 1: End of the service |
| | NOTE: This SP is activated only when SP 5816-001 is set to "2". |
| | Function Flag |
| | Enables or disables the remote service function. |
| 003 | [0 to 1 / 0 / 1 /step] |
| | 0: Disabled, 1: Enabled |
| | NOTE: This SP setting is changed to "1" after @Remote registration has been completed. |
| | Communication Test Call |
| 004 | This SP issues a test call from a GW machine to determine whether it can communicate successfully with the call center after it has been set up for NRS. Successful return will be in the range 0 to 99. |

| | Device Information Call |
|-----|--|
| 005 | This SP issues a call to notify the NRS device information to the call center. Successful return will be in the range 0 to 99. |
| | SSL Disable |
| 007 | Uses or does not use the RCG certification by SSL when calling the RCG. [0 to 1 / 0 / 1 /step] 0: Uses the RCG certification 1: Does no use the RCG certification |
| | RCG Connect Timeout |
| 008 | Specifies the connect timeout interval when calling the RCG. [1 to 90 / 30 / 1 second /step] |
| | RCG Write Timeout |
| 009 | Specifies the write timeout interval when calling the RCG. [0 to 100 / 60 / 1 second / step] |
| | RCG Read Timeout |
| 010 | Specifies the read timeout interval when calling the RCG. [0 to 100 / 60 / 1 second / step] |
| | Port 80 Enable |
| 011 | Enables/disables access via port 80 to the SOAP method. [O or 1 / O / -] O: Disabled, 1: Enabled |
| | @Remote Communication Permission |
| 012 | [0 to 2 / 1 / 1] 0: Not permitted 1: Permitted 2: Partially limit |

| | RFU (Remote Firmware Update) Timing |
|-----|---|
| | Selects the RFU timing. |
| 013 | [0 or 1 / 1 / -] |
| | 0: RFU is executed whenever update request is received. |
| | 1: RFU is executed only when the machine is in the sleep mode. |
| | RCG Error Cause |
| | [0 or 1 / 0 / –] |
| 014 | 0: Normal |
| | 1: Fails to reflect the client/server certificate settings by network failure to reboot. Transition to 0 on restart the machine. |
| | RCG-C Registed |
| 021 | This SP displays the Embedded RC Gate installation end flag. |
| 021 | 0: Installation not completed |
| | 1: Installation completed |
| | Connect Type (N/M) |
| | This SP displays and selects the Embedded RC Gate connection method. |
| 023 | [0 or 1 / 0 / 1 /step |
| | 0: Internet connection |
| | 1: Dial-up connection |
| 061 | Cert. Expire Timing DFU |
| 001 | Proximity of the expiration of the certification. |
| | Use Proxy |
| 062 | 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 Embedded RC Gate-N and the gateway. Use this SP to set up or display the customer proxy server address. The address is necessary to set up Embedded RC Gate-N. 063 **Note** • The address display is limited to 128 characters. Characters beyond the 128 character are ignored. • This address is customer information and is not printed in the SMC report. Proxy Port Number This SP sets the port number of the proxy server used for communication between Embedded RC Gate-N and the gateway. This setting is necessary to set up Embedded 064 RC Gate-N. **Note** • This port number is customer information and is not printed in the SMC report. Proxy User Name This SP sets the HTTP proxy certification user name. **Note** 065 • The length of the name is limited to 31 characters. Any character beyond the 31st character is ignored. This name is customer information and is not printed in the SMC report. Proxy Password This SP sets the HTTP proxy certification password. Note 066 • The length of the password is limited to 31 characters. Any character beyond the 31st character is ignored. • This name is customer information and is not printed in the SMC report.

| | CERT | : Up State | |
|-----|--|---|--|
| | Displays the status of the certification update. | | |
| | 0 | The certification used by Embedded RC Gate is set correctly. | |
| | 1 | The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated. | |
| | 2 | The certification update is completed and the GW URL is being notified of the successful update. | |
| | 3 | The certification update failed, and the GW URL is being notified of the failed update. | |
| | 4 | The period of the certification has expired and new request for an update is being sent to the GW URL. | |
| | 11 | A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection. | |
| 067 | 12 | The rescue certification setting is completed and the GW URL is being notified of the certification update request. | |
| | 13 | The notification of the request for certification update has completed successfully, and the system is waiting for the certification update request from the rescue GW URL. | |
| | 14 | The notification of the certification request has been received from the rescue GW controller, and the certification is being stored. | |
| | 15 | The certification has been stored, and the GW URL is being notified of the successful completion of this event. | |
| | 16 | The storing of the certification has failed, and the GW URL is being notified of the failure of this event. | |
| | 17 | The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded. | |
| | 18 | The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update. | |

| | CERT | : Error | | |
|-----|---|--|---|--|
| | Displays a number code that describes the reason for the request for update of the certification. | | | |
| | 0 | Normal. There is no request for certification update in progress. | | |
| | 1 | Request for certification | update in progress. The current certification has expired. | |
| 068 | 2 | An SSL error notification | An SSL error notification has been issued. Issued after the certification has expired. | |
| | 3 | Notification of shift from a common authentication to an individual certification. | | |
| | 4 | Notification of a commo | on certification without ID2. | |
| | 5 | Notification that no certi | fication was issued. | |
| | 6 | Notification that GW UI | RL does not exist. | |
| 069 | CERT | : Up ID | The ID of the request for certification. | |
| 083 | Firm l | Up Status | Displays the status of the firmware update. | |
| 085 | 085 Firm Up User Check 086 Firmware Size | | 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 | | | Allows the service technician to confirm the size of the firmware data files during the firmware update execution. | |
| 087 | CERT | : Macro Ver. | Displays the macro version of the @Remote certification. | |
| 088 | CERT | : PAC Ver. | Displays the PAC version of the @Remote certification. | |
| 089 | CERT: ID2 Code | | Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asteriskes (*) indicate that no @Remote certification exists. "000000" indicates "Common certification". | |
| 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 @Remote certification exists. "000000" indicates "Common certification". | |

| 091 | CERT: SerialNo. Displays serial number for the @Remote certification. Asterisks (*) indicate that no @Remote certification ex | | | |
|------|---|---|--|--|
| 092 | Displays the common name of the issuer of the certification. CN = the following 30 bytes. A indicate that no @Remote certification 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. | | |
| 007 | Server CN Check | | | |
| 096 | Not used | | | |
| 004 | GW Host | | | |
| 096 | Not used | | | |
| 097 | GW URL Path | | | |
| 097 | Not used | | | |
| 099 | Debug RescueG/WURL Set | | | |
| 099 | Not used | | | |
| 102* | CERT: Encrypt Level | | | |
| | Displays the encryption level for the NRS certificate. [1 or 2 / 1 / -] 1: Indicates that the certificate encryption level is 512-bit. 2: Indicates that the certificate encryption level is 2048-bit. | | | |
| 1.50 | Selection Country | | | |
| 150 | Not used | | | |
| 1.51 | Line Type Automatic Judgment | | | |
| 151 | Not used | | | |
| 150 | Line Type Judgment Result | | | |
| 152 | Not used | | | |
| | | | | |

| 153 | Selection Dial / Push |
|------|---------------------------------------|
| 153 | Not used |
| 154 | Outside Line Outgoing Number |
| 134 | Not used |
| 156 | Dial Up User Name |
| 130 | Not used |
| 157 | Dial Up Password |
| 137 | Not used |
| 161 | Local Phone Number |
| 101 | Not used |
| 162 | Connection Timing Adjustment Incoming |
| 102 | Not used |
| 163 | Access Point |
| 103 | Not used |
| 164 | Line Connecting |
| 104 | Not used |
| 173 | Modem Serial No. |
| 173 | Not used |
| 174 | Retransmission Limit |
| 17.4 | Not used |
| 186 | RCG-C M DebugBitSW |
| 100 | Not used |
| 187 | FAX TX Priority |
| 107 | Not used |
| 200 | Manual Polling |
| 200 | Executes the manual polling. |

| 0: | : Neither the @Remote devi | ates the status of the @Remote service device. | | |
|-----------|---|--|--|--|
| 1: | : The Embedded RCG Gate | | | |
| | | | | |
| 201 510 | | is being set. Only Box registration is completed. In this ot communicate with this device. | | |
| | : The Embedded RCG Gate ommunicate with this device | is set. In this status, the @Remote device cannot . | | |
| | : The @Remote device is be et. | ing set. In this status the Embedded RCG Gate cannot be | | |
| 4: | : The @Remote module has | not started. | | |
| 202 Le | etter Number | Allows entry of the request number needed for the Embedded RCG Gate. | | |
| 203 C | Confirm Execute Executes the confirmation request to the @Remote Gateway. | | | |
| 204 C | Confirm Result | | | |
| | Displays a number that indicates the result of the confirmation executed with SP5816-203. | | | |
| 0: | 0: Succeeded | | | |
| 1: | 1: Confirmation number error | | | |
| 2: | 2: Registration in progress | | | |
| 3: | 3: Proxy error (proxy enabled) | | | |
| 4: | 4: Proxy error (proxy disabled) | | | |
| 5: | 5: Proxy error (Illegal user name or password) | | | |
| 6: | : Communication error | | | |
| 7: | : Certification update error | | | |
| | : Other error | | | |
| 9: | : Confirmation executing | | | |
| С | Confirm Place | | | |
| | Displays the result of the notification sent to the device from the Gateway in answer to the confirmation request. Displayed only when the result is registered at the Gateway. | | | |
| 206 Re | Register Execute Executes "Embedded RCG Registration". | | | |

Register Result

Displays a number that indicates the registration result.

- 0: Succeeded
- 2: Registration in progress
- 3: Proxy error (proxy enabled)
- 207
 - 4: Proxy error (proxy disabled)
 - 5: Proxy error (Illegal user name or password)
 - 6: Communication error
 - 7: Certification update error
 - 8: Other error
 - 9: Registration executing

Error Code

Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.

| | Cause | Code | Meaning | | |
|-----|---------------------------------------|--------|--|--|--|
| | Illegal Modem Parameter | -11001 | Chat parameter error | | |
| | | -11002 | Chat execution error | | |
| | | -11003 | Unexpected error | | |
| | Operation Error, Incorrect Setting | -12002 | Inquiry, registration attempted without acquiring device status. | | |
| | | -12003 | Attempted registration without execution of an inquiry and no previous registration. | | |
| 208 | | -12004 | Attempted setting with illegal entries for certification and ID2. | | |
| | | -12005 | @Remote communication is prohibited. The device has an Embedded RC gate-related problem. | | |
| | | -12006 | A confirmation request was made after the confirmation had been already completed. | | |
| | | -12007 | The request number used at registration was different from the one used at confirmation. | | |
| | | -12008 | Update certification failed because mainframe was in use. | | |
| | | -12009 | ID2 mismatch between an individual certification and NVRAM | | |
| | | -12010 | Certification area is not initialized. | | |

| | | -2385 | Attempted dial up overseas without the correct international prefix for the telephone number. | |
|-----|---|--|---|--|
| | Error Caused by Response from GW URL | -2387 | Not supported at the Service Center | |
| | | -2389 | Database out of service | |
| | | -2390 | Program out of service | |
| | | -2391 | Two registrations for same device | |
| | | -2392 | Parameter error | |
| | | -2393 | RCG device not managed | |
| | | -2394 | Device not managed | |
| | | -2395 | Box ID for RCG device is illegal | |
| | | -2396 | Device ID for RCG device is illegal | |
| | | -2397 | Incorrect ID2 format | |
| | | -2398 | Incorrect request number format | |
| | Instl Clear | Releases the machine from its Embedded RCG Gate setup. | | |
| 209 | | NOTE: Turn off and on the main power switch after this setting has been changed. | | |
| 250 | CommLog Print | Prints the communication log. | | |

| 5821* | Remote Service Address | |
|-------|------------------------|--|
| 002 | RCG IP Address | Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [00000000h to FFFFFFFh / 0000000h / 1] |
| 003 | RCG Port | Sets the port number of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [0 to 65535 / 443 / 1] |

| 004 | RCG URL Path | Sets the URL path of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [0 to 16 characters / /RCG/services/ /-] |
|-----|--------------|--|
|-----|--------------|--|

| | NV-RAM Data Upload |
|------|---|
| 5824 | Uploads the NVRAM data to an SD card. Push Execute. |
| | Note: When uploading data in this SP mode, the front door must be open. |

| | NV-RAM Data Download |
|------|--|
| 5825 | Downloads data from an SD card to the NVRAM in the machine. After downloading is completed, remove the card and turn the machine power off and on. |

| 5828 | Network Setting | |
|------|--|--|
| | IPv4 Address (Ethernet/IEEE 802.11) | |
| 001 | This SP allows you to check and reset the IPv4 address for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd | |
| | IPv4 Subnet Mask (Ethernet/IEEE 802.11) | |
| 002 | This SP allows you to check and reset the IPv4 subnet mask for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd | |
| | IPv4 Default Gateway (Ethernet/IEEE 802.11) | |
| 003 | This SP allows you to check and reset the IPv4 default gateway used by the network for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd | |
| | DHCP (Ethernet/IEEE 802.11) | |
| 006 | This SP code allows you check and change the setting that determines whether the IP address is used with DHCP on an Ethernet or wireless (802.11) LAN network. [0 to 1 / 1 / 1] | |
| | 0: Not used (manual setting) | |
| | 1: Used | |

| | Active IPv4 Address | | | | |
|-----|---|---|--|--|--|
| 021 | This SP allows you to check the IPv4 address that was used when the machine started up with DHCP. | | | | |
| | Active IPv4 Subnet Mask | | | | |
| 022 | This SP allows you to check the IPv4 subnet mask setting that was used when the machine started up with DHCP. | | | | |
| | Active IPv4 Gateway Address | | | | |
| 023 | This SP allows you to check the machine started up with DHCP | e IPv4 default gateway setting that was used when the | | | |
| 050 | 1284 Compatibility (Centro) | Enables and disables bi-directional communication on the parallel connection between the machine and a computer. [0 to 1 / 1 / 1] 0:Off, 1: On | | | |
| 052 | ECP (Centro) | Disables and enables the ECP feature (1284 Mode) for data transfer. [0 to 1 / 1 / 1] 0: Disabled, 1: Enabled | | | |
| 065 | Job Spooling | Switches the job spooling on and off. [0 to 1 / 0 / 1] 0: No spooling, 1: Spooling enabled | | | |
| 066 | Job Spooling Clear: Start Time | This SP determines whether the job interrupted at power off is resumed at the next power on. This SP operates only when SP5828-065 is set to "1". [0 to 1 / 1 / 1] | | | |
| | | OFF Resumes printing spooled jog. ON Clears spooled job. | | | |

| | | | This SP determines whether job spooling is enabled or disabled for each protocol. This is a 8-bit setting. | | |
|-----|-----------------------------------|------------------------------------|---|------|---------------------------|
| | Job | Job Spooling (Protocol) | | / 1 | / 1] |
| | | | 0: No s | spoo | ling, 1: Spooling enabled |
| 069 | 0 | LPR | | 4 | BMLinks (Japan Only) |
| | 1 | FTP (Not Used) | | 5 | DIPRINT |
| | 2 | IPP | | 6 | Reserved (Not Used) |
| | 3 | SMB | | 7 | Reserved (Not Used) |
| 087 | @R | Remote Protocol Cnt (DFU) | | | |
| 090 | 090 TELNET (0:OFF 1:ON) | | Disables or enables Telnet operation. If this SP is disabled, the Telnet port is closed. [O to 1 / 1 / 1] | | |
| | | | 0: Disable, 1: Enable | | |
| 091 | Web (0:OFF 1:ON) | | Disables or enables the Web operation. [0 to 1 / 1 / 1] 0: Disable, 1: Enable | | |
| | Active IPv6 Link Local Address | | This is the IPv6 local address referenced on the Ethernet or wireless LAN (802.11) in the format: "Link-Local address" + "Prefix Length" | | |
| 145 | | | The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. These notations can be abbreviated. See "Note: IPV6 Addresses " below this table. | | |

| 147 | Active IPv6 Stateless Address | | |
|-----|---|--|--|
| 149 | Active IPv6 Stateless Address | These SPs are the IPv6 stateless addresses (1 to 5) referenced on the Ethernet or wireless LAN (802.11) in | |
| 151 | Active IPv6 Stateless Address | the format: "Stateless Address" + "Prefix Length" | |
| 153 | Active IPv6 Stateless Address 4 | The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. | |
| 155 | Active IPv6 Stateless Address 5 | | |
| | IPv6 Manual Address | | |
| 156 | This SP is the IPv6 manually set (802.11) in the format: | address referenced on the Ethernet or wireless LAN | |
| | "Manual Set Address" + "Prefix Length" | | |
| | The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. These notations can be abbreviated. See "Note: IPV6 Addresses" below this table. | | |
| | IPv6 Gateway Address | | |
| 158 | This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN (802.11). The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. These notations can be abbreviated. See "Note: IPV6 Addresses" below this table. | | |
| | | | |

Note: IPV6 Addresses

Ethernet and the Wireless LAN (802.11) reference the IPV6 "Link-Local address + Prefix Length". The IPV6 address consists of 128 bits divided into 8 blocks of 16 bits: aaaa:bbbb:cccc:dddd:eeee:ffff:gggg:hhhh:

The prefix length is inserted at the 17th byte (Prefix Range: 0x0 to 0x80). The initial setting is 0x40 (64).

For example, the data: "2001123456789012abcdef012345678940h" is expressed:

"2001:1234:5678:9012:abcd:ef01:2345:6789": prefixlen 64

However, the actual IPV6 address display is abbreviated according to the following rules.

Rules for Abbreviating IPV6 Addresses

1. The IPV6 address is expressed in hexadecimal delimited by colons (:) with the following characters:

0123456789abcdefABCDEF

2. A colon is inserted as a delimiter every 4th hexadecimal character.

fe80:0000:0000:0000:0207:40ff:0000:340e

3. The notations can be abbreviated by eliminating zeros where the MSB and digits following the MSB are zero. The example in "2" above, then, becomes

fe80:0:0:0207:40ff:0:340e

4. Sections where only zeros exist can be abbreviated with double colons (::). This abbreviation can be done also where succeeding sections contain only zeros (but this can be done only at one point in the address). The example in "2" and "3" above then becomes:

fe80::207:40ff:0:340e (only the first null sets zero digits are abbreviated as "::")

fe80:0:0:0:207:40ff::340e (only the last null set before "340e" is abbreviated as "::")

| 161 | IPv6 Stateless Auto Setting | Enable or disables the automatic setting for IPv6 stateless. [O or 1 / 1 / 1] 1: Enable, O: Disable |
|-----|---|---|
| | Web Item visible | |
| 236 | 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) | |
| | Web shopping link visible | |
| 237 | Displays or does not display the the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display | e link to Net RICOH on the top page and link page of |

| | Web supplies Link visible | |
|-----|--|--|
| 238 | 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 | |
| | Web Link1 Name | |
| 239 | 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. | |
| | Web Link1 URL | |
| 240 | his 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. | |
| | Web Link1 visible | |
| 241 | 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" |
| | DHCPv6 DUID | |
| 249 | Sets DHCPv6 DUID. | |
| 247 | [0000000000000000000000000h to | |
| | FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF | Fh / 00000000000000000000000000000000000 |

| | HDD |
|--|----------------------------|
| Enter the SP number for the partition to initialize, then press #. When the exceeds, cycle the machine off and on. | |
| 001 | HDD Formatting (All) |
| 002 | HDD Formatting (IMH) |
| 003 | HDD Formatting (Thumbnail) |

| 004 | HDD Formatting (Job Log) |
|-----|--|
| 005 | HDD Formatting (Printer Fonts) |
| 006 | HDD Formatting (User Info) |
| 007 | Mail RX Data |
| 008 | Mail TX Data |
| 009 | HDD Formatting (Data for Design) |
| 010 | HDD Formatting (Log) |
| 011 | HDD Formatting (Ridoc I/F) (for Ridoc Desk Top Binder) |

| 5836* | Capture Setting | | |
|-------|--|--|--|
| 001 | Capture Function (0:Off 1:On) | | |
| | With this function disabled, the settings related to the capture feature cannot be initialized, displayed, or selected. | | |
| | [0 to 1 / 0 / 1] | | |
| | 0: Disable, 1: Enable | | |
| | Panel Setting | | |
| 002 | Determines whether each capture related setting can be selected or updated from the initial system screen. $[0 \text{ to } 1 / 0 / 1]$ | | |
| | 0: Disable, 1: Enable | | |
| | The setting for SP5836-001 has priority. | | |
| 072 | Reduction for Copy B&W Text | [0 to 6 / 0 / 1] | |
| 072 | Reduction for Copy bavv Text | 0:1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 072 | Reduction for Copy B&W Other | [0 to 6 / 0 / 1] | |
| 073 | | 0:1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 075 | Reduction for Printer B&W | [0 to 6 / 0 / 1] | |
| | Reduction for Fillier DXYY | 0 1, 1:1/2, 2:1/3, 3:1/4, 6:2/3 | |
| 078 | Reduction for Printer B&W 1200 | 1: 1/2 , 3: 1/4, 4: 1/6, 5: 1/8 | |

| Format for Copy B&W Text | | [0 to 3 / 1 / 1] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
|--|--|---|
| Format Copy B&W Other | | [0 to 3 / 1 / 1] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
| Format for Printer B&W | | [0 to 3 / 1 / 1] O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR |
| Default for JPEG | | [5 to 95 / 50 / 1] |
| Sets the JPEG format default for documents sent to the document management server with the MLB, with JPEG selected as the format. Enabled only when optional File Format Converter (MLB: Media Link Board) is installed. | | ormat. Enabled only when optional File |
| Primary srv IP address | | e IP address for the primary capture server. pasically adjusted by the remote system. |
| Primary srv scheme | This is b | pasically adjusted by the remote system. |
| Primary srv port number | This is b | pasically adjusted by the remote system. |
| Primary srv URL path | This is b | pasically adjusted by the remote system. |
| Secondary srv IP address | Sets the IP address for the secondary capture server. This is basically adjusted by the remote system. | |
| Secondary srv scheme | This is basically adjusted by the remote system. | |
| Secondary srv port number | This is basically adjusted by the remote system. | |
| Secondary srv URL path | This is basically adjusted by the remote system. | |
| Reso: Copy (Mono) | [0 to 255 / 3 / 1/step] | |
| Selects the resolution for BW copy mode. This is basically adjusted by the remote system. | | |
| 0: 600dpi/ 1: 400dpi/ 2: 300d | pi/ 3: 2 | 00dpi/ 4: 150dpi/ 5: 100dpi |
| Reso: Print (Mono) | | pasically adjusted by the remote system. |
| | Format Copy B&W Other Format for Printer B&W Default for JPEG Sets the JPEG format default for dwith the MLB, with JPEG selected Format Converter (MLB: Media Literal Converter (MLB: M | Format Copy B&W Other Format for Printer B&W Default for JPEG Sets the JPEG format default for document with the MLB, with JPEG selected as the format Converter (MLB: Media Link Board Primary srv IP address Primary srv scheme This is becondary srv port number Primary srv URL path Secondary srv IP address Sets the This is becondary srv URL path Secondary srv port number This is becondary srv port number This is becondary srv port number This is becondary srv URL path This is becondary srv URL path Reso: Copy (Mono) [0 to 25] Selects the resolution for BW copy mode. system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 2 This is becondary in the path is is becondary. |

| | Selects the resolution for BW print mode. This is basically adjusted by the remote system. | |
|-----|--|-------------------------------------|
| | 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi | |
| 126 | This is basically adjusted by the remote system [0 to 255 / 3 / 1/step] | |
| | Selects the resolution for BW fax mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | |
| 127 | Reso: Scan (Color) This is basically adjusted by the remote system. [0 to 255 / 4 / 1/step] | |
| | Selects the resolution for color scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | |
| 128 | Reso: Scan (Mono) This is basically adjusted by the remote system. [0 to 255 / 3 / 1/step] | |
| | Selects the resolution for BW scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi | |
| 141 | All Addr Info Switch | [0 or 1 / 1 / -] 0: Off, 1: On |
| | Turns on or off the all address information transmission for the captured resources. | |
| 142 | Stand-by Doc Max Number | [10 to 9999 / 2000 / 1/step] |
| | Selects the maximum number of captured documents to be transmitted to the document server. | |

| 5840* | IEEE 802.11 |
|-------|--|
| | Channel MAX |
| 006 | Sets the maximum range of the bandwidth for the wireless LAN. This bandwidth setting varies for different countries. |
| | [1 to 14 / 11 (NA), 13 (EU), 14 (JPN) / 1] |
| | JPN: 1 to 14, NA: 1 to 11, EU: 1 to 13 |

| | Channel MIN | | |
|-----|--|--|--|
| 007 | Sets the minimum range of the bandwidth for operation of the wireless LAN. This bandwidth setting varies for different countries. [1 to 14 / 1 / 1] JPN: 1 to 14, NA: 1 to 11, EU: 1 to 13 | | |
| | Transmission speed | [0 x 00 to 0 x FF / 0 x FF to Auto / -] | |
| | 0 x FF to Auto [Default] | | |
| | 0 x 11 - 55M Fix | 0 x 07 - 11M Fix | |
| | 0 x 10 - 48M Fix | 0 x 05 - 5.5M Fix | |
| 008 | 0 x 0F - 36M Fix | 0 x 08 - 1 M Fix | |
| | 0 x 0E - 18M Fix | 0 x 13 - 0 x FE (reserved) | |
| | 0 x 0D - 12M Fix | 0 x 12 - 72M (reserved) | |
| | 0 x 0B - 9M Fix | 0 x 09 - 22M (reserved) | |
| | 0 x 0A - 6M Fix | | |
| | WEP Key Select | | |
| | Selects the WEP key. | | |
| 011 | Bit 1 and 0 | | |
| | 00: Key1, 01: Key2 (Reserved), | | |
| | 10: Key3 (Reserved), 11: Key4(Reserved) | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |
| | RTS/CTS Thresh | | |
| 013 | Adjusts the RTS/CTS threshold for the IEEE802.11 card. | | |
| 013 | [0 to 3000 / 2432 / 1] | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |
| | Fragment Thresh | | |
| 042 | Adjusts the fragment threshold for the IEEE802.11 card. | | |
| 042 | [256 to 2346 / 2346 / 1] | | |
| | This SP is displayed only when the IEEE802.11 card is installed. | | |

| 043 | 11g CTS to Self |
|-----|--|
| | 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. |
| | 1 1g Slot Time |
| 044 | Selects the slot time for IEEE802.11. |
| | [0 to 1 / 0 / 1] 0: 20 µm, 1: 9 µm |
| | This SP is displayed only when the IEEE802.11 card is installed. |
| | WPA Debug Lvl |
| 045 | 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 | |
|-------|---|--|
| | Press the User Tools key. These names appear when the user presses the Inquiry button on the User Tools screen. | |
| 001 | Toner Name Setting: Black | |
| 007 | OrgStamp | |
| 011 | StapleStd1 | |
| 012 | StapleStd2 | |
| 013 | StapleStd3 | |
| 014 | StapleStd4 | |
| 021 | StapleBind 1 | |
| 022 | StapleBind2 | |
| 023 | StapleBind3 | |

| | GWWS Analysis (DFU) | | | | |
|-------|---|---|--|--|--|
| | | | Groups | | |
| | This is a debugging tool. It sets the debugging output mode of each Net File process. Bit SW 0011 1111 | 0 | System & other groups (LSB) | | |
| | | 1 | Capture related | | |
| 5842* | | 2 | Certification related | | |
| | | 3 | Address book related | | |
| | | 4 | Machine management related | | |
| | | 5 | Output related (printing, delivery) | | |
| | | 6 | Repository related | | |
| | | Default: 00000000 – do not change | | | |
| 001 | Setting 1 | | les: Jobs to be printed from the document server a PC and the DeskTopBinder software | | |
| | | Adjusts the debug program mode setting. | | | |
| | Setting 2 | Bit7: 5682 mmseg-log setting | | | |
| 002 | | 0: Date/Hour/Minute/Second | | | |
| | | 1: Minute/Second/Msec. | | | |
| | | 0 to 6: Not used | | | |

| 5844 USB | |
|----------|---|
| | Transfer Rate |
| 001 | Sets the speed for USB data transmission. [0 x 01 or 0 x 04 / 0 x 04 /-] |
| | 0 x 01 [Full Speed], 0 x 04 [Auto Change] |
| | Vendor ID |
| 002 | Sets the vendor ID: |
| | Initial Setting: 0x05A Ricoh Company |
| | [0x0000 to 0xFFFF/1] (DFU) |

| 002 | |
|---------|--|
| 003 S | Sets the product ID. |
| [0 | 0x0000 to 0xFFFF/1] (DFU) |
| D | Device Release No. |
| S | Sets the device release number of the BCD (binary coded decimal) display. |
| 004 [0 | 0000 to 9999 / 100 / 1] (DFU) |
| | enter as a decimal number. NCS converts the number to hexadecimal number ecognized as the BCD. |
| 005 Fi | ixed USB Port |
| | his SP standardizes for common use the model name and serial number for USB PnP Plug & Play). It determines whether the driver requires re-installation. |
| [(| 0 to 2 / 0 / 1] |
| 0 |): OFF |
| 1 | : Level 1 |
| 2 | 2: Level 2 |
| 006 Pi | nP Model Name |
| TI | his SP sets the model name to be used by the USB PnP when "Function Enable (Level |
| | 2) is set so the USB Serial No. can have a common name (SP5844-5). |
| D | Default: Laser Printer (up to 20 characters allowed). |
| 007 Pi | nP Serial Number |
| TI 2 | this SP sets the serial number to be used by the USB PnP when "Function Enable (Level 2) |
| S€ | et so the USB Serial No. can have a common name (SP5844-5). |
| D | Default: None (up to 12 characters allowed for entry). |
| | Make sure that this entry is the same as the serial number in use. |
| | At initialization the serial number generated from the model name is used, not the setting of this SP code. |
| | At times other than initialization, the value set for this SP code is used. |
| 100 N | Notify Unsupport |

This SP determines whether an alert message appears on the control panel when a USB device (unsupported device) that cannot use an A-connector is connected.

[0 to 1 / 1 / 1]

0: Function enable

1: Function disable

- An unsupported device is a device that cannot use the functions of the USB device. For example, a USB mouse cannot be used even if it connected.
- If the PictBridge option is not mounted, even if a digital camera is connected it cannot be used because it is an unsupported device.

| 5845* | Delivery Server Setting |
|-------|---|
| 3643 | These are delivery server settings. |
| 001 | FTP Port No. |
| 001 | [0 to 65535 / 3670 / 1] |
| | IP Address (Primary) |
| 002 | Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be used with the initial system setting. [Range: 000.000.000.000 to 255.255.255.255] |
| | [Range: 000.000.000 to 255.255.255] |
| | Delivery Error Display Time |
| 006 | Use this setting to set the length of time that the message is shown when a test error occurs during document transfer with the NetFile application and an external device. [0 to 999 / 300 / 1 sec] |
| | IP Address (Secondary) |
| 008 | Sets the IP address that is given to the computer that is the secondary delivery server for Scan Router. This SP lets you set only the IP address, and does not refer to the DNS setting. |
| | [Range: 000.000.000.000 to 255.255.255.255] |

| | Delivery Server Model | | | | |
|-----|--|------------------------------|--|--|--|
| | Lets you change the model of the delivery server that is registered by the I/O device. [0 to $4/0/1$ step] | | | | |
| 009 | 0: Unknown | | | | |
| | 1: SG1 Provided | | | | |
| | 2: SG1 Package | | | | |
| | 3: SG2 Provided | | | | |
| | 4: SG2 Package | | | | |
| | Delivery Svr. Capability | | | | |
| | Changes the functions that the registered l | O device can do. | | | |
| | [0 to 255 / 0 / 1 step] | | | | |
| | Bit7 = 1 Comment information exits | | | | |
| | Bitó = 1 Direct specification of mail address possible | | | | |
| 010 | Bit5 = 1 Mail RX confirmation setting possible | | | | |
| | Bit4 = 1 Address book automatic update function exists | | | | |
| | Bit3 = 1 Fax RX delivery function exists | | | | |
| | Bit2 = 1 Sender password function exists | | | | |
| | Bit1 = 1 Function to link MK-1 user and Sender exists | | | | |
| | BitO = 1 Sender specification required (if set to 1, Bit6 is set to "0") | | | | |
| | | | | | |
| 011 | These settings are for future use. They will let you increase the number of registered devices (in addition to those registered for SP5845 010). | | | | |
| | There are eight bits (Bit 0 to Bit 7). All are unused at this time. | | | | |
| 013 | Server Scheme (Primary) | | | | |
| 014 | Server port Number (Primary) | | | | |
| 015 | 5 Server URL Path (Primary) | | | | |
| 016 | Server Scheme (Secondary) | | | | |
| 017 | Server Port Number(Secondary) | [1 to 65535 / 80 / 1] | | | |
| 018 | Server URL Path (Secondary) | | | | |

| 022 | Rapid Sending Control | [0 to 1 / 1 / -] 0: Disable, 1: Enable | |
|-----|--|--|--|
| | Enables or disables the prevention function for the continuous data sending error. | | |

| 5846* | UCS Setting |
|-------|--|
| | Machine ID (for Delivery Server) |
| 001 | Displays the unique device ID in use by the delivery server directory. The value is only displayed and cannot be changed. |
| | This ID is created from the NIC MAC or IEEE 1394 EUI. |
| | The ID is displayed as either 6-byle or 8-byte binary. |
| | Machine ID Clear (for Delivery Server) |
| 002 | Clears the unique ID of the device used as the name in the file transfer directory. Execute this SP if the connection of the device to the delivery server is unstable. After clearing the ID, the ID will be established again automatically by cycling the machine off and on. |
| | Maximum Entries |
| 003 | Changes the maximum number of entries that UCS can handle. [2000 to 20000 / 2000 / 1 step] |
| | If a value smaller than the present value is set, the UCS managed data is cleared, and the data (excluding user code information) is displayed. |
| | Delivery Server Retry Timer |
| 006 | Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book. |
| | [0 to 255 / 0 / 1 step] |
| | 0: No retries |
| | Delivery Server Retry Times |
| 007 | Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book. [0 to 255 / 0 / 1 step] |
| | |

| | Delivery Server Maximum Entries |
|-----|--|
| 008 | Lets you set the maximum number of account entries and information about the users of the delivery server controlled by UCS. [2000 to 20000 / 2000 / 1 step] |
| | LDAP Search Timeout |
| 010 | Sets the length of the time-out for the search of the LDAP server. [1 to 255 / 60 / 1 step] |
| | WSD Maximum Entries |
| 020 | WSD (Web Services on Devices) is the Microsoft standard for connectivity to webservice enabled devices. [50 to 250 / 250 / 1] |
| | Folder Auth Change |
| 021 | This SP determines whether the user login information (Login User name and Password) or address (destination setting in the address book for Scan-to-SMB) is used to permit folder access. The machine must be cycled off/on for this setting to take effect if it is changed. |
| 021 | [0 to 1 / 0 / 1] |
| | O: Login User Uses operator login information (initial value of main machine) 1: Destination Uses address authorization information |
| | Initial Value of Upper Limit Count |
| 022 | [0 to 999999 / 500 / 1] |

Addr Book Migration (USB -> HDD)

This SP moves the address book data from the SD card or flash ROM on the controller board to the HDD. You must cycle the machine off and on after executing this SP.

- 1. Turn the machine off.
- 2. Install the HDD.
- 3. Turn the machine on.
- 4. Do SP5846 040.

040 5. Turn the machine off/on.



- Executing this SP overwrites any address book data already on the HDD with the data from the flash ROM on the controller board.
- We recommend that you back up all directory information to an SD card with SP5846-051 before you execute this SP.
- After the address book data is copied to HDD, all the address book data is deleted from the flash ROM. If the operation fails, the data is not erased from the flash ROM.

041 Fill Addr Acl Info.

This SP must be executed immediately after installation of an HDD unit in a basic machine that previously had no HDD. The first time the machine is powered on with the new HDD installed, the system automatically takes the address book from the NVRAM and writes it onto the new HDD. However, the new address book on the HDD can be accessed only by the system administrator at this stage. Executing this SP by the service technician immediately after power on grants full address book access to all users.

Procedure

- 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. However, at this point the address book can be accessed by only the system administrator or key operator.
- 5. Enter the SP mode and do SP5846 041. After this SP executes successfully, any user can access the address book.

| | Addr Book Media | | | | |
|-----|--|-------------|--|--|--|
| | Displays the slot number where an address book data is in. [0 to 30 / - /1] | | | | |
| 043 | 0: Unconfirmed | | | | |
| | 1: SD Slot 1 | 20: HDD | | | |
| | 2: SD Slot 2 | 30: Nothing | | | |
| | 4: USB Flash ROM | | | | |
| 046 | Initialize All Setting & Addr Book | | | | |
| 040 | Initializes all settings and the address book. | | | | |
| | Initialize Local Address Book | | | | |
| 047 | Clears all of the address information from the local address book of a machine managed with UCS. | | | | |
| | Initialize Delivery Addr Book | | | | |
| 048 | Push [Execute] to delete all items (this does not include user codes) in the delivery address book that is controlled by UCS. | | | | |
| | Initialize LDAP Addr Book | | | | |
| 049 | Push [Execute] to delete all items (this does not include user codes) in the LDAP address book that is controlled by UCS. | | | | |
| | Initialize All Addr Book | | | | |
| 050 | Clears everything (including users codes) in UCS. However, the accounts and password deleted. | , | | | |
| | Backup All Addr Book | | | | |
| 051 | ard. Do this SP before replacing the y not succeed if the controller board or | | | | |
| | Restore All Addr Book | | | | |
| 052 | Copies back all directory information from the SD card to the flash ROM or HDD. Upload the address book from the old flash ROM or HDD with SP5846-51 before removing it. Do SP5846 52 after installing the new HDD. | | | | |

| | Clear Backup Info | | | |
|-----|--|--|--|--|
| 053 | Deletes the address book uploaded from the SD card in the slot 2. Deletes only the files uploaded for that machine. This feature does not work if the card is write-protected. | | | |
| | | Note: After you do this SP, go out of the SP mode, turn the power off. Do not remove the SD card until the Power LED stops flashing. | | |
| | Searc | h Option | | |
| | This S book | P uses bit switches to set up the fuzzy search options for the UCS local address | | |
| | Bit | Meaning | | |
| | 0 | Checks both upper/lower case characters | | |
| | 1 | | | |
| 060 | 2 | Japan Only | | |
| | 3 | | | |
| | 4 | Not Used | | |
| | 5 Not Used | | | |
| | 6 | Not Used | | |
| | 7 | Not Used | | |
| | Comp | plexity Option 1 | | |
| | Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to upper case and sets the length of the password. | | | |
| 062 | [0 to 32 / 0 / 1 step] | | | |
| | Note | | | |
| | | This SP does not normally require adjustment. | | |
| | | This SP is enabled only after the system administrator has set up a group cassword policy to control access to the address book. | | |

Complexity Option 2

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to lower case and defines the length of the password.

063 [0 to 32 / **0** / 1step]



- 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.

Complexity Option 3

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to numbers and defines the length of the password.

064 [0 to 32 / **0** / 1 step]



- 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.

Complexity Option 4

Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to symbols and defines the length of the password.

065 [0 to 32 / **0** / 1step]



091

- 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.

FTP Auth Port Setting

Sets the FTP port to get the delivery server address book that is used in the individual authorization mode.

[0 to 65535 / **3671** / 1step]

| Encryption Start | | |
|------------------|---|--|
| 094 | Shows the status of the encryption function of the address book on the LDAP server. | |
| | [0 to 255 / 1] No default | |

| 5847* | Rep Resolution Reduction | | | | |
|-------|---|-------------------------|---|--|--|
| | 5847-2 through 5847-6 changes the default settings of image data sent externally by the Net File page reference function. | | | | |
| 3047 | 5847-21 sets the default for JPEG | image quality of im | age files controlled by NetFile. | | |
| | "NetFile" refers to jobs to be printed from the document server with a PC and the DeskTopBinder software. | | | | |
| 002 | Rate for Copy B&W Text | [0 to 6 / 0 / 1] | 0: 1x | | |
| 003 | Rate for Copy B&W Other | [0 to 6 / 0 / 1] | 1: 1/2x | | |
| 005 | Rate for Printer B&W | [0 to 6 / 0 / 1] | 2: 1/3x | | |
| 007 | Rate for Printer B&W 1200dpi | [0 to 6 / 1 / 1] | 3: 1/4x 4: 1/5x 5: 1/8x 6: 2/3x1 | | |
| | Network Quality Default for JPEG | | | | |
| 021 | Sets the default value for the quality of JPEG images sent as NetFile pages. This function is available only with the MLB (Media Link Board) option installed. [5 to 95 / 50 / 1 step] | | | | |

| | Web Service | | |
|-------|--|--|--|
| 5848* | 5848-2 sets the 4-bit switch assignment for the access has no effect on access and delivery from Scan Router | 9 | |
| | 5848-100 sets the maximum size of images that can be downloaded. The default is equal to 1 gigabyte. | | |
| 002 | Acc. Ctrl.: Repository (only Lower 4 Bits) | 0000: No access control 0001: Denies access to DeskTop Binder. | |

| 003 | Acc. Ctrl.: Doc. Svr. Print (Lower 4 Bits) | |
|-----|---|---|
| 004 | Acc. Ctrl.: User Directory (Lower 4 Bits) | |
| 007 | Acc. Ctrl Comm. Log Fax (Lower 4 Bits) | |
| 009 | Acc. Ctrl.: Job Control (Lower 4 Bits) | Switches access control on and off. |
| 011 | Acc. Ctrl: Device Management (Lower 4 Bits) | 0000: OFF, 0001: ON |
| 021 | Acc. Ctrl: Delivery (Lower 4 Bits) | |
| 022 | Acc. Ctrl: User Administration (Lower 4 Bits) | |
| 099 | Repository: Download Image Setting | |
| 100 | Repository: Download Image Max. Size | Specified the max size of the image data that the machine can download/ |
| | | [1 to 2048 / 2048 / 1 MB] |
| 210 | Setting: Log Type: Job 1 | |
| | No information is available at this time. | |
| 211 | Setting: Log Type: Job 2 | |
| 2 | No information is available at this time. | |
| 212 | Setting: Log Type: Access | |
| 212 | No information is available at this time. | |
| 213 | Setting: Primary Srv | |
| 210 | No information is available at this time. | |
| 214 | Setting: Secondary Srv | |
| 214 | No information is available at this time. | |
| 215 | Setting: Start Time | |
| 213 | No information is available at this time. | |
| 216 | Setting: Interval Time | |
| 210 | No information is available at this time. | |
| | | |

| 217 | Setting: Timing | |
|-----|---|--|
| 217 | No information is available at this time. | |

| | Installation Date | |
|------|--|--|
| 5849 | Displays or prints the installation date of the machine. | |
| 001 | Display | The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date". |
| | | Determines whether the installation date is printed on the printout for the total counter. |
| 002 | Switch to Print | [0 to 1 / 1 / -] |
| | | 0: OFF (No Print) |
| | | 1: ON (Print) |
| 003 | Total Counter | When the total number of pages that are made reaches this value, the current date becomes the 'official' installation date for this machine. |
| | | [0 to 99999999 / 0 / 1] |

| 5850* | Address Book Function Japan Only |
|-------|--|
| | Replacement of Circuit Classification |
| 003 | The machine is sold ready to use with a G3 line. This SP allows you to switch all at once to convert to G4 after you add a G4 line. Conversely, if for some reason the G4 line becomes unusable, you can easily switch back to G3. |

| | Bluetooth |
|-------|---|
| 5851* | Sets the operation mode for the Bluetooth Unit. Press either key. [0: Public] / [1: Private] |

| | Stamp Data Download |
|------|--|
| 5853 | Push [Execute] to download the fixed stamp data from the machine ROM onto the hard disk. Then these stamps can be used by the system. If this is not done, the user will not have access to the fixed stamps ("Confidential", "Secret", etc.). |
| | You must always execute this SP after replacing the HDD or after formatting the HDD. Always switch the machine off and on after executing this SP. |

| 5856 | Remote ROM Update |
|------|---|
| | When set to "1" allows reception of firmware data via the local port (IEEE 1284) during a remote ROM update. This setting is reset to zero after the machine is cycled off and on. Allows the technician to upgrade the firmware using a parallel cable |
| 002 | [0 to 1 / 0 / 1 step] 0: Not allowed |
| | 0: Not allowed |
| | 1: Allowed |

| 5857 | Save Debug Log |
|------|---|
| | On/Off (1:ON 0:OFF) |
| 001 | Switches on the debug log feature. The debug log cannot be captured until this feature is switched on. |
| | [0 to 1 / 0 / 1] |
| | 0: OFF, 1: ON |
| | Target (2: HDD 3: SD) |
| 002 | Selects the destination where the debugging information generated by the event selected by SP5858 will be stored if an error is generated |
| | [2 to 3 / 2 / 1] |
| | 2: HDD, 3: SD Card |
| 005 | Save to HDD |
| 003 | Specifies the decimal key number of the log to be written to the hard disk. |
| 006 | Save to SD Card |
| 008 | Specifies the decimal key number of the log to be written to the SD Card. |

| Copy HDD to SD Card (Latest 4 MB) Takes the most recent 4 MB of the log written to the hard disk and copies them to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. Copy HDD to SD Card Latest 4 MB Any Key) Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erases SD Card Debug Data Erases SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug This SP creates a 32 MB file to store a log on the HDD. | | |
|--|-----|--|
| SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. Copy HDD to SD Card Latest 4 MB Any Key) Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erase SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SPS858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. | | Copy HDD to SD Card (Latest 4 MB) |
| Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. Copy HDD to SD Card Latest 4 MB Any Key) Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erase SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 009 | · |
| Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erases SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one |
| Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erases SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | Copy HDD to SD Card Latest 4 MB Any Key) |
| A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified. Erase HDD Debug Data Erases all debug logs on the HDD Erase SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) 1014 Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | |
| Erases all debug logs on the HDD Erases SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 010 | Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no |
| Erases all debug logs on the HDD Erase SD Card Debug Data Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 011 | Erase HDD Debug Data |
| Erases all debug logs on the SD Card. If the card contains only debugging files generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 011 | Erases all debug logs on the HDD |
| generated by an event specified by SP5858, the files are erased when SP5857 010 or 011 is executed. To enable this SP, the machine must be cycled off and on. Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | Erase SD Card Debug Data |
| Free Space on SD Card Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 012 | generated by an event specified by SP5858, the files are erased when SP5857 010 |
| Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | To enable this SP, the machine must be cycled off and on. |
| Displays the amount of space available on the SD card. Copy SD to SD (Latest 4MB) Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 013 | Free Space on SD Card |
| Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | 013 | Displays the amount of space available on the SD card. |
| Copies the last 4MB of the log (written directly to the card from shared memory) onto an SD card. Copy SD to SD (Latest 4MB Any 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. Make HDD Debug | | Copy SD to SD (Latest 4MB) |
| 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. Make HDD Debug | 014 | |
| directly from shared memory) to a log specified by key number. Make HDD Debug | | Copy SD to SD (Latest 4MB Any Key) |
| 016 | 015 | , |
| | 017 | Make HDD Debug |
| | 016 | This SP creates a 32 MB file to store a log on the HDD. |

| 017 | Make SD Debug | |
|-----|---|--|
| 017 | This SP creates a 4 MB file to store a log on an SD card. | |

| | Debug Save When | |
|-------|---|--|
| 5858* | These SPs select the content of the debugging information to be saved to the destination selected by SP5857-002. SP5858-003 stores one SC specified by number. | |
| 001* | Engine SC Error (0:OFF 1:ON) | Stores SC codes generated by copier engine errors. |
| 002* | Controller SC Error (0:OFF 1:ON) | Stores SC codes generated by GW controller errors. |
| 003* | Any SC Error | [0 to 65535 / 0 / 1 step] |
| 004* | Jam (0:OFF 1:ON) | Stores jam errors. |

| 5859* | Debug Save K | Cey No. |
|-------|--------------|--|
| 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 for functions that use common memory on the controller board. [0 to 9999999 / 0 / 1] |
| 005 | Key 5 | |
| 006 | Key 6 | |
| 007 | Key 7 | |
| 008 | Key 8 | |
| 009 | Key 9 | |
| 010 | Key 10 | |

|--|

| | Partial Mail Receive Timeout |
|-----|---|
| 000 | [1 to 168 / 72 / 1 hour] |
| 020 | Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time. |
| | MDN Response RFC2298 Compliance |
| 021 | Determines whether RFC2298 compliance is switched on for MDN reply mail. [0 to 1 / 1 / 1] 0: No, 1: Yes |
| | SMTP Auth. From Field Replacement |
| 022 | Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. |
| 022 | [0 to 1 / 0 / 1] |
| | 0: No. "From" item not switched. |
| | 1: Yes. "From" item switched. |
| | SMTP Auth Direct Sending |
| | Select the authentication method for SMPT. |
| | Bit 0: LOGIN |
| | Bit 1: PLAIN |
| 025 | Bit 2: CRAM_MD5 |
| | Bit 3: DIGEST_MD5 |
| | Bit 4 to Bit 7: Not Used |
| | Note |
| | This SP is activated only when SMTP authentication is enabled by UP mode. |
| | S/MIME: MIME Header Setting |
| | Selects the MIME header type of an E-mail sent by S/MIME. |
| 026 | [0 to 2 / 0 / 1] |
| 020 | 0: Microsoft Outlook Express standard |
| | 1: Internet Draft standard |
| | 2: RFC standard |
| | |

| | S/MIME: Authentication Check |
|-----|--|
| | When sending S/MIME mail, specify whether to check the destination authentication. |
| 028 | [0 to 1 / 0 / 1] |
| | 0: Not checked |
| | 1: Checked |

| 5866 | E-Mail Report | |
|------|-----------------|--|
| 001 | Report Validity | Enables or disables the E-mail alert function. [0 or 1 / 0 / -] 0: Enabled, 1: Disabled |
| 005 | Add Date Field | Adds or does not add the date field to the header of the alert mail. |
| 005 | | [0 or 1 / 0 / –] 0: Not added, 1: Added |

| 5870 | Common Key | Info Writing |
|------|---------------------|---|
| 001 | Writing | Writes to flash ROM the common proof for validating the device for @Remote specifications. |
| 003 | Initialize | Initializes the data area of the common proof for validating. |
| 004 | Writing: 2048bit | Writes to flash ROM the common proof (2048-bit) for validating the device for @Remote specifications. |

| | SD Card Appli. Move | |
|------|--|--|
| 5873 | Allows you to move applications from one SD card another. For more, see "SD Card Appli Move" in the chapter "System Maintenance (Main Chapters). | |
| 001 | Move Exec | Executes the move from one SD card to another. |
| 002 | Undo Exec | This is an undo function. It cancels the previous execution. |

| 5875 | SC Auto Reboot |
|------|----------------|
|------|----------------|

| | occurs. Note | s whether the machine reboots automatically when an SC error loes not occur for Type A SC codes. |
|-----|----------------|---|
| 001 | Reboot Setting | [0 to 1/0/1] 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. |
| 002 | Reboot Type | [0 to 1 / 0 / 1] 0: Manual reboot, 1: Automatic reboot |

| 5878 | Option Setup | |
|------|-------------------------|--|
| 001 | Data Overwrite Security | Press [Execute] to initialize the Data Overwrite Security option for the copier. For more, see "DataOverwriteSecurity Unit" in the chapter "Installation". |

| | 5881 | Fixed Phase Block Erasing |
|------|---------------------------|---------------------------|
| 3881 | Detects the Fixed phrase. | |

| 5882 | CPM Set | |
|------|---------|--|
| 3882 | DFU | |

| 5885* | Set WIM Function | | | | |
|-------|------------------|--|--|--|--|
|-------|------------------|--|--|--|--|

| 020 | DocSvr Acc Ctrl | Allows or disallows the functions of web image monitor. 0: OFF, 1: ON Bit: 0: Forbid all document server access 1: Forbid user mode access 2: Forbid print function 3: Forbid Fax 4: Forbid scan sending 5: Forbid download 6: Forbid delete 7: Forbid guest user |
|-----|---|---|
| 050 | DocSvr Format Selects the display type for the document box list. [0 to 2 / 0 / 1] 0: Thumbnail, 1: Icon, 2: Details | |
| 051 | DocSvr Trans Sets the number of documents to be displayed in the document box list. [5 to 20 / 10 / 1] | |
| 100 | Set Signature [0 to 2 / 0 / 1/step] 0: Signature for each e-mail 1: Signature for all e-mails 2: No signature Selects whether the signature is added to the scanned documents with the WIM when they are transmitted by an e-mail. | |
| 101 | Set Encryption Determines whether the scanned documents with the WIM are encrypted when they are transmitted by an e-mail. [0 to 1 / 0 / 1] 0: Not encrypted, 1:Encryption | |

| 200 | Detect Mem Leak | Not used |
|-----|-----------------|----------|
| 201 | DocSvr Timeout | Not used |

| 5887 | SD Get Counter |
|------|---|
| | This SP determines whether the ROM can be updated. |
| 001 | 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. |

| | Personal Information Protect |
|-------|---|
| | Selects the protection level for logs. |
| 5888* | [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 |
|--|-------------------------|
| Displays the counter name of each SDK application. | |
| 001 | SDK-1 |
| 002 | SDK-2 |
| 003 | SDK-3 |
| 004 | SDK-4 |
| 005 | SDK-5 |
| 006 | SDK-6 |

| | Plug & Play Maker/Model Name |
|------|---|
| 5907 | 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. |

| | LCT Paper Size |
|-------|--------------------------------------|
| | Specifies the paper size in the LCT. |
| 5908* | [0 or 1 / 0 / -] |
| | 0: A4 |
| | 1: LT |

| 5913* | Switchover Permission Time | |
|-------|--|--------------------------------------|
| | Print Application Timer | [3 to 30 / 3 / 1 second step] |
| 002 | Sets the length of time to elapse before allowing another application to take control of the display when the application currently controlling the display is not operating because a key has not been pressed. | |

| 5919* | HDD Encryption |
|-------|--|
| | Display Operation State |
| | Shows the status of the encryption function for the HDD. |
| 001 | [0 or 1 / 0 / -] 0: Not Activated |
| | 0: Not Activated |
| | 1: Activated |

| | Copy Server: Set Function | 0: ON, 1: OFF |
|-------|---------------------------|---|
| 5967* | | This is a security measure that prevents image of the HDD. After changing this setting, you enable the new setting. |

| 5973* | User Stamp Registration |
|-------|-------------------------|
|-------|-------------------------|

| 101 | Frame deletion setting |
|-----|----------------------------|
| | [0 to 3 / 0 / 1 mm] |

| 5974* | Cherry Server |
|-------|--|
| | Selects which version of the Scan Router application program, "Light" or "Full" (Professional) is installed. |
| | [0 or 1 / 0 / -] |
| | 0: Light |
| | 1: Full |

| | Device Setting | |
|------|--|---|
| 5985 | The NIC and USB support features are built into the GW controller. Use this SP to enable and disable these features. In order to use the NIC and USB functions built into the controller board, these SP codes must be set to "1". | |
| 001 | On Board NIC | [0 to 2 / 0 / 1 /step] 0: Disable, 1: Enable, 2: Function limitation When the "Function limitation" is set, "On board NIC" is limited only for the NRS or LDAP/NT authentication. • Other network applications than @Remote 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* | Counter Falsification Prevention |
|-------|---|
| | This SP detects that a mechanical counter device is removed. If it is detected, SC610 occurs. |
| | [0 or 1 / 1 / 1/step] |
| | 0: OFF. 1: ON |

| 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 |
| 008 | Capture Log |
| 021 | Copier User Program |
| 022 | Scanner SP |
| 023 | Scanner User Program |
| 024 | SDK/J Summary |
| 025 | SDK/J Application Info |
| 026 | Print SP |

| 5992 | SP Text Mode |
|------|---|
| | Writes the SMC sheets into the SD card. |
| 001 | All (Data List) |
| 002 | SP (Mode Data List) |
| 003 | User Program |
| 004 | Logging Data |
| 005 | Diagnostic Report |
| 006 | Non-Default |
| 007 | NIB Summary |

| 008 | Capture Log |
|-----|------------------------|
| 021 | Copier User Program |
| 022 | Scanner SP |
| 023 | Scanner User Program |
| 024 | SDK/J Summary |
| 025 | SDK/J Application Info |
| 026 | Print SP |

System SP Tables-6

SP6-xxx: Peripherals

| | ADF Registration Adjust | |
|-------|--|--|
| 6006* | Adjusts the side-to-side and leading edge registration for simplex and duplex original feeding in ARDF mode. SP6006-5 sets the maximum setting allowed for rear edge erase. | |
| 001 | Side-to-Side Regist: Front | [-3 to 3 / 0 / 0.1 mm / step] |
| 002 | Side-to-Side Regist: Rear | [-3 10 3 / 0 / 0.1 mm / siep] |
| 003 | Leading Edge Registration | [-5 to 5 / 0 / 0.1 mm / step] |
| 005 | Buckle: Duplex Front | [-3 to 3 / 0 / 0.1 mm / step] |
| 006 | Buckle: Duplex Rear | [-2.5 to 2.5 / 0 / 0.1 mm / step] |
| 007 | Rear Edge Erase | [-10 to 10 / 0 / 0.1 mm / step] |

| 6007 ADI |
|----------|
|----------|

| 001 | Original Length 1 (B5 Detection Sensor) | | |
|-----|---|---|--|
| 002 | Original Length 2 (A4 Detection Sensor) | | |
| 003 | Original Length 3 (LG Detection Sensor) | | |
| 004 | Original Width Sensor 1 | | |
| 005 | Original Width Sensor 2 | | |
| 006 | Original Width Sensor 3 | 0: Paper not detected | |
| 007 | Original Width Sensor 4 | 1: Paper detected | |
| 008 | Original Width Sensor 5 | | |
| 009 | Original Set Sensor | | |
| 010 | Separation Sensor | | |
| 011 | Skew Correction Sensor | | |
| 012 | Scan Entrance Sensor | | |
| 013 | Registration Sensor | | |
| 014 | Exit Sensor | | |
| 015 | Feed Cover Sensor | 0: ADF cover closed 1: ADF cover open | |
| 016 | Lift Up Sensor | 0: ADF closed 1: ADF open | |
| 017 | Inverter Sensor | 0: Paper not detected 1: Paper detected | |
| 018 | Pick-up Roller HP Sensor | 0: HP (Pick-up roller: Up) 1: Not HP (Pick-up roller: Down) | |
| 019 | Original Set HP Sensor | 0: HP (Stopper: UP) 1: Not HP (Stopper: Down) | |

| 6008 | ADF Output Check | |
|------|------------------------|--|
| 001 | Pick-up Motor Forward | |
| 002 | Pick-up Motor Reserve | |
| 003 | Feed Motor Forward | |
| 004 | Feed Motor Reserve | |
| 005 | Relay Motor Forward | |
| 007 | Inverter Motor Forward | |
| 008 | Inverter Motor Reserve | |
| 011 | Inverter Solenoid | |
| 012 | Stamp | |
| 013 | Fan Motor | |

| | ADF FreeRun |
|------|---|
| 6009 | Performs an ARDF free run in duplex mode. Press [ON] to start, press [OFF] to stop. |
| | Note: This is a general free run controlled from the copier. |
| 001 | Free Run: Simplex Motion |
| 002 | Free Run: Duplex Motion |
| 003 | Free Run: Stamp Motion |

| 6010* | ADF Stamp Position Adjust. | [-5 to 5 / 0 / 0.1 mm step] |
|-------|--|------------------------------------|
| | Adjusts the horizontal position of the stamp on the scanned originals. | |

| | Original | Size Detect Setting | | |
|-------|-----------|--|------------|--|
| | 1 | Specifies the original size for a size detected by the original sensor, since original sensors cannot recognize all sizes. | | |
| | (7) 0000 | 0000 (0) | | |
| | Different | Different bits are used for detection, depending on the location as shown below. | | |
| | Bit | Size | Location | |
| 6016* | 7 | A4 (L)/LT (L) | | |
| | 6 | 11" x 15"/DLT (L) | Japan only | |
| | 5 | DLT (L)/ 11" x 15" | | |
| | 4 | LT (S)/ US Exec (S) | NIA I | |
| | 3 | LT (L)/8" x 10" (L) | NA only | |
| | 2 | LG (L)/ F4 (L) | | |
| | 1 | A4 (L)/ 16K (L) | FIL/AA I | |
| | 0 | 8K (L)/ DLT (L) | EU/AA only | |

| | DF Magnification Adj. | [-5 to 5 / 0 / 0.1% step] |
|-------|--|----------------------------------|
| 6017* | Adjusts the magnification in the sub-sca | n direction for ADF mode. |
| | Use the key to toggle between + and - | before entering the value |

| | Skew Correction Moving Setting |
|-------|--|
| | Turns the original skew correction in the ARDF for all original sizes on or off. |
| 6020* | [0 to 1 / 0 / 1] |
| | 0: Off (only for small original sizes) |
| | 1: On (for all original sizes) |
| | 6020* |

| 6128 | Punch Position: Sub Scan | |
|------|--|--|
| | Adjusts the punching position in the sub scan direction. (For D636/D637) | |

| 001 | 2-Hole: DOM (Japan) | |
|-----|---------------------|-----------------------------------|
| 002 | 3-Hole: NA | |
| 003 | 4-Hole: EU | [-7.5 to 7.5 / 0 / 0.5 mm] |
| 004 | 5-Hole: SCAN | |
| 005 | 2-Hole: NA | |

| 6129 | Punch Position: Main Scan | |
|------|---|-------------------------------|
| 0129 | Adjusts the punching position in the main scan direction. (For D636/D637) | |
| 001 | 2-Hole: DOM (Japan) | |
| 002 | 3-Hole: NA | |
| 003 | 4-Hole: EU | [-2 to 2 / 0 / 0.4 mm] |
| 004 | 4-Hole: SCAN | |
| 005 | 2-Hole: NA | |

| 6130* | Skew Correction: Buckle Adj. | |
|-------|---|--|
| | Adjusts the paper buckle at the punch unit for each paper size. (For D636/D637) | |

| 001 | A3 SEF | |
|-----|-----------|--------------------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [-5 to 5 / 0 / 0.25 mm] |
| 007 | DLT SEF | [-3 10 3 / 0 / 0.23 mm] |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| 6131* | Skew Correction Control |
|-------|--|
| 0131 | Selects the skew correction control for each paper size. (For D636/D637) |

| 001 | A3 SEF | |
|-----|-----------|----------------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [0 to 1 / 1 / 1 mm] |
| 007 | DLT SEF | |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| | 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 D636/D637. The adjustment is done perpendicular to the direction of paper feed. |

| 001 | A3 SEF | |
|-----|-----------|---------------------------------------|
| 002 | B4 SEF | |
| 003 | A4 SEF | |
| 004 | A4 LEF | |
| 005 | B5 SEF | |
| 006 | B5 LEF | [-1.5 to 1.5 / 0 / 0.5 mm] |
| 007 | DLT SEF | [-1.5 to 1.5 / 0 / 0.5 tillin] |
| 008 | LG SEF | |
| 009 | LT SEF | |
| 010 | LT LEF | |
| 011 | 12" x 18" | |
| 012 | Other | |

| | Staple Position Adjustment |
|-------|--|
| 6133* | Adjusts the staple position for each finisher (D636/D637). + Value: Moves the staple position to the rear side. |
| | - Value: Moves the staple position to the front side. [-3.5 to 3.5 / 0 / 0.5 mm] |

| | Saddle Stitch Position Adj. |
|-------|---|
| 6134* | Use this SP to adjust the stapling position of the booklet stapler when paper is stapled and folded in the Booklet Finisher (D637). |

| 001 | A3 SEF | |
|-----|-----------|--|
| 002 | B4 SEF | [-3 to 3 / 0 / 0.2 mm] |
| 003 | A4 SEF | + Value: Shifts staple position toward the crease. |
| 004 | B5 SEF | - Value: Shifts staple position away from the crease |
| 005 | DLT SEF | Feed Out |
| 006 | LG SEF | J |
| 007 | LT SEF | |
| 008 | 12" x 18" | $\bigoplus \longleftarrow \rightarrow \ominus$ |
| 009 | Other | |

| Folder Position Adj. | | lį. |
|----------------------|------------------------------------|---|
| 6135* | This SP corrects th Finisher D637. | e folding position when paper is stapled and folded in the Booklet |
| 001 | A3 SEF | |
| 002 | B4 SEF | [-3 to 3 / 0 / 0.2 mm] |
| 003 | A4 SEF | + Value: Shifts staple position toward the crease. - Value: Shifts staple position away from the crease. |
| 004 | B5 SEF | |
| 005 | DLT SEF | |
| 006 | LG SEF | |
| 007 | LT SEF | |
| 008 | 12" x 18" | |
| 009 | Other | |

| | Book Fold Repeat | |
|-------|---|--|
| 6136* | Sets the number of times that folding is done in the Booklet Finisher D637. | |
| | [2 to 30 / 2 / 1 time/step] | |

| (107 | Finisher Free Run | |
|------|---|--|
| 6137 | These SPs are used for the D588 or D636/D637. | |
| 001 | Free Run 1 | D588: System free run D636/D637: Free run for paper edge stapling. |
| 002 | 002 Free Run 2 | D588: Free run for durability testing D636/D637: Not used |
| 003 | Free Run 3 | Not used |
| 004 | Free Run 4 | Not used |

| | Entrance Sensor | |
|------|--|--|
| 6139 | Display the signals received from sensors and switches of the (booklet) finisher. (D588) | |

| | FIN (EUP) INPUT Check |
|------|---|
| 6140 | Display the signals received from sensors and switches of the (booklet) finisher. (D636/D637) (**p.243 "Input Check") |

| | FIN (KIN) OUPUT Check |
|------|--|
| 6144 | Display the signals received from sensors and switches of the (booklet) finisher. (D588) (p.253 "Output Check") |

| | FIN (EUP) OUPUT Check |
|--|---|
| | Display the signals received from sensors and switches of the (booklet) finisher. (D636/D637) (p.253 "Output Check") |

| | Max. Pre-Stack Sheet | [0 to 3 / 3 / 1 sheets step] |
|--------|---|---|
| 6149* | This SP sets the number of sheets sent Note You may need to adjust this setti | to the pre-stack tray. ng or switch it off when feeding thick or slick |
| рарег. | | |

| 6800 | Sheet Conversion (Thick Paper) |
|------|---|
| | Permits punching, including tab sheets. |
| | Note: Do not change this setting. |
| | [1 to 3 / 3 / 1 sheet] |
| | 1: 1 Sheet |
| | 2: 2 Sheets |
| | 3: 3 Sheets |

| 6830* | Extra Staples |
|-------|--|
| | More than the standard number of sheets can be stapled. This SP sets the additional number of sheets (This Setting + Standard Number = maximum number of sheets). |
| | If the number of the maximum for staples is increased, and the mechanical warranty of the unit can be guaranteed, then the setting can take effect without changing the controller software. |
| | However, assurance that mechanical performance can be guaranteed is required before changing the setting to increase the staple load for more than the maximum in the feed/exit specifications. Raising this setting without quality assurance could damage the machine. |
| 1 | Staple positions other than booklet stapling |
| | [0 to 50 / 0 / 1] |
| 2 | 2 Booklet stapling |
| | [0 to 50 / 0 / 1] |

| 6910 | Shading Control | | |
|------|---|---|--|
| 001 | ON/OFF | [0 to 1 / 0 / 1] 0= OFF, 1= ON | |
| | Enables or disables the shading adjustment for DF mode. | | |
| 002 | Shading Interval: A | [0 to 60 / 3 / 1 sec] DFU | |
| 003 | Shading Interval: B | [0 to 120 / 60 / 1] DFU | |

3

System SP Tables-7

SP7-xxx: Data Log

| 7401* | Total SC Counter |
|-------|---|
| 001 | SC Counter |
| | Displays the total number of service calls that have occurred. This SC counter can be reset by executing SP7807 (SC/Jam Counter Reset). |
| | Total SC Counter |
| 002 | Displays the cumulative sum of service calls that have occurred. This SC counter cannot be reset by executing SP7807 (SC/Jam Counter Reset). |

| 7403* | SC History | |
|-------|------------|--|
| 001 | Latest | |
| 002 | Latest 1 | |
| 003 | Latest 2 | Displays the most recent 10 service calls. |
| 004 | Latest 3 | |
| 005 | Latest 4 | |
| 006 | Latest 5 | |
| 007 | Latest 6 | |
| 008 | Latest 7 | |
| 009 | Latest 8 | |
| 010 | Latest 9 | |

| 7404* | SC991 History | | | |
|-------|---------------|--|--|--|
|-------|---------------|--|--|--|

| 001 | Latest | |
|-----|----------|---|
| 002 | Latest 1 | |
| 003 | Latest 2 | Displays the 10 most recently detected SC991 codes. |
| 004 | Latest 3 | |
| 005 | Latest 4 | |
| 006 | Latest 5 | |
| 007 | Latest 6 | |
| 008 | Latest 7 | |
| 009 | Latest 8 | |
| 010 | Latest 9 | |

| 7502* | Total Paper Jam |
|-------|---|
| | Jam Counter |
| 001 | Displays the total number of paper jams. |
| | This SC counter can be reset by executing SP7807 (SC/Jam Counter Reset). |
| | Total Jam Counter |
| 002 | Displays the cumulative sum of paper jams. |
| | This SC counter cannot be reset by executing SP7807 (SC/Jam Counter Reset). |

| 7503* | Total Original Jam |
|-------|--|
| 001 | Original Jam Counter |
| | Displays the total number of original jams. This SC counter can be reset by executing SP7807 (SC/Jam Counter Reset). |
| | Total Original Counter |
| 002 | Displays the cumulative sum of original jams. This SC counter cannot be reset by executing SP7807 (SC/Jam Counter Reset). |

| | Total Jams Location | | |
|-------|---|--|--|
| 7504* | These SPs display the total number of paper jams by location. A "Check-in" (paper late) error occurs when the paper fails to activate the sensor at the precise time. A "Checkout" ("paper lag") paper jam occurs when the paper remains at the sensor for longer than the prescribed time. | | |
| 001 | 001 At power On | | |
| 003 | Tray 1: On | | |
| 004 | Tray 2: On | | |
| 005 | Tray 3: On | | |
| 006 | Tray 4: On | | |
| 007 | LCT: On | | |
| 008 | Bypass: On | | |
| 009 | Duplex: On | | |
| 011 | Vertical Transport 1: On | | |
| 012 | 012 Vertical Transport 2: On | | |
| 013 | Bank: Transport Sn 1: On | | |
| 014 | Bank: Transport Sn 2: On | | |
| 017 | Registration: On | | |
| 019 | Fusing Exit: On | | |
| 020 | Paper Exit: On | | |
| 021 | Bridge Exit On | | |
| 022 | Bridge Transport: On | | |
| 024 | Junction Gate Sensor: On | | |
| 025 | Duplex Exit: On | | |
| 026 | Duplex Entrance: On (In) | | |
| 027 | Duplex Entrance: On (Out) | | |
| 051 | Vertical Transport 1: Off | | |

| 052 | Vertical Transport 2: Off |
|-----|-------------------------------|
| 053 | Bank Transport 1: Off |
| 054 | Bank Transport 2: Off |
| 057 | Registration Sensor: Off |
| 058 | LCT Feed Sensor: Off |
| 060 | Paper Exit: Off |
| 061 | Bridge: Exit: Off |
| 062 | Bridge: Transport: Off |
| 064 | Junction Gate Sensor: Off |
| 065 | Duplex Exit: Off |
| 066 | Duplex Entrance: Off (In) |
| 067 | Duplex Entrance: Off (Out) |
| 100 | Finisher Entrance: KIN |
| 101 | Finisher Shift Tray Exit: KIN |
| 102 | Finisher Staple: KIN |
| 103 | Finisher Exit: KIN |
| 105 | Finisher Tray Lift Motor: KIN |
| 106 | Finisher Jogger Motor: KIN |
| 107 | Finisher Shift Motor: KIN |
| 108 | Finisher Staple Motor: KIN |
| 109 | Finisher Exit Motor: KIN |
| 191 | Finisher Entrance: EUP |
| 192 | Finisher Proof Exit: EUP |
| 193 | Finisher Shift Tray Exit: EUP |
| 194 | Finisher Staple Exit: EUP |
| 195 | Finisher Exit: EUP |

| 198 | Finisher Folder: EUP |
|-----|-----------------------------------|
| 199 | Finisher Tray Motor: EUP |
| 200 | Finisher Jogger Motor: EUP |
| 201 | Finisher Shift Motor: EUP |
| 202 | Finisher Staple Moving Motor: EUP |
| 203 | Finisher Staple Motor: EUP |
| 204 | Finisher Folder Motor: EUP |
| 206 | Finisher Punch Motor: EUP |
| | |

| | Original Jam Detection |
|-----------------------------|--|
| 7505 | Displays the total number of original jams by location. These jams occur when the original does not activate the sensors. A Check-in ("paper late") error occurs when the paper fails to activate the sensor at the precise time. A Check-out ("paper lag") paper jam occurs when the paper remains at the sensor for longer than the prescribed time. |
| 001 | At Power: On |
| 003 | Separation Sensor: On |
| 004 | Skew Correction Sensor: On |
| 005 | Interval Sensor: On |
| 006 Registration Sensor: On | |
| 007 | Inverter Sensor: On |
| 008 | Original Exit Sensor: On |
| 053 | Separation Sensor: Off |
| 054 | Skew Correction Sensor: Off |
| 055 | Interval Sensor: Off |
| 056 | Registration Sensor: Off |
| 057 | Inverter Sensor: Off |
| 058 | Original Exit Sensor: Off |

| 7506* | Jam Count by | 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 | Displays the total number of copy jams by paper size. |
| 141 | B4 SEF | |
| 142 | B5 SEF | |
| 160 | DLT SEF | |
| 164 | LG SEF | |
| 166 | LT SEF | |
| 172 | HLT SEF | |
| 255 | Others | |

| | 7507* | Plotter Jam History | |
|--|-------|---------------------|--|
|--|-------|---------------------|--|

| 001 | Last | Displays the same | iam bioton. | /the most recent 10 is me | |
|---------|----------|--|--------------------------------|---------------------------|------|
| 002 | Latest 1 | Displays the copy jam history (the most recent 10 jams) Sample Display: | | | |
| 003 | Latest 2 | CODE:007 | | | |
| 004 | Latest 3 | SIZE:05h | | | |
| 005 | Latest 4 | TOTAL:0000334 | | | |
| 006 | Latest 5 | DATE: Mon Mar in where: | DATE: Mon Mar 15 11:44:50 2000 | | |
| 007 | Latest 6 | CODE is the SP7504-*** number (see above. | | | |
| 008 | Latest 7 | SIZE is the ASAP paper size code in hex. | | | |
| 009 | Latest 8 | TOTAL is the total jam error count (SP7502) DATE is the date the jams occurred. | | | |
| 010 | Latest 9 | DATE is the date the juins occurred. | | | |
| Size | Code | Size | Code | Size | Code |
| A4 (S) | 05 | A3 (L) | 84 | DLT (L) | A0 |
| A5 (S) | 06 | A4 (L) | 85 | LG (L) | A4 |
| B5 (S) | OE | A5 (L) 86 LT (L) A6 | | | |
| LT (S) | 26 | B4 (L) 8D HLT (L) AC | | AC | |
| HLT (S) | 2C | B5 (L) 8E Others FF | | | |

| 7508* | Original Jam History |
|-------|----------------------|
|-------|----------------------|

| 001 | Last | | | | |
|---------|--------|--|--------------|---------------------------|------|
| 002 | Last 1 | | al jam histo | ry (the most recent 10 ja | ms). |
| 003 | Last 2 | Sample Display: CODE:007 | | | |
| 004 | Last 3 | SIZE:05h | | | |
| 005 | Last 4 | TOTAL:0000334 | | | |
| 006 | Last 5 | DATE: Mon Mar 1 | 5 11:44:50 | 2000 | |
| 007 | Last 6 | where: CODE is the SP7505*** number (see above. | | | |
| 008 | Last 7 | SIZE is the ASAP paper size code in hex. | | | |
| 009 | Last 8 | TOTAL is the total jam error count (SP7503) | | | |
| 010 | Last 9 | DATE is the date the jams occurred. | | | |
| Size | Code | Size | Code | Size | Code |
| A4 (S) | 05 | A3 (L) | 84 | DLT (L) | A0 |
| A5 (S) | 06 | A4 (L) | 85 | LG (L) | A4 |
| B5 (S) | OE | A5 (L) | 86 | LT (L) | A6 |
| LT (S) | 26 | B4 (L) | 8D | HLT (L) | AC |
| HLT (S) | 2C | B5 (L) | 8E | Others | FF |

| 7624* | Part Replacement Operation | | |
|-------|---|---|--|
| 7024 | Selects the PM maintenance for each part. | | |
| 001 | PCU-BK | | |
| 002 | Fuser | [0 to 1 / 1 / 1] | |
| 003 | Transfer Unit | 0:No (Not PM maintenance) 1: Yes (PM maintenance) | |
| 004 | FuserCleaner | , | |

| | ROM No./Firmware Version |
|------|---|
| 7801 | This SP codes display the firmware versions of all ROMs in the system, including the mainframe, the ARDF, and peripheral devices. |

| 7002* | PM Counter Display | | |
|-------|--|-------------------------------------|--|
| 7803* | Displays the PM counter since the last PM. | | |
| 001 | Paper | [0 to 999999 / 0 / 1 page] | |
| 001 | Displays the paper counter (pages) | | |
| 002 | Page: PCD | [0 to 999999 / 0 / 1 page] | |
| 002 | Displays the PCD (Drum and Develop | oment unit) counter (pages) | |
| 003 | Page: Transfer | [0 to 999999 / 0 / 1 page] | |
| 003 | Displays the transfer unit counter (pag | ges). | |
| 004 | Page: Fuser | [0 to 999999 / 0 / 1 page] | |
| 004 | Displays the fusing unit counter (pages). | | |
| 005 | Rotation: PCD | [0 to 999999999 / 0 / 1 mm] | |
| 003 | Displays the PCD rotation counter (distance). | | |
| 006 | Rotation: Transfer | [0 to 999999999 / 0 / 1 mm] | |
| 008 | Displays the transfer unit rotation counter (distance). | | |
| 007 | Rotation: Fuser | [0 to 999999999 / 0 / 1 mm] | |
| 007 | Displays the fuser unit rotation counter (distance). | | |
| 008 | Rotation(%): PCD | [0 to 255 / 0 / 1 %] | |
| 008 | Displays the PCD (%) rotation counter (Distance/PM). | | |
| 009 | Rotation(%):Transfer | [0 to 255 / 0 / 1 %] | |
| 009 | Displays the transfer unit (%) rotation counter (distance/PM). | | |
| 010 | Rotation(%):Fuser | [0 to 255 / 0 / 1 %] | |
| 010 | Displays the fuser unit (%) rotation counter (distance/PM). | | |
| 011 | Rotation(%):Web | [0 to 255 / 0 / 1 %] | |
| 011 | Displays the web unit (%) rotation counter (distance/PM). | | |

| | PM Counter Reset |
|------|--|
| 7804 | Resets the PM counter. |
| | Touch [Execute] two times > "Completed" > [Exit] |
| 001 | Paper |
| 001 | Resets the PM counter of the paper. |
| 002 | PCD |
| 002 | Resets the PM counter of the PCD (Drum and Development unit except developer). |
| 003 | Transfer |
| 003 | Resets the PM counter of the transfer unit. |
| 004 | Fuser |
| 004 | Resets the PM counter of the fuser unit. |
| 005 | Web |
| 003 | Reset the PM counter of the web unit. |
| 004 | All Clear |
| 006 | Resets all PM counter |

| 7805 | Parts Counter | | |
|--|---|-----------------------------------|--|
| 001 | Page: OPC | [0 to 999999 / 0 / 1 page] | |
| 001 | Displays the parts counter (pages) of the OPC. | | |
| 002 | Page: Charge Roller | [0 to 999999 / 0 / 1 page] | |
| 002 | Displays the parts counter (pages) of the charge roller. | | |
| 000 | Page: Developer | [0 to 999999 / 0 / 1 page] | |
| Displays the parts counter (pages) of the developer. | | the developer. | |
| 004 | Page: Belt Blade | [0 to 999999 / 0 / 1 page] | |
| 004 | Displays the parts counter (pages) of the transfer belt cleaning blade. | | |

| 005 | Page: Heat Roller | [0 to 999999 / 0 / 1 page] | |
|-----|---|-------------------------------------|--|
| 005 | Displays the parts counter (pages) of the hot roller. | | |
| 007 | Page: Pressure Roller | [0 to 999999 / 0 / 1 page] | |
| 006 | Displays the parts counter (pages) of | the pressure roller. | |
| 007 | Page: Cleaning Roller | [0 to 999999 / 0 / 1 page] | |
| 007 | Displays the parts counter (pages) of | the cleaning roller. | |
| 000 | Page: Thermistor | [0 to 999999 / 0 / 1 page] | |
| 008 | Displays the parts counter (pages) of | the thermistors. | |
| 000 | Page: Stripper | [0 to 999999 / 0 / 1 page] | |
| 009 | Displays the parts counter (pages) of the strippers. | | |
| 010 | Rotation: OPC | [0 to 999999999 / 0 / 1 mm] | |
| 010 | Displays the parts counter (rotations) of the OPC. | | |
| 011 | Rotation: Charge Roller | [0 to 999999999 / 0 / 1 mm] | |
| 011 | Displays the parts counter (rotations) of the charge roller. | | |
| 012 | Rotation: Developer | [0 to 999999999 / 0 / 1 mm] | |
| 012 | Displays the parts counter (rotations) of the developer. | | |
| 013 | Rotation: Belt Blade | [0 to 999999999 / 0 / 1 mm] | |
| 013 | Displays the parts counter (rotations) of the transfer belt, blade. | | |
| 014 | Rotation: Heat Roller | [0 to 999999999 / 0 / 1 mm] | |
| 014 | Displays the parts counter (rotations) of the hot roller. | | |
| 015 | Rotation: Pressure Roller | [0 to 999999999 / 0 / 1 mm] | |
| 013 | Displays the parts counter (rotations) | of the pressure roller. | |
| 016 | Rotation: Cleaning Roller | [0 to 999999999 / 0 / 1 mm] | |
| 018 | Displays the parts counter (rotations) of the cleaning roller. | | |
| 017 | Rotation: Thermistor | [0 to 999999999 / 0 / 1 mm] | |
| 017 | Displays the parts counter (rotations) of the thermistors. | | |

| | 010 | Rotation: Stripper | [0 to 999999999 / 0 / 1 mm] |
|--|-----|--|-------------------------------------|
| Displays the parts counter (rotations) of the strippers. | | of the strippers. | |
| | 010 | Page(%): Web | [0 to 255 / 0 / 1 %] |
| 019 | | Displays the parts counter (rotations/PM %) of the cleaning web. | |

| 7806 | Counter Clear | | |
|------|---|--|--|
| | OPC | | |
| 001 | Resets the parts counter of the OPC. | | |
| 000 | Charge Roller | | |
| 002 | Resets the parts counter of the charge roller. | | |
| 003 | Developer | | |
| 003 | Resets the parts counter of the developer. | | |
| 004 | Belt: Blade | | |
| 004 | Resets the parts counter of the transfer belt cleaning blade. | | |
| 005 | Heat Roller | | |
| 003 | Resets the parts counter of the hot roller. | | |
| 006 | Pressure Roller | | |
| 000 | Resets the parts counter of the pressure roller. | | |
| 007 | Cleaning Roller | | |
| 007 | Resets the parts counter of the cleaning roller. | | |
| 008 | Web | | |
| 008 | Resets the parts counter of the cleaning web. | | |
| 009 | Thermistor | | |
| 009 | Resets the parts counter of the thermistors. | | |
| 010 | Stripper | | |
| 010 | Resets the parts counter of the strippers. | | |

| 011 | All Clear | |
|-----|----------------------------|--|
| 011 | Resets all parts counters. | |

| | SC/Jam Counter Reset |
|------|---|
| 7807 | Resets the SC and jam counters. To reset, press Execute on the touch panel. |
| | This SP does not reset the jam history counters: SP7507, SP7508. |

| | 7826 | MF Error Counter Japan Only | |
|---|------|---|--|
| | 7020 | Displays the number of counts requested of the card/key counter. | |
| | 001 | Error Total | A request for the count total failed at power on. This error will occur if the device is installed but disconnected. |
| OO2 Error Staple The request for a staple count failed at power on occur if the device is installed but disconnected. | | The request for a staple count failed at power on. This error will occur if the device is installed but disconnected. | |

| 7827 | MF Error Counter Clear Japan Only |
|------|--|
| | Press Execute to reset to 0 the values of SP7826. Japan Only |

| | Self-Diagnose Result Display |
|------|--|
| 7832 | Execute to open the "Self-Diagnostics Result Display" to view details about errors. Use the keys in the display on the touch-panel to scroll through all the information. If no errors have occurred, you will see the "No Error" message on the screen. |

| 7836 | Total Memory Size |
|------|--|
| 7630 | Displays the memory capacity of the controller system. |

| | DF Glass Dust Check | |
|-------|--|--|
| 7852* | Counts the number of occurrences (0 to 65,535) when dust was detected on the scanning glass of the ADF or resets the dust detection counter. Counting is done only if SP4-020-1 (Dust Check) is switched on. | |
| 001 | Dust Detection Counter [0 to 65535 / 0 / 1 /step] | |
| 002 | Dust Detection Clear Counter [0 to 65535 / 0 / 1 /step] | |

| 7853 | Replacement Counter | |
|-------|--|----------------------------|
| 0.0.1 | PCD | [0 to 255 / 0 / 1] |
| 001 | Displays the replacement counter of the PCD (Drum and Development unit). | |
| 000 | Transfer | [0 to 255 / 0 / 1] |
| 002 | Displays the replacement counter of the transfer unit. | |
| 003 | Fuser | [0 to 255 / 0 / 1] |
| 003 | Displays the replacement counter of the fusing unit. | |
| 004 | Web | [0 to 255 / 0 / 1] |
| | Displays the replacement counter of the cleaning web. | |

| | zero cross | [0 to 255 / 60 / 1] |
|---|------------|---|
| 7856* Stores and displays the detected zero cross frequency of the main ac power su from the wall socket. | | o cross frequency of the main ac power supply |

| | Assert Info. DFU | |
|---|---|--|
| These SP numbers display the results of the occurrence of the most recent SC congenerated by the machine. | | |
| 001* | File Name Module name | |
| 002* | Number of Lines Number of the lines where error occurred. | |
| 003* | Location Value | |

| 7906 | Prev Counter | |
|------|--|-----------------------------------|
| 001 | Page: PCD | [0 to 999999 / 0 / 1 page] |
| 001 | Displays the counter (pages) of the previous PCD | |
| 000 | Page: Transfer | [0 to 999999 / 0 / 1 page] |
| 002 | Displays the previous counter (pages) of the previous transfer unit. | |
| 003 | Page: Fuser | [0 to 999999 / 0 / 1 page] |
| | Displays the previous counter (pages) of the previous fusing unit. | |

| 004 | Rotation: PCD | [0 to 999999999 / 0 / 1 mm] | |
|-----|---|-------------------------------------|--|
| 004 | Displays the previous counter (rotations) of the previous PCD | | |
| 005 | Rotation: Transfer | [0 to 999999999 / 0 / 1 mm] | |
| 005 | Displays the previous counter (rotatio | ons) of the previous transfer unit. | |
| 004 | Rotation: Fuser | [0 to 999999999 / 0 / 1 mm] | |
| 006 | Displays the previous counter (rotations/PM %) of the previous fusing unit. | | |
| 007 | Rotation(%):PCD | [0 to 255 / 0 / 1 mm] | |
| 007 | Displays the previous counter (rotations/PM %) of the previous PCD | | |
| 000 | Rotation(%):Transfer | [0 to 255 / 0 / 1 mm] | |
| 008 | Displays the previous counter (rotations/PM %) of the previous transfer unit. | | |
| 000 | Rotation(%):Fuser | [0 to 255 / 0 / 1 mm] | |
| 009 | Displays the previous counter (rotations/PM %) of the previous fusing unit. | | |
| 010 | Rotation(%):Web | [0 to 255 / 0 / 1 %] | |
| | Displays the previous counter (rotations/PM %) of the previous cleaning web. | | |

| 7950 | Replacement Date |
|------|---|
| 001 | PCD |
| 001 | Displays the replacement date of the PCD. |
| 000 | Transfer |
| 002 | Displays the replacement date of the transfer unit. |
| 003 | Fuser |
| 003 | Displays the replacement date of the fusing unit. |
| 004 | Web |
| | Displays the replacement date of the web unit. |

| 7951 | Remaining Counter |
|------|-------------------|
|------|-------------------|

| | PCD(Page) | [0 to 255 / 255 / 1 days] | |
|-----|--|----------------------------------|--|
| 001 | Displays the remaining counter (pages) of the PCD. | | |
| | Transfer(Page) | [0 to 255 / 255 / 1 days] | |
| 002 | Displays the remaining counter (page | es) of the transfer unit. | |
| 000 | Fuser(Page) | [0 to 255 / 255 / 1 days] | |
| 003 | Displays the remaining counter (page | es) of the fusing unit. | |
| 005 | PCD(Rotation) | [0 to 255 / 255 / 1 days] | |
| 005 | Displays the remaining counter (rotations) of the PCD. | | |
| 006 | Transfer(Rotation) | [0 to 255 / 255 / 1 days] | |
| 008 | Displays the remaining counter (rotations) of the transfer unit. | | |
| 007 | Fuser(Rotation) | [0 to 255 / 255 / 1 days] | |
| 007 | Displays the remaining counter (rotations) of the fusing unit. | | |
| 009 | PCD (%) | [0 to 255 / 100 / 1 %] | |
| 009 | Displays the remaining counter (%) of the PCD. | | |
| 010 | Transfer (%) | [0 to 255 / 100 / 1 %] | |
| 010 | Displays the remaining counter (%) of the transfer unit. | | |
| 011 | Fuser (%) | [0 to 255 / 100 / 1 %] | |
| | Displays the remaining counter (%) of the fusing unit. | | |
| 013 | Web (%) | [0 to 255 / 100 / 1 %] | |
| 013 | Displays the remaining counter (%) of the cleaning web. | | |

| 7952 | PM Yield Setting | |
|------|---------------------------------------|--|
| 7932 | Sets the each yield of the following. | |
| 001 | PCD(Page) | [0 to 99999999/ 160000 / 1 sheet] |
| | Sets the PM yield of the PCD (Pages). | |

| | Transfer(Page) | [0 to 9999999 / 160000 / 1 sheet] | |
|-----|---|---|--|
| 002 | Sets the PM yield of the transfer unit (Pages). | | |
| 003 | Fuser(Page) | [0 to 9999999 / 160000 / 1 sheet] | |
| | Sets the PM yield of the fusing unit (Po | ages). | |
| 005 | PCD(Rotation) | C2b: [0 to 999999999 / 71990000 / 1 mm] C2c: [0 to 999999999 / 75500000 / 1 mm] | |
| | Sets the PM yield of the PCD (Rotatio | ns). | |
| 006 | Transfer(Rotation) | C2b: [0 to 999999999 / 62770000 / 1 mm] C2c: [0 to 999999999 / 65420000 / 1 mm] | |
| | Sets the PM yield of the transfer unit (Rotations). | | |
| 007 | Fuser(Rotation) | C2b: [0 to 999999999 / 54880000 / 1 mm] C2b: [0 to 999999999 / 55800000 / 1 mm] | |
| | Sets the PM yield of the fusing unit (Rotations). | | |
| 000 | Web (%) | [0 to 255 / 92 / 1 %] | |
| 009 | Sets the PM yield (%) of the web unit. | | |
| 021 | Day Threshold: PCD | [1 to 30 / 15 / 1 days] | |
| 021 | Adjusts the threshold day for the near end for the PCD. | | |
| 022 | Day Threshold: Transfer Unit | [1 to 30 / 15 / 1 days] | |
| 022 | Adjusts the threshold day for the near end for the transfer unit. | | |
| 023 | Day Threshold: Fusing Unit | [1 to 30 / 15 / 1 days] | |
| 023 | Adjusts the threshold day for the near | end for the fusing unit. | |

| 7953 | Operation Env Log | |
|------|--|-----------------------------------|
| 001 | T<10 | [0 to 99999999 / 0 / 1 mm] |
| | Displays the PCU rotation distance in the environment: T<10°C | |
| 002 | 10<=T<=17 | [0 to 99999999 / 0 / 1 mm] |
| | Displays the PCU rotation distance in the environment: 10°C<=T<=17°C | |

| 003 | 17 <t<23< td=""><td>[0 to 99999999 / 0 / 1 mm]</td></t<23<> | [0 to 99999999 / 0 / 1 mm] |
|-----|---|-----------------------------------|
| | Displays the PCU rotation distance in the environment: 17<=T<=23 | |
| 004 | 23<=T<=27 | [0 to 99999999 / 0 / 1 mm] |
| 004 | Displays the PCU rotation distance of the environment: 23<=T<=27 | |
| 005 | 27<=T<=32 | [0 to 99999999 / 0 / 1 mm] |
| 005 | Displays the PCU rotation distance of the environment: 27<=T<=32 | |
| 006 | 32 <t< td=""><td>[0 to 99999999 / 0 / 1 mm]</td></t<> | [0 to 99999999 / 0 / 1 mm] |
| | Displays the PCU rotation distance of the environment: 32 <t< td=""></t<> | |

| 7954 | Env Log Clear |
|------|---------------------------------------|
| 7934 | Resets the environment logs (SP7953). |

System SP Tables-8

SP8-xxx: Data Log 2

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 8codes 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 the job was not stored on the document server. |
| P: | Print application. | |
| S: | Scan application. | |

| L: | Local storage (document server) | Totals (jobs, pages, etc.) for the document server. The L: counters work differently case by case. Sometimes, they count jobs/pages stored on the document server; this can be in document server mode (from the document server window), or from another mode, such as from a printer driver or by pressing the Store File button in the Copy mode window. Sometimes, they include occasions when the user uses a file that is already on the document server. Each counter will be discussed case by case. |
|----|---|--|
| O: | Other applications (external network applications, for example) | Refers to network applications such as Web Image Monitor. Utilities developed with the SDK (Software Development Kit) will also be counted with this group in the future. |

The Group 8 SP codes are limited to 17 characters, forced by the necessity of displaying them on the small LCDs of printers and faxes that also use these SPs. Read over the list of abbreviations below and refer to it again if you see the name of an SP that you do not understand.

Key for Abbreviations

| Abbreviation | What It Means | |
|--------------|---|--|
| / | "By", e.g. "T:Jobs/Apl" = Total Jobs "by" Application | |
| > | More (2> "2 or more", 4> "4 or more" | |
| AddBook | Address Book | |
| Apl | Application | |
| B/W | Black & White | |
| Bk | Black | |
| С | Cyan | |
| ColCr | Color Create | |
| ColMode | Color Mode | |
| Comb | Combine | |
| Comp | Compression | |
| Deliv | Delivery | |

| Abbreviation | What It Means | |
|--------------|---|--|
| DesApl | Designated Application. The application (Copy, Fax, Scan, Print) used to store the job on the document server, for example. | |
| Dev Counter | Development Count, no. of pages developed. | |
| Dup, Duplex | Duplex, printing on both sides | |
| Emul | Emulation | |
| FC | Full Color | |
| FIN | Post-print processing, i.e. finishing (punching, stapling, etc.) | |
| Full Bleed | No Margins | |
| GenCopy | Generation Copy Mode | |
| GPC | Get Print Counter. For jobs 10 pages or less, this counter does not count up. For jobs larger than 10 pages, this counter counts up by the number that is in excess of 10 (e.g., for an 11-page job, the counter counts up 11-10 = 1) | |
| IFax | Internet Fax | |
| ImgEdt | Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc. | |
| К | Black (YMCK) | |
| LS | Local Storage. Refers to the document server. | |
| LSize | Large (paper) Size | |
| Mag | Magnification | |
| МС | One color (monochrome) | |
| NRS | New Remote Service, which allows a service center to monitor machines remotely. "NRS" is used overseas, "CSS" is used in Japan. | |
| Org | Original for scanning | |
| OrgJam | Original Jam | |

| Abbreviation | What It Means | |
|--------------|---|--|
| Palm 2 | Print Job Manager/Desk Top Editor: A pair of utilities that allows print jobs to be distributed evenly among the printers on the network, and allows files to moved around, combined, and converted to different formats. | |
| PC | Personal Computer | |
| PGS | Pages. A page is the total scanned surface of the original. Duplex pages count as two pages, and A3 simplex count as two pages if the A3/DLT counter SP is switched ON. | |
| PJob | Print Jobs | |
| Ppr | Paper | |
| PrtJam | Printer (plotter) Jam | |
| PrtPGS | Print Pages | |
| R | Red (Toner Remaining). Applies to the wide format model A2 only. This machine is under development and currently not available. | |
| Rez | Resolution | |
| SC | Service Code (Error SC code displayed) | |
| Scn | Scan | |
| Sim, Simplex | Simplex, printing on 1 side. | |
| S-to-Email | Scan-to-E-mail | |
| SMC | SMC report printed with SP5990. All of the Group 8counters are recorded in the SMC report. | |
| Svr | Server | |
| TonEnd | Toner End | |
| TonSave | Toner Save | |
| TXJob | Send, Transmission | |
| YMC | Yellow, Magenta, Cyan | |
| YMCK | Yellow, Magenta, Cyan, BlacK | |



• All of the Group 8 SPs are reset with SP5 801-1 Memory All Clear.

| 8001 | T:Total Jobs | These SPs count the number of times each application is | |
|------|--------------|---|--|
| 8002 | C:Total Jobs | used to do a job. | |
| 8003 | F:Total Jobs | [0 to 9999999 / 0 / 1] Note: The L: counter is the total number of times the other | |
| 8004 | P:Total Jobs | applications are used to send a job to the document server, | |
| 8005 | S:Total Jobs | plus the number of times a file already on the document server is used. | |
| 8006 | L:Total Jobs | | |

- These SPs reveal the number of times an application is used, not the number of pages processed.
- When an application is opened for image input or output, this counts as one job.
- Interrupted jobs (paper jams, etc.) are counted, even though they do not finish.
- Only jobs executed by the customer are counted. Jobs executed by the customer engineer using the SP modes are not counted.
- When using secure printing (when a password is required to start the print job), the job is counted at the time when either "Delete Data" or "Specify Output" is specified.
- A job is counted as a fax job when the job is stored for sending.
- When a fax is received to fax memory, the F: counter increments but the L: counter does not (the document server is not used).
- A fax broadcast counts as one job for the F: counter (the fax destinations in the broadcast are not counted separately).
- A fax broadcast is counted only after all the faxes have been sent to their destinations. If one
 transmission generates an error, then the broadcast will not be counted until the transmission has
 been completed.
- A printed fax report counts as one job for the F: counter.
- The F: counter does not distinguish between fax sending or receiving.
- When a copy job on the document server is printed, SP8022 also increments, and when a print job stored on the document server is printed, SP8024 also increments.
- When an original is both copied and stored on the document server, the C: and L: counters both increment.
- When a print job is stored on the document server, only the L: counter increments.
- When the user presses the Document Server button to store the job on the document server, only
 the L: counter increments.

- When the user enters document server mode and prints data stored on the document server, only
 the L: counter increments.
- When an image received from Palm 2 is received and stored, the L: counter increments.
- When the customer prints a report (user code list, for example), the O: counter increments.
 However, for fax reports and reports executed from the fax application, the F: counter increments.

| 8011 | T:Jobs/LS | |
|------|-----------|--|
| 8012 | C:Jobs/LS | These SPs count the number of jobs stored to the document server |
| 8013 | F:Jobs/LS | by each application, to reveal how local storage is being used for |
| 8014 | P:Jobs/LS | input. [0 to 9999999 / 0 / 1] |
| 8015 | S:Jobs/LS | The L: counter counts the number of jobs stored from within the |
| 8016 | L:Jobs/LS | document server mode screen at the operation panel. |
| 8017 | O:Jobs/LS | |

- 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.

| 8021 | T:Pjob/LS | |
|------|-----------|---|
| 8022 | C:Pjob/LS | |
| 8023 | F:Pjob/LS | These SPs reveal how files printed from the document server were stored on the document server originally. |
| 8024 | P:Pjob/LS | [0 to 9999999 / 0 / 1] |
| 8025 | S:Pjob/LS | The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. |
| 8026 | L:Pjob/LS | assessing as the second at the operation parion |
| 8027 | O:Pjob/LS | |

 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.

| 8031 | T:Pjob/DesApl | |
|------|---------------|--|
| 8032 | C:Pjob/DesApl | |
| 8033 | F:Pjob/DesApl | These SPs reveal what applications were used to output documents from the document server. |
| 8034 | P:Pjob/DesApl | [0 to 9999999 / 0 / 1] The L: counter counts the number of jobs printed from within the document server mode screen at the operation panel. |
| 8035 | S:Pjob/DesApl | |
| 8036 | L:Pjob/DesApl | |
| 8037 | O:Pjob/DesApl | |

- 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.

| 8041 | T:TX Jobs/LS | |
|------|--------------|--|
| 8042 | C:TX Jobs/LS | These SPs count the applications that stored files on the document server that were later accessed for transmission over |
| 8043 | F:TX Jobs/LS | the telephone line or over a network (attached to an e-mail, or |
| 8044 | P:TX Jobs/LS | as a fax image by I-Fax). [0 to 9999999 / 0 / 1] |
| 8045 | S:TX Jobs/LS | Note: Jobs merged for sending are counted separately. |
| 8046 | L:TX Jobs/LS | The L: counter counts the number of jobs scanned from within the document server mode screen at the operation panel. |
| 8047 | O:TX Jobs/LS | |

- 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.

| 8051 | T:TX Jobs/DesApl | |
|------|------------------|---|
| 8052 | C:TX Jobs/DesApl | These SPs count the applications used to send files from |
| 8053 | F:TX Jobs/DesApl | the document server over the telephone line or over a network (attached to an e-mail, or as a fax image by I- |
| 8054 | P:TX Jobs/DesApl | Fax). Jobs merged for sending are counted separately. |
| 8055 | S:TX Jobs/DesApl | [0 to 9999999 / 0 / 1] The L: counter counts the number of jobs sent from with |
| 8056 | L:TX Jobs/DesApl | the document server mode screen at the operation panel. |
| 8057 | O:TX Jobs/DesApl | |

• If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

| | T:FIN Jobs | [0 to 9999999 / 0 / 1] | | |
|------|---|-------------------------------|--|--|
| 8061 | These SPs total the finishing methods. The finishing method is specified by the application. | | | |
| | C:FIN Jobs | [0 to 9999999 / 0 / 1] | | |
| 8062 | These SPs total finishing methods for copy jobs only. The finishing method is specified by the application. | | | |

| | F:FIN Jobs | | [0 to 9999999 / 0 / 1] | |
|--------|--|---|--|--|
| 8063 | These SPs total finishing methods for fax jobs only. The finishing method is specified by the application. | | | |
| | Note: Finishing features for fax jobs are not available at this time. | | | |
| | P:FIN Jobs | | [0 to 9999999 / 0 / 1] | |
| 8064 | These SPs total finishing the application. | methods for p | rint jobs only. The finishing method is specified by | |
| | S:FIN Jobs | | [0 to 9999999 / 0 / 1] | |
| 8065 | by the application. | | can jobs only. The finishing method is specified are not available at this time. | |
| | L:FIN Jobs | | [0 to 9999999 / 0 / 1] | |
| 8066 | 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 | | [0 to 9999999 / 0 / 1] | |
| 8067 | These SPs total finishing methods for jobs executed by an external application, over the network. The finishing method is specified by the application. | | | |
| 806x 1 | Sort | Number of jobs started in Sort mode. When a stored copy job is set for Sort and then stored on the document server, the L: counter increments. (See SP8066 1) | | |
| 806x 2 | Stack | Number of jobs started out of Sort mode. | | |
| 806x 3 | Staple | Number of jobs started in Staple mode. | | |
| 806x 4 | Booklet | Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments. | | |
| 806x 5 | Z-Fold | Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold). | | |
| 806x 6 | Punch | Number of jobs started in Punch mode. When Punch is set for a print job, the P: counter increments. (See SP8064 6.) | | |
| 806x 7 | Other | Reserved. Not used | | |

| 806x 8 | Inside-Fold | Number of jobs started In any mode other than the Booklet mode and set for folding (Inside-fold). | |
|---------|----------------|---|--|
| 806x 9 | Three-IN-Fold | Letter Fold-in Not Used | |
| 806x 10 | Three-OUT-Fold | Letter Fold-out Not Used | |
| 806x 11 | Four-Fold | Double Parallel Fold Not Used | |
| 806x 12 | KANNON-Fold | Gate Fold Not Used | |
| 806x 13 | Perfect-Bind | Perfect Binder Not Used | |
| 806x 14 | Ring-Bind | Ring Binder Not Used | |

| | T:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
|--|---|--|--|--|
| 8071 | 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 | [0 to 9999999 / 0 / 1] | | |
| 8072 | These SPs count and calculate the number of copy jobs by size based on the number of pages in the job. | | | |
| | F:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| These SPs count and calculate the name pages in the job. | | per of fax jobs by size based on the number of | | |
| | P:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8074 | 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] | | |
| 8075 | These SPs count and calculate the number of scan jobs by size based on the n pages in the job. | | | |
| | L:Jobs/PGS | [0 to 9999999 / 0 / 1] | | |
| 8076 | 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 | [0 to 9999 | [0 to 9999999 / 0 / 1] | |
|--------|----------------|---|-------------------------------|--|
| 8077 | | calculate the number of "Other" application jobs (Web Image by size based on the number of pages in the job. | | |
| 807x 1 | 1 Page | 807x 8 | 21 to 50 Pages | |
| 807x 2 | 2 Pages | 807x 9 | 51 to 100 Pages | |
| 807x 3 | 3 Pages | 807x 10 | 101 to 300 Pages | |
| 807x 4 | 4 Pages | 807x 11 | 301 to 500 Pages | |
| 807x 5 | 5 Pages | 807x 12 | 501 to 700 Pages | |
| 807x 6 | 6 to 10 Pages | 807x 13 | 701 to 1000 Pages | |
| 807x 7 | 11 to 20 Pages | 807x 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 Jo | bs | [0 to 9999999 / 0 / 1] |
|------|--|----------|-------------------------------|
| 8111 | These SPs count the total number of jobs (color or black-and-white) sent by fax, either directly or using a file stored on the document server, on a telephone line. | | |
| | Note: Color fax sending is not available at this time. | | |
| 001 | B/W | Black TX | |

| | F:FAX TX Jobs [0 to 9999999 / 0 / 1] | | |
|------|---|----------|--|
| 8113 | 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. | | |
| 001 | B/W | Black TX | |

- 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 (812x) also increments.
- The fax job is counted when the job is scanned for sending, not when the job is sent.

| | T:IFAX TX J | obs | [0 to 9999999 / 0 / 1] | |
|------|-------------|--|-------------------------------|--|
| 8121 | | 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: Colo | Note: Color fax sending is not available at this time. | | |
| 00 | 1 B/W | B/W Black TX | | |
| | F:IFAX TX J | obs | [0 to 9999999 / 0 / 1] | |
| 8123 | documents | 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. | | |
| 00 | 1 B/W | B/W Black TX | | |

- 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 | | [0 to 9999999 / 0 / 1] |
|---|------|--|--|-------------------------------|
| 8 | 3131 | These SPs count the total number of jobs scanned and attached to an e-mail, regardless of whether the document server was used or not. | | |
| | 001 | 01 B/W Black TX | | |

| 00 | 02 | Color Color TX | | |
|--|------------------|-------------------|----------|--|
| 00 | 03 | ACS | Color TX | |
| | | S:S-to-Email Jobs | | |
| These SPs count the number of jobs scanned and attached to an e-mail, without the original on the document server. | | | , | |
| 00 | 01 | B/W Black TX | | |
| 00 | 02 | Color TX | | |
| 00 | 003 ACS Color TX | | | |

- These counters count jobs, not pages.
- If the job is stored on the document server, after the job is stored it is determined to be color or black-and-white then counted.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- If several jobs are combined for sending to the Scan Router, Scan-to-Email, or Scan-to-PC, or if one job is sent to more than one destination. each send is counted separately. For example, if the same document is sent by Scan-to-Email as well as Scan-to-PC, then it is counted twice (once for Scan-to-Email and once for Scan-to-PC).

| 01.41 | T:Deliv Jobs | s/Svr | [0 to 9999999 / 0 / 1] |
|---------------------|--|-------------|-------------------------------|
| 8141 | These SPs count the total number of jobs scanned and sent to a Scan Router server. | | |
| 001 | B/W | Black Deliv | |
| 002 | 2 Color Color Deliv | | |
| 003 | ACS | Color Deliv | |
| 8145 | S:Deliv Jobs/Svr | | |
| 6143 | These SPs count the number of jobs scanned and sent to a Scan Router server. | | |
| 001 B/W Black Deliv | | | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |

- 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 | s/PC | [0 to 9999999 / 0 / 1] |
|--|--|-------------|---|
| These SPs count the total number of to-PC). Note: At the present time, 8151 and | | · | s scanned and sent to a folder on a PC (Scan- |
| 001 | B/W | Black Deliv | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |
| S:Deliv Jobs/PC | | | |
| 8155 | These SPs count the total number of jobs scanned and sent with Scan-to-PC. | | s scanned and sent with Scan-to-PC. |
| 001 | B/W | Black Deliv | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |

- 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.

| 8161 | T:PCFAX TX Jobs | These SPs count the number of PC Fax transmission jobs |
|------|-----------------|---|
| 8163 | | A job is counted from when it is registered for sending, not when it is sent. |
| | F:PCFAX TX Jobs | [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.

| 8171 | T:Deliv Jobs/WSD | | These SPs count the pages scanned by WSD. |
|------|------------------|-------------|---|
| 8175 | S:Deliv Jobs | s/WSD | [0 to 9999999 / 0 / 1] |
| 001 | B/W | Black Deliv | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |

| 8181 | T:Scan to N | 1edia Jobs | These SPs count the pages scanned to media by the |
|------|-------------|-------------|--|
| 8185 | S:Scan to N | Nedia Jobs | scanner application. [0 to 9999999 / 0 / 1] |
| 001 | B/W | Black Deliv | |
| 002 | Color | Color Deliv | |
| 003 | ACS | Color Deliv | |

| 8191 | T:Total Scan PGS | These SPs count the pages scanned by each application that uses the scanner to scan images. |
|------|------------------|---|
| 8192 | C:Total Scan PGS | |
| 8193 | F:Total Scan PGS | |
| 8195 | S:Total Scan PGS | [0 to 9999999 / 0 / 1] |
| 8196 | L:Total Scan PGS | |

- SP 8191 to 8196 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.

| 8201 | T:LSize Scan PGS | [0 to 9999999 / 0 / 1] |
|------|---|-------------------------------|
| 8203 | F Lsize Scan PGS | [0 to 9999999 / 0 / 1] |
| | S:LSize Scan PGS | [0 to 9999999 / 0 / 1] |
| 8205 | These SP codes count the total number of large pages input with the scanner for scipobs 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 displayed. | |

| 8211 | T:Scan PGS/LS | These SPs count the number of pages scanned into the | | |
|------|---------------|--|--|--|
| 8212 | C:Scan PGS/LS | document server . [0 to 9999999 / 0 / 1] | | |
| 8213 | F:Scan PGS/LS | The L: counter counts the number of pages stored from | | |
| 8215 | S:Scan PGS/LS | within the document server mode screen at the operation panel, and with the Store File button from within the Copy | | |
| 8216 | L:Scan PGS/LS | 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.

| 8221 | ADF Org Feeds | | [0 to 9999999 / 0 / 1] | | | |
|------|---|--|-------------------------------|--|--|--|
| | These SPs count the number of pages fed through the ADF for front and back side scanning. | | | | | |
| 001 | Front | Number of front sides fed for scanning: With an ADF that can scan both sides simultaneously, the Front side count is the same as the number of pages fed for either simplex or duplex scanning. With an ADF that cannot scan both sides simultaneously, the Front side count is the same as the number of pages fed for duplex front side scanning. (The front side is determined by which side the user loads face up.) | | | | |
| 002 | Back | Number of rear sides fed for scanning: With an ADF that can scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex scanning. With an ADF that cannot scan both sides simultaneously, the Back count 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.

| 8231 | Scan PGS/Mode | | [0 to 9999999 / 0 / 1] | | | |
|------|---|---|-------------------------------|--|--|--|
| | These SPs count the number of pages scanned by each ADF mode to determine the work load on the ADF. | | | | | |
| 001 | Large Volume | Selectable. Large copy jobs that cannot be loaded in the ADF at one time. | | | | |
| 002 | SADF | Selectable. Feeding pages one by one through the ADF. | | | | |
| 003 | Mixed Size | Selectable. Select "Mixed Sizes" on the operation panel. | | | | |
| 004 | Custom Size | Selectable. Originals of non-standard size. | | | | |
| 005 | Platen | Book mode. Raising the ADF and placing the original directly on the platen. | | | | |
| 006 | Mixed 1 side/2 side | Selectable. Select "Simplex/Duplex" on the operation panel. | | | | |

- 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.

| 8241 | T:Scan PGS/Org | | [0 to 9999999 / 0 / 1] | | | | | |
|-------------------------|--|---|-------------------------------|-------------------------------|------|------|------|--|
| | These SPs count the total number of scanned pages by original type for all jobs, regardless of which application was used. | | | | | | | |
| 8242 | C:Scan PGS/Org | :Scan PGS/Org [0 to 9999999 / 0 / 1] | | | | | | |
| | These SPs count the number of pages scanned by original type for Copy jobs. | | | | | | | |
| | F:Scan PGS/Org | [0 to 9999999 / 0 / 1] | | | | | | |
| 8243 | These SPs count th | These SPs count the number of pages scanned by original type for Fax jobs. | | | | | | |
| | S:Scan PGS/Org [C | | | [0 to 9999999 / 0 / 1] | | | | |
| 8245 | These SPs count th | These SPs count the number of pages scanned by original type for Scan jobs. | | | | | | |
| 8246 | L:Scan PGS/Org | | [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 | | | | | | | |
| | | 824 | 11 | 8242 | 8243 | 8245 | 8246 | |
| 824x 1: Text | | Ye | S | Yes | Yes | Yes | Yes | |
| 824x 2: Text/Photo | | Yes | | Yes | Yes | Yes | Yes | |
| 824x 3: Photo | | Yes | | Yes | Yes | Yes | Yes | |
| 824x 4: GenCopy, Pale | | Ye | S | Yes | No | Yes | Yes | |
| 824x 5: Map | | Ye | s | Yes | No | No | Yes | |
| 824x 6: Normal/Detail | | Ye | S | No | Yes | No | No | |
| 824x 7: Fine/Super Fine | | Ye | s | No | Yes | No | No | |
| 824x 8: Binary | | Ye | s | No | No | Yes | No | |
| | | | | | | | | |

| 824x 9: Grayscale | Yes | No | No | Yes | No |
|-------------------|-----|-----|-----|-----|-----|
| 824x 10: Color | Yes | No | No | Yes | No |
| 824x 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.

| 8251 | T:Scan PGS/ImgEdt | These SPs show how many times Image Edit features have |
|------|-------------------|--|
| 8252 | C:Scan PGS/ImgEdt | been selected at the operation panel for each application. Some examples of these editing features are: |
| 8255 | S:Scan PGS/ImgEdt | Erase> Border |
| 8256 | L:Scan PGS/ImgEdt | Erase> Center |
| | | Image Repeat |
| | | Centering |
| | | Positive/Negative |
| 8257 | O:Scan PGS/ImgEdt | [0 to 9999999 / 0 / 1] |
| | | Note: The count totals the number of times the edit features have been used. A detailed breakdown of exactly which features have been used is not given. |

The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen.

| 8281 | T:Scan PGS/TWAIN | These SPs count the number of pages scanned using a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. |
|------|------------------|--|
| | | |
| 8285 | S:Scan PGS/TWAIN | [0 to 9999999 / 0 / 1] Note: At the present time, these counters perform identical counts. |

| 8291 | T:Scan PGS/Stamp | These SPs count the number of pages stamped with the | |
|------|------------------|--|--|
| 8293 | F:Scan PGS/Stamp | stamp in the ADF unit. [0 to 9999999 / 0 / 1] | |
| 8295 | S:Scan PGS/Stamp | 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 | [0 to 9999999 / 0 / 1] | |
|------|--|-------------------------------|--|
| 8301 | These SPs count by size the total number of pages scanned by all applications. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-441]. | | |
| | C:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8302 | 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 | [0 to 9999999 / 0 / 1] | |
| 8303 | These SPs count by size the total number of pages scanned by the Fax application. Use these totals to compare original page size (scanning) and output page size [SP 8-443]. | | |
| | S:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8305 | These SPs count by size the total number of pages scanned by the Scan application. Use these totals to compare original page size (scanning) and output page size [SP 8-445]. | | |
| | L:Scan PGS/Size | [0 to 9999999 / 0 / 1] | |
| 8306 | 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]. | | |

| 830x 1 | A3 |
|----------|------------------|
| 830x 2 | A4 |
| 830x 3 | A5 |
| 830x 4 | B4 |
| 830x 5 | B5 |
| 830x 6 | DLT |
| 830x 7 | LG |
| 830x 8 | LT |
| 830x 9 | HLT |
| 830x 10 | Full Bleed |
| 830x 254 | Other (Standard) |
| 830x 255 | Other (Custom) |

| | T:Scan PGS/Rez | [0 to 9999999 / 0 / 1] | |
|--------|---|-------------------------------|--|
| 8311 | These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. | | |
| | S:Scan PGS/Rez | [0 to 9999999 / 0 / 1] | |
| 8315 | These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. Note: At the present time, 8311 and 8315 perform identical counts. | | |
| 831x 1 | 1200dpi to | | |
| 831x 2 | 600dpito1199dpi | | |
| 831x 3 | 400dpito599dpi | | |
| 831x 4 | 200dpito399dpi | | |
| 831x 5 | to 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.

| 8381 | T:Total PrtPGS | |
|------|----------------|---|
| 8382 | C:Total PrtPGS | These SPs count the number of pages printed by the customer. The counter for the application used for storing |
| 8383 | F:Total PrtPGS | the pages increments. |
| 8384 | P:Total PrtPGS | [0 to 9999999 / 0 / 1] The L: counter counts the number of pages stored from within the document server mode screen at the operation |
| 8385 | S:Total PrtPGS | |
| 8386 | L:Total PrtPGS | panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter. |
| 8387 | O:Total PrtPGS | |

- 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 | [0 to 9999999 / 0 / 1] |
|------|--|--|
| 8391 | These SPs count pages printe | d on paper sizes A3/DLT and larger. |
| | Note: In addition to being displayed in the User Tools d | splayed in the SMC Report, these counters are also isplay on the copy machine. |

| 8401 | T:PrtPGS/LS | |
|------|-------------|---|
| 8402 | C:PrtPGS/LS | These SPs count the number of pages printed from the document server. The counter for the application used to print |
| 8403 | F:PrtPGS/LS | the pages is incremented. |
| 8404 | P:PrtPGS/LS | The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. |
| 8405 | S:PrtPGS/LS | [0 to 9999999 / 0 / 1] |
| 8406 | L:PrtPGS/LS | |

- 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.

| 8411 | Prints/Duplex | This SP counts the amount of paper (front/back counted as 1 page) used for duplex printing. Last pages printed only on one side are not counted. [0 to 9999999 / 0 / 1] |
|------|---------------|--|
|------|---------------|--|

| | T:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 8421 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing. This is the total for all applications. | | |
| | C:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8422 | These SPs count by binding and combine, and n-Up settings the number of processed for printing by the copier application. | | |
| | F:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8423 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the fax application. | | |
| | P:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8424 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the printer application. | | |
| | S:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] | |
| 8425 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the scanner application. | | |

| | L:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] |
|---------|--|--|
| 8426 | These SPs count by binding and combine, and n-Up settings the number of pages processed for printing from within the document server mode window at the operation panel. | |
| | O:PrtPGS/Dup Comb | [0 to 9999999 / 0 / 1] |
| 8427 | These SPs count by binding or processed for printing by Otl | and combine, and n-Up settings the number of pages her applications |
| 842x 1 | Simplex> Duplex | |
| 842x 2 | Duplex> Duplex | |
| 842x 3 | Book> Duplex | |
| 842x 4 | Simplex Combine | |
| 842x 5 | Duplex Combine | |
| 842x 6 | 2in1 | 2 pages on 1 side (2-Up) |
| 842x 7 | 4in1 | 4 pages on 1 side (4-Up) |
| 842x 8 | 6in1 | 6 pages on 1 side (6-Up) |
| 842x 9 | 8 in 1 | 8pages on 1 side (8-Up) |
| 842x 10 | 9in1 | 9 pages on 1 side (9-Up) |
| 842x 11 | 16in1 | 16 pages on 1 side (16-Up) |
| 842x 12 | Booklet | |
| 842x 13 | Magazine | |
| 842x 14 | 2in1 + Booklet | |
| 842x 15 | 4in1 + Booklet | |
| 842x 16 | 6in1 + Booklet | |
| 842x 17 | 8in1 + Booklet | |
| 842x 18 | 9in1 + Booklet | |
| 842x 19 | 2in1 + Magazine | |
| 842x 20 | 4in1 + Magazine | |

| 842x 21 | 6in1 + Magazine | |
|---------|------------------|--|
| 842x 22 | 8in1 + Magazine | |
| 842x 23 | 9in1 + Magazine | |
| 842x 24 | 16in1 + Magazine | |

- These counts (SP8421 to SP8427) are especially useful for customers who need to improve their compliance with ISO standards for the reduction of paper consumption.
- Pages that are only partially printed with the n-Up functions are counted as 1 page.
- Here is a summary of how the counters work for Booklet and Magazine modes:

| Booklet | | Magazine | |
|----------------|-------|----------------|-------|
| Original Pages | Count | Original Pages | Count |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 2 | 3 | 2 |
| 4 | 2 | 4 | 2 |
| 5 | 3 | 5 | 4 |
| 6 | 4 | 6 | 4 |
| 7 | 4 | 7 | 4 |
| 8 | 4 | 8 | 4 |

| | T:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
|--|---|-------------------------------|--|
| 8431 | These SPs count the total number of pages output with the three features below, regardless of which application was used. | | |
| C:PrtPGS/ImgEdt [0 to 9999999 / 0 / 1] | | [0 to 9999999 / 0 / 1] | |
| 8432 | These SPs count the total number of pages output with the three features below with the copy application. | | |
| | P:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
| 8434 | These SPs count the total number of pages output with the three features below with the print application. | | |

| | L:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
|---|--|---|--|
| 8436 | These SPs count the total number of pages output from within the document server mode window at the operation panel with the three features below. | | |
| | O:PrtPGS/ImgEdt | [0 to 9999999 / 0 / 1] | |
| These SPs count the total number of pages output with the three fee Other applications. | | umber of pages output with the three features below with | |
| 843x 1 | Cover/Slip Sheet | Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2. | |
| 843x 2 | Series/Book | The number of pages printed in series (one side) or printed as a book with booklet right/left pagination. | |
| 843x 3 | User Stamp | The number of pages printed where stamps were applied, including page numbering and date stamping. | |

| 8441 | T:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
|------|---|-------------------------------|--|
| 0441 | These SPs count by print paper size the number of pages printed by all applications. | | |
| | C:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8442 | These SPs count by print paper size the number of pages printed by the copy application. | | |
| | F:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8443 | These SPs count by print paper size the number of pages printed by the fax application. | | |
| | P:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8444 | These SPs count by print paper size the number of pages printed by the printer application. | | |
| | S:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8445 | These SPs count by print paper size the number of pages printed by the scanner application. | | |
| | L:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] | |
| 8446 | These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel. | | |

| 8447 | O:PrtPGS/Ppr Size | [0 to 9999999 / 0 / 1] |
|----------|--|-------------------------------|
| 0447 | These SPs count by print paper size the number of pages printed by Other application | |
| 844x 1 | A3 | |
| 844x 2 | A4 | |
| 844x 3 | A5 | |
| 844x 4 | B4 | |
| 844x 5 | B5 | |
| 844x 6 | DLT | |
| 844x 7 | LG | |
| 844x 8 | LT | |
| 844x 9 | HLT | |
| 844x 10 | Full Bleed | |
| 844x 254 | Other (Standard) | |
| 844x 255 | Other (Custom) | |

• These counters do not distinguish between LEF and SEF.

| 0.451 | PrtPGS/Ppr Tray [0 to 9999999 / 0 / 1] These SPs count the number of sheets fed from each paper feed station. | | [0 to 9999999 / 0 / 1] |
|-------|--|--------------------------|---------------------------------|
| 8451 | | | d from each paper feed station. |
| 001 | Bypass Tray | Bypass Tray | |
| 002 | Tray 1 | Copier | |
| 003 | Tray 2 | Copier | |
| 004 | Tray 3 | Paper Tray Unit (Option) | |
| 005 | Tray 4 | Paper Tray Unit (Option) | |
| 006 | Tray 5 | LCT (Option) | |
| 007 | Tray 6 | Currently not used. | |
| 008 | Tray 7 | Currently not used. | |

| 009 | Tray 8 | Currently not used. |
|-----|---------|---------------------|
| 010 | Tray 9 | Currently not used. |
| 011 | Tray 10 | Currently not used. |
| 012 | Tray 11 | Currently not used. |
| 013 | Tray 12 | Currently not used. |
| 014 | Tray 13 | Currently not used. |
| 015 | Tray 14 | Currently not used. |
| 016 | Tray 15 | Currently not used. |

| | T:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | | |
|--------|---|-------------------------------|--|--|
| | These SPs count by paper type the number pages printed by all applications. | | | |
| 8461 | These counters are not the same as the PM counter. The PM counter is based on feed timing to accurately measure the service life of the feed rollers. However, these counts are based on output timing. | | | |
| | Blank sheets (covers, chapter covers, slip s | heets) are also counted. | | |
| | During duplex printing, pages printed on both sides count as 1, and a page printed on one side counts as 1. | | | |
| 8462 | C:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | | |
| 0402 | These SPs count by paper type the number pages printed by the copy application. | | | |
| 8463 | F:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | | |
| 0403 | These SPs count by paper type the number pages printed by the fax application. | | | |
| 8464 | P:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | | |
| 0404 | These SPs count by paper type the number pages printed by the printer application. | | | |
| | L:PrtPGS/Ppr Type | [0 to 9999999 / 0 / 1] | | |
| 8466 | These SPs count by paper type the number pages printed from within the document server mode window at the operation panel. | | | |
| 846x 1 | Normal | | | |
| 846x 2 | Recycled | | | |

| 846x 3 | Special |
|--------|---------------|
| 846x 4 | Thick |
| 846x 5 | Normal (Back) |
| 846x 6 | Thick (Back) |
| 846x 7 | OHP |
| 846x 8 | Other |

| 8471 | PrtPGS/Mag | [0 to 9999999 / 0 / 1] |
|------|--|-------------------------------|
| 04/1 | These SPs count by magnification rate the number of pages printed. | |
| 001 | to 49% | |
| 002 | 50% to 99% | |
| 003 | 100% | |
| 004 | 101% to 200% | |
| 005 | 201% to | |

- 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%.

| 8481 | T:PrtPGS/TonSave |
|------|------------------|
| 8484 | P:PrtPGS/TonSave |

These SPs count the number of pages printed with the Toner Save feature switched on.

Note: These SPs return the same results as this SP is limited to the Print application.

[0 to 9999999 / 0 / 1]

| 0.5.1.1 | T:PrtPGS/Emul | [0 to 9999999 / 0 / 1] | | |
|---------|-------------------|--|--|--|
| 8511 | These SPs count b | SPs count by printer emulation mode the total number of pages printed. | | |
| 0514 | P:PrtPGS/Emul | [0 to 9999999 / 0 / 1] | | |
| 8514 | These SPs count b | by printer emulation mode the total number of pages printed. | | |
| 001 | RPCS | | | |
| 002 | RPDL | Japan Only | | |
| 003 | PS3 | | | |
| 004 | R98 | | | |
| 005 | R16 | Japan Only | | |
| 006 | GL/GL2 | | | |
| 007 | R55 | | | |
| 008 | RTIFF | | | |
| 009 | PDF | | | |
| 010 | PCL5e/5c | | | |
| 011 | PCL XL | | | |
| 012 | IPDL-C | | | |
| 013 | BM-Links | Japan Only | | |
| 014 | Other | | | |
| 015 | IPDS | | | |

- SP8511 and SP8514 return the same results as they are both limited to the Print application.
- Print jobs output to the document server are not counted.

| | T:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
|--------|---|------------------------------------|--|--|
| 8521 | These SPs count by finishing mode the total number of pages printed by all applications. | | | |
| | C:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8522 | These SPs count by finishing mode the total napplication. | umber of pages printed by the Copy | | |
| | F:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8523 | These SPs count by finishing mode the total number of pages printed by the Fax application. Note: Print finishing options for received faxes are currently not available. | | | |
| | P:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8524 | These SPs count by finishing mode the total number of pages printed by the Print application. | | | |
| | S:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8525 | These SPs count by finishing mode the total number of pages printed by the Scanner application. | | | |
| | L:PrtPGS/FIN | [0 to 9999999 / 0 / 1] | | |
| 8526 | These SPs count by finishing mode the total number of pages printed from within the document server mode window at the operation panel. | | | |
| 852x 1 | Sort | | | |
| 852x 2 | Stack | | | |
| 852x 3 | Staple | | | |
| 852x 4 | Booklet | | | |
| 852x 5 | Z-Fold | | | |
| 852x 6 | Punch | | | |
| 852x 7 | Other | | | |
| 852x 8 | Inside-Fold | | | |

| 852x 9 | Three-IN-Fold |
|---------|----------------|
| 852x 10 | Three-OUT-Fold |
| 852x 11 | Four-Fold |
| 852x 12 | KANNON-Fold |
| 852x 13 | Perfect-Bind |
| 852x 14 | Ring-Bind |



- 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.

| 8531 | Staples | This SP counts the amount of staples used by the machine. |
|------|---------|---|
| | | [0 to 9999999 / 0 / 1] |

| 8551 | T:PrtBooks/FIN | |
|------|----------------|----------|
| 8552 | C:PrtBooks/FIN | |
| 8554 | P:PrtBooks/FIN | |
| 8556 | L:PrtBooks/FIN | |
| 001 | Perfect-Bind | Not Used |
| 002 | Ring-Bind | Not Used |

| 8561 | T:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
|------|--------------------|-------------------------------|
| 8562 | C:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8563 | F:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8564 | P:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |
| 8566 | L:A Sheet Of Paper | [0 to 9999999 / 0 / 1] |

| O:A Sheet Of Paper [0 to 9999999 / 0 / 1 These SPs count the totals number of duplex pages printed. | | | [0 to 9999999 / 0 / 1] |
|--|----------------------|---------------------|-------------------------------|
| | | plex pages printed. | |
| 001 | Total: Over A3/DLT | | |
| 002 | Total: Under A3/DLT | | |
| 003 | Duplex: Over A3/DLT | | |
| 004 | Duplex: Under A3/DLT | | |

| | T: Counter | [0 to 9999999 / 0 / 1] |
|------|--|---|
| 8581 | also displayed in the User Tools display | splayed in the SMC Report, these counters are |

| | O: Counter | | [0 to 9999999 / 0 / 1] |
|------|---|--|-------------------------------|
| 8591 | These SPs count the totals for A3/DLT paper use, number of duplex pages printed, and the number of staples used. These totals are for Other (O:) applications only. | | |
| 001 | A3/DLT | | |
| 002 | Duplex | | |

| 8601 | T:Coverage Counter | | |
|------|---|--|----------------------------------|
| 8601 | These SPs count the total coverage for each color and printout pages. | | color and printout pages. |
| 001 | B/W [0 to 21474836 | | 47 / 0 / 1] |
| 011 | B/W Printing Pages [0 to 9999999 / | | (0/1] |
| 0402 | C:Coverage Counter | | [0 to 2147483647 / 0 / 1] |
| 8602 | These SPs count the total coverage for B/W. | | |
| 0402 | F:Coverage Counter [0 to 2147483647 / 0 / 1] | | [0 to 2147483647 / 0 / 1] |
| 8603 | These SPs count the total coverage for B/W. | | |

| 0404 | P:Coverage Counter | [0 to 2147483647 / 0 / 1] | |
|-------|---|----------------------------------|--|
| 8604 | These SPs count the total coverage for B/W. | | |
| 0.404 | L:Coverage Counter | [0 to 2147483647 / 0 / 1] | |
| 8606 | These SPs count the total coverage for B/W. | | |

| 8617 | SDK Apli Counter | | [0 to 9999999 / 0 / 1] |
|-------------------------------|------------------|--------------------|-------------------------------|
| These SPs count the total pri | | ntout pages for ec | ach SDK applicaion. |
| 001 | SDK-1 | | |
| 002 | SDK-2 | | |
| 003 | SDK-3 | | |
| 004 | SDK-4 | | |
| 005 | SDK-5 | | |
| 006 | SDK-6 | | |

| 8621 | Func Use Counter | - |
|------------|------------------------------|---|
| 001 to 064 | Function-001 to Function-064 | |

| T:FAX TX PGS [0 to 9999999 / 0 / 1] These SPs count by color mode the number of pages sent by fax to a telephonumber. | | T:FAX TX PGS | | [0 to 9999999 / 0 / 1] |
|--|-----|--|--|-------------------------------------|
| | | of pages sent by fax to a telephone | | |
| | 001 | B/W Black TX | | |
| | | F:FAX TX PGS | | [0 to 999999 / 0 / 1] |
| 8633 | | These SPs count by color mode the number of pages sent by fax to a telephone number. | | of pages sent by fax to a telephone |
| | 001 | B/W Black TX | | |

- 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.

| 04.41 | | T:FAX TX PGS | | [0 to 9999999 / 0 / 1] | |
|-------|-----|---|---|---|--|
| | | ount by color mode the num | ber of pages sent by fax to as fax images using | | |
| 0 | 001 | B/W | Black TX | | |
| | | F:FAX TX PC | AX TX PGS [0 o 9999999 / 0 / 1] | | |
| 8643 | | These SPs count by color mode the number of pages sent by Fax as fax images usin Fax. | | ber of pages sent by Fax as fax images using I- | |
| 0 | 001 | B/W | Black TX | | |

- 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 | [0 to 9999999 / 0 / 1] | |
|---|------------------|---|--|
| These SPs count by color mode the total number of pages attached to an eleboth the Scan and document server applications. | | | |
| 001 | B/W | | |
| 002 | Color | | |
| | S:S-to-Email PGS | [0 to 9999999 / 0 / 1] | |
| These SPs count by color mode the total number of pages attached to Scan application only. | | mber of pages attached to an e-mail for the | |

| 001 | B/W | |
|-----|-------|--|
| 002 | Color | |

U Note

- The count for B/W and Color pages is done after the document is stored on the HDD. If the job is cancelled before it is stored, the pages are not counted.
- If Scan-to-Email is used to send a 10-page document to 5 addresses, the count is 10 (the pages are sent to the same SMTP server together).
- If Scan-to-PC is used to send a 10-page document to 5 folders, the count is 50 (the document is sent to each destination of the SMB/FTP server).
- Due to restrictions on some devices, if Scan-to-Email is used to send a 10-page document to a
 large number of destinations, the count may be divided and counted separately. For example, if a
 10-page document is sent to 200 addresses, the count is 10 for the first 100 destinations and the
 count is also 10 for the second 100 destinations, for a total of 20).

| | T:Deliv PGS/Svr | [0 to 9999999 / 0 / 1] | |
|---|-----------------|--|--|
| These SPs count by color mode the total number of pages sent to by both Scan and LS applications. | | number of pages sent to a Scan Router server | |
| 001 | B/W | | |
| 002 | Color | | |
| | S:Deliv PGS/Svr | [0 to 9999999 / 0 / 1] | |
| These SPs count by color mode the total number of pages sent to a Scan Route by the Scan application. | | number of pages sent to a Scan Router server | |
| 001 | B/W | | |
| 002 | 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 [0 to 9999999 / 0 / 1] These SPs count by color mode the total number of pages sent to a folder on (Scan-to-PC) with the Scan and LS applications. | | T: Deliv PGS/PC | [0 to 9999999 / 0 / 1] | |
|---|----|---|-------------------------------|--|
| | | | | |
| 00 | 01 | B/W | | |
| 00 | 02 | Color | | |
| | | S: Deliv PGS/PC | [0 to 9999999 / 0 / 1] | |
| 8675 | | These SPs count by color mode the total number of pages sent with Scan-to-PC with Scan application. | | |
| 00 | 01 | B/W | | |
| 00 | 02 | Color | | |

| 8681 | T:PCFAX TXPGS | These SPs count the number of pages sent by PC Fax. | |
|------|---------------------|--|--|
| 8683 | F:PCFAX TXPGS | These SPs are provided for the Fax application only, so the counts for SP8681 and SP8683 are the same. | |
| | 1.1. 3.7.0. 7.1. 30 | [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.)

| 8691 | T:TX PGS/LS | These SPs count the number of pages sent from the document |
|------|-------------|--|
| 8692 | C:TX PGS/LS | server. The counter for the application that was used to store the pages is incremented. |
| 8693 | F:TX PGS/LS | [0 to 9999999 / 0 / 1] |
| 8694 | P:TX PGS/LS | The L: counter counts the number of pages stored from within the document server mode screen at the operation panel. |
| 8695 | S:TX PGS/LS | Pages stored with the Store File button from within the Copy |
| 8696 | L:TX PGS/LS | mode screen go to the C: counter. |



• Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.

3

- 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 [0 to 9999999 / 0 / 1] | | [0 to 9999999 / 0 / 1] |
|------|--|--|-------------------------------|
| 8701 | These SPs count the number of pages sent by the physical port used to send them. For example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for ISDN (G3, G4) is 12. | | |
| 001 | PSTN-1 | | |
| 002 | PSTN-2 | | |
| 003 | PSTN-3 | | |
| 004 | ISDN (G3,G4) | | |
| 005 | Network | | |

| | T:Scan PGS/Comp | | [0 to 9999999 / 0 / 1] |
|------|---|--|--|
| 8711 | These SPs count the number of compressed pages scanned into the document service counted by the formats listed below. | | ages scanned into the document server, |
| 001 | JPEG/JPEG2000 | | |
| 002 | TIFF (Multi/Single) | | |
| 003 | PDF | | |
| 004 | Other | | |
| 005 | PDF/Comp | | |
| 006 | PDF/A | | |

| S:Scan PGS/Comp | | | [0 to 9999999 / 0 / 1] |
|-----------------|--|--|---------------------------------------|
| 8715 | These SPs count the number of compressed pages scanne counted by the formats listed below. | | ages scanned by the scan application, |
| 001 | JPEG/JPEG2000 | | |
| 002 | TIFF (Multi/Single) | | |

| 003 | PDF | |
|-----|----------|--|
| 004 | Other | |
| 005 | PDF/Comp | |
| 006 | PDF/A | |

| 8721 | T:Deliv PGS/WSD | | [0 to 9999999 / 0 / 1] |
|------|--|--|-------------------------------|
| 8725 | S:Deliv PGS/WSD These SPs count the number of pages scanner | | [0 to 9999999 / 0 / 1] |
| 6/23 | | | d by each scanner mode. |
| 001 | B/W | | |
| 002 | Color | | |

| 8731 | T:Scan PGS/Media | [0 to 9999999 / 0 / 1] |
|------------------|--|-------------------------------|
| S:Scan PGS/Media | | [0 to 9999999 / 0 / 1] |
| 8735 | These SPs count the number of pages scanned and saved in a meia by each scanne mode. | |
| 001 | B/W | |
| 002 | Color | |

| | RX PGS/Port | | [0to9999999/ 0 /1] |
|------|---|--|--|
| 8741 | These SPs count the number of pages received by the physical port used to receive them. | | red by the physical port used to receive |
| 001 | PSTN-1 | | |
| 002 | PSTN-2 | | |
| 003 | PSTN-3 | | |
| 004 | ISDN (G3,G4) | | |
| 005 | Network | | |

| | Dev Counter | [0to9999999/ 0 / 1] |
|--|--|---|
| These SPs count the frequency of use (number of rotations of the development for black and other color toners. | | mber of rotations of the development rollers) |
| | Note: For machines that do not support of Total count. | color, the Black toner count is the same as the |

| | Toner_Botol_Info. |
|------|---|
| 8781 | This SP displays the number of toner bottles used. The count is done based on the equivalent of 1,000 pages per bottle. |

| 8791 | LS Memory Remain | This SP displays the percent of space available on the document server for storing documents. |
|------|------------------|---|
| | | [0 to 100 / 0 / 1] |

| | Toner Remain | [0 to 100 / 0 / 1] | |
|------------|---|---------------------------|--|
| | This SP displays the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time. | | |
| 8801 Note: | | | |
| | This precise method of measuring remaining toner supply (1% steps) is lother machines in the market that can only measure in increments of 10 | | |
| | This SP is expanded for color MFP and color LP machines. For this machine, the count is done for black only. | | |

| 8811 | Eco Counter | |
|---|---|--|
| 001 | Eco Total | [0 to 9999999 / 0 / 1] |
| 001 | Displays the number of pages reduced by using the duplex and the combine function | |
| 004 | Duplex | [0 to 9999999 / 0 / 1] |
| Displays the number of pages reduced by | | ges reduced by using the duplex function. |
| Combine [0 to 9999999 / 0 / 1] | | [0 to 9999999 / 0 / 1] |
| 005 | Displays the number of pag | ges reduced by using the combine function. |

| | 1 | | |
|-----|-------------------------------------|--------------------------------|--|
| 008 | Duplex(%) | [0 to 100 / 0 / 1] | |
| 000 | Displays the utilization ratio | o of the duplex function. | |
| 000 | Combine(%) | [0 to 100 / 0 / 1] | |
| 009 | Displays the utilization ratio | o of the duplex function. | |
| 010 | Paper Cut(%) | [0 to 100 / 0 / 1] | |
| 010 | Displays the paper reduction ratio. | | |
| 101 | Eco Totalr:Last | [0 to 99999999 / 0 / 1] | |
| | | | |
| 104 | Duplex:Last | [0 to 99999999 / 0 / 1] | |
| 105 | Combine:Last | [0 to 99999999 / 0 / 1] | |
| | | | |
| 108 | Duplex(%):Last | [0 to 100 / 0 / 1] | |
| | Combine 19/1.1 get | [0 to 100 / 0 / 1] | |
| 109 | Combine(%):Last | [0 to 100 / 0 / 1] | |
| 110 | Paper Cut(%):Last | [0 to 100 / 0 / 1] | |
| | | | |

| 8851 | Cvr Cnt:0-10% | [0 to 9999999 / 0 / 1] |
|-------------------------------------|---------------|-------------------------------------|
| These SPs count the percentage of c | | erage for black other color toners. |
| 011 | 0 to 2%: BK | |
| 021 | 3 to 4%: BK | |
| 031 | 5 to 7%: BK | |
| 041 | 8 to 10%: BK | |

| 8861 | Cvr Cnt: 11-20% [0 to 9999999 / 0 / 1] | | [0 to 9999999 / 0 / 1] |
|------|--|-------------|-------------------------------|
| 8801 | These SPs count the percentage of dot coverage for black other color toners. | | |
| 001 | BK | Black toner | |

| 0.071 | | Cvr Cn | t:21-30% | | [0 to 9999999 / 0 / 1] | |
|-------|-----|--|---|------|-------------------------------------|--|
| 8871 | | These SPs count the percentage of dot coverage for black other color toners. | | | | |
| | 001 | ВК | Black toner | | | |
| | | | | | | |
| 8881 | | Cvr Cn | t:31%- | | [0 to 9999999 / 0 / 1] | |
| 0001 | | These S | SPs count the percentage of dot c | ove | erage for black other color toners. | |
| | 001 | ВК | BK Black toner | | | |
| | | l. | | | | |
| 0001 | | Page/1 | Toner Bottle | [0 | to 9999999 / 0 / 1] | |
| 8891 | | These S | SPs display the amount of the rem | ain | ing current toner. | |
| | 001 | ВК | Black toner | | | |
| | | | | | | |
| 8901 | | Page/1 | Page/Toner_Prev1 [0 to 9999999 / 0 / 1] | | | |
| 8901 | | These SPs display the amount of the remaining previous toner. | | | | |
| | 001 | ВК | Black toner | | | |
| | | | | | | |
| 8911 | | Page/1 | ge/Toner_Prev2 [0 to 9999999 / 0 / 1] | | to 9999999 / 0 / 1] | |
| 0711 | | These SPs display the amount of the remaining 2nd previous toner. | | | | |
| | 001 | ВК | BK Black toner | | | |
| | | | | | | |
| 8921 | | Cvr Cn | t/Total | | [0 to 9999999 / 0 / 1] | |
| 0721 | | Displays the total coverage and total printout number for each color. | | | | |
| | 001 | Coverage (%) BK | | | | |
| | 011 | Coverd | Coverage/P:BK | | | |
| | | | | | | |
| | | Machir | ne Status | [(| 0 to 9999999 / 0 / 1] | |
| 8941 | | SPs are | SPs count the amount of time the results useful for customers who need to be ment in their compliance with IS | o in | • | |

| 001 | Operation Time | Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating). |
|-----|--------------------|--|
| 002 | Standby Time | Engine not operating. Includes time while controller saves data to HDD. Does not include time spent in Energy Save, Low Power, or Off modes. |
| 003 | Energy Save Time | Includes time while the machine is performing background printing. |
| 004 | Low Power Time | Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing. |
| 005 | Off Mode Time | Includes time while machine is performing background printing. Does not include time machine remains powered off with the power switches. |
| 006 | SC | Total down time due to SC errors. |
| 007 | PrtJam | Total down time due to paper jams during printing. |
| 008 | OrgJam | Total down time due to original jams during scanning. |
| 009 | Supply PM Unit End | Total down time due to supply unit end. |

| 8951 | AddBook Register | AddBook Register | | | | |
|------|------------------------|--|-------------------------------|--|--|--|
| 0931 | These SPs count the nu | These SPs count the number of events when the machine manages data registration. | | | | |
| 00 | 1 User Code /User ID | User code registrations. | | | | |
| 00 | 2 Mail Address | Mail address registrations. | | | | |
| 00 | 3 Fax Destination | Fax destination registrations. | | | | |
| 00 | 4 Group | Group destination registrations. | [0 to 9999999 / 0 / 1] | | | |
| 00 | 5 Transfer Request | Fax relay destination registrations for relay TX. | | | | |
| 00 | 6 F-Code | F-Code box registrations. | | | | |

| 007 | Copy Program | Copy application registrations with the Program (job settings) feature. | |
|-----|-----------------|--|-----------------------------|
| 008 | Fax Program | Fax application registrations with the Program (job settings) feature. | [0.1. 255 / 0 / 255] |
| 009 | Printer Program | Printer application registrations with the Program (job settings) feature. | [0 to 255 / 0 / 255] |
| 010 | Scanner Program | Scanner application registrations with the Program (job settings) feature. | |

| 8999 | Adomin. Counter List | [0 to 9999999 / 0 / 1] | |
|------|--|-------------------------------|--|
| 0777 | Display the total coverage and total printout number for each color. | | |
| 001 | Total | | |
| 003 | Copy: BW | | |
| 007 | Printer: BW | | |
| 010 | Fax Print: BW | | |
| 012 | A3/DLT | | |
| 013 | B Duplex | | |
| 023 | Copy: BW (%) | | |
| 027 | Printer: BW (%) | | |
| 030 | Fax Print: BW (%) | | |
| 101 | Transmission Total: Color | | |
| 102 | Transmission Total: BW | | |
| 103 | Fax Transmission | | |
| 104 | Scanner Transmission: Color | | |
| 105 | Scanner Transmission: BW | | |

Input Check

Copier

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 |

| | Input Check | | | | |
|------|----------------------------------|---------------------------------------|-----------------|--|--|
| 5803 | D : " | Reading | | | |
| | Description | 0 | 1 | | |
| 001 | Tray 1: Paper Size Sensor | See the table 1 following | this table. | | |
| 002 | Tray 1: Tray Set Sensor | Set | Not set | | |
| 003 | Tray 1: Paper Lift Sensor | Not upper limit | Upper limit | | |
| 004 | Tray 1: Paper End Sensor | No paper | Paper remaining | | |
| 005 | Tray 1: Paper Height Sensor 1 | See the table 2 following this table. | | | |
| 006 | Tray 1: Paper Height Sensor 2 | See me lable 2 following | inis iddie. | | |
| 007 | Tray 2: Paper Size Sensor | See the table 1 following | this table. | | |
| 008 | Tray 2: Tray Set Sensor | Set | Not set | | |
| 009 | Tray 2: Paper Lift Sensor | Not upper limit | Upper limit | | |
| 010 | Tray 2: Paper End Sensor | No paper | Paper remaining | | |
| 011 | Tray 2: Paper Height Sensor 1 | See the table 2 following this table. | | | |
| 012 | Tray 2: Paper Height Sensor 2 | | | | |

| 013 | Tray 1: Paper Feed Sensor | Paper detected | No paper detected |
|-----|-------------------------------|---------------------------|-------------------|
| 014 | Tray 2: Paper Feed Sensor | Paper detected | No paper detected |
| 015 | Tray 3: Paper Feed Sensor | Paper detected | No paper detected |
| 016 | Tray 4: Paper Feed Sensor | Paper detected | No paper detected |
| 017 | LCT: Paper Feed Sensor | No paper detected | Paper detected |
| 018 | Relay Sensor 1 | Paper detected | No paper detected |
| 019 | Relay Sensor 2 | Paper detected | No paper detected |
| 020 | Relay Sensor 3 | No paper detected | Paper detected |
| 021 | Relay Sensor 4 | No paper detected | Paper detected |
| 022 | Relay Sensor: LCT | No paper detected | Paper detected |
| 023 | By-pass: Paper End Sensor | Not end | Paper end |
| 024 | By-pass: Paper Size Sensor | See the table 3 following | this table. |
| 025 | Registration Sensor | Paper detected | No paper detected |
| 026 | Fusing Exit Sensor | No paper detected | Paper detected |
| 027 | Fusing Entrance Sensor | Paper detected | No paper detected |
| 028 | Junction Gate Relay Sensor | Paper detected | No paper detected |
| 029 | Exit Sensor | Paper detected | No paper detected |
| 030 | Paper Overflow Sensor | Not full | Full |
| 031 | Right Cover Open/Close | Close | Open |
| 032 | Duplex Unit Open/Close | Open | Close |
| 033 | Duplex Entrance Sensor | Paper detected | No paper detected |
| 034 | Duplex Exit Sensor | Paper detected | No paper detected |
| 035 | Bank Right Cover Open/Close | Close | Open |
| 036 | Tray Cover Open/Close | Close | Open |
| 037 | LCT Set | Set | Not set |
| 038 | Bridge/Exit Tray: Exit Sensor | Paper detected | No paper detected |

| 000 | D. I. (5); T. D. I. C. | D 11 | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|-----|---|------------------------------|---------------------------------------|
| 039 | Bridge/Exit Tray: Relay Sensor | Paper detected | No paper detected |
| 040 | Bridge/Exit/Shift: Set Detection | Set | Not set |
| 041 | Bridge/Exit Tray: Left Guide Open/ Close | Close | Open |
| 042 | Bridge/Exit Tray: Right Guide Open/Close | Close | Open |
| 043 | Transfer Belt Unit HP Sensor | Not HP | НР |
| 046 | Fusing Unit Set | Set (Bit1) | Not set (Bit1) |
| 047 | Toner Overflow Sensor | Not full | Full |
| 048 | Interlock Detection 1 | Right or front door is open. | Right or front door is close. |
| 049 | Interlock Detection 2 | Right or front door is open. | Right or front door is close. |
| 050 | Key Card Set | Set | Not set |
| 051 | Key Counter Set | Set | Not set |
| 052 | Mechanical Counter Set | Not set | set |
| 053 | 1-Bin Unit Set | Set | Not set |
| 054 | 1-Bin Unit: Paper Set | Paper detected | No paper detected |
| 057 | Cleaning Web End | Not end | End |
| 060 | Shift Sensor | No paper detected | Paper detected |
| 064 | Shift Tray Sensor | Stay at rear | Stay at front |
| 065 | Bypass Tray Paper Length Detection | Paper detected | No paper detected |
| 200 | Scanner HP Sensor | Not HP | HP |
| 201 | Platen Cover Sensor | Open | Close |

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

Switch 1 is used for the tray set detection.

0: Pushed, 1: Not pushed

| Мо | Models | | | on |
|---------------------------------|---------------------------------|---|---|----|
| North America | Europe/Asia | 4 | 3 | 2 |
| 11" x 17" SEF* 1 (A3 SEF) | A3 SEF*1 (11" x 17" SEF) | 0 | 0 | 1 |
| 8.5" x 14" SEF *2 (B4 SEF) | B4 SEF *2 (8.5" x 14" SEF) | 0 | 0 | 0 |
| A4 SEF | A4 SEF | 1 | 1 | 0 |
| 8.5" x 11" SEF | 8.5" x 11" SEF | 1 | 1 | 1 |
| B5 SEF | B5 SEF | 0 | 1 | 1 |
| 11" x 81/2" LEF*3 (A4 LEF) | A4 LEF*3 (11" x 81/2" LEF) | 1 | 0 | 0 |
| 10.5" x 7.25" LEF*4 (B5 LEF) | B5 LEF*4 (10.5" x 7.25" LEF) | 0 | 1 | 0 |
| A5 LEF | A5 LEF | 1 | 0 | 1 |

Table 3: Paper Size (By-pass Table)

0: Pushed, 1: Not pushed

| Models | Bit No. | Bit No. | | | | |
|--|-----------------------|---------|---|---|---|--|
| North America | Europe/Asia | 3 | 2 | 1 | 0 | |
| 11" x 17" SEF*1 (11" x 8.5" LEF) | A3 SEF*1 (A4 LEF) | 1 | 1 | 1 | 0 | |
| 11" x 17" SEF*1 (11" x 8.5" LEF) | A3 SEF*1 (A4 LEF) | 1 | 1 | 0 | 0 | |
| 8.5" x 11" SEF*1 (8.5" x 11" SEF*2) | A4 SEF* 1 (A5 LEF) | 1 | 1 | 0 | 1 | |
| 8.5" x 11" SEF*1 (8.5" x 11" SEF*2) | A4 SEF* 1 (B5 LEF) | 1 | 0 | 0 | 1 | |
| 5.5" x 8.5" SEF | A5 SEF | 1 | 0 | 1 | 1 | |
| 5.5" x 8.5" SEF | A5 SEF | 0 | 0 | 1 | 1 | |
| 5.5" x 8.5" SEF | A6 SEF | 0 | 1 | 1 | 1 | |
| 5.5" x 8.5" SEF | A6 SEF | 1 | 1 | 1 | 1 | |



• *1: When the machine determines that the paper feed direction is "LEF", it considers that the paper size is bracketed size.

 $^{^*}$ 1: The machine detects either 11" x 17" SEF or A3 SEF, depending on the setting of SP 5-181-002 (Tray 1) or -006 (Tray 2).

^{*2}: The machine detects either 8.5" x 14" SEF or B4 SEF, depending on the setting of SP 5-181-003 (Tray 1) or -007 (Tray 2).

^{*3}: The machine detects either 11" x 81/2" LEF or A4 LEF, depending on the setting of SP 5-181-001 (Tray 1) or -005 (Tray 2).

^{*4:} The machine detects either B5 LEF or 10.5" x 7.25" LEF, depending on the setting of SP 5-181-004 (Tray 1) or -008 (Tray 2)..

| - | 7 |
|----|----|
| ы | D) |
| | -1 |
| Ų. | т, |

| Original S | Length Sensor | | | Width Sensor | | SP4-301 | | |
|---|-----------------------------|----|----|-----------------|----|---------|----------|--|
| Metric version | Inch version | L3 | L2 | L1 | W1 | W2 | display | |
| A3 | 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 | Х | Х | 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 | Χ | 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 | |

Options

3000/2000-Sheet (Booklet) Finisher (D636/D637)

| 6140 | Bit | Description | Read | Reading | |
|------|-----------------------------|---------------------|------------------------|-------------------|--|
| 0140 | Bit Description | 0 | 1 | | |
| 001 | Entra | ince Sensor | No paper detected | Paper detected | |
| 002 | Proof Exit Sensor | | No paper detected | Paper detected | |
| 003 | Proof Full Detection Sensor | | Not Full | Full | |
| 004 | Uppe | er Tray Exit Sensor | No paper detected*1 | Paper detected* 1 | |

| /1/0 | D. | | Read | ling | |
|------|--------------------------------|------------------------|--------------------|-----------------|--|
| 6140 | Bit | Description | 0 | 1 | |
| 005 | Stap | e Exit Sensor | No paper detected | Paper detected | |
| 006 | Shift | Roller HP Sensor | Not HP | HP | |
| 007 | Shift | Exit Sensor | No paper detected | Paper detected | |
| 008 | Exit (| Guide Plate HP Sensor | Not HP | HP | |
| 009 | Lowe | er Tray Height Sensor | No paper detected | Paper detected | |
| 010 | Uppe | er Tray Height Sensor | No paper detected | Paper detected | |
| 011 | Uppe | er Tray Full Sensor | Not Full | Full | |
| 012 | Stack | Roller HP Sensor | Not HP | HP | |
| 013 | Jogg | er HP Sensor | Not HP | HP | |
| 014 | Feed | Out Belt HP Sensor | НР | Not HP | |
| 015 | Stap | ling Tray Paper Sensor | No paper detected | Paper detected | |
| 016 | Corn | er Stapler HP Sensor | Not HP | HP | |
| 017 | Stap | er Rotation HP Sensor | Not HP | HP | |
| 018 | Uppe | er Tray Limit SW | Not Limit | Limit | |
| 019 | Door | Switch | Closed | Open | |
| 020 | Corn | er Stapler Operation | Not HP | HP | |
| 021 | Stap | le Detection | No staple detected | Staple detected | |
| 022 | Stap | le Dip Detection | No staple detected | Staple detected | |
| 023 | Punc | h Movement HP Sensor | Not HP | HP | |
| 024 | Paper Position Slide HP Sensor | | Not HP | HP | |
| 025 | 025 Paper Position Sensor | | No paper detected | Paper detected | |
| 026 | Punc | h Full Sensor | Not Full | Full | |
| 027 | Punc | h HP Sensor | Not HP | HP | |
| 028 | Punc | h DIP SW 1 | See | * 1 | |

| | | | Read | ing | |
|------|--|---|------------------------|------------------|--|
| 6140 | Bit | Description | 0 | 1 | |
| 029 | Punc | h DIP SW 2 | See | * 1 | |
| 030 | Stacl | k Junction Gate HP Sensor | Not HP | HP | |
| 031 | Stacl | k Present Sensor | No paper detected | Paper detected | |
| 032 | Clam | np Roller HP Sensor | Not HP | HP | |
| 033 | Fold | Entrance Sensor | No paper detected | Paper detected | |
| 034 | Botto | om Fence HP Sensor | Not HP | HP | |
| 035 | Fold | Cam HP Sensor | Not HP | HP | |
| 036 | Fold | Plate HP Sensor | Not HP | HP | |
| 037 | Fold | Unit Exit Sensor | No paper detected | Paper detected | |
| 038 | Lower Tray Full Sensor: Front | | No paper detected*2 | Paper detected*2 | |
| 039 | Lowe | er Tray Full Sensor: Rear | No paper detected*2 | Paper detected*2 | |
| 040 | Book | clet Stapler 1: Operation | Not HP | HP | |
| 041 | Book | clet Stapler 1: Staple In (Front) | No staple detected | Staple detected | |
| 042 | Booklet Stapler 1: Staple In (Leading Edge) | | No staple detected | Staple detected | |
| 043 | Booklet Stapler 1: Operation (Rotation/ Rear) | | Not HP | НР | |
| 044 | Booklet Stapler 1: Staple In (Rear) | | No staple detected | Staple detected | |
| 045 | 1 | clet Stapler 1: Staple In (Leading e/Rear) | No staple detected | Staple detected | |
| 046 | Uppe | er Tray Full Sensor: 3000 | Not Full | Full | |

* 1: Combination of DIP SW 1 and SW 2

| DIP SW 1 | DIP SW 2 | Punch Type |
|-----------|-----------|---------------|
| DII 077 1 | DII 011 Z | 1 011011 1790 |

| 0 | 0 | Japan |
|---|---|---------------|
| 1 | 0 | Europe |
| 0 | 1 | North America |
| 1 | 1 | North Europe |

 $^{^*}$ 2: Please refer to "Lower Tray (D637 Only)" in the Service Manual for the "3000/2000 (Booklet) Finisher".

1000-Sheet Finisher (D588)

| 4120 | Bit Description | Reading | | |
|------|--|---|-------------------|--------------------|
| 6139 | | 0 | 1 | |
| 001 | Entra | nce Sensor | Paper detected | No paper detected |
| 002 | | Exit Sensor er Tray Exit Sensor) | No paper detected | Paper detected |
| 003 | | e Entrance Sensor bler Tray Entrance Sensor) | Paper detected | No paper detected |
| 004 | Staple Moving HP Sensor (Stapler HP Sensor) | | Not HP | НР |
| 005 | Jogger HP Sensor (Jogger Fence HP Sensor) | | Not HP | НР |
| 006 | Stack | Feed-out Belt HP Sensor | HP | Not HP |
| 007 | Stapl | e Tray Paper Sensor | No paper detected | Paper detected |
| 008 | OO8 Staple Rotation Sensor (Staple Rotation HP Sen | | Not HP | НР |
| 009 | 009 Staple Sensor | | Staple detected | No staple detected |
| 010 | Stapl | e READY Detection | Staple detected | No staple detected |
| 011 | Exit Guide Plate HP | | Not HP | НР |

| 4120 | D:: | Reading | | |
|--|--|-----------------|----------------------------|-------------------------|
| 6139 | DIT | Bit Description | 0 | 1 |
| 012 | Shift HP Sensor | | Not HP | HP |
| 013 | Paper Sensor (Stack Height Sensor) | | No output tray detected | Output tray detected |
| 014 | Tray Lower Sensor (Lower Tray Lower Limit Sensor) | | Lower limit | Not lower limit |
| O15 Proof Full Sensor (Paper Limit Sensor) | | Not full | Full | |

3

Output Check

Copier

| 5804 | Output Check | | |
|------|-----------------------|---|--|
| 001 | Exit Motor: 350 | | |
| 002 | Exit Motor: 175 | | |
| 003 | Exit Motor: 230 | Danar ovit mater (Mainframa) | |
| 004 | Exit Motor: 180 | Paper exit motor (Mainframe) | |
| 005 | Exit Motor: 154 | | |
| 006 | Exit Motor: 90 | | |
| 007 | Feed Motor: 300 | | |
| 008 | Feed Motor: 255 | | |
| 009 | Feed Motor: 230 | | |
| 010 | Feed Motor: 215 | Paper feed motor (Mainframe) | |
| 011 | Feed Motor: 180 | | |
| 012 | Feed Motor: 154 | | |
| 013 | Feed Motor: 90 | | |
| 014 | Bank: Feed Motor: 300 | | |
| 015 | Bank: Feed Motor: 255 | | |
| 016 | Bank: Feed Motor: 230 | | |
| 017 | Bank: Feed Motor: 215 | Paper feed motor (Optional paper feed unit) | |
| 018 | Bank: Feed Motor: 180 | | |
| 019 | Bank: Feed Motor: 154 | | |
| 020 | Bank: Feed Motor: 90 | | |

| 5804 | Output Check | | |
|------|--------------------------------|---|--|
| 021 | LCT: Feed Motor: 300 | | |
| 022 | LCT: Feed Motor: 255 | | |
| 023 | LCT: Feed Motor: 230 | | |
| 024 | LCT: Feed Motor: 215 | Paper feed motor (Optional LCT) | |
| 025 | LCT: Feed Motor: 180 | | |
| 026 | LCT: Feed Motor: 154 | | |
| 027 | LCT: Feed Motor: 90 | | |
| 028 | Paper Feed Clutch 1 | Panar food alutah 1/2 (Mainframa) | |
| 029 | Paper Feed Clutch 2 | Paper feed clutch 1/2 (Mainframe) | |
| 030 | Bank: Paper Feed Clutch 3 | Paper feed clutch 3/4 (Optional paper | |
| 031 | Bank: Paper Feed Clutch 4 | feed unit) | |
| 032 | LCT: Paper Feed Clutch | Paper feed clutch (Optional LCT) | |
| 033 | Pick-up Solenoid 1 | Pick-up Solenoid 1/2 (Mainframe) | |
| 034 | Pick-up Solenoid 2 | Tick-up Soleliold 1/2 (Maillindine) | |
| 035 | Bank: Pick-up Solenoid 3 | Pick-up Solenoid 3/4 (Optional paper | |
| 036 | Bank: Pick-up Solenoid 4 | feed unit) | |
| 037 | LCT: Pick-up Solenoid | Pick-up Solenoid (LCT) | |
| 038 | Tray Lift Motor 1: Up | | |
| 039 | Tray Lift Motor 1: Down | | |
| 040 | Tray Lift Motor 2: Up | | |
| 041 | Tray Lift Motor 2: Down | | |
| 042 | Paper Tray Lock Solenoid | Not used | |
| 043 | Bank: Paper Tray Lock Solenoid | Tray lock solenoid (Optional paper feed unit) | |

| 5804 | Output Check | |
|------|---------------------------------|--------------------------|
| 044 | Registration Motor: 230 | |
| 045 | Registration Motor: 180 | |
| 046 | Registration Motor: 154 | - |
| 047 | Registration Motor: 90 | |
| 048 | Exit: Junction Gate Solenoid | Junction gate 1 solenoid |
| 049 | Duplex: Inverter Gate Solenoid | Not used |
| 050 | Duplex Inverter Motor: Fwd: 230 | |
| 051 | Duplex Inverter Motor: Fwd: 180 | |
| 052 | Duplex Inverter Motor: Fwd: 154 | |
| 053 | Duplex Inverter Motor: Fwd: 90 | |
| 054 | Duplex Inverter Motor: Rev: 230 | - |
| 055 | Duplex Inverter Motor: Rev: 180 | |
| 056 | Duplex Inverter Motor: Rev: 154 | |
| 057 | Duplex Inverter Motor: Rev: 90 | |
| 058 | Duplex/By-pass Motor: Fwd: 230 | |
| 059 | Duplex/By-pass Motor: Fwd: 180 | |
| 060 | Duplex/By-pass Motor: Fwd: 154 | |
| 061 | Duplex/By-pass Motor: Fwd: 90 | |
| 062 | Duplex/By-pass Motor: Rev: 230 | - |
| 063 | Duplex/By-pass Motor: Rev: 180 | |
| 064 | Duplex/By-pass Motor: Rev: 154 | |
| 065 | Duplex/By-pass Motor: Rev: 90 | |
| 066 | By-pass Feed Clutch | - |
| 067 | By-pass Pick-up Solenoid | - |

| 5804 | | Output Check | | |
|------|----|--|--------------------------------------|--|
| 06 | 68 | Bridge/Exit Tray: Drive Motor: 230 | | |
| 06 | 59 | Bridge/Exit Tray: Drive Motor: 180 | | |
| 07 | 70 | Bridge/Exit Tray: Drive Motor: 154 | Drive motor (Bridge unit) | |
| 07 | 71 | Bridge/Exit Tray: Drive Motor: 90 | | |
| 07 | 72 | Bridge/Exit Tray: Junction Gate Solenoid | Junction Gate Solenoid (Bridge unit) | |
| 07 | 73 | Bridge/Exit Tray: Drive Motor: Reset | - | |
| 07 | 74 | Bridge/Exit Tray: Drive Motor: Enable | - | |
| 07 | 75 | Bridge: Cooling Fan Motor | Not used | |
| 07 | 76 | Transfer Belt Contact Motor | - | |
| 07 | 77 | OPC Motor: 230 | | |
| 07 | 78 | OPC Motor: 180 | Drum motor | |
| 07 | 79 | OPC Motor: 154 | | |
| 08 | 80 | OPC Motor: 90 | | |
| 08 | 81 | Transfer/Development Motor: 230 | | |
| 08 | 82 | Transfer/Development Motor: 180 | | |
| 08 | 83 | Transfer/Development Motor: 154 | _ | |
| 08 | 84 | Transfer/Development Motor: 90 | | |
| 08 | 85 | Fusing Motor: 230 | | |
| 08 | 86 | Fusing Motor: 180 | | |
| 08 | 87 | Fusing Motor: 154 | _ | |
| 08 | 88 | Fusing Motor: 90 | | |
| 08 | 89 | Development Puddle Motor | - | |
| 09 | 90 | PTL Control | - | |
| 09 | 91 | Fusing Fan Motor: High | Fusing exhaust fan motor | |
| 09 | 92 | Fusing Fan Motor: Low | i using extigusi idii motor | |

| 5804 | Output Check | |
|------|------------------------------|---------------------------------------|
| 093 | Exhaust Fan Motor: High | Exhaust fan motor |
| 094 | Exhaust Fan Motor: Low | Exhaust fan motor |
| 095 | Duct Fan Motor | Cooling fan motor |
| 096 | Exit Fan Motor: High | D |
| 097 | Exit Fan Motor: Low | Paper exit cooling fan motor |
| 098 | PSU Fan Motor | - |
| 099 | 1-Bin Junction Gate Solenoid | Junction gate 2 solenoid (1-bin unit) |
| 100 | Polygon Motor: 230 | |
| 101 | Polygon Motor: 180 | |
| 102 | Polygon Motor: 154 |] |
| 103 | Polygon Motor: 90 | |
| 104 | LD 1 | _ |
| 105 | LD 2 | - |
| 106 | Toner Bottle Motor: Fwd | Toner supply motor |
| 107 | Quenching Lamp | - |
| 108 | Charge Bias | - |
| 109 | Development Bias | - |
| 110 | Transfer Belt Voltage | - |
| 111 | ID Sensor LED | - |
| 115 | Cleaning Web Motor | Web motor |
| 116 | Shift Tray Motor | Not used |
| 117 | CTL Cooling FAN | Controller fan |
| 202 | Scanner Lamp | - |

1000-Sheet Finisher (D588)

| 6144 | Output Check | |
|------|--------------------------------|-----------------------------|
| 0144 | Display | Description |
| 001 | Upper Relay Motor | Upper Transport Motor |
| 002 | Lower Relay Motor | Lower Transport Motor |
| 003 | Exit Motor | - |
| 004 | Proof Junction Gate SOL | Tray Junction Gate Solenoid |
| 005 | Lower Tray Lift Motor | - |
| 006 | Jogger Fence Motor | - |
| 007 | Stapler Motor | - |
| 008 | Stapler Hammer | - |
| 009 | Stapler Junction Gate Solenoid | - |
| 010 | Positioning Roller Solenoid | - |
| 011 | Stack Feed-out Motor | - |
| 012 | Shift Motor | - |
| 013 | Exit Guide Plate Motor | - |

3000 / 2000-Sheet (Booklet) Finisher (D636/D637)

| 6145 | Output | | |
|------|-------------------------------|-------------|--|
| 0143 | Display | Description | |
| 001 | Entrance Motor | - | |
| 002 | Upper Transport Motor | - | |
| 003 | Lower Transport Motor | - | |
| 004 | Upper/Proof Tray Exit Motor | - | |
| 005 | Clamp Roller Retraction Motor | - | |

| 006 | Shift Roller Motor | - |
|-----|---------------------------------------|---|
| 007 | Exit Guide Plate Motor | - |
| 008 | Upper Tray Lift Motor | - |
| 009 | Stacking Sponge Roller Motor | - |
| 010 | Jogger Fence Motor | - |
| 011 | Feed Out Belt Motor | - |
| 012 | Corner Stapler Movement Motor | - |
| 013 | Corner Stapler Rotation Motor | - |
| 014 | Corner Stapler | - |
| 015 | Proof Junction Gate Solenoid | - |
| 016 | Stapling Tray Junction Gate Solenoid | - |
| 017 | Stapling Edge Pressure Plate Solenoid | - |
| 018 | Positioning Roller Solenoid | - |
| 019 | Booklet Pressure Roller Solenoid | - |
| 020 | Stack Junction Gate Motor | - |
| 021 | Fold Unit Bottom Fence Lift Motor | - |
| 022 | Booklet Stapler: Front | - |
| 023 | Booklet Stapler: Rear | - |
| 024 | Fold Plate Motor | - |
| 025 | Fold Roller Motor | - |
| 026 | Positioning Roller Motor | - |
| 027 | Punch Drive Motor | - |
| 028 | Punch Movement Motor | - |
| 029 | Paper Position Sensor Slide Motor | - |

Printer Service Tables

SP1-xxx (Service Mode)

| 1001 | Bit Switch | | | |
|-----------|------------|---|-----------------|------------------|
| 001 | Bit Swi | Bit Switch 1 | | 1 |
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | DFU | - | - |
| | bit 3 | No I/O Timeout | 0: Disable | 1: Enable |
| | | Enable: The MFP I/O Timeout setting will have no effect. I/O Timeouts will never occur. | | |
| | bit 4 | SD Card Save Mode | 0: Disable | 1: Enable |
| | | Enable: Print jobs will be saved to an SD Card in the | GW SD slot. | |
| | 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 |
|------|
|------|

.3

| 002 | Bit Swit | Bit Switch 2 | | 1 | |
|-----|---|--|-------------------------------|------------------|--|
| | bit 0 | DFU | - | - | |
| | bit 1 | DFU | - | - | |
| | bit 2 | Applying a collation Type | Shift Collate | Normal Collate | |
| | | A collation type (shift or normal) will be applied to a a 'Collate Type' configured. | ll jobs that do r | not already have | |
| | | ●Note | | | |
| | If #5-0 is enabled, this Bit Switch has no effect. | | | | |
| | bit 3 | [PCL5e/c,PS]: PDL Auto Switching | 0: Enable | 1: Disable | |
| | | Disable: The MFPs ability to change the PDL process | ge the PDL processor mid-job. | | |
| | Some host systems submit jobs that contain both PS and PCL5e/c. If Auto switching is disabled, these jobs will not be printed properly. | | | f Auto PDL | |
| | bit 4 | DFU | - | - | |
| | bit 5 | DFU | - | - | |
| | bit 6 | DFU | - | - | |
| | bit 7 | DFU | - | - | |

| 1001 | Bit Switch |
|------|------------|
|------|------------|

| 003 | Bit Switch 3 | | 0 | 1 | |
|-----|--------------|---|------------|-----------|--|
| | bit 0 | DFU | - | - | |
| | bit 1 | DFU | - | - | |
| | bit 2 | [PCL5e/c]: Legacy HP compatibility | 0: Disable | 1: Enable | |
| | | Enable: Uses the same left margin as older HP models such as HP4000/HP80 In other words, the left margin defined in the job (usually " <esc>*r0A") will be changed to "<esc>*r1A"</esc></esc> | | | |
| | bit 3 | DFU | - | - | |
| | bit 4 | DFU | - | - | |
| | bit 5 | DFU | - | - | |
| | bit 6 | DFU | - | - | |
| | bit 7 | DFU | - | - | |

| 1001 | Bit Switch | | | |
|------|--|--|------------|------------------|
| 004 | Bit Swit | rch 4 | 0 | 1 |
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | DFU | - | - |
| | bit 3 | IPDS print-side reversal | 0: Disable | 1: Enable |
| | | Enable: Increases printing speed but simplex pages may be printed on the back side of the sheet. | | on the back side |
| | bit 4 | DFU | - | - |
| | bit 5 | DFU | - | - |
| | bit 6 | DFU | - | - |
| | bit 7 | IPDS support tools | 0: Disable | 1: Enable |
| | Enable: Enables the port for IPDS support tools. | | | |

| 1001 | Bit Switch |
|------|------------|
|------|------------|

| 005 | Bit Swit | tch 5 | 0 | 1 |
|-----|--|---|--------------------------------|------------------------------|
| | | Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel. Disable | | Enable |
| | bit 0 | If enabled, users will be able to configure a Collate Type, Staple Type, and Punch Type from the operation panel. The available types will depend on the device and configured options. | | |
| | | After enabling the function, the settings will appear u | ınder: | |
| | | "User Tools > Printer Features > System" | | |
| | bit 1 | Multiple copies if a paper size or type mismatch occurs | 0: Disable (Single copy) | 1: Enable (Multiple copy) |
| | | If a paper size or type mismatch occurs during the printing of multiple copies, only a single copy is output by default. Using this Bit Switch, the device can be configured to print all copies even if a paper mismatch occurs. | | |
| | bit 2 | Prevent SDK applications from altering the contents of a job | 0: Disable | 1: Enable |
| | | If this BitSw is enabled, SDK applications will not be achieved by preventing SDK applications from acce Filter". | | |
| | | Note: The main purpose of this BitSw is for troublesh applications on data. | ooting the effe | cts of SDK |
| | bit 3 | [PS] PS Criteria | Pattern3 | Pattern 1 |
| | | Change the number of PS criterion used by the PS ir job is PS data or not. | nterpreter to de | termine whether a |
| | | Pattern3: includes most PS commands. | | |
| | 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 can be stored on the HDD via Job Type settings to 1000. The default is 100. | | |
| | bit 5 | DFU | - | - |

| bit 6 | Method for determining the image rotation for the edge to bind on. | 0: Disable | 1: Enable |
|--|--|------------|-----------------------|
| If enabled, the image rotation will be performed as they were in the specifications older models for the binding of pages of mixed orientation jobs. | | | |
| | The old models are below: | | |
| | - PCL: Pre-04A models | | |
| | - PS/PDF/RPCS:Pre-05S models | | |
| bit 7 | Letterhead mode printing | 0: Disable | 1: Enable (Duplex) |
| | Routes all pages through the duplex unit. | | |
| | If this is disabled, simplex pages or the last page of an odd-paged duplex job are not routed through the duplex unit. This could result in problems with letterhead/preprinted pages. | | |
| | Only affects pages specified as Letterhead paper. | | |

| 1001 | Bit Swit | Bit Switch | | | | |
|------|---|----------------------------------|------------|-------------------|--|--|
| 006 | Bit Swit | Bit Switch 6 DFU | | | | |
| 1001 | 1001 Bit Switch | | | | | |
| 007 | | Bit Switch 7 0 1 | | | | |
| | Print path | | 0: Disable | 1: Enable | | |
| | bit 0 If enabled, simplex pages (in mixed simplex/duplex PS/PCL5 jobs only) and the last page of an odd paged duplex job (PS, PCL5, PCL6), are always routed through the duplex unit. Not having to switch paper paths increases the print speed slightly. | | | outed through the | | |
| | bit 1 to 7 | DFU | - | - | | |
| | | | | | | |
| 1001 | Bit Switch | | | | | |
| 008 | Bit Switch 8 DFU | | | | | |

bit 0

to 3

DFU

| | bit 4 | PCL edge to edge printing setting | 0: Disable (Standard) | 1: Enable (BMS) |
|--|---------------|-----------------------------------|--------------------------|--------------------|
| Switch the edge to edge printing setting for the custom-made machine (BM | | | ine (BMS). | |
| | bit 5 to 7 | DFU | - | - |

| 1001 | Bit Switch | | | |
|------|---|---|---------------------------------|---------------------------|
| 009 | Bit Swi | Bit Switch 9 | | 1 |
| | bit 0 | PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284). | "Disabled (Immediatel y)" | "Enabled (10 seconds)" |
| | Sil C | To be used if PDL auto-detection fails. A failure of PDL autodetection doesn't necessarily mean that the job can't be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds. | | |
| | bit 1 | DFU | - | - |
| | bit 2 | Job Cancel | Disabled (Not cancelled) | Enabled (Cancelled) |
| | | If this bit switch, all jobs will be cancelled after a jam occurs. Note: If this bitsw is enabled, printing under the following conditions might result in problems: - Job submission via USB or Parallel Port - Spool printing (WIM > Configuration > Device Settings > System) | | |
| | bit 3 | PCL/PS bypass tray paper rotation (SEF/LEF) | 0: Disable | 1: Enable |
| | This bitsw causes the device to revert to the behavior of previous generations. It only takes effect if "Bypass Tray Setting Priority" = "Driver/Command". Previous spec (bitsw=1): If a standard sized paper mismatch occurred in the bypass tray, the MFP always prompted for SEF paper. If this bitsw=0 (default) then in the event of a standard sized paper mismatch, the MFP will always prompt for paper of the rotation (SEF/LEF) determined by the MFP bypass tray paper setting or by the bypass tray sensor. | | ed in the bypass | |

| bit 4 | Response to PJL USTATUS when multiple collated copies are printed | 0: Disable | 1: Enable | |
|------------|---|--|-----------|--|
| | | enabled, if multiple collated copies are printed, the device no longer ds to PJL USTATUS with the number of pages in the current copy. Instead the will return the total number of pages for all copies. | | |
| Bit 5 to 7 | DFU | - | - | |

| 1001 | D'a Const | Bit Switch | | |
|------|---|--|------------|--------------------|
| 1001 | Bit SWII | BIT SWITCH | | |
| 010 | Bit Swit | Bit Switch 10 | | 1 |
| | bit 0 to 4 | DFU | - | - |
| | bit 5 | List / Test Print Lock | 0: Disable | 1: Enable |
| | If enabled, you can lock or unlock the [List/Test Print] items under the Pinter Features menu when the Store and Skip Errored Job Function is on. | | | ne Pinter Features |
| | Bit 6 | Optional charge machines | - | - |
| | | If enabled, you can use the optional charge machines when the Store and Skip Errored Job Function is on. | 0: Disable | 1: Enable |
| | Bit 7 | DFU | - | - |

| 1001 | Bit Swit | Bit Switch | | |
|------|----------|--|------------|-----------|
| 011 | Bit Swit | Bit Switch 11 | | 1 |
| | bit 0 | List / Test Print menu | 0: Disable | 1: Enable |
| | | When enabled, [Multiple Lists] menu is displayed in [List / Test Print] under the Printer Features menu. | | |
| | bit 1 | Interrupt printing | 0: Job | 1: Page |
| | | Selects the interrupting units for the interrupt printing function. When you select "0," you can interrupt printing of a job while being processed. When you select "1," you can interrupt printing of a page while being processed. | | |

| | Bit 2 | DFU | | |
|--|-------|-----|---|---|
| | to 7 | | - | - |

| 100 | 01 | Bit Switch | | | |
|-----|----|---------------|-----|---|---|
| 0 | 12 | Bit Switch 12 | | 0 | 1 |
| | | bit 0 to 7 | DFU | - | - |

| 1003 | [Clear Setting] |
|----------|---|
| 1002 001 | Initialize Printer System |
| 1003 001 | Initializes settings in the "System" menu of the user mode. |
| 1003 003 | Delete Program |

| 1004 | [Print Summary] | |
|----------|--|--|
| 1004 001 | Print Printer Summary | |
| 1004 001 | Prints the service summary sheet (a summary of all the controller settings). | |

| 1006 | [Sample/Locked Print] | *CTL | 0: Link with Doc. Svr, 1: Enable |
|----------|--|------|----------------------------------|
| 1006 001 | Enables and disables the document server. When you select "0," the document server is enabled or disabled in accordance with Copy Service Mode SP5-967. When you select "1," the document server is enabled regardless of Copy Service Mode SP5-96 | | Service Mode SP5-967. When you |

| 1110 | [Media Print Device Setting] | |
|----------|------------------------------|---|
| 1110 002 | 0: Disable 1: Enable | Selects the setting for the media print device. |

| 1111 | [All Job Delete Mode] | |
|----------|--|---|
| 1111 001 | 0: excluding New Job 1: including New Job | Select whether to include an image processing job in jobs subject to full cancellation from the SCS job list. |

Scanner Service Table

SP Tables

| SP | Number/Name | Function/[Setting] |
|------|-----------------------------|--|
| 1001 | Scan NV Version | Displays the version of the scanner NV. |
| 1004 | Compression Type | Selects the compression type for binary picture processing. [1 to 3 / 1 / 1/step] 1: MH, 2: MR, 3: MMR |
| 1005 | Erase Margin | Creates an erase margin for all edges of the scanned image. If the machine has scanned the edge of the original, create a margin. [0 to 5 / 0 / 1 mm/step] |
| 1009 | Remote scan disable | Enables or disables the TWAIN function. [0 or 1 / 0 / -] 0: Enable, 1: Disable |
| 1010 | Non Display Clear Light PDF | Displays or does not display the clear light PDF function. [0 or 1 / 0 / -] 0: Display, 1: Not display |
| 1011 | Org Count Disp | Displays or does not display the original counter. [0 or 1 / 0 / -] 0: Not display, 1: Display |
| 1012 | User Info Release | Clears or does not clear a user information after a job. [0 or 1 / 1 / -] 0: Not clear, 1: Clear |

3

| SP | Number/Name | Function/[Setting] | |
|------|--|---------------------------------|--|
| | Compression level (grayscale) | | |
| 2021 | These SP codes set the compression ratio for the grayscale processing mode that a selected with the notch settings on the operation panel. Range: 5 (lowest ratio) <-> 95 (highest ratio) | | |
| 1 | Comp 1: 5 - 95 | [5 to 95 / 20 / 1 /step] | |
| 2 | Comp 2: 5 - 95 | [5 to 95 / 40 / 1 /step] | |
| 3 | Comp 3: 5 - 95 | [5 to 95 / 65 / 1 /step] | |
| 4 | Comp 4: 5 - 95 | [5 to 95 / 80 / 1 /step] | |
| 5 | Comp 5: 5 - 95 | [5 to 95 / 95 / 1 /step] | |

| | [Compression ratio of ClearLight PDF] | | |
|-------|--|----------------------------------|--|
| 2024* | Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel. | | |
| 1 | Compression Ratio (Normal image) | [5 to 95 / 25 / 1 /step] | |
| 2 | Compression Ratio (High comp image) | [5 to 95 / 20 / 1 /step] | |

MEMO