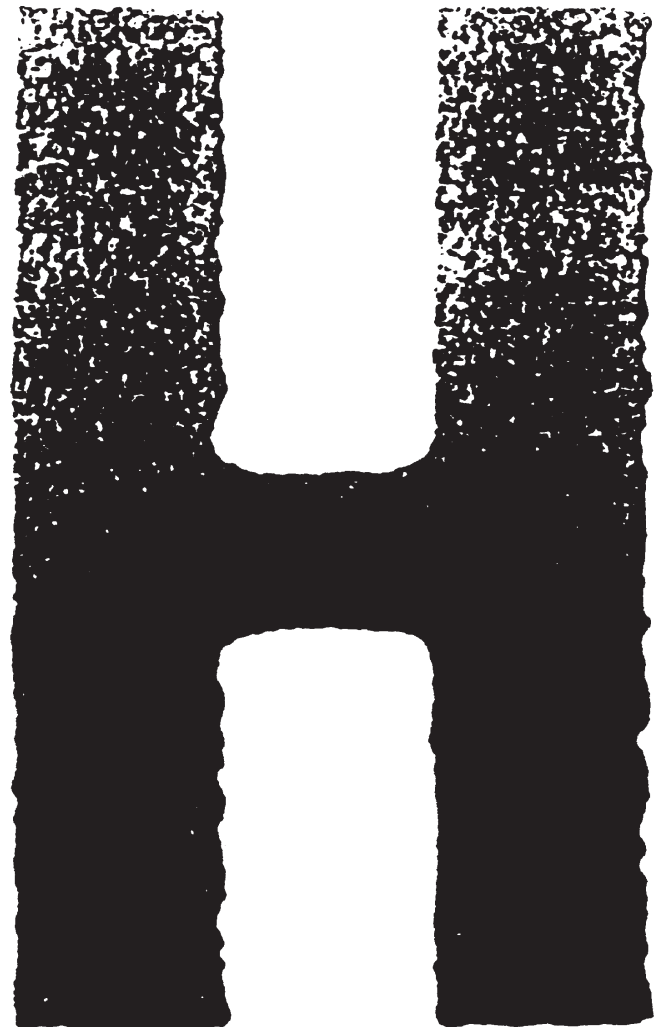


TOSHIBA

SERVICE HANDBOOK

MULTIFUNCTIONAL DIGITAL SYSTEMS

e-STUDIO200L/202L/230/232/280/282



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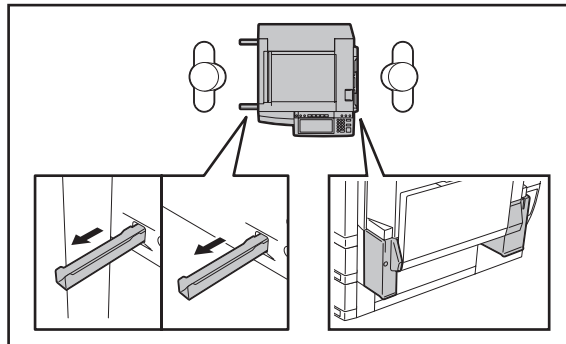
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GENERAL PRECAUTIONS REGARDING THE SERVICE FOR e-STUDIO200L/202L/230/232/280/282 SERIES

The installation and service should be done by a qualified service technician.

1) Transportation/Installation

- When transporting/installing the equipment, employ two persons and be sure to hold the positions as shown in the figure.
The equipment is quite heavy and weighs approximately 75 kg (165.34 lb.) therefore pay full attention when handling it.



- Be sure not to hold the movable parts or units (e.g. the control panel, ADU or RADF) when transporting the equipment.
- Be sure to use a dedicated outlet with AC 110 V / 13.2 A, 115 V or 127 V / 12 A, 220-240 V or 240 V / 8 A for its power source.
- The equipment must be grounded for safety.
- Select a suitable place for installation. Avoid excessive heat, high humidity, dust, vibration and direct sunlight.
- Provide proper ventilation since the equipment emits a slight amount of ozone.
- To insure adequate working space for the copying operation, keep a minimum clearance of 80 cm (32") on the left, 80 cm (32") on the right and 10 cm (4") on the rear.
- The equipment shall be installed near the socket outlet and shall be accessible.
- Be sure to fix and plug in the power cable securely after the installation so that no one trips over it.

2) General Precautions at Service

- Be sure to turn the power OFF and unplug the power cable during service (except for the service should be done with the power turned ON).
- Unplug the power cable and clean the area around the prongs of the plug and socket outlet once a year or more. A fire may occur when dust lies on this area.
- When the parts are disassembled, reassembly is the reverse of disassembly unless otherwise noted in this manual or other related documents. Be careful not to install small parts such as screws, washers, pins, E-rings, star washers in the wrong places.
- Basically, the equipment should not be operated with any parts removed or disassembled.
- The PC board must be stored in an anti-electrostatic bag and handled carefully using a wristband since the ICs on it may be damaged due to static electricity.

Caution: Before using the wristband, unplug the power cable of the equipment and make sure that there are no charged objects which are not insulated in the vicinity.

- Avoid expose to laser beam during service. This equipment uses a laser diode. Be sure not to expose your eyes to the laser beam. Do not insert reflecting parts or tools such as a screwdriver on the laser beam path. Remove all reflecting metals such as watches, rings, etc. before starting service.
- Be sure not to touch high-temperature sections such as the exposure lamp, fuser unit, damp heater and areas around them.
- Be sure not to touch high-voltage sections such as the chargers, developer, high-voltage transformer, exposure lamp control inverter, inverter for the LCD backlight and power supply unit. Especially, the board of these components should not be touched since the electric charge may remain in the capacitors, etc. on them even after the power is turned OFF.
- Make sure that the equipment will not operate before touching potentially dangerous places (e.g. rotating/operating sections such as gears, belts pulleys, fans and laser beam exit of the laser optical unit).
- Be careful when removing the covers since there might be the parts with very sharp edges underneath.
- When servicing the equipment with the power turned ON, be sure not to touch live sections and rotating/operating sections. Avoid exposing your eyes to laser beam.
- Use designated jigs and tools.
- Use recommended measuring instruments or equivalents.
- Return the equipment to the original state and check the operation when the service is finished.

3) Important Service Parts for Safety

- The breaker, door switch, fuse, thermostat, thermofuse, thermistor, IC-RAMs including lithium batteries, etc. are particularly important for safety. Be sure to handle/install them properly. If these parts are short-circuited and their functions become ineffective, they may result in fatal accidents such as burnout. Do not allow a short-circuit or do not use the parts not recommended by Toshiba TEC Corporation.

4) Cautionary Labels

- During servicing, be sure to check the rating plate and cautionary labels such as "Unplug the power cable during service", "CAUTION. HOT", "CAUTION. HIGH VOLTAGE", "CAUTION. LASER BEAM", etc. to see if there is any dirt on their surface and if they are properly stuck to the equipment.

5) Disposal of the Equipment, Supplies, Packing Materials, Used Batteries and IC-RAMs

- Regarding the recovery and disposal of the equipment, supplies, packing materials, used batteries and IC-RAMs including lithium batteries, follow the relevant local regulations or rules.

Caution:

Dispose of used batteries and IC-RAMs including lithium batteries according to this manual.

Attention:

Se débarrasser de batteries et IC-RAMs usés y compris les batteries en lithium selon ce manuel.

Vorsicht:

Entsorgung der gebrauchten Batterien und IC-RAMs (inclusive der Lithium-Batterie) nach diesem Handbuch.

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- 10. WIRE HARNESS CONNECTION DIAGRAMS**

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1. SPECIFICATIONS / ACCESSORIES / OPTIONS / SUPPLIES

1.1 Specifications

Values in { } are for e-STUDIO200L/202L and values in [] are for e-STUDIO280/280S/282/282S in case that the specification is different among e-STUDIO200L/202L, e-STUDIO230/230L/232/232S and e-STUDIO280/280S/282/282S.

- Copy process Indirect electrophotographic process (dry)
- Type Desktop type (console type: when paper feed pedestal (PFP) and large capacity feeder (LCF) are installed)
- Original table Fixed type (the left rear corner used as guide to place originals)
- Accepted originals Sheet, book and 3-dimensional object. The reversing automatic document feeder (RADF) only accepts paper which are not pasted or stapled. Carbon paper are not acceptable either.
Maximum size: A3/LD

| | Single - sided original | Double - sided original |
|---------|---|--|
| MR-3016 | 50 ~ 127 g/m ² (13 lb. Bond - 34 lb. Bond) | 50 ~ 105 g/m ² (13 lb. Bond - 28 lb. Bond) |
| MR-3018 | 35 ~ 157 g/m ² (9.3 lb. Bond - 58 lb. Cover) | 50 ~ 157 g/m ² (13 lb. Bond - 58 lb. Cover) |

- Copy speed (Copies/min.)
e-STUDIO200L/202L

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|--------|----------------|--------------------|-----|-----|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | 20 | 20 | 16 | 20 | 20 |
| A4-R, B5-R, LT-R | 19 | 19 | 16 | 19 | – |
| B4, LG | 18 | 18 | 16 | 18 | – |
| A3, LD | 16 | 16 | 16 | 16 | – |

e-STUDIO230/230L/232/232S

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|--------|----------------|--------------------|------|-----|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | 23 | 23 | 16 | 23 | 23 |
| A4-R, B5-R, LT-R | 21.5 | 21.5 | 16 | 21.5 | – |
| B4, LG | 18 | 18 | 16 | 18 | – |
| A3, LD | 16 | 16 | 16 | 16 | – |

e-STUDIO280/280S/282/282S

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|--------|----------------|--------------------|------|-----|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | 28 | 28 | 16 | 28 | 28 |
| A4-R, B5-R, LT-R | 21.5 | 21.5 | 16 | 21.5 | – |
| B4, LG | 18 | 18 | 16 | 18 | – |
| A3, LD | 16 | 16 | 16 | 16 | – |

* “–” means “Not acceptable”.

* The copy speed in the above table are available when originals are manually placed for single side, multiple copying.

* When the RADF is used, the copy speed of {20}23[28] sheets per minute is only available under the following conditions:

- Original/Mode: Single side original/A4/LT size. APS/automatic density are not selected.
- Number of sheets: {20}23[28] or more.
- Reproduction ratio: 100%

Copy speed for thick paper (Copies/min.)
e-STUDIO200/200L/230/232/280/282 series

Thick 1 (81 g/m² to 105 g/m², 21.3 lb. Bond to 28 lb. Bond)

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|--------------|----------------|--------------------|--------------|--------------|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | {20} 23 [27] | {20} 23 [27] | {15} 16 [16] | {20} 23 [27] | {20} 23 [27] |
| A4-R, B5-R, LT-R | {19} 21 [21] | {19} 21 [21] | {15} 16 [16] | {19} 21 [21] | {-} - [-] |
| B4, LG | {18} 18 [18] | {18} 18 [18] | {15} 16 [16] | {18} 18 [18] | {-} - [-] |
| A3, LD | {15} 16 [16] | {15} 16 [16] | {15} 16 [16] | {15} 16 [16] | {-} - [-] |

Thick 2 (106 g/m² to 163 g/m², 28 lb. Bond to 90 lb. Index)

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|-----------|----------------|--------------------|-----------|-----------|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | {-} - [-] | {20} 23 [27] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| A4-R, B5-R, LT-R | {-} - [-] | {19} 21 [21] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| B4, LG | {-} - [-] | {18} 18 [18] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| A3, LD | {-} - [-] | {15} 16 [16] | {15} 16 [16] | {-} - [-] | {-} - [-] |

Thick 3 (164 g/m² to 209 g/m², 90 lb. Index to 115.7 lb. Index)

| Paper size | Drawer | Bypass feed | | PFP | LCF |
|------------------------|-----------|----------------|--------------------|-----------|-----------|
| | | Size specified | Size not specified | | |
| A4, LT, B5, A5-R, ST-R | {-} - [-] | {20} 23 [27] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| A4-R, B5-R, LT-R | {-} - [-] | {19} 21 [21] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| B4, LG | {-} - [-] | {18} 18 [18] | {15} 16 [16] | {-} - [-] | {-} - [-] |
| A3, LD | {-} - [-] | {15} 16 [16] | {15} 16 [16] | {-} - [-] | {-} - [-] |

* Only A4/LT size is available for the LCF.

* The tolerance is within ±2.

* System copy speed

| Copy mode | | Sec. | | |
|--|--------|------------------|-------------------------------|-------------------------------|
| | | e-STUDIO200L/202 | e-STUDIO230/230L/ 232/232S | e-STUDIO280/280S/ 282/282S |
| Single-sided originals ↓ Single-sided copies | 1 set | 34.18 | 31.5 | 27.6 |
| | 3 sets | 95.53 | 84.8 | 72.2 |
| | 5 sets | 154.28 | 136.2 | 114.0 |
| Single-sided originals ↓ Double-sided copies | 1 set | 37.44 | 34.5 | 31.6 |
| | 3 sets | 96.81 | 85.9 | 73.4 |
| | 5 sets | 155.54 | 137.4 | 116.4 |
| Double-sided originals ↓ Double-sided copies | 1 set | 70.26 | 64.8 | 58.9 |
| | 3 sets | 188.48 | 167.7 | 143.8 |
| | 5 sets | 306.64 | 270.6 | 228.5 |
| Double-sided originals ↓ Single-sided copies | 1 set | 64.65 | 57.8 | 50.5 |
| | 3 sets | 184.73 | 163.1 | 137.3 |
| | 5 sets | 302.58 | 266.1 | 222.1 |

* The system copy speed, including scanning time, is available when 10 sheets of A4/LT size original are set on RADF and one of the copy modes in the above table is selected. The period of time from pressing [START] to the paper exit completely out of the equipment based on the actually measured value.

* Upper drawer is selected and copying is at the non-sort mode.

* Automatic copy density, APS/AMS are turned off.

* Finisher is not installed.

•Copy paper

| | Drawer | ADU | PFP | LCF | Bypass copy | Remarks |
|---------------|---|---|-----|--------|--|--|
| Size | A3 to A5-R, LD to ST-R, FOLIO, COMPUTER, 13"LG, 8.5" x 8.5", 8K, 16K, 16K-R | | | A4, LT | A3 to A5-R, LD to ST-R, FOLIO, COMPUTER, 13"LG, 8.5" x 8.5", 8K, 16K, 16K-R (Non-standard or user-specified sizes can be set.) | |
| Weight | | 64 to 105 g/m ² 17 to 28 lb. Bond | | | 64 to 209 g/m ² , 17 lb. Bond to 110 lb. Index (Continuous feeding) 50 to 209 g/m ² , 13 lb. Bond to 110 lb. Index (Single paper feeding) | |
| Special paper | | — | | | Tracing paper, labels, OHP film (thickness: 80 µm or thicker), tab paper, envelope (COM10, Monarch, DL, CHO-3, YOU-4) | These special papers recommended by Toshiba Tec CHO-3: 92 mm x 235 mm YOU-4: 105 mm x 235 mm |

•First copy time Approx. 5.4 sec. or less
(A4/LT, upper drawer, 100%, original placed manually)

•Warming-up time Approx. 25 sec. (temperature: 20°C)

•Multiple copying..... Up to 999 copies; Key in set numbers

•Reproduction ratio Actual ratio: 100±0.5%
Zooming: 25 to 400% in increments of 1%
(25 to 200% when using RADF)

•Resolution/Gradation..... Scanning: 600 dpi x 600 dpi
Printing: Equivalent to 2400 dpi x 600 dpi
Gradation: 256 steps

- Eliminated portion.....Leading edges: 3.0±2.0 mm, Side/trailing edges: 2.0±2.0 mm (copy)
Leading / trailing edges: 5.0±2.0 mm, Side edges: 5.0±2.0 mm (print)

- Paper feedingStandard drawers:
1 or 2 drawers (stack height 60.5 mm, equivalent to 550 sheets;
64 to 80 g/m² (17 to 22 lb. Bond)); Depends on destinations or
versions.

PFP:
Option (One drawer or two: stack height 60.5 mm, equivalent to
550 sheets; 64 to 80 g/m² (17 to 22 lb. Bond))

LCF:
Option (Stack height 137.5 mm x 2: equivalent to 2500 sheets;
64 to 80 g/m² (17 to 22 lb. Bond))

Bypass feeding:
Stack height 11 mm: equivalent to 100 sheets; 64 to 80 g/m² (17
to 22 lb. Bond)

- Capacity of originals in the reversing automatic document feeder (Option)
.....A3 to A5-R, LD to ST-R:
100 sheets / 80 g/m² (Stack height 16 mm or less)

- Automatic duplexing unit (ADU is available as standard equipment for some destinations or versions.)
.....Stackless, Switchback type

- Toner supplyAutomatic toner density detection/supply
Toner cartridge replacing method (There is a recovered toner supply
mechanism.)

- Density control.....Automatic density mode and manual density mode selectable in 11
steps

- WeightApproximately 75 kg (165.34 lb.): e-STUDIO200L/230/230L/280/280S
Approximately 77 kg (169.75 lb.): e-STUDIO202/232/232S/282/282S
(include the developer material and drum) (The ADU and Drawer mod-
ule are installed.)

- Power requirementsAC 110 V / 13.2 A, 115 V or 127 V / 12 A
220-240 V or 240 V / 8 A (50/60 Hz)
* The acceptable value of each voltage is ±10%.

- Power consumption..... 1.5 kW or less (115 V series, 200 V series)
* The electric power is supplied to the RADF, (ADU), Finisher, Job Separator, Offset Tray, PFP and
LCF through the equipment.

- Total counter.....Electronical counter

- Dimensions of the equipment..... See the figure below (W 637 x D 719 x H 739 (mm))
- * When the tilt angle of the control panel is 45 degrees.

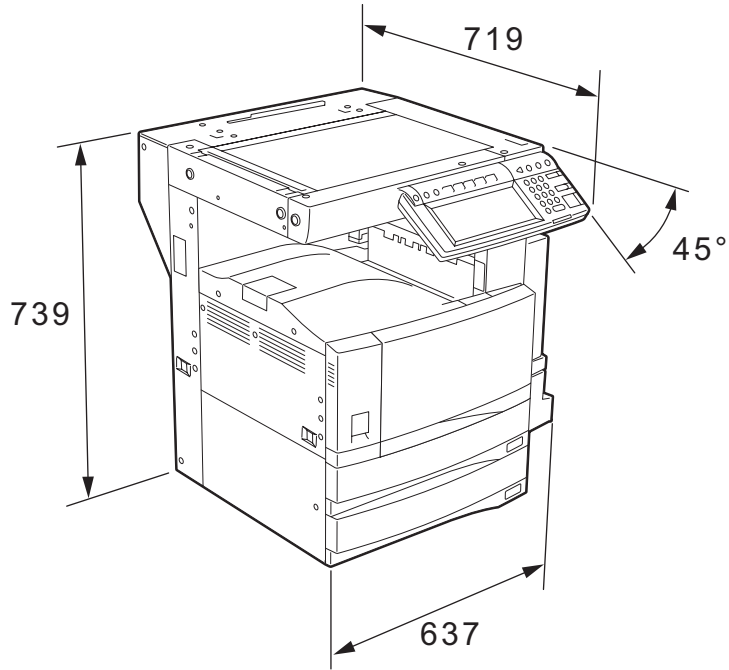


Fig. 1-1

1.2 Accessories

| | |
|---|-----------------------------|
| Unpacking/setup instruction | 1 set |
| Operator's manual | 3 pcs. (except for MJD) |
| Operator's manual pocket | 1 pc. |
| Power cable | 1 pc. |
| Warranty sheet | 1 pc. (for NAD) |
| Setup report | 1 set (for NAD and MJD) |
| Customer satisfaction card | 1 pc. (for MJD) |
| Drum (installed inside of the equipment) | 1 pc. |
| Toner cartridge | 1 pc. (except for NAD, MJD) |
| Developer material | 1 pc. (except for NAD, MJD) |
| Control panel stopper | 1 pc. |
| Blind seal | 1 pc. |
| Rubber plug | 5 pcs. |
| CD-ROM | 4 pcs. *2 |
| Transfer charger wire cleaner (installed inside of the transfer cover) | 1 pc. |
| Paper stopper *1 | 1 pc. |
| Stopper bracket *1 | 1 pc. |

Machine version

| | |
|------|---------------------------------------|
| NAD: | North America |
| ARD: | Argentina |
| ASD: | Central and South America / Hong Kong |
| AUD: | Australia |
| MJD: | Europe |
| ASU: | Asia |
| SAD: | Saudi Arabia |
| IRD: | Iran |
| CND: | China |
| TWD: | Taiwan |
| JPD: | Japan |
| KRD: | Korea |

*1: e-STUDIO200L/230/230L/280/280S only

*2: In e-STUDIO202L/232/232S/282/282S, 2 discs are included.

1.3 Options

1.3.1 e-STUDIO200L/230/230L/280/280S

| | |
|--|--|
| Platen Cover | KA-3511 PC/PC-C |
| Reversing Automatic Document Feeder (RADF) | MR-3016 |
| Drawer Module | MY-1021/-C |
| Paper Feed Pedestal (PFP) | KD-1011/-C |
| Large Capacity Feeder (LCF) | KD-1012 A4/LT/A4-C |
| Finisher (Hanging type) | MJ-1022/-C |
| Saddle stitch Finisher | MJ-1025/-C |
| Hole Punch Unit | MJ-6005 N/E/F/S *1 |
| Staple Cartridge | STAPLE-1600 (for MJ-1022) STAPLE-2000 (for MJ-1025) |
| Bridge Kit | KN-3520/-C |
| Job Separator | MJ-5004/-C |
| Offset Tray | MJ-5005/-C |
| Key copy Counter, Key copy counter socket | MU-8, MU-10 |
| Work Tray | KK-3511 |
| Damp Heater | MF-2320 U/E |
| Fax Board | GD-1150 NA/AU/EU/TW/C/AS |
| 2nd Line for Fax Board | GD-1160 NA/EU/TW/C |
| Wireless LAN Adapter | GN-1010 |
| PCI Slot | GO-1040/C |
| Scrambler Board | GP-1030 |
| Printer Kit | GM-1020/GM-1030 |
| Printer/Scanner Kit | GM-2020/GM-2030 |
| Scanner upgrade Kit | GM-3020/GM-3030 |
| Parallel interface kit | GF-1140 |
| Desk | MH-1700 |
| Harness kit for coin controller | GQ-1020 |
| Automatic Duplexing Unit (ADU) | MD-0102 |
| Slot cover | KE-2330 |
| NIC board | GF-1150 |
| Data overwrite kit | GP-1050 |

* 1) N: North America E: Europe F: France S: Sweden

Notes:

- The bridge unit (KN-3520) is necessary for installation of the finisher (MJ-1022, MJ-1025).
- The finisher (MJ-1025) is necessary for installation of the hole punch unit (MJ-6005N/E/F/S).
- The PCI slot (GO-1040) is necessary for installation of the scrambler board (GP-1030) and parallel interface kit (GF-1140).
- GM-1030/GM-2030/GM-3030 are exclusive for e-STUDIO200L.
They do not operate with e-STUDIO230/230L/280/280S.

1.3.2 e-STUDIO202L/232/232S/282/282S

| | |
|--|--|
| Platen Cover | KA-3511PC/-C |
| Reversing Automatic Document Feeder (RADF) | MR-3020 |
| Automatic Duplexing Unit (ADU) | MD-0102 |
| Drawer module | MY-1021/-C |
| Slot cover | KE-2330 |
| Paper Feed Pedestal (PFP) | KD-1011/-C |
| Large Capacity Feeder (LCF) | KD-1012LT/A4/A4-C |
| Finisher (Hanging type) | MJ-1022/-C |
| Finisher (Console saddle stitcher type) | MJ-1025 |
| Hole punch unit (for MJ-1025) | MJ-6005N/E/F/S *1 |
| Staple cartridge | STAPLE-1600 (for MJ-1022) STAPLE-2000 (for MJ-1025) |
| Bridge kit | KN-3520/-C |
| Job separator | MJ-5004/-C |
| Offset tray | MJ-5005/-C |
| Work tray | KK-3511/-C |
| Damp heater | MF-3520U/E |
| Fax board | GD-1150NA/EU/AU/AS/C/TW |
| 2nd line for fax board | GD-1160NA/EU-N/C/TW |
| Printer kit | GM-1070/GM-1080U |
| Printer/Scanner kit | GM-2070/GM-2080U |
| Scanner kit | GM-4070/GM-4080U |
| Scrambler board | GP-1040 |
| Wireless LAN module | GN-1041 |
| Bluetooth module | GN-2010 |
| Antenna | GN-3010 |
| Data overwrite kit | GP-1060 |
| PCI slot | GO-1060 |
| Desk | MH-1700 |
| Harness kit for coin controller | GQ-1020 |

* 1) N: North America E: Europe F: France S: Sweden

Notes:

1. The bridge kit (KN-3520) is necessary for installation of the finisher (MJ-1022 or MJ-1025).
2. The saddle stitch finisher (MJ-1025) is necessary for installation of the hole punch unit (MJ-6005N/E/F/S).
3. The PCI slot (GO-1060) is necessary for installation of the scrambler board (GP-1040).
4. The antenna (GN-3010) is necessary to enable the wireless LAN module (GN-1041) and Bluetooth module (GN-2010).
5. When the wireless LAN module (GN-1041) and the Bluetooth module (GN-2010) are installed, only 1 antenna (GN-3010) can be connected to each.
6. GM-1080U / GM-2080U / GM-4080U are exclusive to e-STUDIO202L. They do not operate with e-STUDIO232/232S/282/282S.

1.4 Supplies

1.4.1 e-STUDIO200L/230/230L/280/280S

| | |
|-----------------|-----------------------|
| Drum | OD-1600 |
| Toner cartridge | PS-ZT2320 /T/D/C/E *1 |
| Developer | D-2320 /C |

* 1) T: Taiwan D: Asia C: China E: Europe NONE: North America

1.4.2 e-STUDIO202L/232/232S/282/282S

| | |
|-----------------|-----------------------|
| Drum | OD-1600 |
| Toner cartridge | PS-ZT2340 /T/D/C/E *1 |
| Developer | D-2340 /C |

* 1) T: Taiwan D: Asia C: China E: Europe NONE: North America

1.5 System List

1.5.1 e-STUDIO200L/230/230L/280/280S

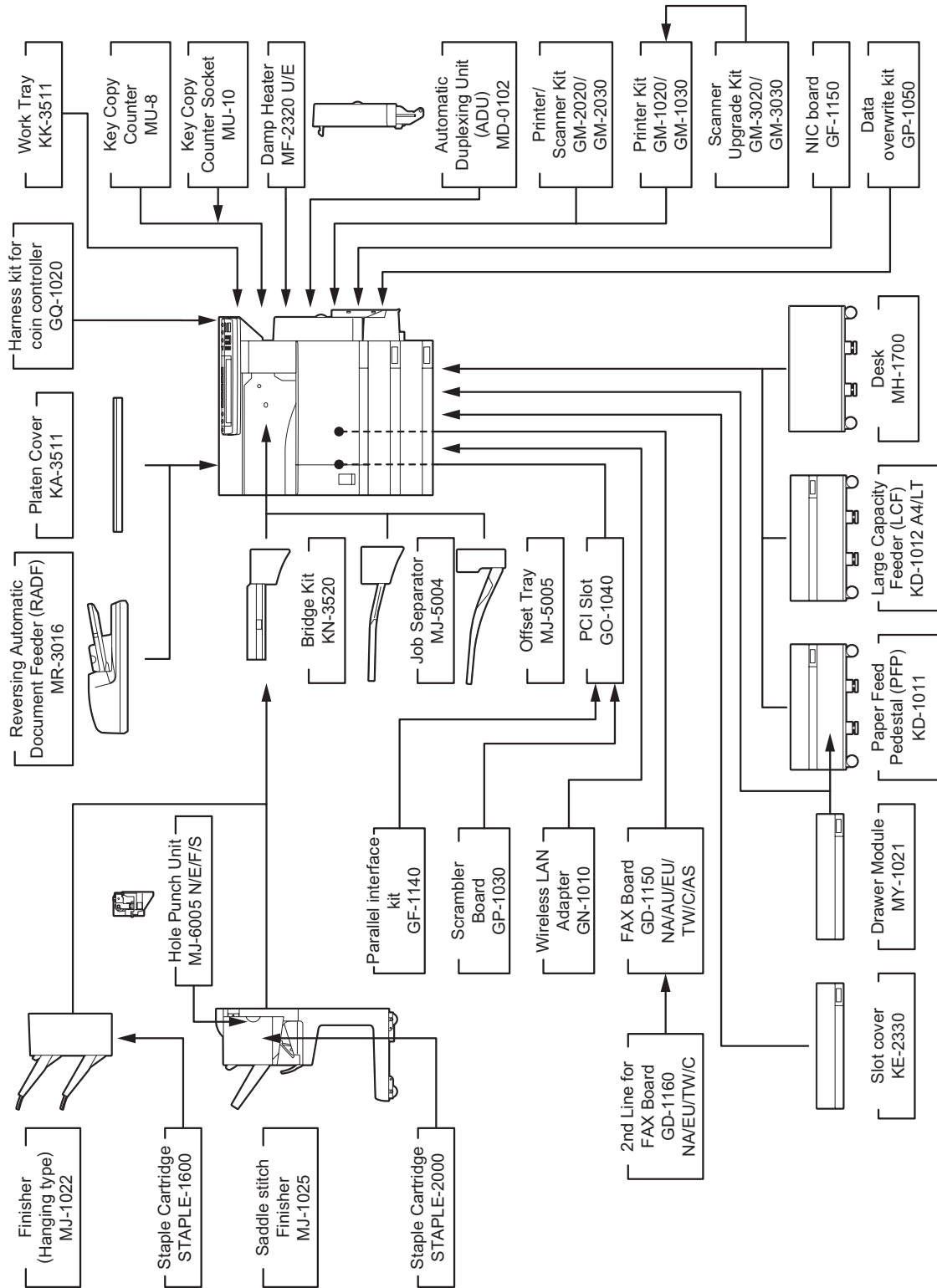


Fig. 1-2

e-STUDIO280/280S

| Area | North America | Central and South America/ Hong Kong | Australia | Europe | Asia |
|---------------------------------|---------------|---|----------------|----------------|----------------|
| Machine version (destination) | NAD (115V) | ASD (220-240V) | AUD (220-240V) | MJD (220-240V) | ASU (220-240V) |
| Model name | e-STUDIO280 | e-STUDIO280 | e-STUDIO280 | e-STUDIO280 | e-STUDIO280 |
| Platen cover | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC |
| RADF | MR-3016 | MR-3016 | MR-3016 | MR-3016 | MR-3016 |
| Drawer module (for Equipment) | Standard | MY-1021 | Standard | Standard | MY-1021 |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | - | Standard | - | - | KE-2330 |
| ADU | Standard | MD-0102 | Standard | Standard | MD-0102 |
| PFP | KD-1011 | KD-1011 | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012LT | KD-1012A4 | KD-1012A4 | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E | MJ-6005E | MJ-6005E/F/S | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 | KN-3520 | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 |
| Key copy counter | MU-8 | MU-8 | MU-8 | MU-8 | MU-8 |
| Key copy counter socket | MU-10 | MU-10 | MU-10 | MU-10 | MU-10 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | MF-2320U | Standard | Standard | MF-2320E | Standard |
| Fax board | GD-1150NA | GD-1150AS | GD-1150AU | GD-1150EU | GD-1150AS |
| 2nd line for Fax board | GD-1160NA | GD-1160EU | GD-1160EU | GD-1160EU | GD-1160EU |
| Wireless LAN adapter | GN-1010 | GN-1010 | GN-1010 | GN-1010 | GN-1010 |
| PCI slot | GO-1040 | GO-1040 | GO-1040 | GO-1040 | GO-1040 |
| Scrambler board | GP-1030 | GP-1030 | GP-1030 | GP-1030 | GP-1030 |
| Parallel interface kit | GF-1140 | GF-1140 | GF-1140 | GF-1140 | GF-1140 |
| NIC board | Standard | GF-1150 | Standard | Standard | GF-1150 |
| Printer/Scanner kit | GM-2020 | GM-2020 | GM-2020 | GM-2020 | GM-2020 |
| Printer kit | GM-1020 | GM-1020 | GM-1020 | GM-1020 | GM-1020 |
| Scanner upgrade kit | GM-3020 | GM-3020 | GM-3020 | GM-3020 | GM-3020 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Saudi Arabia | Iran | China | | Taiwan |
|---------------------------------|--------------|----------------|----------------|-------------|-------------|
| Machine version (destination) | SAD (127V) | IRD (220-240V) | CND (220-240V) | | TWD (110V) |
| Model name | e-STUDIO280 | e-STUDIO280 | e-STUDIO280S | e-STUDIO280 | e-STUDIO280 |
| Platen cover | KA-3511PC | KA-3511PC | Standard | Standard | KA-3511PC |
| RADF | MR-3016 | MR-3016 | MR-3016 | MR-3016 | MR-3016 |
| Drawer module (for Equipment) | MY-1021 | Standard | Standard | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | KE-2330 | - | - | - | - |
| ADU | MD-0102 | Standard | MD-0102 | Standard | MD-0102 |
| PFP | KD-1011 | KD-1011 | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012A4 | KD-1012A4 | KD-1012-C | KD-1012-C | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022-C | MJ-1022-C | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 | KN-3520-C | KN-3520-C | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004-C | MJ-5004-C | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005-C | MJ-5005-C | MJ-5005 |
| Key copy counter | MU-8 | MU-8 | MU-8 | MU-8 | MU-8 |
| Key copy counter socket | MU-10 | MU-10 | MU-10 | MU-10 | MU-10 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | Standard | Standard | Standard | Standard | Standard |
| Fax board | GD-1150NA | N/A | GD-1150C | GD-1150C | GD-1150TW |
| 2nd line for Fax board | GD-1160NA | N/A | GD-1160C | GD-1160C | GD-1160TW |
| Wireless LAN adapter | GN-1010 | GN-1010 | GN-1010 | GN-1010 | GN-1010 |
| PCI slot | GO-1040 | GO-1040 | GO-1040C | GO-1040C | GO-1040 |
| Scrambler board | GP-1030 | GP-1030 | GP-1030 | GP-1030 | GP-1030 |
| Parallel interface kit | GF-1140 | GF-1140 | GF-1140 | GF-1140 | GF-1140 |
| NIC board | GF-1150 | Standard | GF-1150 | Standard | Standard |
| Printer/Scanner kit | GM-2020 | Standard | GM-2020 | Standard | GM-2020 |
| Printer kit | GM-1020 | GM-1020 | GM-1020 | GM-1020 | GM-1020 |
| Scanner upgrade kit | GM-3020 | GM-3020 | GM-3020 | GM-3020 | GM-3020 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

e-STUDIO230/230L

| Area | North America | Central and South America/ Hong Kong | Australia | Europe | |
|---------------------------------|---------------|---|----------------|----------------|--------------|
| Machine version (destination) | NAD (115V) | ASD (220-240V) | AUD (220-240V) | MJD (220-240V) | |
| Model name | e-STUDIO230 | e-STUDIO230 | e-STUDIO230 | e-STUDIO230 | e-STUDIO230L |
| Platen cover | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC |
| RADF | MR-3016 | MR-3016 | MR-3016 | MR-3016 | MR-3016 |
| Drawer module (for Equipment) | Standard | MY-1021 | Standard | Standard | MY-1021 |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | - | Standard | - | - | Standard |
| ADU | Standard | MD-0102 | Standard | Standard | MD-0102 |
| PFP | KD-1011 | KD-1011 | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012LT | KD-1012A4 | KD-1012A4 | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E | MJ-6005E | MJ-6005E/F/S | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520E | KN-3520 | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 |
| Key copy counter | MU-8 | MU-8 | MU-8 | MU-8 | MU-8 |
| Key copy counter socket | MU-10 | MU-10 | MU-10 | MU-10 | MU-10 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | MF-2320U | Standard | Standard | MF-2320E | MF-2320E |
| Fax board | GD-1150NA | GD-1150AS | GD-1150AU | GD-1150EU | GD-1150EU |
| 2nd line for Fax board | GD-1160NA | GD-1160EU | GD-1160EU | GD-1160EU | GD-1160EU |
| Wireless LAN adapter | GN-1010 | GN-1010 | GN-1010 | GN-1010 | GN-1010 |
| PCI slot | GO-1040 | GO-1040 | GO-1040 | GO-1040 | GO-1040 |
| Scrambler board | GP-1030 | GP-1030 | GP-1030 | GP-1030 | GP-1030 |
| Parallel interface kit | GF-1140 | GF-1140 | GF-1140 | GF-1140 | GF-1140 |
| NIC board | Standard | GF-1150 | Standard | Standard | GF-1150 |
| Printer/Scanner kit | GM-2020 | GM-2020 | GM-2020 | GM-2020 | GM-2020 |
| Printer kit | GM-1020 | GM-1020 | GM-1020 | GM-1020 | GM-1020 |
| Scanner upgrade kit | GM-3020 | GM-3020 | GM-3020 | GM-3020 | GM-3020 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Asia | Saudi Arabia | China | Taiwan |
|---------------------------------|----------------|--------------|----------------|-------------|
| Machine version (destination) | ASU (220-240V) | SAD (127V) | CND (220-240V) | TWD (110V) |
| Model name | e-STUDIO230 | e-STUDIO230 | e-STUDIO230 | e-STUDIO230 |
| Platen cover | KA-3511PC | KA-3511PC | Standard | KA-3511PC |
| RADF | MR-3016 | MR-3016 | MR-3016 | MR-3016 |
| Drawer module (for Equipment) | MY-1021 | MY-1021 | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | KE-2330 | KE-2330 | - | - |
| ADU | MD-0102 | MD-0102 | Standard | MD-0102 |
| PFP | KD-1011 | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012A4 | KD-1012A4 | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022-C | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 | KN-3520-C | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004-C | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005-C | MJ-5005 |
| Key copy counter | MU-8 | MU-8 | MU-8 | MU-8 |
| Key copy counter socket | MU-10 | MU-10 | MU-10 | MU-10 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | Standard | Standard | Standard | Standard |
| Fax board | GD-1150AS | GD-1150NA | GD-1150C | GD-1150TW |
| 2nd line for Fax board | GD-1160EU | GD-1160NA | GD-1160C | GD-1160TW |
| Wireless LAN adapter | GN-1010 | GN-1010 | GN-1010 | GN-1010 |
| PCI slot | GO-1040 | GO-1040 | GO-1040C | GO-1040 |
| Scrambler board | GP-1030 | GP-1030 | GP-1030 | GP-1030 |
| Parallel interface kit | GF-1140 | GF-1140 | GF-1140 | GF-1140 |
| NIC board | GF-1150 | GF-1150 | Standard | Standard |
| Printer/Scanner kit | GM-2020 | GM-2020 | Standard | GM-2020 |
| Printer kit | GM-1020 | GM-1020 | GM-1020 | GM-1020 |
| Scanner upgrade kit | GM-3020 | GM-3020 | GM-3020 | GM-3020 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

e-STUDIO200L

| Area | North America | Central and South America |
|---------------------------------|---------------|---------------------------|
| Machine version (destination) | NAD (115V) | ASD (220-240V) |
| Model name | e-STUDIO200L | e-STUDIO200L |
| Platen cover | KA-3511PC | KA-3511PC |
| RADF | MR-3016 | MR-3016 |
| Drawer module (for Equipment) | MY-1021 | MY-1021 |
| Drawer module (for PFP) | MY-1021 | MY-1021 |
| Slot cover | Standard | Standard |
| ADU | MD-0102 | MD-0102 |
| PFP | KD-1011 | KD-1011 |
| LCF | KD-1012LT | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 |
| Key copy counter | MU-8 | MU-8 |
| Key copy counter socket | MU-10 | MU-10 |
| Work tray | KK-3511 | KK-3511 |
| Damp heater | MF-2320 | Standard |
| Fax board | GD-1150NA | GD-1150AS |
| 2nd line for Fax board | GD-1160NA | GD-1160EU |
| Wireless LAN adapter | GN-1010 | GN-1010 |
| PCI slot | GO-1040 | GO-1040 |
| Scrambler board | GP-1030 | GP-1030 |
| Parallel interface kit | GF-1140 | GF-1140 |
| NIC board | GF-1150 | GF-1150 |
| Printer/Scanner kit | GM-2030 | GM-2030 |
| Printer kit | GM-1030 | GM-1030 |
| Scanner upgrade kit | GM-3030 | GM-3030 |
| Desk | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 |

1.5.2 e-STUDIO202L/232/232S/282/282S

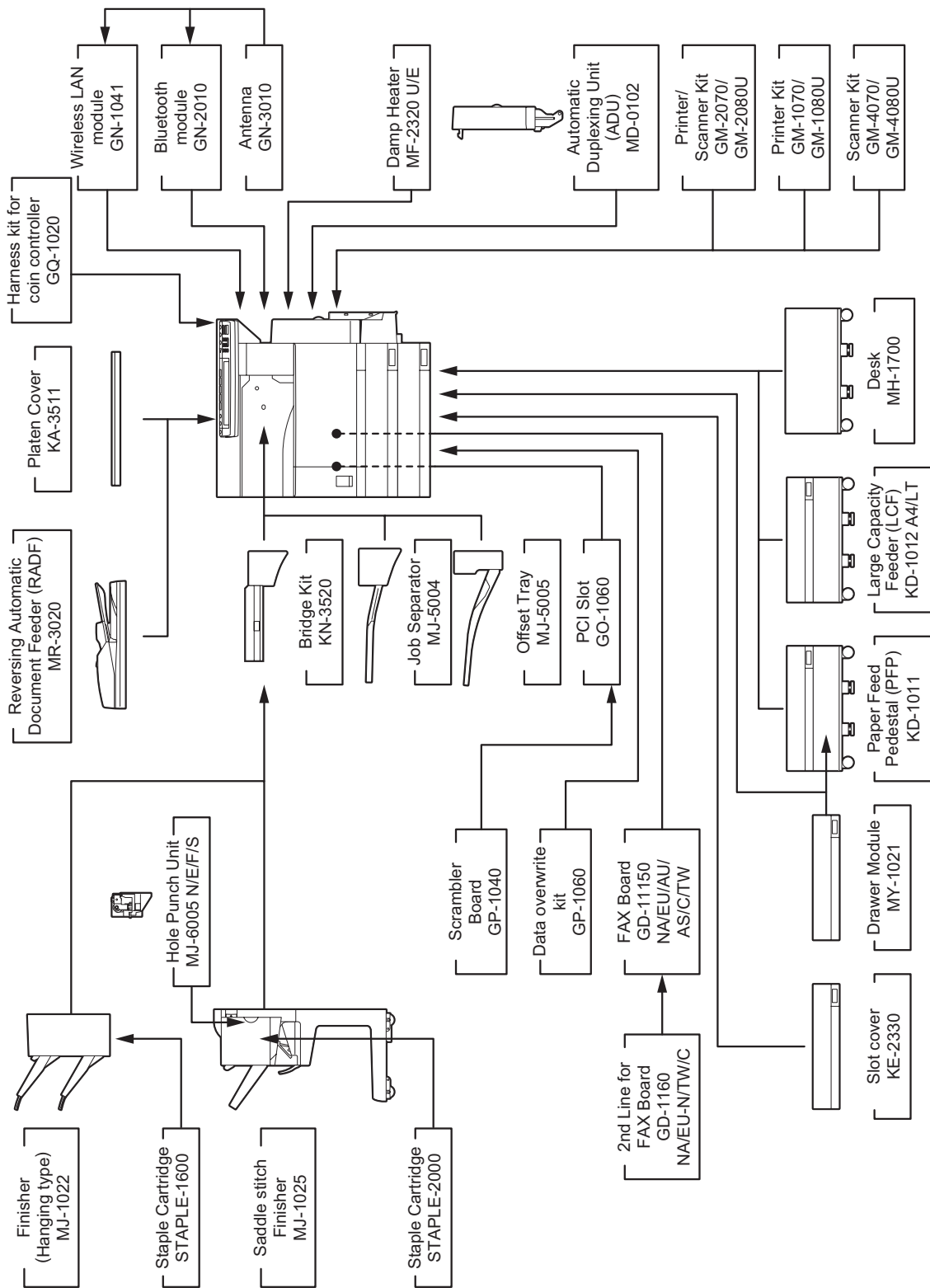


Fig. 1-3

e-STUDIO282/282S

| Area | North America | Central and South America/Hong Kong | Argentina | Australia | Europe |
|---------------------------------|---------------|-------------------------------------|----------------|----------------|----------------|
| Machine version (destination) | NAD (115V) | ASD (220-240V) | ARD (220-240V) | AUD (220-240V) | MJD (220-240V) |
| Model name | e-STUDIO282 | e-STUDIO282 | e-STUDIO282 | e-STUDIO282 | e-STUDIO282 |
| Platen cover | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC |
| RADF | MR-3020 | MR-3020 | MR-3020 | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | Standard | MY-1021 | MY-1021 | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | - | Standard | Standard | - | - |
| ADU | Standard | MD-0102 | MD-0102 | Standard | Standard |
| PFP | KD-1011 | KD-1011-N | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012LT | KD-1012A4 | KD-1012A4 | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E/F/S |
| Bridge kit | KN-3520 | KN-3520 | KN-3520 | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | MF-2320U | Standard | Standard | Standard | MF-2320E |
| Fax board | GD-1150NA | GD-1150AS | GD-1150AS | GD-1150AU | GD-1150EU |
| 2nd line for Fax board | GD-1160NA | GD-1160EU-N | GD-1160EU-N | GD-1160EU-N | GD-1160EU-N |
| Wireless LAN module | GN-1041 | GN-1041 | GN-1041 | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 | GN-2010 | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 | GN-3010 | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 | GO-1060 | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 | GP-1040 | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 | GM-1070 | GM-1070 | GM-1070 |
| Printer/Scanner kit | GM-2070 | GM-2070 | GM-2070 | GM-2070 | GM-2070 |
| Scanner kit | GM-4070 | GM-4070 | GM-4070 | GM-4070 | GM-4070 |
| Data overwrite kit | GP-1060 | GP-1060 | GP-1060 | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Asia | Saudi Arabia | China | |
|---------------------------------|----------------|--------------|----------------|--------------|
| Machine version (destination) | ASU (220-240V) | SAD (127V) | CND (220-240V) | |
| Model name | e-STUDIO282 | e-STUDIO282 | e-STUDIO282 | e-STUDIO282S |
| Platen cover | KA-3511PC | KA-3511PC | Standard | Standard |
| RADF | MR-3020 | MR-3020 | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | MY-1021 | MY-1021 | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021-C | MY-1021-C |
| Slot cover | KE-2330 | KE-2330 | - | - |
| ADU | MD-0102 | MD-0102 | Standard | MD-0102-C |
| PFP | KD-1011 | KD-1011 | KD-1011-C | KD-1011-C |
| LCF | KD-1012 | KD-1012A4 | KD-1012A4-C | KD-1012A4-C |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022-C | MJ-1022-C |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 | KN-3520-C | KN-3520-C |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004-C | MJ-5004-C |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005-C | MJ-5005-C |
| Work tray | KK-3511 | KK-3511 | KK-3511-C | KK-3511-C |
| Damp heater | Standard | Standard | Standard | Standard |
| Fax board | GD-1150AS | GD-1150NA | GD-1150C | GD-1150C |
| 2nd line for Fax board | GD-1160EU-N | GD-1160NA | GD-1160C | GD-1160C |
| Wireless LAN module | GN-1041 | GN-1041 | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 | GM-1070 | - |
| Printer/Scanner kit | GM-2070 | GM-2070 | Standard | - |
| Scanner kit | GM-4070 | GM-4070 | GM-4070 | - |
| Data overwrite kit | GP-1060 | GP-1060 | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Taiwan | Korea |
|---------------------------------|-------------|----------------|
| Machine version (destination) | TWD (110V) | KRD (220-240V) |
| Model name | e-STUDIO282 | e-STUDIO282 |
| Platen cover | KA-3511PC | Standard |
| RADF | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 |
| Slot cover | - | - |
| ADU | MD-0102 | MD-0102 |
| PFP | KD-1011 | KD-1011 |
| LCF | KD-1012A4 | KD-1012A |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 |
| Work tray | KK-3511 | KK-3511 |
| Damp heater | Standard | Standard |
| Fax board | GD-1150TW | GD-1150AS |
| 2nd line for Fax board | GD-1160TW | GD-1160EU-N |
| Wireless LAN module | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 |
| Printer/Scanner kit | GM-2070 | GM-2070 |
| Scanner kit | GM-4070 | GM-4070 |
| Data overwrite kit | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 |

e-STUDIO232/232S

| Area | North America | Central and South America/Hong Kong | Argentina | Australia | Europe |
|---------------------------------|---------------|-------------------------------------|----------------|----------------|----------------|
| Machine version (destination) | NAD (115V) | ASD (220-240V) | ARD (220-240V) | AUD (220-240V) | MJD (220-240V) |
| Model name | e-STUDIO232 | e-STUDIO232 | e-STUDIO232 | e-STUDIO232 | e-STUDIO232 |
| Platen cover | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC | KA-3511PC |
| RADF | MR-3020 | MR-3020 | MR-3020 | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | Standard | MY-1021 | MY-1021 | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021 | MY-1021 | MY-1021 |
| Slot cover | - | Standard | Standard | - | - |
| ADU | Standard | MD-0102 | MD-0102 | Standard | Standard |
| PFP | KD-1011 | KD-1011-N | KD-1011 | KD-1011 | KD-1011 |
| LCF | KD-1012LT | KD-1012A4 | KD-1012A4 | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E/F/S |
| Bridge kit | KN-3520 | KN-3520 | KN-3520 | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 | MJ-5005 |
| Work tray | KK-3511 | KK-3511 | KK-3511 | KK-3511 | KK-3511 |
| Damp heater | MF-2320U | Standard | Standard | Standard | MF-2320E |
| Fax board | GD-1150NA | GD-1150AS | GD-1150AS | GD-1150AU | GD-1150EU |
| 2nd line for Fax board | GD-1160NA | GD-1160EU-N | GD-1160EU-N | GD-1160EU-N | GD-1160EU-N |
| Wireless LAN module | GN-1041 | GN-1041 | GN-1041 | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 | GN-2010 | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 | GN-3010 | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 | GO-1060 | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 | GP-1040 | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 | GM-1070 | GM-1070 | GM-1070 |
| Printer/Scanner kit | GM-2070 | GM-2070 | GM-2070 | GM-2070 | GM-2070 |
| Scanner kit | GM-4070 | GM-4070 | GM-4070 | GM-4070 | GM-4070 |
| Data overwrite kit | GP-1060 | GP-1060 | GP-1060 | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Asia | Saudi Arabia | China | |
|---------------------------------|----------------|--------------|----------------|--------------|
| Machine version (destination) | ASU (220-240V) | SAD (127V) | CND (220-240V) | |
| Model name | e-STUDIO232 | e-STUDIO232 | e-STUDIO232 | e-STUDIO232S |
| Platen cover | KA-3511PC | KA-3511PC | Standard | Standard |
| RADF | MR-3020 | MR-3020 | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | MY-1021 | MY-1021 | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 | MY-1021-C | MY-1021-C |
| Slot cover | KE-2330 | KE-2330 | - | - |
| ADU | MD-0102 | MD-0102 | Standard | MD-0102-C |
| PFP | KD-1011 | KD-1011 | KD-1011-C | KD-1011-C |
| LCF | KD-1012 | KD-1012A4 | KD-1012A4-C | KD-1012A4-C |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 | MJ-1022-C | MJ-1022-C |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 | KN-3520-C | KN-3520-C |
| Job separator | MJ-5004 | MJ-5004 | MJ-5004-C | MJ-5004-C |
| Offset tray | MJ-5005 | MJ-5005 | MJ-5005-C | MJ-5005-C |
| Work tray | KK-3511 | KK-3511 | KK-3511-C | KK-3511-C |
| Damp heater | Standard | Standard | Standard | Standard |
| Fax board | GD-1150AS | GD-1150NA | GD-1150C | GD-1150C |
| 2nd line for Fax board | GD-1160EU-N | GD-1160NA | GD-1160C | GD-1160C |
| Wireless LAN module | GN-1041 | GN-1041 | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 | GM-1070 | - |
| Printer/Scanner kit | GM-2070 | GM-2070 | Standard | - |
| Scanner kit | GM-4070 | GM-4070 | GM-4070 | - |
| Data overwrite kit | GP-1060 | GP-1060 | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 | GQ-1020 | GQ-1020 |

| Area | Taiwan | Korea |
|---------------------------------|---------------|----------------|
| Machine version (destination) | TWD (110V) | KRD (220-240V) |
| Model name | e-STUDIO232 | e-STUDIO232 |
| Platen cover | KA-3511PC | Standard |
| RADF | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | Standard | Standard |
| Drawer module (for PFP) | MY-1021 | MY-1021 |
| Slot cover | - | - |
| ADU | MD-0102 | MD-0102 |
| PFP | KD-1011-TW | KD-1011 |
| LCF | KD-1012A4 | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005E | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 |
| Work tray | KK-3511 | KK-3511 |
| Damp heater | Standard | Standard |
| Fax board | GD-1150TW | GD-1150AS |
| 2nd line for Fax board | GD-1160TW | GD-1160EU-N |
| Wireless LAN module | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 |
| Printer kit | GM-1070 | GM-1070 |
| Printer/Scanner kit | GM-2070 | GM-2070 |
| Scanner kit | GM-4070 | GM-4070 |
| Data overwrite kit | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 |

e-STUDIO202L

| Area | North America | Argentina |
|---------------------------------|---------------|----------------|
| Machine version (destination) | NAD (115V) | ARD (220-240V) |
| Model name | e-STUDIO202L | e-STUDIO202L |
| Platen cover | KA-3511PC | KA-3511PC |
| RADF | MR-3020 | MR-3020 |
| Drawer module (for Equipment) | MY-1021 | MY-1021 |
| Drawer module (for PFP) | MY-1021 | MY-1021 |
| Slot cover | Standard | Standard |
| ADU | MD-0102 | MD-0102 |
| PFP | KD-1011 | KD-1011-N |
| LCF | KD-1012LT | KD-1012A4 |
| Finisher (Hanging type) | MJ-1022 | MJ-1022 |
| Staple cartridge (for MJ-1022) | STAPLE-1600 | STAPLE-1600 |
| Saddle stitch finisher | MJ-1025 | MJ-1025 |
| Staple cartridge (for MJ-1025) | STAPLE-2000 | STAPLE-2000 |
| Hole punch unit | MJ-6005N | MJ-6005E |
| Bridge kit | KN-3520 | KN-3520 |
| Job separator | MJ-5004 | MJ-5004 |
| Offset tray | MJ-5005 | MJ-5005 |
| Work tray | KK-3511 | KK-3511 |
| Damp heater | MF-2320U | Standard |
| Fax board | GD-1150NA | GD-1150AS |
| 2nd line for Fax board | GD-1160NA | GD-1160EU-N |
| Wireless LAN module | GN-1041 | GN-1041 |
| Bluetooth module | GN-2010 | GN-2010 |
| Antenna | GN-3010 | GN-3010 |
| PCI slot | GO-1060 | GO-1060 |
| Scrambler board | GP-1040 | GP-1040 |
| Printer kit | GM-1080U | GM-1080U |
| Printer/Scanner kit | GM-2080U | GM-2080U |
| Scanner kit | GM-4080U | GM-4080U |
| Data overwrite kit | GP-1060 | GP-1060 |
| Desk | MH-1700 | MH-1700 |
| Harness kit for coin controller | GQ-1020 | GQ-1020 |

2. ERROR CODE AND SELF-DIAGNOSTIC MODE

2.1 Error Code List

One of the following error codes is displayed at the upper right of the screen while pressing the [CLEAR] button and the digital key [8] simultaneously when the "CLEAR PAPER" or "CALL SERVICE" symbol is blinking.

2.1.1 Jam

| Error code | Classification | Contents | Troubleshooting |
|------------|------------------|---|-----------------|
| E010 | Paper exit jam | Jam not reaching the exit sensor: The paper which has passed through the fuser unit does not reach the exit sensor. | P. 5-1 |
| E020 | | Stop jam at the exit sensor: The trailing edge of the paper does not pass the exit sensor after its leading edge has reached this sensor. | P. 5-1 |
| E030 | Other paper jam | Power-ON jam: The paper is remaining on the paper transport path when power is turned ON. | P. 5-2 |
| E090 | | HDD abnormality causes jam: Image data to be printed cannot be prepared. | P. 5-3 |
| E110 | Paper misfeeding | ADU misfeeding (Paper not reaching the 1st transport sensor): The paper which has passed through ADU does not reach the 1st transport sensor during duplex printing. | P. 5-15 |
| E120 | | Bypass misfeeding (Paper not reaching the 1st transport sensor): The paper fed from the bypass tray does not reach the 1st transport sensor. | P. 5-16 |
| E130 | | Upper drawer misfeeding (Paper not reaching the 1st transport sensor): The paper fed from the upper drawer does not reach the 1st transport sensor. | P. 5-17 |
| E140 | | Lower drawer misfeeding (Paper not reaching the 2nd transport sensor): The paper fed from the lower drawer does not reach the 2nd transport sensor. | P. 5-18 |
| E150 | | PFP upper drawer misfeeding (Paper not reaching the PFP upper drawer feed sensor): The paper fed from the PFP upper drawer does not reach the PFP upper drawer feed sensor. | P. 5-19 |
| E160 | | PFP lower drawer misfeeding (Paper not reaching the PFP lower drawer feed sensor): The paper fed from the PFP lower drawer does not reach the PFP lower drawer feed sensor. | P. 5-20 |
| E190 | | LCF misfeeding (Paper not reaching the LCF feed sensor): The paper fed from the LCF does not reach the LCF feed sensor. | P. 5-21 |

| Error code | Classification | Contents | Troubleshooting |
|-------------------|-----------------------|---|------------------------|
| E200 | Paper transport jam | Upper drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-3 |
| E210 | | Lower drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-3 |
| E220 | | Lower drawer transport jam (Paper not reaching the 1st transport sensor): The paper does not reach the 1st transport sensor after it has passed the lower drawer feed sensor. | P. 5-4 |
| E270 | | Bypass transport jam (paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-5 |
| E280 | | ADU transport jam (paper not reaching the registration sensor): The paper which has passed through ADU and the 1st transport sensor does not reach the registration sensor during duplex printing. | P. 5-5 |
| E300 | | PFP upper drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-3 |
| E310 | | PFP upper drawer transport jam (Paper not reaching the 1st transport sensor): The paper does not reach the 1st transport sensor after it has passed the 2nd transport sensor. | P. 5-4 |
| E320 | | PFP upper drawer transport jam (Paper not reaching the 2nd transport sensor): The paper does not reach the 2nd transport sensor after it has passed the PFP upper drawer feed sensor. | P. 5-6 |
| E330 | | PFP lower drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-3 |
| E340 | | PFP lower drawer transport jam (Paper not reaching the 1st transport sensor): The paper does not reach the 1st transport sensor after it has passed the PFP lower drawer feed sensor. | P. 5-4 |
| E350 | | PFP lower drawer transport jam (Paper not reaching the 2nd transport sensor): The paper does not reach the 2nd transport sensor after it has passed the PFP upper drawer feed sensor. | P. 5-6 |
| E360 | | PFP lower drawer transport jam (Paper not reaching the PFP upper drawer feed sensor): The paper does not reach the PFP upper drawer feed sensor after it has passed the PFP lower drawer feed sensor. | P. 5-7 |
| E3C0 | | LCF transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st transport sensor. | P. 5-3 |
| E3D0 | | LCF transport jam (Paper not reaching the 1st transport sensor): The paper does not reach the 1st transport sensor after it has passed the 2nd transport sensor. | P. 5-4 |

| Error code | Classification | Contents | Troubleshooting |
|------------|--|---|--|
| E3E0 | Paper transport jam | LCF transport jam (Paper not reaching the 2nd transport sensor): The paper does not reach the 2nd transport sensor after it has passed the LCF feed sensor. | P. 5-6 |
| E400 | Cover open jam | Transfer cover open jam: The transfer cover has opened during printing. | P. 5-22 |
| E410 | | Front cover open jam: The front cover has opened during printing. | P. 5-23 |
| E420 | | PFP side cover open jam: The PFP side cover has opened during printing. | P. 5-24 |
| E430 | | ADU open jam: The ADU has opened during printing. | P. 5-25 |
| E440 | | Side cover open jam: The side cover has opened during printing. | P. 5-25 |
| E450 | | LCF side cover open jam: The LCF side cover has opened during printing. | P. 5-26 |
| E480 | | Bridge unit open jam: The bridge unit has opened during printing. | P. 5-26 |
| E490 | | Job separator cover open jam: The job separator cover has opened during printing. | P. 5-27 |
| E491 | | Offset tray cover open jam: The offset tray cover has opened during printing. | P. 5-27 |
| E510 | | Paper transport jam (ADU section) | Stop jam in the ADU: The paper does not reach the ADU exit sensor after it has passed the ADU entrance sensor. |
| E520 | Jam not reaching the ADU entrance sensor: The paper does not reach the ADU entrance sensor after it is switchbacked in the exit section. | | P. 5-9 |
| E550 | Other paper jam | Paper remaining jam on the transport path: The paper is remaining on the transport path when printing is finished (caused by a multiple paper feeding). | P. 5-10 |

| Error code | Classification | Contents | Troubleshooting |
|------------|----------------|--|-----------------|
| E711 | RADF jam | Jam not reaching the original length sensor: The original fed from the original feeding tray does not reach the original length sensor. | P. 5-28 |
| E712 | | Jam not reaching the registration sensor: The original fed from the original feeding tray does not reach the registration sensor. | P. 5-28 |
| E713 | | Stop jam at the original length sensor: The trailing edge of the original does not pass the original length sensor after its leading edge has reached this sensor. | P. 5-28 |
| E714 | | Feed signal reception jam: The feed signal is received even no original exists on the original feeding tray. | P. 5-29 |
| E721 | | Jam not reaching the read sensor: The original does not reach the read sensor after it has passed the registration sensor (when scanning obverse side) or the reverse sensor (when scanning reverse side). | P. 5-29 |
| E722 | | Jam not reaching the exit sensor (during scanning): The original which passed the read sensor does not reach the exit sensor when it is transported from the scanning section to exit section. | P. 5-30 |
| E723 | | Jam not reaching the reverse sensor (during scanning): The original which passed the read sensor does not reach the reverse sensor when it is transported from the scanning section to reverse section. | P. 5-30 |
| E724 | | Stop jam at the registration sensor: The trailing edge of the original does not pass the registration sensor after its leading edge has reached this sensor. | P. 5-30 |
| E725 | | Stop jam at the read sensor: The trailing edge of the original does not pass the read sensor after its leading edge has reached this sensor. | P. 5-31 |
| E726 | | Transport/exit signal reception jam: RADF receives the transport/exit reception signal from the equipment when no original is at the exposure waiting position. | P. 5-31 |
| E731 | | Stop jam at the exit sensor: The trailing edge of the original does not pass the exit sensor after its leading edge has reached this sensor. | P. 5-32 |
| E741 | | Stop jam at the reverse sensor: The trailing edge of the original does not pass the reversal sensor after its leading edge has reached this sensor. | P. 5-32 |
| E742 | | Jam not reaching the reverse sensor (during reverse feeding): The leading edge of the original does not reach the reverse sensor when original is fed from the reverse section. | P. 5-33 |
| E743 | | Jam not reaching the exit sensor (during reverse feeding): The original does not reach the exit sensor after it has passed the reverse sensor when the original is exited from the reverse section. | P. 5-33 |
| E860 | | RADF jam access cover open: The RADF jam access cover has opened during RADF operation. | P. 5-34 |
| E870 | | RADF open jam: RADF has opened during RADF operation. | P. 5-34 |

| Error code | Classification | Contents | Troubleshooting |
|------------|---|---|--|
| E910 | Finisher jam (Bridge unit) | Jam at the bridge unit transport sensor-1: The paper does not reach the bridge unit transport sensor-1 after it has passed the exit sensor. | P. 5-35 |
| E920 | | Stop jam at the bridge unit transport sensor-1: The trailing edge of the paper does not pass the bridge unit transport sensor-1 after its leading edge has reached the sensor. | P. 5-35 |
| E930 | | Jam at the bridge unit transport sensor-2: The trailing edge of the paper does not reach the bridge unit transport sensor-2 after its leading edge has reached the bridge unit transport sensor-1. | P. 5-35 |
| E940 | | Stop jam at the bridge unit transport sensor-2: The trailing edge of the paper does not reach the bridge unit transport sensor-2 after its leading edge has reached the bridge unit transport sensor-2. | P. 5-35 |
| E950 | Job separator jam | Jam not reaching the job separator transport sensor: The paper has passed through the exit sensor does not reach the job separator transport sensor. | P. 5-11 |
| E951 | | Stop jam at the job separator transport sensor: The trailing edge of the paper does not pass the job separator transport sensor. | P. 5-11 |
| E960 | Offset tray jam | Jam not reaching the offset tray transport sensor: The paper has passed through the exit sensor does not reach the offset tray transport sensor. | P. 5-11 |
| E961 | | Stop jam at the offset tray transport sensor: The trailing edge of the paper does not pass the offset tray transport sensor. | P. 5-11 |
| E9F0 | Finisher jam (Puncher unit) | Punching jam: Punching is not performed properly. [MJ-1025 (When MJ-6005 is installed)] | P. 5-36 |
| EA10 | Finisher jam (Finisher unit) | Paper transport delay jam: The paper which has passed the bridge unit does not reach the inlet sensor. [MJ-1022/1025] | P. 5-37 |
| EA20 | | Paper transport stop jam: The paper does not pass through the inlet sensor. [MJ-1022/1025] | P. 5-38 |
| EA30 | | Power-ON jam: Paper exists at the inlet sensor when power is turned ON. [MJ-1022/1025] | P. 5-39 |
| EA40 | | Door open jam: The finisher has been released from the equipment during printing. [MJ-1022/1025] | P. 5-40 |
| EA50 | | Stapling jam: Stapling is not performed properly. [MJ-1022/1025] | P. 5-41 |
| EA60 | | Early arrival jam: The inlet sensor detects the paper earlier than a specified timing. [MJ-1022] | P. 5-42 |
| EA70 | | Stack delivery jam: It cannot deliver the stack of paper on the intermediary process tray to the stack tray. [MJ-1022/1025] | P. 5-43 |
| EAB0 | | Finisher jam (Saddle Stitcher section) | Saddle paper transport stop jam: The paper which passed through the inlet sensor does not reach or pass through the folding position sensor. [MJ-1025] |
| EAC0 | Saddle transport delay jam: The paper which has reached the inlet sensor does not pass through this sensor. [MJ-1025] | | P. 5-45 |
| EAD0 | Other paper jam | Print end command time-out jam: The printing has not finished normally because of the communication error between the SYS board and LGC board at the end of printing. | P. 5-46 |

| Error code | Classification | Contents | Troubleshooting |
|-------------------|---------------------------------|--|------------------------|
| EAE0 | Finisher jam | Receiving time time-out jam: The printing has been interrupted because of the communication error between the equipment and finisher when the paper is transported from the equipment to the finisher. | P. 5-46 |
| EAF0 | Finisher jam (Finisher unit) | Stack return jam: It cannot load the paper which passed through the delivery roller on the intermediary process tray. [MJ-1022] | P. 5-44 |
| EB30 | Finisher jam | Ready time time-out jam: The equipment judges that the paper transport to the finisher is disabled because of the communication error between the equipment and finisher at the start of printing. | P. 5-46 |
| EB50 | Paper transport jam | Paper remaining on the transport path: The multiple feeding of preceding paper caused the misfeeding of upcoming paper. | P. 5-12 |
| EB60 | | Paper remaining on the transport path: The multiple feeding of preceding paper caused the misfeeding of upcoming paper (redetection after no jam is detected at [EB50]). | P. 5-14 |

2.1.2 Service call

| Error code | Classification | Contents | Troubleshooting |
|-------------|--|---|--|
| C010 | Drive system related service call | Main motor abnormality: The main motor is not rotating normally. | P. 5-47 |
| C040 | Paper feeding system related service call | PFP motor abnormality: The PFP motor is not rotating normally. | P. 5-48 |
| C130 | | Upper drawer tray abnormality: The upper drawer tray motor is not rotating or the upper drawer tray is not moving normally. | P. 5-49 |
| C140 | | Lower drawer tray abnormality: The lower drawer tray motor is not rotating or the lower drawer tray is not moving normally. | P. 5-49 |
| C150 | | PFP upper drawer tray abnormality: The PFP upper drawer tray motor is not rotating or the PFP upper drawer tray is not moving normally. | P. 5-50 |
| C160 | | PFP lower drawer tray abnormality: The PFP lower drawer tray motor is not rotating or the PFP lower drawer tray is not moving normally. | P. 5-50 |
| C180 | | LCF tray-up motor abnormality: The LCF tray-up motor is not rotating or the LCF tray is not moving normally. | P. 5-51 |
| C1A0 | | LCF end fence motor abnormality: The LCF end fence motor is not rotating or the LCF end fence is not moving normally. | P. 5-52 |
| C1B0 | | LCF transport motor abnormality: The LCF transport motor is not rotating normally. | P. 5-53 |
| C260 | | Scanning system related service call | Peak detection error: Lighting of the exposure lamp (white reference) is not detected when power is turned ON. |
| C270 | Carriage home position sensor not turning OFF within a specified period of time: The carriage does not shift from its home position in a specified period of time. | | P. 5-55 |
| C280 | Carriage home position sensor not turning ON within a specified period of time: The carriage does not reach to its home position in a specified period of time. | | P. 5-55 |
| C410 | Fuser unit related service call | Thermistor or heater abnormality at power-ON: Abnormality of service call the thermistor is detected when power is turned ON or the temperature of the fuser roller does not rise in a specified period of time after power is turned ON. | P. 5-56 |
| C440 | | Heater abnormality after abnormality judgment: The temperature of the fuser roller has exceeded the range of control (in this case, the main switch turns OFF automatically) or does not even reach the range. | P. 5-57 |
| C450 | | Thermistor abnormality during printing: Abnormality of the thermistor is detected during printing. | P. 5-57 |
| C550 (C780) | Optional communication related service call | RADF I/F error: Communication error has occurred between the RADF and the scanner. | P. 5-58 |
| C570 | | Communication error between Engine-CPU and IPC board | P. 5-58 |
| C580 | | Communication error between IPC board and finisher | P. 5-58 |
| C730 | RADF related service call | EEPROM initialization error: EEPROM is not initialized normally when performing the code 05-356. | P. 5-59 |
| C810 | | Fan motor abnormality: The fan motor is not rotating normally. | P. 5-59 |
| C820 | | Read sensor adjustment error: The read sensor cannot be adjusted normally when performing the code 05-356. | P. 5-59 |
| C830 | | Original length sensor adjustment error: The original length sensor cannot be adjusted normally when performing the code 05-356. | P. 5-59 |

| Error code | Classification | Contents | Troubleshooting |
|------------|--|---|-----------------|
| C940 | Circuit related service call | Engine-CPU abnormality | P. 5-76 |
| C970 | Process related service call | High-voltage transformer abnormality: Leakage of the main charger is detected. | P. 5-76 |
| CA10 | Laser optical unit related service call | Polygonal motor abnormality: The polygonal motor is not rotating normally. | P. 5-60 |
| CA20 | | H-Sync detection error: H-Sync detection PC board cannot detect laser beams. | P. 5-60 |
| CB10 | Finisher related service call | Transport motor abnormality: The transport motor or stack transport roller is not rotating normally. [MJ-1025] | P. 5-61 |
| CB20 | | Delivery motor abnormality: Delivery motor or delivery roller is not rotating normally. [MJ-1022/1025] | P. 5-62 |
| CB30 | | Tray lift motor abnormality: The tray lift motor is not rotating normally or the delivery tray is not moving normally. [MJ-1025] | P. 5-63 |
| CB50 | | Staple motor (staple/fold) abnormality: The staple motor is not rotating normally or the stapler is not moving normally. [MJ-1025] | P. 5-64 |
| CB60 | | Stapler unit shift motor abnormality: The stapler unit shift motor is not rotating normally or the Stapler Unit is not moving normally. [MJ-1025] | P. 5-66 |
| CB80 | | Backup RAM data abnormality: 1) Abnormality of checksum value on finisher controller board is detected when the power is turned on. [MJ-1025] 2) Abnormality of checksum value on punch controller board is detected when the power is turned on. [MJ-1025 (when MJ-6005 is installed)] | P. 5-67 |
| CC30 | | Stack processing motor abnormality: The stack processing motor is not rotating normally or the stack delivery belt is not moving normally. [MJ-1022] Paddle motor abnormality: The paddle motor is not rotating normally or the swing guide is not moving normally. [MJ-1025] | P. 5-67 |
| CC50 | | Horizontal registration motor abnormality: The horizontal registration motor is not rotating normally or the puncher is not moving normally. [MJ-1025 (when MJ-6005 is installed)] | P. 5-69 |
| CC60 | Punch motor abnormality: The punch motor is not rotating normally or the puncher is not moving normally. [MJ-1025 (when MJ-6005 is installed)] | P. 5-69 | |
| CC80 | Front jogging motor abnormality: Front jogging motor is not rotating normally or the front alignment plate is not moving normally. [MJ-1022] Alignment motor (front) abnormality: The alignment motor (front) is not rotating normally or the front alignment plate is not moving normally. [MJ-1025] | P. 5-70 | |
| CC90 | Upper stack tray lift motor abnormality: The upper stack tray lift motor is not rotating or the upper stack tray is not moving normally. [MJ-1022] | P. 5-71 | |
| CCA0 | Lower stack tray lift motor abnormality: The lower stack tray lift motor is not rotating or the lower stack tray is not moving normally. [MJ-1022] | P. 5-72 | |
| CCB0 | Rear jogging motor abnormality: Rear jogging motor is not rotating normally or the rear alignment plate is not moving normally. [MJ-1022] Alignment motor (rear) abnormality: The alignment motor (rear) is not rotating normally or the rear alignment plate is not moving normally. [MJ-1025] | P. 5-73 | |

| Error code | Classification | Contents | Troubleshooting | |
|------------|------------------------------------|---|--|---------|
| CDC0 | Finisher related service call | Punch power failure abnormality: 24 V is not applied to the punch controller board. [MJ-1025 (when MJ-6005 is installed)] | P. 5-74 | |
| CDD0 | | Folding position sensor abnormality: Automatic adjustment of the folding position sensor can not be performed properly. [MJ-1025] | P. 5-74 | |
| CDE0 | | Paddle motor abnormality: The paddle motor does not rotate properly. [MJ-1025] | P. 5-75 | |
| CDF0 | Offset tray related service call | Initialization error of the offset tray: The home position of the separator cannot be detected when the power is turned ON. | P. 5-76 | |
| CE00 | Finisher related service call | Communication error between finisher unit and puncher unit: Communication error between the finisher controller PC board and punch controller PC board. [MJ-1025 (when MJ-6005 is installed)] | P. 5-75 | |
| CF60 | Other service call | Toner for recycle transport area lock | P. 5-76 | |
| F070 | Communication related service call | Communication error between System-CPU and Engine-CPU | P. 5-58 | |
| F090 | Other service call | SRAM abnormality on the SYS board | P. 5-76 | |
| F091 | | NVRAM abnormality on the SYS board | P. 5-77 | |
| F092 | | SRAM and NVRAM abnormality on the SYS board | P. 5-77 | |
| F100 | | HDD format error: HDD cannot be initialized normally. | P. 5-77 | |
| F101 | | HDD unmounted: Connection of HDD cannot be detected. | P. 5-77 | |
| F102 | | HDD start error: HDD cannot become 'Ready' state. | P. 5-77 | |
| F103 | | HDD transfer time-out: Reading/writing cannot be performed in the specified period of time. | P. 5-77 | |
| F104 | | HDD data error: Abnormality is detected in the data of HDD. | P. 5-77 | |
| F105 | | HDD other error | P. 5-77 | |
| F106 | | Point and Print partition damage | P. 5-78 | |
| F107 | | /SHR partition damage | P. 5-78 | |
| F108 | | /SHA partition damage | P. 5-78 | |
| F110 | | Communication related service call | Communication error between System-CPU and Scanner-CPU | P. 5-58 |
| F111 | | | Scanner response abnormality | P. 5-58 |
| F120 | Other service call | Database abnormality: Database is not operating normally. | P. 5-78 | |
| F130 | | Invalid MAC address | P. 5-78 | |
| F200 | | Data overwrite kit (GP-1050/1060) is taken off | P. 5-78 | |

2.1.3 Error in Internet FAX / Scanning Function

1) Internet FAX related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Contents | Troubleshooting |
|------------|---|-----------------|
| 1C10 | System access abnormality | P. 5-79 |
| 1C11 | Insufficient memory | P. 5-79 |
| 1C12 | Message reception error | P. 5-79 |
| 1C13 | Message transmission error | P. 5-79 |
| 1C14 | Invalid parameter | P. 5-79 |
| 1C15 | Exceeding file capacity | P. 5-79 |
| 1C20 | System management module access abnormality | P. 5-79 |
| 1C21 | Job control module access abnormality | P. 5-79 |
| 1C22 | Job control module access abnormality | P. 5-79 |
| 1C30 | Directory creation failure | P. 5-80 |
| 1C31 | File creation failure | P. 5-80 |
| 1C32 | File deletion failure | P. 5-79 |
| 1C33 | File access failure | P. 5-80 |
| 1C40 | Image conversion abnormality | P. 5-80 |
| 1C60 | HDD full failure during processing | P. 5-80 |
| 1C61 | Address Book reading failure | P. 5-80 |
| 1C62 | Memory acquiring failure | P. 5-80 |
| 1C63 | Terminal IP address unset | P. 5-80 |
| 1C64 | Terminal mail address unset | P. 5-80 |
| 1C65 | SMTP address unset | P. 5-80 |
| 1C66 | Server time time-out error | P. 5-80 |
| 1C67 | NIC time time-out error | P. 5-80 |
| 1C68 | NIC access error | P. 5-80 |
| 1C69 | SMTP server connection error | P. 5-81 |
| 1C6A | HOST NAME error | P. 5-81 |
| 1C6B | Terminal mail address error | P. 5-81 |
| 1C6C | Destination mail address error | P. 5-81 |
| 1C6D | System error | P. 5-80 |
| 1C70 | SMTP client OFF | P. 5-81 |
| 1C71 | SMTP authentication error | P. 5-81 |
| 1C72 | POP before SMTP error | P. 5-81 |
| 1C80 | Internet FAX transmission failure when processing E-mail job received | P. 5-81 |
| 1C81 | Onramp Gateway transmission failure | P. 5-81 |
| 1C82 | Internet FAX transmission failure when processing FAX job received | P. 5-81 |
| 1CC0 | Job canceling | - |
| 1CC1 | Power failure | P. 5-81 |

2) RFC related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|-------------------|--|---|------------------------|
| 2500 | Syntax error, command unrecognized | HOST NAME error (RFC: 500) Destination mail address error (RFC: 500) Terminal mail address error (RFC: 500) | P. 5-82 |
| 2501 | Syntax error in parameters or arguments | HOST NAME error (RFC: 501) Destination mail address error (RFC: 501) Terminal mail address error (RFC: 501) | P. 5-82 |
| 2503 | Bad sequence of commands | Destination mail address error (RFC: 503) | P. 5-82 |
| 2504 | Command parameter not implemented | HOST NAME error (RFC: 504) | P. 5-82 |
| 2550 | Mailbox unavailable | Destination mail address error (RFC: 550) | P. 5-82 |
| 2551 | User not local | Destination mail address error (RFC: 551) | P. 5-82 |
| 2552 | Insufficient system storage | Terminal/Destination mail address error (RFC: 552) | P. 5-82 |
| 2553 | Mailbox name not allowed | Destination mail address error (RFC: 553) | P. 5-82 |

3) Electronic Filing related error

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|-------------------|--|--|------------------------|
| 2B10 | There was no applicable job. | No applicable job error in job control module | P. 5-83 |
| 2B11 | Job status failed. | JOB status abnormality | P. 5-83 |
| 2B20 | Failed to access file. | File library function error | P. 5-83 |
| 2B30 | Insufficient disk space. | Insufficient disk space in /SHR partition | P. 5-83 |
| 2B31 | Failed to access Electronic Filing. | Status of specified Electronic Filing or folder is undefined or being created/ deleted | P. 5-83 |
| 2B32 | Failed to print Electronic Filing document. | Electronic Filing printing failure: Specified document can not be printed because of client's access (being edited, etc.). | P. 5-83 |
| 2B50 | Failed to process image. | Image library error | P. 5-83 |
| 2B51 | Failed to process print image. | List library error | P. 5-83 |
| 2B71 | Document(s) expire(s) in a few days | Documents expiring in a few days exist | - |
| 2B80 | Hard Disk space for Electronic Filing nearly full. | Hard disk space in /SHR partition is nearly full (90%). | - |
| 2B90 | Insufficient Memory. | Insufficient memory capacity | P. 5-83 |
| 2BA0 | Invalid Box password specified. | Invalid Box password | P. 5-84 |
| 2BB0 | Job canceled | Job canceling | - |
| 2BB1 | Power failure occurred | Power failure | P. 5-84 |
| 2BC0 | System fatal error. | Fatal failure occurred. | P. 5-83 |
| 2BC1 | Failed to acquire resource. | System management module resource acquiring failure | P. 5-83 |
| 2BD0 | Power failure occurred during e-Filing restoring. | Power failure occurred during restoring of Electronic Filing | P. 5-84 |
| 2BE0 | Failed to get machine parameter. | Machine parameter reading failure | P. 5-84 |
| 2BF0 | Maximum number of pages has been exceeded (list Maximum) | Exceeding maximum number of pages | P. 5-84 |
| 2BF1 | Maximum number of documents has been exceeded (list Maximum) | Exceeding maximum number of documents | P. 5-84 |
| 2BF2 | Maximum number of folders has been exceeded (list Maximum) | Exceeding maximum number of folders | P. 5-84 |

4) E-mail related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|------------|--|---|-----------------|
| 2C10 | Illegal Job status | System access abnormality | P. 5-85 |
| 2C11 | Not enough memory | Insufficient memory | P. 5-85 |
| 2C12 | Illegal Job status | Message reception error | P. 5-85 |
| 2C13 | Illegal Job status | Message transmission error | P. 5-85 |
| 2C14 | Invalid parameter specified | Invalid parameter | P. 5-85 |
| 2C15 | Message size exceeded limit or maximum size | Exceeding file capacity | P. 5-85 |
| 2C20 | Illegal Job status | System management module access abnormality | P. 5-85 |
| 2C21 | Illegal Job status | Job control module access abnormality | P. 5-85 |
| 2C22 | Illegal Job status | Job control module access abnormality | P. 5-85 |
| 2C30 | Failed to create directory | Directory creation failure | P. 5-85 |
| 2C31 | Failed to create file | File creation failure | P. 5-85 |
| 2C32 | Failed to delete file | File deletion failure | P. 5-85 |
| 2C33 | Failed to create file | File access failure | P. 5-85 |
| 2C40 | Failed to convert image file format | Image conversion abnormality | P. 5-85 |
| 2C60 | Failed to process your Job. Insufficient disk space. | HDD full failure during processing | P. 5-86 |
| 2C61 | Failed to read AddressBook | Address Book reading failure | P. 5-86 |
| 2C62 | Not enough memory | Memory acquiring failure | P. 5-85 |
| 2C63 | Invalid Domain Address | Terminal IP address unset | P. 5-86 |
| 2C64 | Invalid Domain Address | Terminal mail address unset | P. 5-86 |
| 2C65 | Failed to connect to SMTP server | SMTP address unset | P. 5-86 |
| 2C66 | Failed to connect to SMTP server | Server time time-out error | P. 5-86 |
| 2C67 | Failed to send E-Mail message | NIC time time-out error | P. 5-86 |
| 2C68 | Failed to send E-Mail message | NIC access error | P. 5-86 |
| 2C69 | Failed to connect to SMTP server | SMTP server connection error | P. 5-86 |
| 2C6A | Failed to send E-Mail message | HOST NAME error (No RFC error) | P. 5-86 |
| 2C6B | Invalid address specified in From: field | Terminal mail address error | P. 5-86 |
| 2C6C | Invalid address specified in To: field | Destination mail address error (No RFC error) | P. 5-87 |
| 2C6D | NIC system error | System error | P. 5-86 |
| 2C70 | SMTP service is not available | SMTP client OFF | P. 5-87 |
| 2C71 | Failed SMTP Authentication | SMTP authentication error | P. 5-87 |
| 2C72 | POP Before SMTP Authentication Failed | POP before SMTP error | P. 5-87 |
| 2C80 | Failed to process received E-mail job | E-mail transmission failure when processing E-mail job received | P. 5-87 |
| 2C81 | Failed to process received Fax job | Process failure of FAX job received | P. 5-87 |
| 2CC0 | Job canceled | Job canceling | - |
| 2CC1 | Power failure occurred | Power failure | P. 5-87 |

5) File sharing related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|------------|--|--|-----------------|
| 2D10 | Illegal Job status | System access abnormality | P. 5-88 |
| 2D11 | Not enough memory | Insufficient memory | P. 5-88 |
| 2D12 | Illegal Job status | Message reception error | P. 5-88 |
| 2D13 | Illegal Job status | Message transmission error | P. 5-88 |
| 2D14 | Invalid parameter specified | Invalid parameter | P. 5-88 |
| 2D15 | There are too many documents in the folder. Failed in creating new document. | Exceeding document number | P. 5-88 |
| 2D20 | Illegal Job status | System management module access abnormality | P. 5-88 |
| 2D21 | Illegal Job status | Job control module access abnormality | P. 5-88 |
| 2D22 | Illegal Job status | Job control module access abnormality | P. 5-88 |
| 2D30 | Failed to create directory | Directory creation failure | P. 5-88 |
| 2D31 | Failed to create file | File creation failure | P. 5-88 |
| 2D32 | Failed to delete file | File deletion failure | P. 5-88 |
| 2D33 | Failed to create file | File access failure | P. 5-88 |
| 2D40 | Failed to convert image file format | Image conversion abnormality | P. 5-89 |
| 2D60 | Failed to copy file | File library access abnormality | P. 5-88 |
| 2D61 | Invalid parameter specified | Invalid parameter | P. 5-88 |
| 2D62 | Failed to connect to network destination. Check destination path | File server connection error | P. 5-89 |
| 2D63 | Specified network path is invalid. Check destination path | Invalid network path | P. 5-89 |
| 2D64 | Logon to file server failed. Check username and password | Login failure | P. 5-89 |
| 2D65 | There are too many documents in the folder. Failed in creating new document. | Exceeding documents in folder: Creating new document is failed. | P. 5-89 |
| 2D66 | Failed to process your Job. Insufficient disk space. | HDD full failure during processing | P. 5-89 |
| 2D67 | FTP service is not available | FTP service not available | P. 5-89 |
| 2D68 | File Sharing service is not available | File sharing service not available | P. 5-89 |
| 2DA0 | Expired scan documents deleted from share folder. | Periodical deletion of scanned documents completed properly. | - |
| 2DA1 | Expired Sent Fax documents deleted from shared folder. | Periodical deletion of transmitted FAX documents completed properly. | - |
| 2DA2 | Expired Received Fax documents deleted from shared folder. | Periodical deletion of received FAX documents completed properly. | - |
| 2DA3 | Scanned documents in shared folder deleted upon user's request. | Manual deletion of scanned documents completed properly. | - |
| 2DA4 | Sent Fax Documents in shared folder deleted upon user's request. | Manual deletion of transmitted FAX documents completed properly. | - |
| 2DA5 | Received Fax Documents in shared folder deleted upon user's request. | Manual deletion of received FAX documents completed properly. | - |
| 2DA6 | Failed to delete file. | File deletion failure | P. 5-88 |

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|-------------------|--|----------------------------|------------------------|
| 2DA7 | Failed to acquire resource. | Resource acquiring failure | P. 5-88 |
| 2DC0 | Job canceled | Job canceling | - |
| 2DC1 | Power failure occurred | Power failure | P. 5-89 |

- 6) E-mail reception related error
 (when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))
 (when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|------------|--|--------------------------------------|-----------------|
| 3A10 | MIME Error has been detected in the received mail. | E-mail MIME error | P. 5-90 |
| 3A11 | MIME Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3A12 | MIME Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3A20 | Analyze Error has been detected in the received mail. | E-mail analysis error | P. 5-90 |
| 3A21 | Analyze Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3A22 | Analyze Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3A30 | Whole partial mails were not reached by timeout. | Partial mail time-out error | P. 5-90 |
| 3A40 | Partial Mail Error has been detected in the received mail. | Partial mail related error | P. 5-90 |
| 3A50 | HDD Full Error has been occurred in this mail. | Insufficient HDD capacity error | P. 5-90 |
| 3A51 | HDD Full Error has been occurred in this mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3A52 | HDD Full Error has been occurred in this mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3A60 | HDD Full Warning has been occurred in this mail. | Warning of insufficient HDD capacity | P. 5-90 |
| 3A61 | HDD Full Warning has been occurred in this mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3A62 | HDD Full Warning has been occurred in this mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3A70 | Receiving partial mail was aborted since the partial mail setting has been changed to Disable. | Warning of partial mail interruption | P. 5-90 |

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|-------------------|---|------------------------------------|------------------------|
| 3A80 | Partial mail was received during the partial mail setting is disabled. | Partial mail reception setting OFF | P. 5-90 |
| 3A81 | Partial mail was received during the partial mail setting is disabled. This mail has been transferred to the administrator. | | P. 5-90 |
| 3A82 | Partial mail was received during the partial mail setting is disabled. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3B10 | Format Error has been detected in the received mail. | E-mail format error | P. 5-90 |
| 3B11 | Format Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3B12 | Format Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3B20 | Content-Type Error has been detected in the received mail. | Content-Type error | P. 5-90 |
| 3B21 | Content-Type Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3B22 | Content-Type Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3B30 | Charset Error has been detected in the received mail. | Charset error | P. 5-90 |
| 3B31 | Charset Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3B32 | Charset Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |
| 3B40 | Decode Error has been detected in the received mail. | E-mail decode error | P. 5-90 |
| 3B41 | Decode Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-90 |
| 3B42 | Decode Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-90 |

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|-------------------|--|---------------------------|------------------------|
| 3C10 | Tiff Analyze Error has been detected in the received mail. | TIFF analysis error | P. 5-91 |
| 3C11 | Tiff Analyze Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C12 | Tiff Analyze Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |
| 3C13 | Tiff Analyze Error has been detected in the received mail. | | P. 5-91 |
| 3C20 | Tiff Compression Error has been detected in the received mail. | TIFF compression error | P. 5-91 |
| 3C21 | Tiff Compression Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C22 | Tiff Compression Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |
| 3C30 | Tiff Resolution Error has been detected in the received mail. | TIFF resolution error | P. 5-91 |
| 3C31 | Tiff Resolution Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C32 | Tiff Resolution Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |
| 3C40 | Tiff Paper Size Error has been detected in the received mail. | TIFF paper size error | P. 5-91 |
| 3C41 | Tiff Paper Size Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C42 | Tiff Paper Size Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |
| 3C50 | Offramp Destination Error has been detected in the received mail. | Offramp destination error | P. 5-91 |
| 3C51 | Offramp Destination Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C52 | Offramp Destination Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |

| Error code | Message displayed in the TopAccess screen | Contents | Troubleshooting |
|------------|---|---------------------------------------|-----------------|
| 3C60 | Offramp Security Error has been detected in the received mail. | Offramp security error | P. 5-91 |
| 3C61 | Offramp Security Error has been detected in the received mail. This mail has been transferred to the administrator. | | P. 5-91 |
| 3C62 | Offramp Security Error has been detected in the received mail. This mail could not be transferred to the administrator. | | P. 5-91 |
| 3C70 | Power Failure has been occurred in E-mail receiving. | Power failure error | P. 5-91 |
| 3D10 | SMTP Destination Error has been detected in the received mail. This mail was deleted. | Destination address error | P. 5-91 |
| 3D20 | Offramp Destination limitation Error has been detected in the received mail. | Offramp destination limitation error | P. 5-91 |
| 3D30 | Fax Board Error has been occurred in the received mail. | FAX board error | P. 5-91 |
| 3E10 | POP3 Connection Error has been occurred in the received mail. | POP3 server connection error | P. 5-92 |
| 3E20 | POP3 Connection Timeout Error has been occurred in the received mail. | POP3 server connection time-out error | P. 5-92 |
| 3E30 | POP3 Login Error has been occurred in the received mail. | POP3 login error | P. 5-92 |
| 3E40 | POP3 Login Error occurred in received mail. | POP3 login method error | P. 5-92 |
| 3F00 | File I/O Error has been occurred in this mail. The mail could not be received until File I/O is recovered. | File I/O error | P. 5-92 |
| 3F10 | | | P. 5-92 |
| 3F20 | | | P. 5-92 |
| 3F30 | | | P. 5-92 |
| 3F40 | | | P. 5-92 |

2.1.4 Printer function error

Following codes are displayed at the end of the user name on the print job log screen
 (when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))
 (when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

| Error code | Contents | Troubleshooting |
|------------|---|-----------------|
| 4030 | No printer kit / Invalid: When the printer kit or printer/scanner kit is not installed, network print is performed after the trial period. | P. 5-92 |
| 4031 | HDD full during print: Large quantity image data by private print or invalid network print are saved in HDD. | P. 5-92 |
| 4032 | Private-print-only error: Jobs other than Private print jobs cannot be performed. | P. 5-92 |
| 4033 | Printing data storing limitation error: Printing with its data being stored to the HDD temporarily (Proof print, Private print, Scheduled print, etc.) cannot be performed. | P. 5-92 |
| 4034 | e-Filing storing limitation error: Printing with its data being stored to the HDD (print and e-Filing, print to e-Filing, etc.) cannot be performed. | P. 5-92 |
| 4035 | Local file storing limitation error: Network FAX or Internet FAX cannot be sent when "Local" is selected for the destination of the file to save. | P. 5-92 |
| 4036 | User authentication error: The user who intended to print a document is not registered as a user. | P. 5-92 |
| A221 | Print job cancellation: Print job (copy, list print, network print) is deleted from the print job screen. | P. 5-92 |
| A222 | Print job power failure: The power of the equipment is turned OFF during print job (copy, list print, network print). | P. 5-92 |
| A290 | Limit over error: The numbers of output pages have exceeded those specified with both of the department code and the user code at the same time. | P. 5-93 |
| A291 | Limit over error: The number of output pages has exceeded the one specified with the user code. | P. 5-93 |
| A292 | Limit over error: The number of output pages has exceeded the one specified with the department code. | P. 5-93 |

<<Error history>>

In the setting mode (08-253), the latest twenty groups of error data will be displayed. Display example

| | | | | |
|-------------|---|------------|------------|--------------------|
| <u>EA10</u> | <u>04 07 11 17 57 32</u> | <u>064</u> | <u>064</u> | <u>23621000000</u> |
| Error code | YY MM DD HH MM SS | MMM | NNN | ABCDEFGHIJLO |
| 4 digits | 12 digits (Year is indicated with its last two digits.) | 3 digits | 3 digits | 11 digits |

| | |
|-----|--|
| A | Paper source |
| | 0: Not selected 1: Bypass feed 2: LCF 3: PFP upper drawer 4: Unused 5: PFP lower drawer 6: Unused 7: Upper drawer 8: Lower drawer |
| B | Paper size code |
| | 0: A5/ST 1: A5-R 2: ST-R 3: LT 4: A4 5: B5-R 6: LT-R 7: A4-R 8: OTHER/UNIV 9: B5 A: FOLIO/COMP B: LG C: B4 D: LD E: A3 F: 13" LG G: Unused H: A6-R I: Postcard J: 8.5SQ K: Unused L: Unused M: 8K N: 16K-R O: 16K P: COM10 (Envelope) Q: DL (Envelope) R: Monarch (Envelope) S: CHO-3 (Envelope) T: YOU-4 (Envelope) Z: Not selected |
| C | Sort mode/staple mode |
| | 0: Non-sort/Non-staple 1: Group 2: Sort 7: Front staple 8: Double staple 9: Rear staple A: Saddle stitch |
| D | ADF mode |
| | 0: Unused 1: AUTO FEED (SADF) 2: STACK FEED |
| E | APS/AMS mode |
| | 0: Not selected 1: APS 2: AMS |
| F | Duplex mode |
| | 0: Not selected 1: Book 2: Double-sided/Single-sided 4: Double-sided/Duplex copying 8: Single-sided/Duplex copying |
| G | Unused |
| H | Image shift |
| | 0: Unused 1: Book 2: Left 4: Right |
| I | Editing |
| | 0: Unused 1: Masking 2: Trimming 3: Mirror image 4: Negative/Positive Reversal |
| J | Edge erase/Dual-page |
| | 0: Unused 1: Edge erase 2: Dual-page 3: Edge erase & Dual-page |
| K | Unused |
| L | Function |
| | 0: Unused 1: Copying 2: FAX/Internet FAX transmission 3: FAX/Internet FAX/E-mail reception printing 4: Unused 5: Printing/List print 6: Scan/E-mail transmission |
| MMM | Primary scanning reproduction ratio (Display in hexadecimal) |
| | (Mx256)+(Mx16)+M |
| NNN | Secondary scanning reproduction ratio (Display in hexadecimal) |
| | (Nx256)+(Nx16)+N |
| O | Mode |
| | 0: Unused 1: Unused 2: Black |



2.2 Self-diagnosis Modes

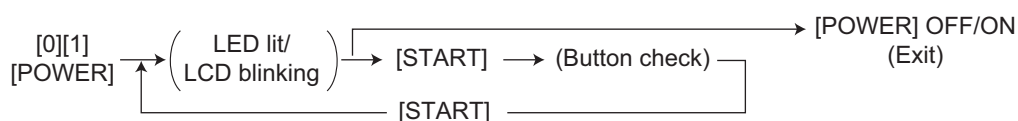
| Mode | For start | Contents | For exit | Display |
|--------------------------|-------------------------|--|-------------------|--------------------------|
| Control panel check mode | [0]+[1]+ [POWER] | All LEDs on the control panel are lit, and all the LCD pixels blink. | [POWER] OFF/ON | - |
| Test mode | [0]+[3]+ [POWER] | Checks the status of input/output signals. | [POWER] OFF/ON | 100% C A4 TEST MODE |
| Test print mode | [0]+[4]+ [POWER] | Outputs the test patterns. | [POWER] OFF/ON | 100% P A4 TEST PRINT |
| Adjustment mode | [0]+[5]+ [POWER] | Adjusts various items. | [POWER] OFF/ON | 100% A A4 TEST MODE |
| Setting mode | [0]+[8]+ [POWER] | Sets various items. | [POWER] OFF/ON | 100% D TEST MOD |
| List print mode | [9]+[START] +[POWER] | Prints out the data lists of the codes 05 and 08, PM support mode and pixel counter. | [POWER] OFF/ON | 100% UA A4 LIST PRINT |
| PM support mode | [6]+[START] +[POWER] | Clears each counter. | [POWER] OFF/ON | 100% K TEST MODE |
| Firmware update mode | [8]+[9]+ [POWER] | Performs updating of the system firmware. | [POWER] OFF/ON | - |

Note:

To enter the desired mode, turn ON the power while two digital keys designated to each mode (e.g. [0] and [5]) are pressed simultaneously.

<Operation procedure>

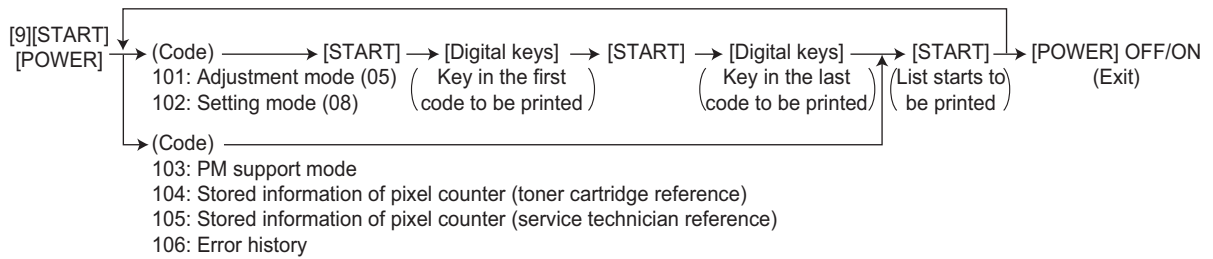
- Control panel check mode (01):



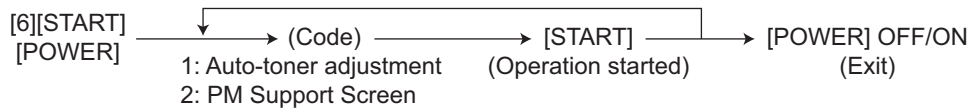
Notes:

- A mode can be canceled by [POWER] OFF/ON when the LED is lit and the LCD is blinking.
 - Button Check
 - Buttons with LED (Press to turn OFF the LED.)
 - Buttons without LED (Press to display the message on the control panel.)
 - Button on touch panel (Press to display the screen on the control panel at power-ON.)
- Test mode (03): Refer to [P. 2-24 "2.2.1 Input check \(Test mode 03\) \(e-STUDIO200L/230/280\)"/](#) [P. 2-31 "2.2.2 Input check \(Test mode 03\) \(e-STUDIO202L/232/282\)"](#) and [P. 2-39 "2.2.3 Output check \(test mode 03\)"](#).
 - Test print mode (04): Refer to [P. 2-42 "2.2.4 Test print mode \(test mode 04\)"](#).
 - Adjustment mode (05): Refer to [P. 2-43 "2.2.5 Adjustment mode \(05\) \(e-STUDIO200L/230/280\)"/](#) [P. 2-63 "2.2.6 Adjustment mode \(05\) \(e-STUDIO202L/232/282\)"](#).
 - Setting mode (08): Refer to [P. 2-83 "2.2.7 Setting mode \(08\) \(e-STUDIO200L/230/280\)"/](#) [P. 2-152 "2.2.8 Setting mode \(08\) \(e-STUDIO202L/232/282\)"](#).

- List print mode (9S): The procedure varies depending on the code.



- PM support mode (6S):



- Firmware update mode (89): Refer to "6. FIRMWARE UPDATING".

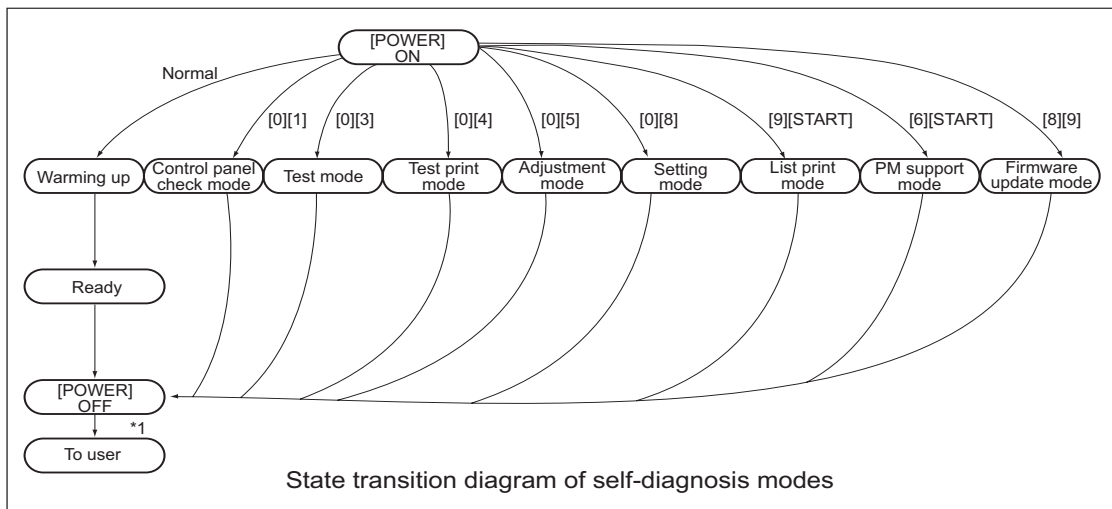


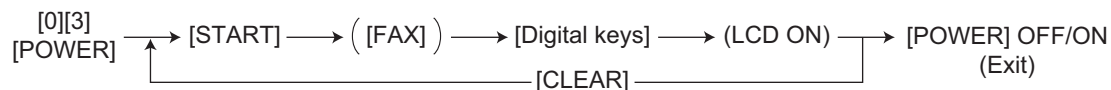
Fig. 2-1

*1 Turn OFF the power after using the self-diagnosis modes, and leave the equipment to the user.

2.2.1 Input check (Test mode 03) (e-STUDIO200L/230/280)

The status of each input signal can be checked by pressing the [FAX] button, and the digital keys in the test mode (03).

<Operation procedure>



Note:

Initialization is performed before the equipment enters the test mode.

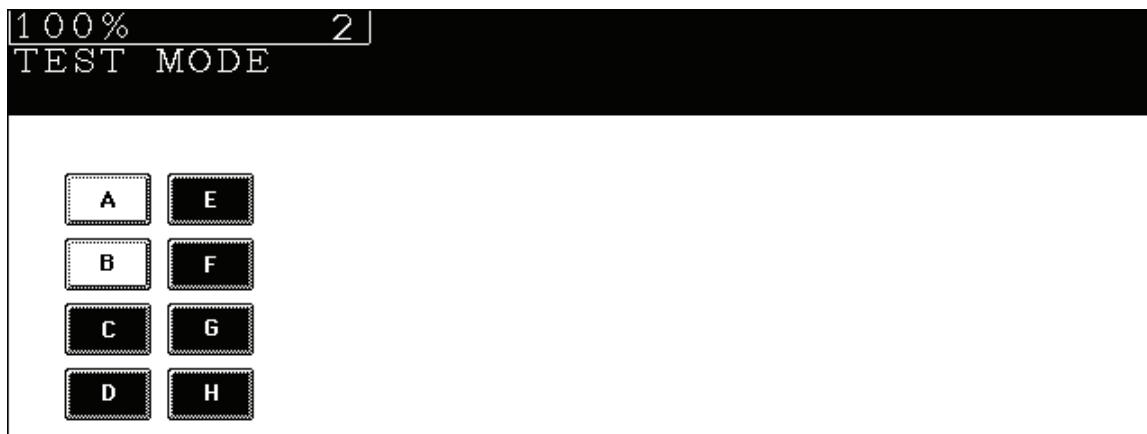






Fig. 2-2 Example of display during input check

Items to be checked and the condition of the equipment when the buttons [A] to [H] are highlighted are listed in the following pages.

[FAX] button: OFF ([FAX] LED: OFF)

| Digital key | Button | Items to check | Contents | |
|-------------|--------|---|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [1] | A | - | - | - |
| | B | LCF connection | Not connected | Connected |
| | C | Bypass unit connection | Not connected | Connected |
| | D | Bypass paper sensor | No paper | Paper present |
| | E | ADU connection | Not connected | Connected |
| | F | ADU opening/closing switch | ADU opened | ADU closed |
| | G | ADU exit sensor | Paper present | No paper |
| | H | ADU entrance sensor | Paper present | No paper |
| [2] | A | PFP upper drawer detection switch | Drawer not installed | Drawer present |
| | B | - | - | - |
| | C | PFP upper drawer paper stock sensor | Paper almost empty | Paper present |
| | D | PFP upper drawer feed sensor | Paper present | No paper |
| | E | PFP connection | Not connected | Connected |
| | F | PFP side cover opening/closing switch | Cover opened | Cover closed |
| | G | PFP upper drawer empty sensor | No paper | Paper present |
| | H | PFP upper drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [3] | A | LCF tray bottom sensor | Tray at bottom position | Other than bottom position |
| | B | LCF standby side paper mis-stacking sensor | Correct stacking | Incorrect stacking |
| | C | - | - | - |
| | D | - | - | - |
| | E | LCF drawer detection switch | Drawer not installed | Drawer present |
| | F | - | - | - |
| | G | - | - | - |
| | H | LCF feed side paper stock sensor | Paper almost empty | Paper present |
| [4] | A | PFP lower drawer detection sensor | Drawer not installed | Drawer present |
| | B | - | - | - |
| | C | PFP lower drawer paper stock sensor | Paper almost empty | Paper present |
| | D | PFP lower drawer feed sensor | Paper present | No paper |
| | E | PFP motor rotation status (Motor is rotating at output mode (03)) | Abnormal rotation | Normal rotation |
| | F | - | - | - |
| | G | PFP lower drawer empty sensor | No paper | Paper present |
| | H | PFP lower drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |

2

| Digital key | Button | Items to check | Contents | |
|-------------|--------|---|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [5] | A | LCF end fence home position sensor | Fence home position | Other than home position |
| | B | LCF end fence stop position sensor | Fence stop position | Other than stop position |
| | C | LCF standby side empty sensor | No paper | Paper present |
| | D | LCF side cover opening/closing switch | Cover closed | Cover opened |
| | E | LCF motor rotation status (Motor is rotating at output mode (03)) | Abnormal rotation | Normal rotation |
| | F | LCF tray-up sensor | Tray at upper limit position | Other than upper limit position |
| | G | LCF feed sensor | No paper | Paper present |
| | H | LCF feed side empty sensor | Paper present | No paper |
| [6] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | 1st transport sensor | Paper present | No paper |
| | F | - | - | - |
| | G | Upper drawer empty sensor | No paper | Paper present |
| | H | Upper drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [7] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | 2nd transport sensor | Paper present | No paper |
| | F | - | - | - |
| | G | Lower drawer empty sensor | No paper | Paper present |
| | H | Lower drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [8] | A | - | - | - |
| | B | Bypass feed paper width sensor-2 | Refer to table 1 | |
| | C | Bypass feed paper width sensor-1 | Refer to table 1 | |
| | D | Bypass feed paper width sensor-0 | Refer to table 1 | |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |
| [9] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | Upper drawer detection switch | Drawer not installed | Drawer present |
| | E | Upper drawer paper stock sensor | Paper almost empty | Paper present |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |







| Digital key | Button | Items to check | Contents | |
|-------------|--------|---------------------------------|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [0] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | Lower drawer detection switch | Drawer not installed | Drawer present |
| | E | Lower drawer paper stock sensor | Paper almost empty | Paper present |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |

Table 1. Relation between the status of the bypass paper width sensor and paper size (width).

| Bypass paper-width sensor | | | Paper-width size |
|---------------------------|---|---|------------------|
| 2 | 1 | 0 | |
| 1 | 1 | 1 | A3/A4 |
| 1 | 1 | 0 | B5-R |
| 1 | 0 | 1 | A5-R |
| 1 | 0 | 0 | A3/A4 |
| 0 | 1 | 1 | Card size |
| 0 | 1 | 0 | A4-R/A5 |
| 0 | 0 | 1 | B6-R |
| 0 | 0 | 0 | B4-R/B5 |

[FAX] button: ON ([FAX] LED: ON)

| Digital key | Button | Items to check | Contents | |
|---|--------|--|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [1] | A | - | - | - |
| | B | - | - | - |
| | C | 24 V power supply | Power ON | Power OFF |
| | D | IPC board connection | Not connected | Connected |
| | E | - | - | - |
| | F | Polygonal motor rotation status (Motor is rotating at Output Mode (03)) | Abnormal rotation | Normal rotation |
| | G | Auger lock switch | Lock | Unlock |
| | H | Toner cartridge installation switch | OFF | ON |
| [2] | A | Registration sensor | Paper present | No paper |
| | B | Exit sensor | Paper present | No paper |
| | C | Auto-toner sensor connection | Not connected | Connected |
| | D | Front cover opening/closing switch | Cover opened | Cover closed |
| | E | - | - | - |
| | F | Side cover opening/closing sensor | Cover opened | Cover closed |
| | G | Transfer cover opening/closing switch | Cover opened | Cover closed |
| | H | Main motor rotation status (Motor is rotating at Output Mode (03)) | Abnormal rotation | Normal rotation |
| [3] | A | - | - | - |
| | B | Key copy counter connection | Not connected | Connected |
| | C | Job Separator upper stack sensor (When Job Separator is installed) | Paper full | Paper not full |
| | | Offset Tray separate sensor (When Offset Tray is installed) | Separator at home position | Other than home position |
| | D | Fuser unit connection | Fuser unit installed | Fuser unit not installed |
| | E | Bridge unit transport sensor-2 (When bridge unit is installed) | No paper | Paper present |
| | F | Bridge unit cover opening/closing detection switch (When Bridge unit is installed) | Cover opened | Cover closed |
| | | Job Separator cover switch (When Job Separator is installed) | Cover opened | Cover closed |
| | | Offset Tray cover switch (When Offset Tray is installed) | Cover opened | Cover closed |
| | G | Bridge unit paper full detection sensor (When bridge unit is installed) | Paper not full | Paper full |
| | | Job Separator lower stack sensor (When Job Separator is installed) | Paper full | Paper not full |
| | | Offset Tray stack sensor (When Offset Tray is installed) | Paper full | Paper not full |
| | H | Bridge unit transport sensor-1 (When bridge unit is installed) | No paper | Paper present |
| Job Separator feed sensor (When Job Separator is installed) | | Paper present | No paper | |
| Offset Tray feed sensor (When Offset Tray is installed) | | Paper present | No paper | |
| [4] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | - | - | - |
| | F | Bypass feed sensor | No paper | Paper present |
| | G | - | - | - |
| | H | High-voltage power supply abnormality (shutdown) detection | Normal | Abnormal |

| Digital key | Button | Items to check | Contents | |
|-------------|--------|-------------------------------|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [5] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | - | - | - |
| | F | RADF connection | RADF connected | Not connected |
| | G | Platen sensor | Platen cover opened | Platen cover closed |
| | H | Carriage home position sensor | Carriage at home position | Other than home position |
| [6] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | APS sensor (APS-R) | No original | Original present |
| | E | APS sensor (APS-C) | No original | Original present |
| | F | APS sensor (APS-3) | No original | Original present |
| | G | APS sensor (APS-2) | No original | Original present |
| | H | APS sensor (APS-1) | No original | Original present |
| [7] | A | RADF tray sensor | Original present | No original |
| | B | RADF empty sensor | Original present | No original |
| | C | RADF jam access cover switch | Cover opened | Cover closed |
| | D | RADF opening/closing sensor | RADF opened | RADF closed |
| | E | RADF exit sensor | Original present | No original |
| | F | RADF reverse sensor | Original present | No original |
| | G | RADF read sensor | Original present | No original |
| | H | RADF registration sensor | Original present | No original |
| [8] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | RADF original length sensor | Original present | No original |
| | F | RADF original width sensor-1 | Original present | No original |
| | G | RADF original width sensor-2 | Original present | No original |
| | H | RADF original width sensor-3 | Original present | No original |



| Digital key | Button | Items to check | Contents | |
|-------------|--------|--|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [9] | A | Bridge unit/Job Separator/Offset Tray connection detection-3 | Refer to table 2 | |
| | B | Bridge unit/Job Separator/Offset Tray connection detection-2 | Refer to table 2 | |
| | C | Bridge unit/Job Separator/Offset Tray connection detection-1 | Refer to table 2 | |
| | D | - | - | - |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |
| [0] | A | Dongle (for Printer/Scanner kit (GM-2020 or 2030)) | Connectable | Not connectable |
| | B | Dongle (for Printer kit (GM-1020 or 1030)) | Connectable | Not connectable |
| | C | Dongle (for Scanner upgrade kit (GM-3020 or 3030)) | Connectable | Not connectable |
| | D | Dongles for other equipments/Other USB devices | Connectable | Not connectable |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |

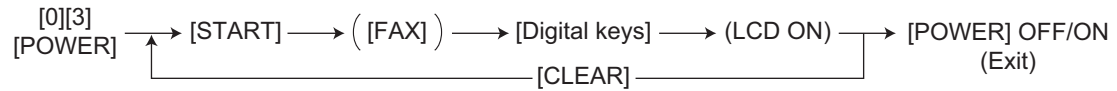
Table 2. Connecting status of additional options at inner area of the equipment

| | Bridge unit | Job Separator | Offset Tray | None |
|--|----------------------|----------------------|----------------------|----------------------|
| Bridge unit/Job Separator/Offset Tray connection detection-3 | Normal display | Highlighting display | Highlighting display | Highlighting display |
| Bridge unit/Job Separator/Offset Tray connection detection-2 | Highlighting display | Highlighting display | Normal display | Highlighting display |
| Bridge unit/Job Separator/Offset Tray connection detection-1 | Normal display | Normal display | Normal display | Highlighting display |

2.2.2 Input check (Test mode 03) (e-STUDIO202L/232/282)

The status of each input signal can be checked by pressing the [FAX] button, and the digital keys in the test mode (03).

<Operation procedure>



Note:



Initialization is performed before the equipment enters the test mode.





Fig. 2-3 Example of display during input check

Items to be checked and the condition of the equipment when the buttons [A] to [H] are highlighted are listed in the following pages.

[FAX] button: OFF ([FAX] LED: OFF)

| Digital key | Button | Items to check | Contents | |
|-------------|--------|---|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [1] | A | - | - | - |
| | B | LCF connection | Not connected | Connected |
| | C | Bypass unit connection | Not connected | Connected |
| | D | Bypass paper sensor | No paper | Paper present |
| | E | ADU connection | Not connected | Connected |
| | F | ADU opening/closing switch | ADU opened | ADU closed |
| | G | ADU exit sensor | Paper present | No paper |
| | H | ADU entrance sensor | Paper present | No paper |
| [2] | A | PFP upper drawer detection switch | Drawer not installed | Drawer present |
| | B | - | - | - |
| | C | PFP upper drawer paper stock sensor | Paper almost empty | Paper present |
| | D | PFP upper drawer feed sensor | Paper present | No paper |
| | E | PFP connection | Not connected | Connected |
| | F | PFP side cover opening/closing switch | Cover opened | Cover closed |
| | G | PFP upper drawer empty sensor | No paper | Paper present |
| | H | PFP upper drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [3] | A | LCF tray bottom sensor | Tray at bottom position | Other than bottom position |
| | B | LCF standby side paper mis-stacking sensor | Correct stacking | Incorrect stacking |
| | C | - | - | - |
| | D | - | - | - |
| | E | LCF drawer detection switch | Drawer not installed | Drawer present |
| | F | - | - | - |
| | G | - | - | - |
| | H | LCF feed side paper stock sensor | Paper almost empty | Paper present |
| [4] | A | PFP lower drawer detection sensor | Drawer not installed | Drawer present |
| | B | - | - | - |
| | C | PFP lower drawer paper stock sensor | Paper almost empty | Paper present |
| | D | PFP lower drawer feed sensor | Paper present | No paper |
| | E | PFP motor rotation status (Motor is rotating at output mode (03)) | Abnormal rotation | Normal rotation |
| | F | - | - | - |
| | G | PFP lower drawer empty sensor | No paper | Paper present |
| | H | PFP lower drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |

| Digital key | Button | Items to check | Contents | |
|-------------|--------|---|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [5] | A | LCF end fence home position sensor | Fence home position | Other than home position |
| | B | LCF end fence stop position sensor | Fence stop position | Other than stop position |
| | C | LCF standby side empty sensor | No paper | Paper present |
| | D | LCF side cover opening/closing switch | Cover closed | Cover opened |
| | E | LCF motor rotation status (Motor is rotating at output mode (03)) | Abnormal rotation | Normal rotation |
| | F | LCF tray-up sensor | Tray at upper limit position | Other than upper limit position |
| | G | LCF feed sensor | No paper | Paper present |
| | H | LCF feed side empty sensor | Paper present | No paper |
| [6] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | 1st transport sensor | Paper present | No paper |
| | F | - | - | - |
| | G | Upper drawer empty sensor | No paper | Paper present |
| | H | Upper drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [7] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | 2nd transport sensor | Paper present | No paper |
| | F | - | - | - |
| | G | Lower drawer empty sensor | No paper | Paper present |
| | H | Lower drawer tray-up sensor | Tray at upper limit position | Other than upper limit position |
| [8] | A | - | - | - |
| | B | Bypass feed paper width sensor-2 | Refer to table 1 | |
| | C | Bypass feed paper width sensor-1 | Refer to table 1 | |
| | D | Bypass feed paper width sensor-0 | Refer to table 1 | |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |
| [9] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | Upper drawer detection switch | Drawer not installed | Drawer present |
| | E | Upper drawer paper stock sensor | Paper almost empty | Paper present |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |





| Digital key | Button | Items to check | Contents | |
|-------------|--------|---------------------------------|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [0] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | Lower drawer detection switch | Drawer not installed | Drawer present |
| | E | Lower drawer paper stock sensor | Paper almost empty | Paper present |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |



Table 1. Relation between the status of the bypass paper width sensor and paper size (width).

| Bypass paper-width sensor | | | Paper-width size |
|---------------------------|---|---|------------------|
| 2 | 1 | 0 | |
| 1 | 1 | 1 | A3/A4 |
| 1 | 1 | 0 | B5-R |
| 1 | 0 | 1 | A5-R |
| 1 | 0 | 0 | A3/A4 |
| 0 | 1 | 1 | Card size |
| 0 | 1 | 0 | A4-R/A5 |
| 0 | 0 | 1 | B6-R |
| 0 | 0 | 0 | B4-R/B5 |

[FAX] button: ON ([FAX] LED: ON)

| Digital key | Button | Items to check | Contents | |
|---|--------|--|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [1] | A | - | - | - |
| | B | - | - | - |
| | C | 24 V power supply | Power ON | Power OFF |
| | D | IPC board connection | Not connected | Connected |
| | E | - | - | - |
| | F | Polygonal motor rotation status (Motor is rotating at Output Mode (03)) | Abnormal rotation | Normal rotation |
| | G | Auger lock switch | Lock | Unlock |
| | H | Toner cartridge installation switch | OFF | ON |
| [2] | A | Registration sensor | Paper present | No paper |
| | B | Exit sensor | Paper present | No paper |
| | C | Auto-toner sensor connection | Not connected | Connected |
| | D | Front cover opening/closing switch | Cover opened | Cover closed |
| | E | - | - | - |
| | F | Side cover opening/closing sensor | Cover opened | Cover closed |
| | G | Transfer cover opening/closing switch | Cover opened | Cover closed |
| | H | Main motor rotation status (Motor is rotating at Output Mode (03)) | Abnormal rotation | Normal rotation |
| [3] | A | - | - | - |
| | B | Key copy counter connection | Not connected | Connected |
| | C | Job Separator upper stack sensor (When Job Separator is installed) | Paper full | Paper not full |
| | | Offset Tray separate sensor (When Offset Tray is installed) | Separator at home position | Other than home position |
| | D | Fuser unit connection | Fuser unit installed | Fuser unit not installed |
| | E | Bridge unit transport sensor-2 (When bridge unit is installed) | No paper | Paper present |
| | F | Bridge unit cover opening/closing detection switch (When Bridge unit is installed) | Cover opened | Cover closed |
| | | Job Separator cover switch (When Job Separator is installed) | Cover opened | Cover closed |
| | | Offset Tray cover switch (When Offset Tray is installed) | Cover opened | Cover closed |
| | G | Bridge unit paper full detection sensor (When bridge unit is installed) | Paper not full | Paper full |
| | | Job Separator lower stack sensor (When Job Separator is installed) | Paper full | Paper not full |
| | | Offset Tray stack sensor (When Offset Tray is installed) | Paper full | Paper not full |
| | H | Bridge unit transport sensor-1 (When bridge unit is installed) | No paper | Paper present |
| Job Separator feed sensor (When Job Separator is installed) | | Paper present | No paper | |
| Offset Tray feed sensor (When Offset Tray is installed) | | Paper present | No paper | |
| [4] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | - | - | - |
| | F | Bypass feed sensor | No paper | Paper present |
| | G | - | - | - |
| | H | High-voltage power supply abnormality (shutdown) detection | Normal | Abnormal |



| Digital key | Button | Items to check | Contents | |
|-------------|--------|-------------------------------|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [5] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | - | - | - |
| | F | RADF connection | RADF connected | Not connected |
| | G | Platen sensor | Platen cover opened | Platen cover closed |
| | H | Carriage home position sensor | Carriage at home position | Other than home position |
| [6] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | APS sensor (APS-R) | No original | Original present |
| | E | APS sensor (APS-C) | No original | Original present |
| | F | APS sensor (APS-3) | No original | Original present |
| | G | APS sensor (APS-2) | No original | Original present |
| | H | APS sensor (APS-1) | No original | Original present |
| [7] | A | RADF tray sensor | Original present | No original |
| | B | RADF empty sensor | Original present | No original |
| | C | RADF jam access cover switch | Cover opened | Cover closed |
| | D | RADF opening/closing sensor | RADF opened | RADF closed |
| | E | RADF exit sensor | Original present | No original |
| | F | RADF reverse sensor | Original present | No original |
| | G | RADF read sensor | Original present | No original |
| | H | RADF registration sensor | Original present | No original |
| [8] | A | - | - | - |
| | B | - | - | - |
| | C | - | - | - |
| | D | - | - | - |
| | E | RADF original length sensor | Original present | No original |
| | F | RADF original width sensor-1 | Original present | No original |
| | G | RADF original width sensor-2 | Original present | No original |
| | H | RADF original width sensor-3 | Original present | No original |





| Digital key | Button | Items to check | Contents | |
|-------------|--------|--|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [9] | A | Bridge unit/Job Separator/Offset Tray connection detection-3 | Refer to table 2 | |
| | B | Bridge unit/Job Separator/Offset Tray connection detection-2 | Refer to table 2 | |
| | C | Bridge unit/Job Separator/Offset Tray connection detection-1 | Refer to table 2 | |
| | D | - | - | - |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |
| [0] | A | Dongle (for Printer/Scanner kit (GM-2020 or 2030)) | Connectable | Not connectable |
| | B | Dongle (for Printer kit (GM-1020 or 1030)) | Connectable | Not connectable |
| | C | Dongle (for Scanner upgrade kit (GM-3020 or 3030)) | Connectable | Not connectable |
| | D | Dongles for other equipments/Other USB devices | Connectable | Not connectable |
| | E | - | - | - |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |

Table 2. Connecting status of additional options at inner area of the equipment

| | Bridge unit | Job Separator | Offset Tray | None |
|--|----------------------|----------------------|----------------------|----------------------|
| Bridge unit/Job Separator/Offset Tray connection detection-3 | Normal display | Highlighting display | Highlighting display | Highlighting display |
| Bridge unit/Job Separator/Offset Tray connection detection-2 | Highlighting display | Highlighting display | Normal display | Highlighting display |
| Bridge unit/Job Separator/Offset Tray connection detection-1 | Normal display | Normal display | Normal display | Highlighting display |

[FAX] button: OFF/ [COPY] button: ON ([FAX] LED: OFF/ [COPY] LED: ON)

| Digital key | Button | Items to check | Contents | |
|-------------|--------|---|---|--|
| | | | Highlighted display e.g.  | Normal display e.g.  |
| [0] | A | Dongle (for Printer/Scanner kit (GM-2070 or 2080U)) Connected | Connectable | Not connectable |
| | B | Dongle (for Printer kit (GM-1070 or 1080U)) Connected | Connectable | Not connectable |
| | C | Dongle (for Scanner kit (GM-4070 or 4080U)) Connected | Connectable | Not connectable |
| | D | Dongles for other equipments/Other USB devices Connected | Connectable | Not connectable |
| | E | Judgement for acceptable USB storage device (*1) | Acceptable | Not acceptable |
| | F | - | - | - |
| | G | - | - | - |
| | H | - | - | - |

*1

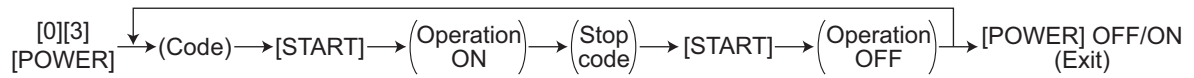
- Be sure to install the USB storage device to the equipment and check if the device can be used with this code.
- Be sure to turn OFF the write protection (the function to prevent data from erasure by the accidental recording or deleting) of the USB storage device before performing the check, otherwise this code cannot be used.
- It may take some time (2 sec. to 10 sec.) before this check is completed depending on the USB storage device.

2.2.3 Output check (test mode 03)

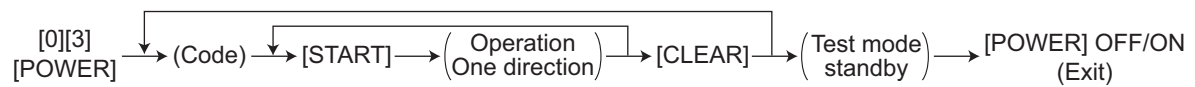
Status of the output signals can be checked by keying in the following codes in the test mode 03.

<Operation procedure>

Procedure 1



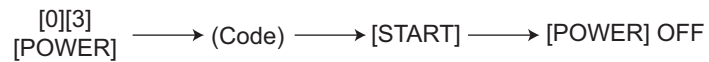
Procedure 2



Procedure 3



Procedure 4



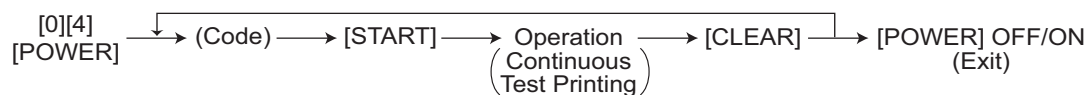
| Code | Function | Code | Function | Procedure |
|------|--|------|---------------------------|-----------|
| 101 | Main motor ON (operational without developer unit) | 151 | Code No. 101 function OFF | 1 |
| 102 | Toner motor ON (normal rotation) | 152 | Code No. 102 function OFF | 1 |
| 103 | Polygonal motor ON (600 dpi) | 153 | Code No. 103 function OFF | 1 |
| 108 | Registration clutch ON | 158 | Code No. 108 function OFF | 1 |
| 109 | PFP motor ON | 159 | Code No. 109 function OFF | 1 |
| 110 | ADU motor ON (low speed) | 160 | Code No. 110 function OFF | 1 |
| 118 | Laser ON | 168 | Code No. 118 function OFF | 1 |
| 120 | Exit motor ON (normal rotation) | 170 | Code No. 120 function OFF | 1 |
| 121 | Exit motor ON (reverse rotation) | 171 | Code No. 121 function OFF | 1 |
| 122 | LCF motor ON | 172 | Code No. 122 function OFF | 1 |
| 177 | Offset Tray motor ON (reciprocating movement) | | | 2 |
| 201 | Upper drawer feed clutch ON/OFF | | | 3 |
| 202 | Lower drawer feed clutch ON/OFF | | | 3 |
| 203 | Upper transport clutch ON/OFF | | | 3 |
| 204 | Bypass feed clutch ON/OFF | | | 3 |
| 205 | Middle transport clutch ON/OFF | | | 3 |
| 206 | LCF pickup solenoid ON/OFF | | | 3 |
| 207 | LCF end fence reciprocating movement | | | 2 |
| 208 | LCF end fence motor ON/OFF | | | 3 |
| 209 | LCF feed clutch ON/OFF | | | 3 |
| 210 | LCF transport clutch ON/OFF | | | 3 |
| 217 | Lower transport clutch ON/OFF | | | 3 |
| 218 | Key copy counter count up | | | 2 |
| 222 | ADU clutch ON/OFF | | | 3 |
| 225 | PFP transport clutch ON/OFF | | | 3 |
| 226 | PFP upper drawer feed clutch ON/OFF | | | 3 |
| 228 | PFP lower drawer feed clutch ON/OFF | | | 3 |
| 232 | Bridge unit gate solenoid ON/OFF | | | 3 |
| 234 | Bypass pickup solenoid ON/OFF | | | 3 |
| 235 | Discharge LED ON/OFF | | | 3 |
| 236 | Exhaust fan ON/OFF (low speed) | | | 3 |
| 237 | Exhaust fan ON/OFF (high speed) | | | 3 |
| 242 | Upper drawer tray-up motor ON (tray up) | | | 2 |
| 243 | Lower drawer tray-up motor ON (tray up) | | | 2 |
| 248 | Developer bias [+DC] ON/OFF | | | 3 |
| 249 | Developer bias [-DC] ON/OFF | | | 3 |
| 252 | Main charger ON/OFF | | | 3 |
| 253 | Separation bias ON/OFF | | | 3 |
| 255 | Transfer guide bias ON/OFF | | | 3 |
| 256 | Transfer transformer ON/OFF | | | 3 |
| 261 | Scan motor ON (Automatically stops at limit position; speed can be changed with the [ZOOM] button) | | | 2 |
| 264 | SLG board cooling fan 1 ON/OFF | | | 3 |
| 265 | SLG board cooling fan 2 ON/OFF | | | 3 |
| 267 | Scanner exposure lamp ON/OFF | | | 3 |

| Code | Function | Procedure |
|-------------|--|------------------|
| 271 | LCF tray-up motor (up/down) | 2 |
| 278 | PFP upper drawer tray-up motor ON (tray up) | 2 |
| 280 | PFP lower drawer tray-up motor ON (tray up) | 2 |
| 281 | RADF feed motor ON/OFF (normal rotation) | 3 |
| 282 | RADF feed motor ON/OFF (reverse rotation) | 3 |
| 283 | RADF read motor ON/OFF (normal rotation) | 3 |
| 284 | RADF reverse motor ON/OFF (normal rotation) | 3 |
| 285 | RADF reverse motor ON/OFF (reverse rotation) | 3 |
| 289 | Internal cooling fan 1 ON/OFF (high speed) | 3 |
| 290 | Internal cooling fan 1 ON/OFF (low speed) | 3 |
| 294 | RADF reverse solenoid ON/OFF | 3 |
| 295 | Power OFF mode (for 200 V series) | 4 |
| 297 | RADF fan motor ON/OFF | 3 |
| 410 | Internal cooling fan 2 ON/OFF (low speed) | 3 |
| 411 | Internal cooling fan 2 ON/OFF (high speed) | 3 |

2.2.4 Test print mode (test mode 04)

The embedded test pattern can be printed out by keying in the following codes in the test print mode (04).

<Operation procedure>



Notes:

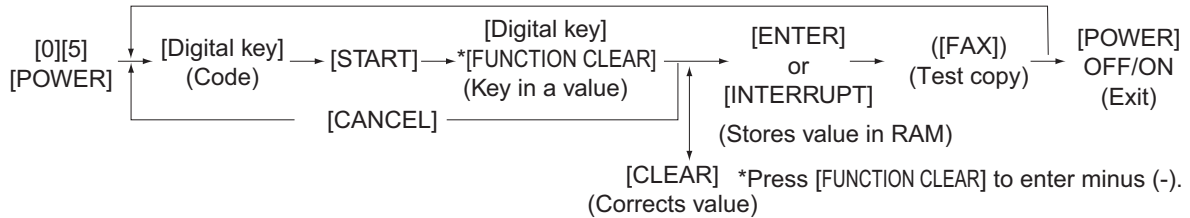
1. When an error occurs, it is indicated on the panel, but the recovery operation is not performed. Turn OFF the power and then back ON to clear the error.
2. During test printing, the [CLEAR] button is disabled when "Wait adding toner" is displayed.

| Code | Types of test pattern | Remarks |
|------|---|-------------------------------------|
| 111 | Primary scanning direction 33 gradation steps | Error diffusion |
| 113 | Secondary scanning direction 33 gradation steps | Error diffusion |
| 142 | Grid pattern | Pattern width: 2 dots, Pitch: 10 mm |

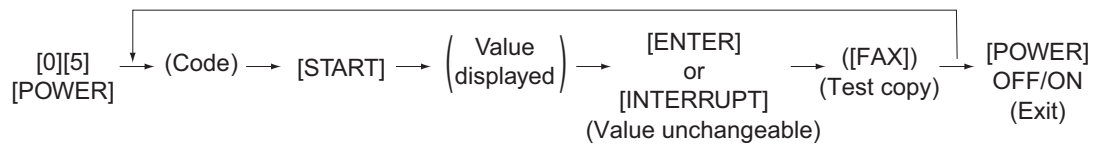
2.2.5 Adjustment mode (05) (e-STUDIO200L/230/280)

Items in the adjustment mode list in the following pages can be corrected or changed in the adjustment mode (05). Turn ON the power with pressing the digital keys [0] and [5] simultaneously in order to enter this mode.

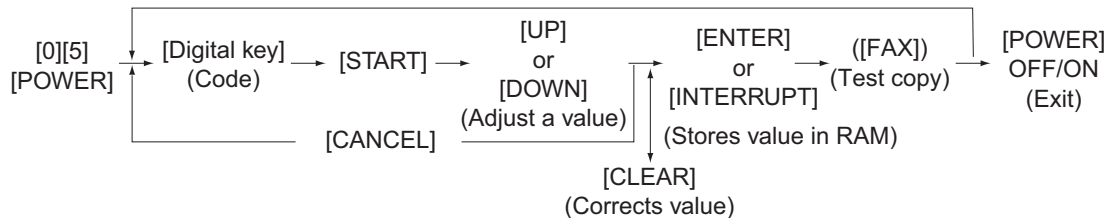
Procedure 1



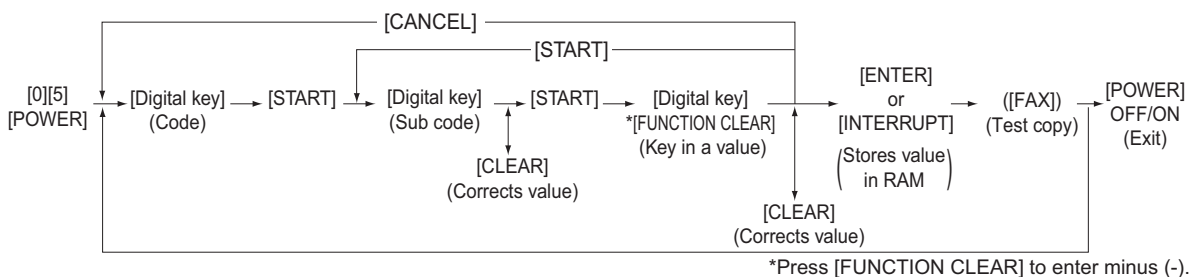
Procedure 2



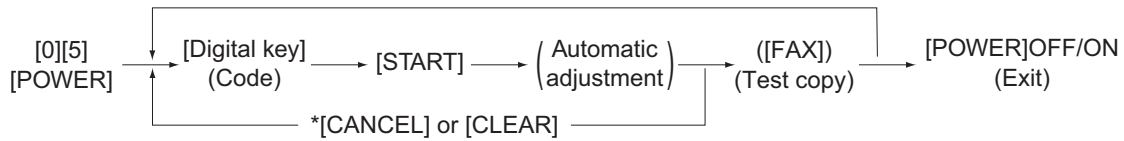
Procedure 3



Procedure 4

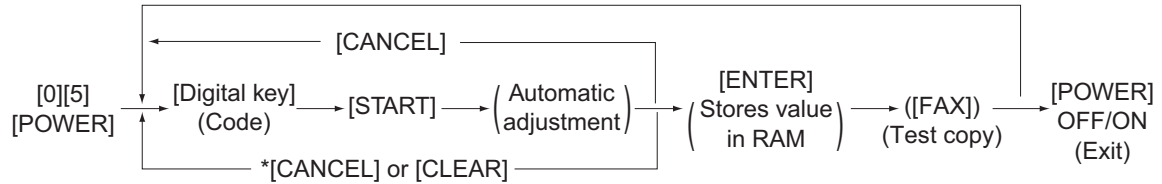


Procedure 6



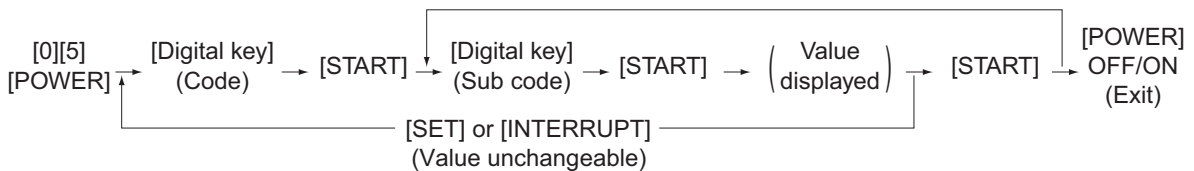
* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 7

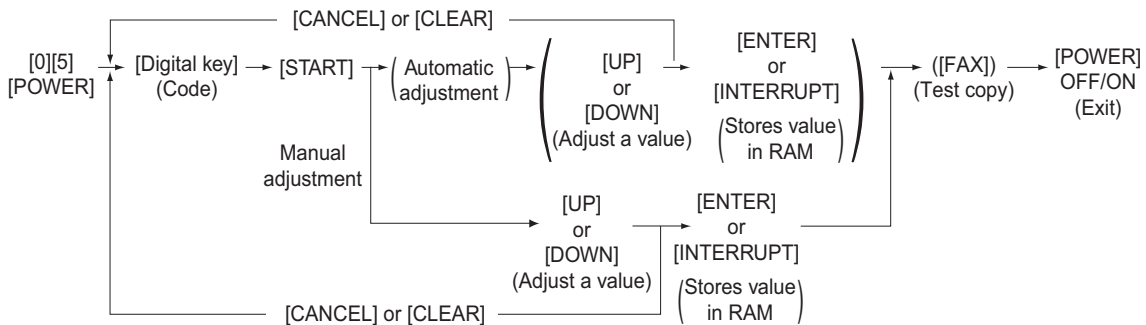


* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 10



Procedure 17



* When the “storing is not performed within 2 minutes after pressing the [START] button at the manual adjustment, the “automatic adjustment” starts automatically.

Note:

The fuser roller temperature control at the adjustment mode is different from that at the normal state. Therefore, the problem of fusing efficiency may be occurred in the test copy at the adjustment mode. In that case, turn ON the power normally, leave the equipment for approx. 3 minutes after it has become ready state and then start up the adjustment mode again.

Test print pattern in Adjustment Mode (05)

Operation: One test print is printed out when the [FAX] button is pressed after the code is keyed in at Standby Screen.

| Code | Types of test pattern | Remarks |
|-------------|--------------------------------|---|
| 1 | Grid pattern | Refer to 3.2.3 Printer related adjustment |
| 3 | Grid pattern (Duplex printing) | Refer to 3.2.3 Printer related adjustment |

Notes:

- The digit after the hyphen in “Code” of the following table is a sub code.
- In “RAM”, the NVRAM of the board in which the data of each code is stored is indicated. “M” stands for the LGC board and “SYS” stands for the SYS board.

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | |
|---|----------------|---|----------|----------------------------|-----|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 200 | Developer | Automatic adjustment of auto-toner sensor (Fuser heater ON) | ALL | - | - | As the value increases, the sensor output increases correspondingly. The value starts changing approx. 2 minutes after this adjustment was started and is automatically set in the range of 2.35 to 2.45 V. * Selection is disable when developer unit is not installed. (Chap. 3.1) | 17 |
| 201 | Developer | Correction of auto-toner sensor (Fuser heater ON) | ALL | 164 <0-255> | M | Corrects the control value of the auto-toner sensor setup in 05-200. * Selection is disable when developer unit is not installed. | 3 |
| 205 | Developer | Developer bias DC output adjustment | ALL | 135 <0-255> | M | As the value increases, the transformer output increases correspondingly. Remove the developer unit and install the adjustment jig to make adjustment. (Chap. 3.6) | 3 |
| 210 | Charger | Main charger grid bias output adjustment | ALL | 90 <0-255> | M | | 3 |
| 220 | Transfer | Transfer transformer DC output adjustment (H) | ALL | 165 <0-255> | M | | 3 |
| 221 | Transfer | Transfer transformer DC output adjustment (C) | ALL | 179 <0-255> | M | | 3 |
| 222 | Transfer | Transfer transformer DC output adjustment (L) | ALL | 126 <0-255> | M | | 3 |
| 233 | Separation | Separation transformer DC output adjustment (H) | ALL | 64 <0-255> | M | | 3 |
| 234 | Separation | Separation transformer DC output adjustment (C) | ALL | 65 <0-255> | M | | 3 |
| 235 | Separation | Separation transformer DC output adjustment (L) | ALL | 46 <0-255> | M | | 3 |
| 280 | Process | Forced performing of idling for toner recycle | ALL | - | M | | Perform this adjustment before the replacement of the developer material. (The toner is forcibly removed from the cleaner.) |
| 286 | Laser | Laser power adjustment | ALL | 63 <0-255> | M | When the value increases, the laser output increases correspondingly. | 3 |
| 305 | Scanner | Image location adjustment of secondary scanning direction (scanner section) | ALL | 125 <92-164> | SYS | When the value increases by “1”, the image shifts by approx. 0.137 mm toward the trailing edge of the paper. | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|-----------------------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 306 | Scanner | Image location adjustment of primary scanning direction (scanner section) | | ALL | 156 <0-255> | SYS | When the value increases by "1", the image shifts by approx. 0.0846 mm toward the front side of the paper. | 1 |
| 308 | Scanner | Distortion mode | | ALL | - | - | Moves carriages to the adjusting position. (Chap. 3.2.4) | 6 |
| 340 | Scanner | Reproduction ratio adjustment of secondary scanning direction (scanner section) | | ALL | 129 <0-255> | SYS | When the value increases by "1", the reproduction ratio in the secondary scanning direction (vertical to paper feeding direction) increases by approx. 0.223%. | 1 |
| 354 | RADF | Adjustment of RADF paper alignment | for single - sided original | ALL | 10 <0-20> | SYS | When the value increases by "1", the aligning amount increases by approx. 0.5 mm. | 1 |
| 355 | | | for double sided original | ALL | 10 <0-20> | SYS | | 1 |
| 356 | RADF | Automatic adjustment of RADF sensor and EEPROM initialization | | ALL | - | SYS | Performs the adjustment and initialization when the RADF board or RADF sensor is replaced. | 6 |
| 357 | RADF | Fine adjustment of RADF transport speed | | ALL | 50 <0-100> | SYS | When the value increases by "1", the reproduction ratio of the secondary scanning direction when using the RADF increases by approx. 0.1%. | 1 |
| 358 | RADF | RADF sideways deviation adjustment | | ALL | 128 <0-255> | SYS | When the value increases by "1", the image of original fed from the RADF shifts toward the rear side of paper by approx. 0.0846 mm. | 1 |
| 359 | Scanner | Carriage position adjustment during scanning from RADF | | ALL | 128 <0-255> | SYS | When the value increases by "1", the carriage position when using the RADF shifts by approx. 0.1 mm toward the original feeding side. | 1 |
| 365 | RADF | RADF leading edge position adjustment | for single - sided original | ALL | 50 <0-100> | SYS | When the value increases by "1", the copied image of original fed from the RADF shifts toward the trailing edge of paper by approx. 0.1 mm. | 1 |
| 366 | | | for double sided original | ALL | 50 <0-100> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | |
|---|----------------|---|-------------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 367 | RADF | RADF original guide width adjustment (Minimum) | ALL | - | - | Stores the current width of RADF original guide by keying in this code with the guide set at the minimum width. Perform this adjustment when the RADF board or volume is replaced, or when the code (05-356) is performed. | 6 |
| 368 | RADF | RADF original guide width adjustment (Maximum) | ALL | - | - | Stores the current width of RADF original guide by keying in this code with the guide set at the maximum width. Perform this adjustment when the RADF board or volume is replaced, or when the code (05-356) is performed. | 6 |
| 401 | Laser | Fine adjustment of polygonal motor rotation speed (adjustment of primary scanning direction reproduction ratio) | PRT | 136 <0-255> | M | When the value increases by "1", the reproduction ratio of primary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/step) | 1 |
| 405 | | | PPC | 134 <0-255> | M | | 1 |
| 410 | Laser | Adjustment of primary scanning laser writing start position. | PPC | 128 <0-255> | M | When the value increases by "1", the writing start position shifts to the front side by approx. 0.0423 mm. | 1 |
| 411 | | | PRT | 153 <0-255> | M | | 1 |
| 421 | Drive | Adjustment of secondary scanning direction reproduction ratio (fine adjustment of main motor speed) | PPC/ PRT | 129 <0-255> | M | When the value increases by "1", the reproduction ratio of secondary scanning direction increases by approx. 0.04%. | 1 |
| 422 | | | FAX | 139 <0-255> | M | | 1 |
| 424 | Drive | Fine adjustment of exit motor speed | PPC/ PRT | 160 <0-255> | M | When the value increases by "1", the rotation becomes faster by approx. 0.05%. | 1 |
| 425 | | | FAX | 121 <0-255> | M | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|-------------------|----------------------------------|----------------------------|---|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 430 | Image | Top margin adjustment (blank area at the leading edge of the paper) | PPC | 0 <0-255> | M | When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm. | 1 | |
| 431 | Image | Left margin adjustment (blank area at the left of the paper along the paper feeding direction) | PPC | 0 <0-255> | M | | 1 | |
| 432 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction) | PPC | 0 <0-255> | M | | 1 | |
| 433 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper) | PPC | 0 <0-255> | M | | 1 | |
| 434-0 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper)/ Reverse side at duplexing | PPC/ PRT | 29 <0-255> | M | | 4 | |
| 434-1 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction)/Reverse side at duplexing | PPC/ PRT | 29 <0-255> | M | | 4 | |
| 435 | Image | Top margin adjustment (blank area at the leading edge of the paper) | PRT | 24 <0-255> | M | | 1 | |
| 436 | Image | Left margin adjustment (blank area at the left of the paper along the paper feeding direction) | PRT | 0 <0-255> | M | 1 | | |
| 437 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction) | PRT | 0 <0-255> | M | 1 | | |
| 438 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper) | PRT | 0 <0-255> | M | 1 | | |
| 440 | Laser | Adjustment of secondary scanning laser writing start position | Upper drawer | ALL | 8 <Refer to content> | M | When the value increases by "1", the image shifts toward the leading edge of the paper by approx. 0.2 mm. <Acceptable value> e-STUDIO230, e-STUDIO280: 0-15 e-STUDIO200L, e-STUDIO230L/S, e-STUDIO280S: 0-40 | 1 |
| 441 | | | Lower drawer | ALL | 21 <0-40> | M | | 1 |
| 442 | | | Bypass feeding | ALL | 8 <0-15> | M | | 1 |
| 443 | | | LCF | ALL | 8 <0-15> | M | | 1 |
| 444 | | | PFP | ALL | 8 <0-15> | M | | 1 |
| 445 | | | Duplex feeding | ALL | 8 <0-15> | M | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|-------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 448-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP upper drawer/Plain paper) | Long size | ALL | 10 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 448-1 | | | Middle size | ALL | 10 <0-63> | M | | 4 |
| 448-2 | | | Short size | ALL | 8 <0-63> | M | | 4 |
| 449-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP lower drawer/Plain paper) | Long size | ALL | 10 <0-63> | M | | 4 |
| 449-1 | | | Middle size | ALL | 10 <0-63> | M | | 4 |
| 449-2 | | | Short size | ALL | 8 <0-63> | M | | 4 |
| 450-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Upper drawer/Plain paper) | Long size | ALL | 17 <0-63> | M | 4 | |
| 450-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 450-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 452-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Lower drawer/Plain paper) | Long size | ALL | 12 <0-63> | M | 4 | |
| 452-1 | | | Middle size | ALL | 10 <0-63> | M | 4 | |
| 452-2 | | | Short size | ALL | 10 <0-63> | M | 4 | |
| 455-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Duplex feeding/Plain paper) | Long size | ALL | 20 <0-63> | M | 4 | |
| 455-1 | | | Middle size | ALL | 20 <0-63> | M | 4 | |
| 455-2 | | | Short size | ALL | 30 <0-63> | M | 4 | |
| 457 | Paper feeding | Paper aligning amount adjustment at the registration section (LCF/Plain paper) | | ALL | 8 <0-63> | M | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|-------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 458-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Plain paper) | Long size | ALL | 26 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter * Postcard is supported only for JPN model. | 4 |
| 458-1 | | | Middle size | ALL | 26 <0-63> | M | | 4 |
| 458-2 | | | Short size | ALL | 25 <0-63> | M | | 4 |
| 460-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 1) | Long size | ALL | 26 <0-63> | M | | 4 |
| 460-1 | | | Middle size | ALL | 26 <0-63> | M | | 4 |
| 460-2 | | | Short size | ALL | 26 <0-63> | M | | 4 |
| 461-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 2) | Long size | ALL | 17 <0-63> | M | 4 | |
| 461-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 461-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 462-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 3) | Long size | ALL | 17 <0-63> | M | 4 | |
| 462-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 462-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 462-3 | | | Postcard | ALL | 14 <0-63> | M | 4 | |
| 463-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/OHP film) | Long size | ALL | 26 <0-63> | M | 4 | |
| 463-1 | | | Middle size | ALL | 26 <0-63> | M | 4 | |
| 463-2 | | | Short size | ALL | 26 <0-63> | M | 4 | |
| 464-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding /Envelope) | Long size | ALL | 26 <0-63> | M | 4 | |
| 464-1 | | | Middle size | ALL | 26 <0-63> | M | 4 | |
| 464-2 | | | Short size | ALL | 26 <0-63> | M | 4 | |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|---------------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 466-0 | Paper feeding | Adjustment of paper pushing amount/ Bypass feeding | Plain paper | ALL | 0 <0-255> | M | When the value increases by "1", the driving speed of bypass feed roller increases by approx. 0.2 ms when the paper transport is started from the registration section. * Postcard is supported only for JPN model. | 4 |
| 466-1 | | | Postcard | ALL | 0 <0-255> | M | | 4 |
| 466-3 | | | Envelope | ALL | 0 <0-255> | M | | 4 |
| 466-4 | | | Thick paper 1 | ALL | 0 <0-255> | M | | 4 |
| 466-5 | | | Thick paper 2 | ALL | 0 <0-255> | M | | 4 |
| 466-6 | | | Thick paper 3 | ALL | 0 <0-255> | M | | 4 |
| 466-7 | | | OHP film | ALL | 0 <0-255> | M | | 4 |
| 468-0 | Finisher | Fine adjustment of binding position/ folding position | A4-R/LT-R | ALL | 0 <-14-14> | M | When the value increases by "1", the binding/folding position shifts toward the right page by 0.25 mm. | 4 |
| 468-1 | | | B4 | ALL | 0 <-14-14> | M | | 4 |
| 468-2 | | | A3/LD | ALL | 0 <-14-14> | M | | 4 |
| 469-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Upper drawer) | Thick paper 1 Long size | ALL | 20 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 469-1 | | | Thick paper 1 Middle size | ALL | 20 <0-63> | M | | 4 |
| 469-2 | | | Thick paper 1 Short size | ALL | 20 <0-63> | M | | 4 |
| 469-3 | | | Thick paper 2 Long size | ALL | 20 <0-63> | M | | 4 |
| 469-4 | | | Thick paper 2 Middle size | ALL | 22 <0-63> | M | | 4 |
| 469-5 | | | Thick paper 2 Short size | ALL | 19 <0-63> | M | | 4 |
| 470-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Lower drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | 4 | |
| 470-1 | | | Middle size | ALL | 22 <0-63> | M | 4 | |
| 470-2 | | | Short size | ALL | 19 <0-63> | M | 4 | |
| 471-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP upper drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | 4 | |
| 471-1 | | | Middle size | ALL | 22 <0-63> | M | 4 | |
| 471-2 | | | Short size | ALL | 19 <0-63> | M | 4 | |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|-------------------------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 472-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP lower drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 472-1 | | | Middle size | ALL | 22 <0-63> | M | | 4 |
| 472-2 | | | Short size | ALL | 19 <0-63> | M | | 4 |
| 473 | Paper feeding | Paper aligning amount adjustment at the registration section (LCF/Thick paper 1) | | ALL | 8 <0-63> | M | | 1 |
| 474-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Duplex feeding/Thick paper 1) | Long size | ALL | 24 <0-63> | M | | 4 |
| 474-1 | | | Middle size | ALL | 24 <0-63> | M | | 4 |
| 474-2 | | | Short size | ALL | 33 <0-63> | M | | 4 |
| 497-0 | Laser | Adjustment of drawer side-ways deviation | Upper drawer | ALL | 128 <0-255> | M | When the value increases by "1", the image shifts toward the front side by 0.0423 mm. | 4 |
| 497-1 | | | Lower drawer | ALL | 128 <0-255> | M | | 4 |
| 497-2 | | | PFP upper drawer | ALL | 128 <0-255> | M | | 4 |
| 497-3 | | | PFP lower drawer | ALL | 128 <0-255> | M | | 4 |
| 497-4 | | | LCF | ALL | 128 <0-255> | M | | 4 |
| 497-5 | | | Bypass feeding | ALL | 128 <0-255> | M | | 4 |
| 498-0 | Laser | Adjustment of primary scanning laser writing start position at duplex feeding | Long size | ALL | 148 <0-255> | M | When the value increases by "1", the image shifts toward the front side by 0.0423 mm. | 4 |
| 498-1 | | | Short size (A4/LT or smaller) | ALL | 148 <0-255> | M | | 4 |
| 501 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Photo | PPC | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 503 | | | Text/Photo | PPC | 128 <0-255> | SYS | | 1 |
| 504 | | | Text | PPC | 128 <0-255> | SYS | | 1 |
| 505 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Text/Photo | PPC | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 506 | | | Photo | PPC | 20 <0-255> | SYS | | 1 |
| 507 | | | Text | PPC | 20 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|------------|----------------------------------|--|----------|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 508 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Text/Photo | PPC | EUR:20 UC:20 JPN:30 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 509 | | | Photo | PPC | EUR:24 UC:24 JPN:24 <0-255> | SYS | | 1 |
| 510 | | | Text | PPC | EUR:20 UC:20 JPN:27 <0-255> | SYS | | 1 |
| 512 | Image | Density adjustment Fine adjustment of "automatic density" | Photo | PPC | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 514 | | | Text/Photo | PPC | 128 <0-255> | SYS | | 1 |
| 515 | | | Text | PPC | 128 <0-255> | SYS | | 1 |
| 532 | Image | Range correction/Back-ground peak adjustment | Text/Photo | PPC | 40 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 533 | | | Photo | PPC | 16 <0-255> | SYS | | 1 |
| 534 | | | Text | PPC | 64 <0-255> | SYS | | 1 |
| 570 | Image | Range correction on original manually set on the original glass | Text/Photo | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 571 | | | Photo | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 572 | | | Text | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|----------------------------------|------------|----------|--|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 593 | Image | Gamma data slope adjustment | Text/Photo | PPC | 0 <0-99> | SYS | One's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of Gamma curve (The larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of low density (The smaller the value is, the darker the background becomes.) 00: Use default value | 1 |
| 594 | Image | | Photo | PPC | 0 <0-99> | SYS | | 1 |
| 595 | Image | | Text | PPC | 0 <0-99> | SYS | | 1 |
| 620 | Image | Sharpness adjustment | Text/Photo | PPC | EUR: 1 UC: 1 JPN: 0 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. One's place: Fixed value (05-620 is "1", 05-621 is "2", 05-622 is "5") Ten's place: Adjustable from 0 to 9 regarding the default value as the standard (The larger the value is, the sharper the image becomes.) * When entering "0" on the ten's place, this value is not displayed on the entry screen. | 1 |
| 621 | | | Photo | PPC | 2 <0-99> | SYS | | 1 |
| 622 | | | Text | PPC | EUR: 45 UC: 45 JPN: 45 <0-99> | SYS | | 1 |
| 653 | Image | Adjustment of smudged/faint text | Text/Photo | PPC | EUR: 208 UC: 208 JPN: 216 <0-255> | SYS | Adjusts the level of the smudged/faint text. With increasing the value, the faint text is suppressed, and with decreasing it, the smudged text is suppressed. | 1 |
| 654 | Image | Adjustment of smudged/faint text | PS | PRT | 5 <0-9> | M | Adjustment of the smudged/faint text. With decreasing the value, the faint text is suppressed, and with increasing it, the smudged text is suppressed. | 1 |
| 655 | | | PCL | PRT | 5 <0-9> | M | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | | |
|---|----------------|--|------------|----------|--|-------------|---|-----------|---|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 667-0 | Image | Density adjustment of copied image | | PPC | 0 <0-10> | M | Adjusts the density level of copied image. When the value decreases, the text becomes lighter. | 4 | |
| 667-1 | | | | PPC | 4 <0-10> | M | | 4 | |
| 667-2 | | | | PPC | 5 <0-10> | M | | 4 | |
| 667-3 | | | | PPC | 6 <0-10> | M | | 4 | |
| 667-4 | | | | PPC | 10 <0-10> | M | | 4 | |
| 672-0 | Image | Adjustment of printer image density | Normal | PRT | 0 <0-10> | M | Adjustment of the image density. With decreasing the value, the text becomes lighter. | 4 | |
| 672-1 | | | | PRT | 4 <0-10> | M | | 4 | |
| 672-2 | | | | PRT | 5 <0-10> | M | | 4 | |
| 672-3 | | | | PRT | 6 <0-10> | M | | 4 | |
| 672-4 | | | | PRT | 10 <0-10> | M | | 4 | |
| 676-0 | | Toner saving | | | PRT | 0 <0-10> | | M | 4 |
| 676-1 | | | | | PRT | 2 <0-10> | | M | 4 |
| 676-2 | | | | | PRT | 3 <0-10> | | M | 4 |
| 676-3 | | | | | PRT | 4 <0-10> | | M | 4 |
| 676-4 | | | | | PRT | 5 <0-10> | | M | 4 |
| 693 | Image | Range correction on original set on the RADF | Text/Photo | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 | |
| 694 | | | Photo | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 | |
| 695 | | | Text | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 | |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|------------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 700 | Image | Adjustment of binarized threshold (Text) | Center value | FAX | 120 <0-255> | SYS | When the value increases, the image at the center step becomes lighter. | 1 |
| 701 | | | Light step value | FAX | 20 <0-255> | SYS | When the value increases, the image of "light" side becomes lighter. | 1 |
| 702 | | | Dark step value | FAX | 20 <0-255> | SYS | When the value increases, the image of "dark" side becomes darker. | 1 |
| 710 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Photo | FAX | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 714 | | | Text/Photo | FAX | 128 <0-255> | SYS | | 1 |
| 715 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Photo | FAX | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 719 | | | Text/Photo | FAX | 20 <0-255> | SYS | | 1 |
| 720 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Photo | FAX | 20 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 724 | | | Text/Photo | FAX | 20 <0-255> | SYS | | 1 |
| 725 | Image | Density adjustment Fine adjustment of "automatic density" | Photo | FAX | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 729 | | | Text/Photo | FAX | 128 <0-255> | SYS | | 1 |
| 820 | Image | Range correction/Text peak adjustment | Text/Photo | SCN | 224 <0-255> | SYS | When the value decreases, the text becomes darker. | 1 |
| 821 | | | Text | SCN | 224 <0-255> | SYS | | 1 |
| 822 | | | Photo | SCN | 239 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|------------|----------------------------|------------------------------------|----------|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 825 | Image | Range correction on original manually set on the original glass | Text/Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 826 | | | Text | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 827 | | | Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 830 | Image | Range correction on original set on the RADF | Text/Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 831 | | | Text | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 832 | | | Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 835 | Image | Range correction/Background peak adjustment | Text/Photo | SCN | 48 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 836 | | | Text | SCN | 48 <0-255> | SYS | | 1 |
| 837 | | | Photo | SCN | 40 <0-255> | SYS | | 1 |
| 845 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Text/Photo | SCN | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 846 | | | Text | SCN | 128 <0-255> | SYS | | 1 |
| 847 | | | Photo | SCN | 128 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|--------------------------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 850 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Text/Photo | SCN | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 851 | | | Text | SCN | 20 <0-255> | SYS | | 1 |
| 852 | | | Photo | SCN | 20 <0-255> | SYS | | 1 |
| 855 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Text/Photo | SCN | 20 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 856 | | | Text | SCN | 20 <0-255> | SYS | | 1 |
| 857 | | | Photo | SCN | 20 <0-255> | SYS | | 1 |
| 860 | Image | Density adjustment Fine adjustment of "automatic density" | Text/Photo | SCN | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 861 | | | Text | SCN | 128 <0-255> | SYS | | 1 |
| 862 | | | Photo | SCN | 128 <0-255> | SYS | | 1 |
| 865-0 | Image | Sharpness adjustment (Text/Photo) | Reproduction ratio 40% or smaller | SCN | 1 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. | 4 |
| 865-1 | | | Reproduction ratio 41-80% | SCN | 1 <0-99> | SYS | | 4 |
| 865-2 | | | Reproduction ratio 81% or larger | SCN | 1 <0-99> | SYS | | 4 |
| 866-0 | Image | Sharpness adjustment (Text) | Reproduction ratio 40% or smaller | SCN | 2 <0-99> | SYS | One's place: Fixed value (05-865 is "1", 05-866 is "2", 05-867 is "5") Ten's place: Sharpness intensity (0: Use default value, 1-9: Filter intensity) | 4 |
| 866-1 | | | Reproduction ratio 41-80% | SCN | 2 <0-99> | SYS | | 4 |
| 866-2 | | | Reproduction ratio 81% or larger | SCN | 2 <0-99> | SYS | | 4 |
| 867-0 | Image | Sharpness adjustment (Photo) | Reproduction ratio 40% or smaller | SCN | 5 <0-99> | SYS | | 4 |
| 867-1 | | | Reproduction ratio 41-80% | SCN | 5 <0-99> | SYS | | 4 |
| 867-2 | | | Reproduction ratio 81% or larger | SCN | 5 <0-99> | SYS | | 4 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|---------------|----------|--|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 913 | Image | Range correction on original manually set on the original glass | Custom Mode 1 | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Set whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 914 | | | Custom Mode 2 | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 915 | | | Custom Mode 3 | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 916 | Image | Range correction on original set on the RADF | Custom Mode 1 | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Set whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 917 | | | Custom Mode 2 | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 918 | | | Custom Mode 3 | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 919 | Image | Range correction Background peak adjustment | Custom Mode 1 | PPC | 40 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 920 | | | Custom Mode 2 | PPC | 64 <0-255> | SYS | | 1 |
| 921 | | | Custom Mode 3 | PPC | 16 <0-255> | SYS | | 1 |

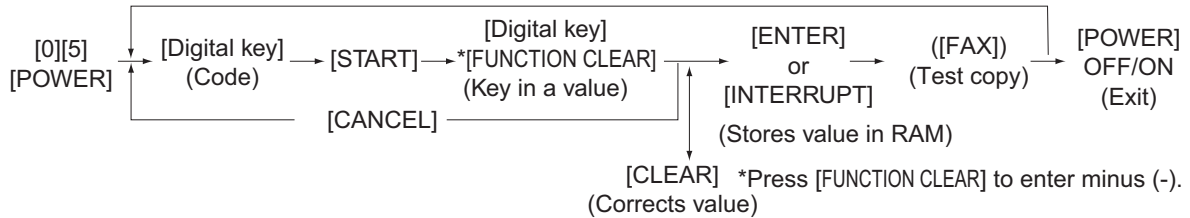
| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|--|---------------|----------|-------------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 922 | Image | Sharpness adjustment | Custom Mode 1 | PPC | 1 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. One's place: Fixed value (05-922 is "1", 05-923 is "5", 05-924 is "2") Ten's place: Adjustable from 0 to 9 regarding the default value as the standard (The larger the value is, the sharper the image becomes.) * When entering "0" on the ten's place, this value is not displayed on the entry screen. | 1 |
| 923 | | | Custom Mode 2 | PPC | EUR:45 UC:45 JPN:45 <0-99> | SYS | | 1 |
| 924 | | | Custom Mode 3 | PPC | 2 <0-99> | SYS | | 1 |
| 928 | Image | Adjustment of smudged/faint text | Custom Mode 1 | PPC | 208 <0-255> | SYS | Adjustment of the smudged/faint text. With increasing the value, the faint text is suppressed, and with decreasing it, the smudged text is suppressed. | 1 |
| 931 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Custom Mode 1 | PPC | 128 <0-255> | SYS | When the value increases, the image of the center step becomes darker. | 1 |
| 932 | | | Custom Mode 2 | PPC | 128 <0-255> | SYS | | 1 |
| 933 | | | Custom Mode 3 | PPC | 128 <0-255> | SYS | | 1 |
| 934 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Custom Mode 1 | PPC | 20 <0-255> | SYS | When the value increases, the image of the "light" step density becomes lighter. | 1 |
| 935 | | | Custom Mode 2 | PPC | 20 <0-255> | SYS | | 1 |
| 936 | | | Custom Mode 3 | PPC | 20 <0-255> | SYS | | 1 |
| 937 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Custom Mode 1 | PPC | 20 <0-255> | SYS | When the value increases, the image of the "dark" step density becomes darker. | 1 |
| 938 | | | Custom Mode 2 | PPC | 20 <0-255> | SYS | | 1 |
| 939 | | | Custom Mode 3 | PPC | 20 <0-255> | SYS | | 1 |
| 940 | Image | Density adjustment Fine adjustment of "automatic density" | Custom Mode 1 | PPC | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 941 | | | Custom Mode 2 | PPC | 128 <0-255> | SYS | | 1 |
| 942 | | | Custom Mode 3 | PPC | 128 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO200L/230/280> | | | | | | | | |
|---|----------------|---|------------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 943 | Image | Gamma data slope adjustment | Custom Mode 1 | PPC | 0 <0-99> | SYS | One's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of Gamma curve (The larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of low density (The smaller the value is, the darker the background becomes.) 00: Use default value | 1 |
| 944 | | | Custom Mode 2 | PPC | 0 <0-99> | SYS | | 1 |
| 945 | | | Custom Mode 3 | PPC | 0 <0-99> | SYS | | 1 |
| 976 | Maintenance | Equipment number (serial number) entry | | ALL | - | SYS | When this adjustment is performed with this code, the setting code (08-995) is also performed auto- matically (10 digits). | 1 |

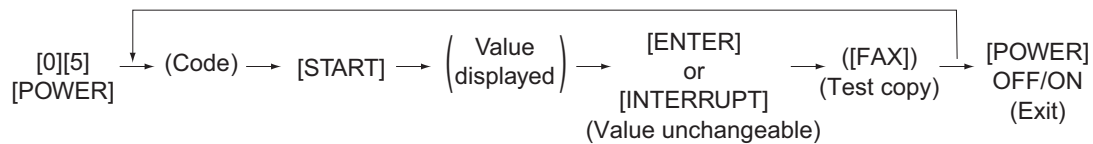
2.2.6 Adjustment mode (05) (e-STUDIO202L/232/282)

Items in the adjustment mode list in the following pages can be corrected or changed in the adjustment mode (05). Turn ON the power with pressing the digital keys [0] and [5] simultaneously in order to enter this mode.

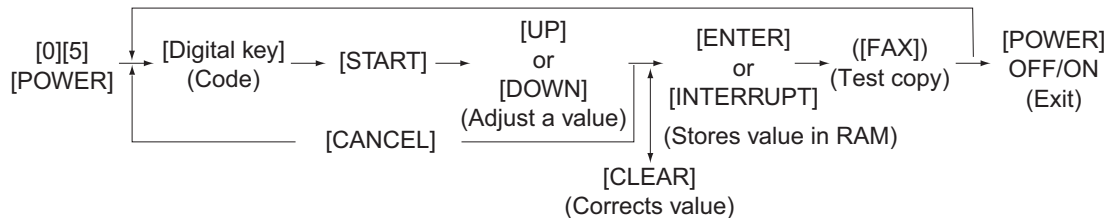
Procedure 1



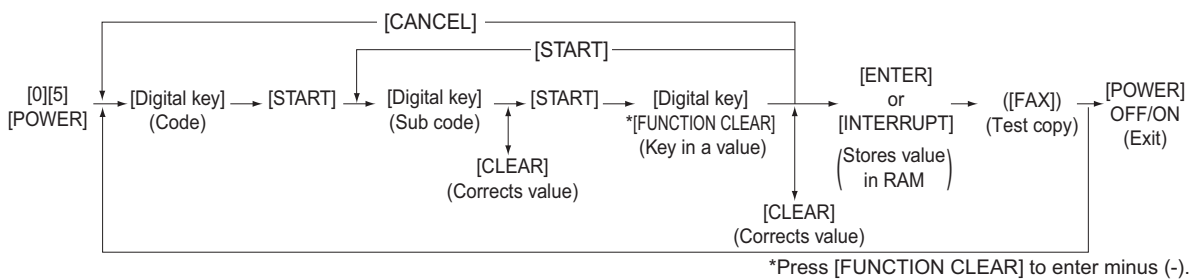
Procedure 2



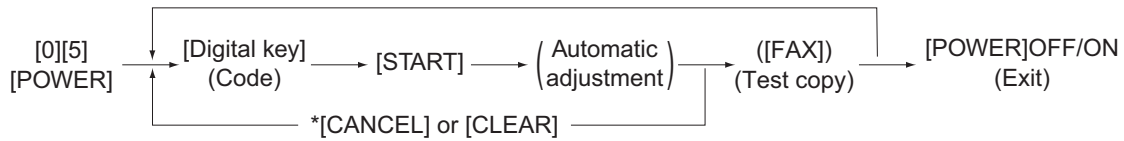
Procedure 3



Procedure 4

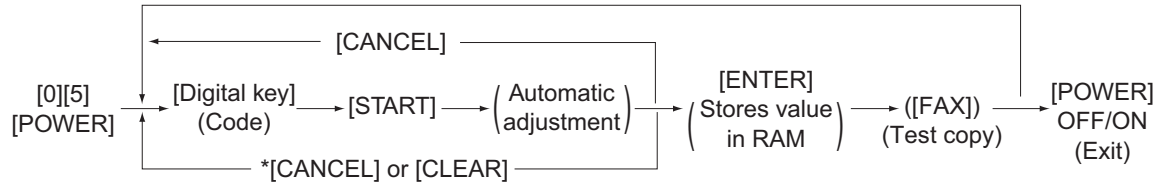


Procedure 6



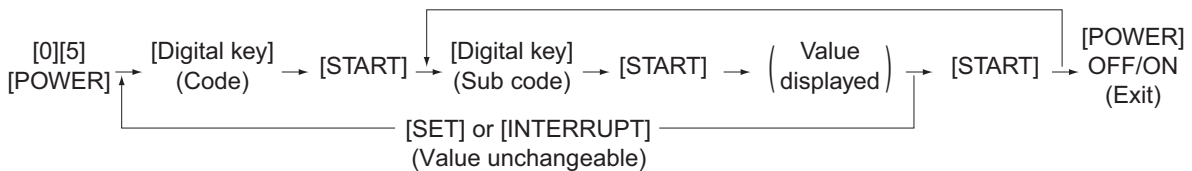
* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 7

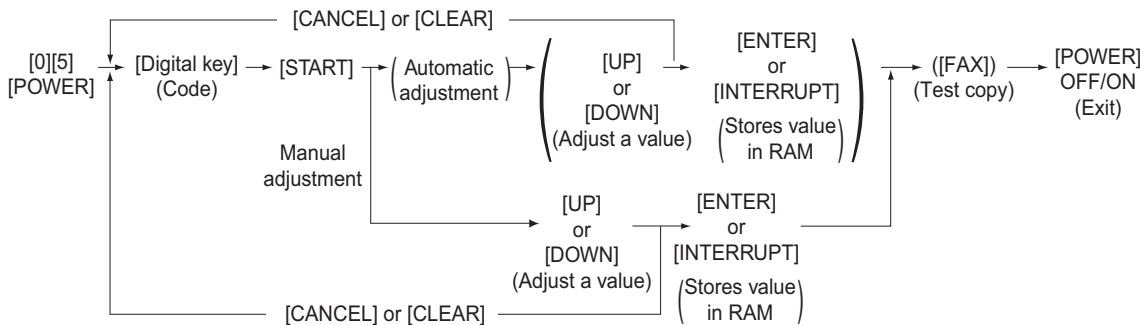


* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 10



Procedure 17



* When the "storing is not performed within 2 minutes after pressing the [START] button at the manual adjustment, the "automatic adjustment" starts automatically.

Note:

The fuser roller temperature control at the adjustment mode is different from that at the normal state.

Therefore, the problem of fusing efficiency may be occurred in the test copy at the adjustment mode. In that case, turn ON the power normally, leave the equipment for approx. 3 minutes after it has become ready state and then start up the adjustment mode again.

Test print pattern in Adjustment Mode (05)

Operation: One test print is printed out when the [FAX] button is pressed after the code is keyed in at Standby Screen.

| Code | Types of test pattern | Remarks |
|-------------|--------------------------------|---|
| 1 | Grid pattern | Refer to 3.2.3 Printer related adjustment |
| 3 | Grid pattern (Duplex printing) | Refer to 3.2.3 Printer related adjustment |

Notes:

- The digit after the hyphen in “Code” of the following table is a sub code.
- In “RAM”, the NVRAM of the board in which the data of each code is stored is indicated. “M” stands for the LGC board and “SYS” stands for the SYS board.

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | |
|---|----------------|---|----------|----------------------------|-----|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 200 | Developer | Automatic adjustment of auto-toner sensor (Fuser heater ON) | ALL | - | - | As the value increases, the sensor output increases correspondingly. The value starts changing approx. 2 minutes after this adjustment was started and is automatically set in the range of 2.35 to 2.45 V. * Selection is disable when developer unit is not installed. (Chap. 3.1) | 17 |
| 201 | Developer | Correction of auto-toner sensor (Fuser heater ON) | ALL | 164 <0-255> | M | Corrects the control value of the auto-toner sensor setup in 05-200. * Selection is disable when developer unit is not installed. | 3 |
| 205 | Developer | Developer bias DC output adjustment | ALL | 135 <0-255> | M | As the value increases, the transformer output increases correspondingly. Remove the developer unit and install the adjustment jig to make adjustment. (Chap. 3.6) | 3 |
| 210 | Charger | Main charger grid bias output adjustment | ALL | 90 <0-255> | M | | 3 |
| 220 | Transfer | Transfer transformer DC output adjustment (H) | ALL | 165 <0-255> | M | | 3 |
| 221 | Transfer | Transfer transformer DC output adjustment (C) | ALL | 179 <0-255> | M | | 3 |
| 222 | Transfer | Transfer transformer DC output adjustment (L) | ALL | 126 <0-255> | M | | 3 |
| 233 | Separation | Separation transformer DC output adjustment (H) | ALL | 64 <0-255> | M | | 3 |
| 234 | Separation | Separation transformer DC output adjustment (C) | ALL | 65 <0-255> | M | | 3 |
| 235 | Separation | Separation transformer DC output adjustment (L) | ALL | 46 <0-255> | M | | 3 |
| 280 | Process | Forced performing of idling for toner recycle | ALL | - | M | | Perform this adjustment before the replacement of the developer material. (The toner is forcibly removed from the cleaner.) |
| 286 | Laser | Laser power adjustment | ALL | 63 <0-255> | M | When the value increases, the laser output increases correspondingly. | 3 |
| 305 | Scanner | Image location adjustment of secondary scanning direction (scanner section) | ALL | 125 <92-164> | SYS | When the value increases by “1”, the image shifts by approx. 0.137 mm toward the trailing edge of the paper. | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|---------------------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 306 | Scanner | Image location adjustment of primary scanning direction (scanner section) | | ALL | 156 <0-255> | SYS | When the value increases by "1", the image shifts by approx. 0.0846 mm toward the front side of the paper. | 1 |
| 308 | Scanner | Distortion mode | | ALL | - | - | Moves carriages to the adjusting position. (Chap. 3.2.4) | 6 |
| 340 | Scanner | Reproduction ratio adjustment of secondary scanning direction (scanner section) | | ALL | 129 <0-255> | SYS | When the value increases by "1", the reproduction ratio in the secondary scanning direction (vertical to paper feeding direction) increases by approx. 0.223%. | 1 |
| 350 | Scanner | Shading position adjustment | Original glass | ALL | 128 <118-138> | SYS | 0.1369 mm/step | 1 |
| 351 | | | RADF | ALL | 128 <118-138> | SYS | | 1 |
| 354 | RADF | Adjustment of RADF paper alignment | for single-sided original | ALL | 10 <0-20> | SYS | When the value increases by "1", the aligning amount increases by approx. 0.5 mm. | 1 |
| 355 | | | for double-sided original | ALL | 10 <0-20> | SYS | | 1 |
| 357 | RADF | Fine adjustment of RADF transport speed | | ALL | 50 <0-100> | SYS | When the value increases by "1", the reproduction ratio of the secondary scanning direction when using the RADF increases by approx. 0.1%. | 1 |
| 358 | RADF | RADF sideways deviation adjustment | | ALL | 128 <0-255> | SYS | When the value increases by "1", the image of original fed from the RADF shifts toward the rear side of paper by approx. 0.0846 mm. | 1 |
| 359 | Scanner | Carriage position adjustment during scanning from RADF | | ALL | 128 <0-255> | SYS | When the value increases by "1", the carriage position when using the RADF shifts by approx. 0.1 mm toward the original feeding side. | 1 |
| 365 | RADF | RADF leading edge position adjustment | for single-sided original | ALL | 50 <0-100> | SYS | When the value increases by "1", the copied image of original fed from the RADF shifts toward the trailing edge of paper by approx. 0.1 mm. | 1 |
| 366 | | | for double-sided original | ALL | 50 <0-100> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | |
|---|----------------|---|-------------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 401 | Laser | Fine adjustment of polygonal motor rotation speed (adjustment of primary scanning direction reproduction ratio) | PRT | 136 <0-255> | M | When the value increases by "1", the reproduction ratio of primary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/step) | 1 |
| 405 | | | PPC | 134 <0-255> | M | | 1 |
| 410 | Laser | Adjustment of primary scanning laser writing start position. | PPC | 128 <0-255> | M | When the value increases by "1", the writing start position shifts to the front side by approx. 0.0423 mm. | 1 |
| 411 | | | PRT | 153 <0-255> | M | | 1 |
| 421 | Drive | Adjustment of secondary scanning direction reproduction ratio (fine adjustment of main motor speed) | PPC/ PRT | 129 <0-255> | M | When the value increases by "1", the reproduction ratio of secondary scanning direction increases by approx. 0.04%. | 1 |
| 422 | | | FAX | 139 <0-255> | M | | 1 |
| 424 | Drive | Fine adjustment of exit motor speed | PPC/ PRT | 160 <0-255> | M | When the value increases by "1", the rotation becomes faster by approx. 0.05%. | 1 |
| 425 | | | FAX | 121 <0-255> | M | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|-------------------|----------------------------------|----------------------------|---|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 430 | Image | Top margin adjustment (blank area at the leading edge of the paper) | PPC | 0 <0-255> | M | When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm. | 1 | |
| 431 | Image | Left margin adjustment (blank area at the left of the paper along the paper feeding direction) | PPC | 0 <0-255> | M | | 1 | |
| 432 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction) | PPC | 0 <0-255> | M | | 1 | |
| 433 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper) | PPC | 0 <0-255> | M | | 1 | |
| 434-0 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper)/ Reverse side at duplexing | PPC/ PRT | 29 <0-255> | M | | 4 | |
| 434-1 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction)/Reverse side at duplexing | PPC/ PRT | 29 <0-255> | M | | 4 | |
| 435 | Image | Top margin adjustment (blank area at the leading edge of the paper) | PRT | 24 <0-255> | M | | 1 | |
| 436 | Image | Left margin adjustment (blank area at the left of the paper along the paper feeding direction) | PRT | 0 <0-255> | M | 1 | | |
| 437 | Image | Right margin adjustment (blank area at the right of the paper along the paper feeding direction) | PRT | 0 <0-255> | M | 1 | | |
| 438 | Image | Bottom margin adjustment (blank area at the trailing edge of the paper) | PRT | 0 <0-255> | M | 1 | | |
| 440 | Laser | Adjustment of secondary scanning laser writing start position | Upper drawer | ALL | 8 <Refer to content> | M | When the value increases by "1", the image shifts toward the leading edge of the paper by approx. 0.2 mm. <Acceptable value> e-STUDIO232/282: 0-15 e-STUDIO202L: 0-40 | 1 |
| 441 | | | Lower drawer | ALL | 21 <0-40> | M | | 1 |
| 442 | | | Bypass feeding | ALL | 8 <0-15> | M | | 1 |
| 443 | | | LCF | ALL | 8 <0-15> | M | | 1 |
| 444 | | | PFP | ALL | 8 <0-15> | M | | 1 |
| 445 | | | Duplex feeding | ALL | 8 <0-15> | M | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|-------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 448-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP upper drawer/Plain paper) | Long size | ALL | 10 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 448-1 | | | Middle size | ALL | 10 <0-63> | M | | 4 |
| 448-2 | | | Short size | ALL | 8 <0-63> | M | | 4 |
| 449-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP lower drawer/Plain paper) | Long size | ALL | 10 <0-63> | M | | 4 |
| 449-1 | | | Middle size | ALL | 10 <0-63> | M | | 4 |
| 449-2 | | | Short size | ALL | 8 <0-63> | M | | 4 |
| 450-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Upper drawer/Plain paper) | Long size | ALL | 17 <0-63> | M | 4 | |
| 450-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 450-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 452-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Lower drawer/Plain paper) | Long size | ALL | 12 <0-63> | M | 4 | |
| 452-1 | | | Middle size | ALL | 10 <0-63> | M | 4 | |
| 452-2 | | | Short size | ALL | 10 <0-63> | M | 4 | |
| 455-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Duplex feeding/Plain paper) | Long size | ALL | 20 <0-63> | M | 4 | |
| 455-1 | | | Middle size | ALL | 20 <0-63> | M | 4 | |
| 455-2 | | | Short size | ALL | 30 <0-63> | M | 4 | |
| 457 | Paper feeding | Paper aligning amount adjustment at the registration section (LCF/Plain paper) | | ALL | 8 <0-63> | M | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|-------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 458-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Plain paper) | Long size | ALL | 26 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter * Postcard is supported only for JPN model. | 4 |
| 458-1 | | | Middle size | ALL | 26 <0-63> | M | | 4 |
| 458-2 | | | Short size | ALL | 25 <0-63> | M | | 4 |
| 460-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 1) | Long size | ALL | 26 <0-63> | M | | 4 |
| 460-1 | | | Middle size | ALL | 26 <0-63> | M | | 4 |
| 460-2 | | | Short size | ALL | 26 <0-63> | M | | 4 |
| 461-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 2) | Long size | ALL | 17 <0-63> | M | 4 | |
| 461-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 461-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 462-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/Thick paper 3) | Long size | ALL | 17 <0-63> | M | 4 | |
| 462-1 | | | Middle size | ALL | 17 <0-63> | M | 4 | |
| 462-2 | | | Short size | ALL | 17 <0-63> | M | 4 | |
| 462-3 | | | Postcard | ALL | 14 <0-63> | M | 4 | |
| 463-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding/OHP film) | Long size | ALL | 26 <0-63> | M | 4 | |
| 463-1 | | | Middle size | ALL | 26 <0-63> | M | 4 | |
| 463-2 | | | Short size | ALL | 26 <0-63> | M | 4 | |
| 464-0 | Paper feeding | Paperaligning amount adjustment at the registration section (Bypass feeding /Envelope) | Long size | ALL | 26 <0-63> | M | 4 | |
| 464-1 | | | Middle size | ALL | 26 <0-63> | M | 4 | |
| 464-2 | | | Short size | ALL | 26 <0-63> | M | 4 | |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|---------------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 466-0 | Paper feeding | Adjustment of paper pushing amount/ Bypass feeding | Plain paper | ALL | 0 <0-255> | M | When the value increases by "1", the driving speed of bypass feed roller increases by approx. 0.2 ms when the paper transport is started from the registration section. * Postcard is supported only for JPN model. | 4 |
| 466-1 | | | Postcard | ALL | 0 <0-255> | M | | 4 |
| 466-3 | | | Envelope | ALL | 0 <0-255> | M | | 4 |
| 466-4 | | | Thick paper 1 | ALL | 0 <0-255> | M | | 4 |
| 466-5 | | | Thick paper 2 | ALL | 0 <0-255> | M | | 4 |
| 466-6 | | | Thick paper 3 | ALL | 0 <0-255> | M | | 4 |
| 466-7 | | | OHP film | ALL | 0 <0-255> | M | | 4 |
| 468-0 | Finisher | Fine adjustment of binding position/ folding position | A4-R/LT-R | ALL | 0 <-14-14> | M | When the value increases by "1", the binding/folding position shifts toward the right page by 0.25 mm. | 4 |
| 468-1 | | | B4 | ALL | 0 <-14-14> | M | | 4 |
| 468-2 | | | A3/LD | ALL | 0 <-14-14> | M | | 4 |
| 469-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Upper drawer) | Thick paper 1 Long size | ALL | 20 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 469-1 | | | Thick paper 1 Middle size | ALL | 20 <0-63> | M | | 4 |
| 469-2 | | | Thick paper 1 Short size | ALL | 20 <0-63> | M | | 4 |
| 469-3 | | | Thick paper 2 Long size | ALL | 20 <0-63> | M | | 4 |
| 469-4 | | | Thick paper 2 Middle size | ALL | 22 <0-63> | M | | 4 |
| 469-5 | | | Thick paper 2 Short size | ALL | 19 <0-63> | M | | 4 |
| 470-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Lower drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | 4 | |
| 470-1 | | | Middle size | ALL | 22 <0-63> | M | 4 | |
| 470-2 | | | Short size | ALL | 19 <0-63> | M | 4 | |
| 471-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP upper drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | 4 | |
| 471-1 | | | Middle size | ALL | 22 <0-63> | M | 4 | |
| 471-2 | | | Short size | ALL | 19 <0-63> | M | 4 | |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|-------------------------------|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 472-0 | Paper feeding | Paper aligning amount adjustment at the registration section (PFP lower drawer/Thick paper 1) | Long size | ALL | 20 <0-63> | M | When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size: 219 mm or shorter | 4 |
| 472-1 | | | Middle size | ALL | 22 <0-63> | M | | 4 |
| 472-2 | | | Short size | ALL | 19 <0-63> | M | | 4 |
| 473 | Paper feeding | Paper aligning amount adjustment at the registration section (LCF/Thick paper 1) | | ALL | 8 <0-63> | M | | 1 |
| 474-0 | Paper feeding | Paper aligning amount adjustment at the registration section (Duplex feeding/Thick paper 1) | Long size | ALL | 24 <0-63> | M | | 4 |
| 474-1 | | | Middle size | ALL | 24 <0-63> | M | | 4 |
| 474-2 | | | Short size | ALL | 33 <0-63> | M | | 4 |
| 497-0 | Laser | Adjustment of drawer side-ways deviation | Upper drawer | ALL | 128 <0-255> | M | When the value increases by "1", the image shifts toward the front side by 0.0423 mm. | 4 |
| 497-1 | | | Lower drawer | ALL | 128 <0-255> | M | | 4 |
| 497-2 | | | PFP upper drawer | ALL | 128 <0-255> | M | | 4 |
| 497-3 | | | PFP lower drawer | ALL | 128 <0-255> | M | | 4 |
| 497-4 | | | LCF | ALL | 128 <0-255> | M | | 4 |
| 497-5 | | | Bypass feeding | ALL | 128 <0-255> | M | | 4 |
| 498-0 | Laser | Adjustment of primary scanning laser writing start position at duplex feeding | Long size | ALL | 148 <0-255> | M | When the value increases by "1", the image shifts toward the front side by 0.0423 mm. | 4 |
| 498-1 | | | Short size (A4/LT or smaller) | ALL | 148 <0-255> | M | | 4 |
| 501 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Photo | PPC | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 503 | | | Text/Photo | PPC | 128 <0-255> | SYS | | 1 |
| 504 | | | Text | PPC | 128 <0-255> | SYS | | 1 |
| 505 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Text/Photo | PPC | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 506 | | | Photo | PPC | 20 <0-255> | SYS | | 1 |
| 507 | | | Text | PPC | 20 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|------------|----------------------------------|--|----------|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 508 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Text/Photo | PPC | EUR:20 UC:20 JPN:30 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 509 | | | Photo | PPC | EUR:24 UC:24 JPN:24 <0-255> | SYS | | 1 |
| 510 | | | Text | PPC | EUR:20 UC:20 JPN:27 <0-255> | SYS | | 1 |
| 512 | Image | Density adjustment Fine adjustment of "automatic density" | Photo | PPC | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 514 | | | Text/Photo | PPC | 128 <0-255> | SYS | | 1 |
| 515 | | | Text | PPC | 128 <0-255> | SYS | | 1 |
| 532 | Image | Range correction/Background peak adjustment | Text/Photo | PPC | 40 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 533 | | | Photo | PPC | 16 <0-255> | SYS | | 1 |
| 534 | | | Text | PPC | 64 <0-255> | SYS | | 1 |
| 570 | Image | Range correction on original manually set on the original glass | Text/Photo | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 571 | | | Photo | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 572 | | | Text | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|----------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 593 | Image | Gamma data slope adjustment | Text/Photo | PPC | 0 <0-99> | SYS | One's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of Gamma curve (The larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of low density (The smaller the value is, the darker the background becomes.) 00: Use default value | 1 |
| 594 | Image | | Photo | PPC | 0 <0-99> | SYS | | 1 |
| 595 | Image | | Text | PPC | 0 <0-99> | SYS | | 1 |
| 596-0 | Image | Gamma balance adjustment (PS/Photo) | Low density | PRT | 128 <0-255> | SYS | When the value increases, the density in the target area becomes higher. | 4 |
| 596-1 | Image | | Medium density | PRT | 128 <0-255> | SYS | | 4 |
| 596-2 | Image | | High density | PRT | 128 <0-255> | SYS | | 4 |
| 597-0 | Image | Gamma balance adjustment (PS/Text) | Low density | PRT | 128 <0-255> | SYS | When the value increases, the density in the target area becomes higher. | 4 |
| 597-1 | Image | | Medium density | PRT | 128 <0-255> | SYS | | 4 |
| 597-2 | Image | | High density | PRT | 128 <0-255> | SYS | | 4 |
| 598-0 | Image | Gamma balance adjustment (PCL/Photo) | Low density | PRT | 128 <0-255> | SYS | When the value increases, the density in the target area becomes higher. | 4 |
| 598-1 | Image | | Medium density | PRT | 128 <0-255> | SYS | | 4 |
| 598-2 | Image | | High density | PRT | 128 <0-255> | SYS | | 4 |
| 599-0 | Image | Adjustment of gamma balance (PCL/Detail) | Low density | PRT | 128 <0-255> | SYS | When the value increases, the density in the target area becomes higher. | 4 |
| 599-1 | Image | | Medium density | PRT | 128 <0-255> | SYS | | 4 |
| 599-2 | Image | | High density | PRT | 128 <0-255> | SYS | | 4 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|------------------------------------|------------|----------|--|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 620 | Image | Sharpness adjustment | Text/Photo | PPC | EUR: 1 UC: 1 JPN: 0 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. One's place: Fixed value (05-620 is "1", 05-621 is "2", 05-622 is "5") Ten's place: Adjustable from 0 to 9 regarding the default value as the standard (The larger the value is, the sharper the image becomes.) * When entering "0" on the ten's place, this value is not displayed on the entry screen. | 1 |
| 621 | | | Photo | PPC | 2 <0-99> | SYS | | 1 |
| 622 | | | Text | PPC | EUR: 45 UC: 45 JPN: 45 <0-99> | SYS | | 1 |
| 648 | Image | Adjustment of smudged/faint text | Text/Photo | PPC | 2 <0-4> | SYS | Adjusts the level of the smudged/faint text. With increasing the value, the faint text is suppressed, and with decreasing it, the smudged text is suppressed. | 1 |
| 654 | Image | Adjustment of smudged/faint text | PS | PRT | 5 <0-9> | M | Adjustment of the smudged/faint text. With decreasing the value, the faint text is suppressed, and with increasing it, the smudged text is suppressed. | 1 |
| 655 | | | PCL | PRT | 5 <0-9> | M | | 1 |
| 667-0 | Image | Density adjustment of copied image | | PPC | 0 <0-10> | M | Adjusts the density level of copied image. When the value decreases, the text becomes lighter. | 4 |
| 667-1 | | | | PPC | 4 <0-10> | M | | 4 |
| 667-2 | | | | PPC | 5 <0-10> | M | | 4 |
| 667-3 | | | | PPC | 6 <0-10> | M | | 4 |
| 667-4 | | | | PPC | 10 <0-10> | M | | 4 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|------------------|----------|--|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 672-0 | Image | Adjustment of printer image density | Normal | PRT | 0 <0-10> | M | Adjustment of the image density. With decreasing the value, the text becomes lighter. | 4 |
| 672-1 | | | | PRT | 4 <0-10> | M | | 4 |
| 672-2 | | | | PRT | 5 <0-10> | M | | 4 |
| 672-3 | | | | PRT | 6 <0-10> | M | | 4 |
| 672-4 | | | | PRT | 10 <0-10> | M | | 4 |
| 676-0 | | | Toner saving | PRT | 0 <0-10> | M | | 4 |
| 676-1 | | | | PRT | 2 <0-10> | M | | 4 |
| 676-2 | | | | PRT | 3 <0-10> | M | | 4 |
| 676-3 | | | | PRT | 4 <0-10> | M | | 4 |
| 676-4 | | | | PRT | 5 <0-10> | M | | 4 |
| 693 | Image | Range correction on original set on the RADF | Text/Photo | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 694 | | | Photo | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 695 | | | Text | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 700 | Image | Adjustment of binarized threshold (Text) | Center value | FAX | 120 <0-255> | SYS | When the value increases, the image at the center step becomes lighter. | 1 |
| 701 | | | Light step value | FAX | 20 <0-255> | SYS | | 1 |
| 702 | | | Dark step value | FAX | 20 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|------------|----------------------------|---|----------|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 710 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Photo | FAX | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 714 | | | Text/Photo | FAX | 128 <0-255> | SYS | | 1 |
| 715 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Photo | FAX | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 719 | | | Text/Photo | FAX | 20 <0-255> | SYS | | 1 |
| 720 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Photo | FAX | 20 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 724 | | | Text/Photo | FAX | 20 <0-255> | SYS | | 1 |
| 725 | Image | Density adjustment Fine adjustment of "automatic density" | Photo | FAX | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 729 | | | Text/Photo | FAX | 128 <0-255> | SYS | | 1 |
| 820 | Image | Range correction/Text peak adjustment | Text/Photo | SCN | 224 <0-255> | SYS | When the value decreases, the text becomes darker. | 1 |
| 821 | | | Text | SCN | 224 <0-255> | SYS | | 1 |
| 822 | | | Photo | SCN | 239 <0-255> | SYS | | 1 |
| 825 | Image | Range correction on original manually set on the original glass | Text/Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 826 | | | Text | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 827 | | | Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|------------|----------------------------|------------------------------------|----------|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 830 | Image | Range correction on original set on the RADF | Text/Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 831 | | | Text | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 832 | | | Photo | SCN | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 835 | Image | Range correction/Background peak adjustment | Text/Photo | SCN | 48 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 836 | | | Text | SCN | 48 <0-255> | SYS | | 1 |
| 837 | | | Photo | SCN | 40 <0-255> | SYS | | 1 |
| 845 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Text/Photo | SCN | 128 <0-255> | SYS | When the value increases, the image at the center step becomes darker. | 1 |
| 846 | | | Text | SCN | 128 <0-255> | SYS | | 1 |
| 847 | | | Photo | SCN | 128 <0-255> | SYS | | 1 |
| 850 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Text/Photo | SCN | 20 <0-255> | SYS | When the value increases, the image of the "light" steps becomes lighter. | 1 |
| 851 | | | Text | SCN | 20 <0-255> | SYS | | 1 |
| 852 | | | Photo | SCN | 20 <0-255> | SYS | | 1 |
| 855 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Text/Photo | SCN | 20 <0-255> | SYS | When the value increases, the image of the "dark" steps becomes darker. | 1 |
| 856 | | | Text | SCN | 20 <0-255> | SYS | | 1 |
| 857 | | | Photo | SCN | 20 <0-255> | SYS | | 1 |
| 860 | Image | Density adjustment Fine adjustment of "automatic density" | Text/Photo | SCN | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 861 | | | Text | SCN | 128 <0-255> | SYS | | 1 |
| 862 | | | Photo | SCN | 128 <0-255> | SYS | | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|---|-----------------------------------|----------|--|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 865-0 | Image | Sharpness adjustment (Text/Photo) | Reproduction ratio 40% or smaller | SCN | 1 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. One's place: Fixed value (05-865 is "1", 05-866 is "2", 05-867 is "5") Ten's place: Sharpness intensity (0: Use default value, 1-9: Filter intensity) | 4 |
| 865-1 | | | Reproduction ratio 41-80% | SCN | 1 <0-99> | SYS | | 4 |
| 865-2 | | | Reproduction ratio 81% or larger | SCN | 1 <0-99> | SYS | | 4 |
| 866-0 | Image | Sharpness adjustment (Text) | Reproduction ratio 40% or smaller | SCN | 2 <0-99> | SYS | | 4 |
| 866-1 | | | Reproduction ratio 41-80% | SCN | 2 <0-99> | SYS | | 4 |
| 866-2 | | | Reproduction ratio 81% or larger | SCN | 2 <0-99> | SYS | | 4 |
| 867-0 | Image | Sharpness adjustment (Photo) | Reproduction ratio 40% or smaller | SCN | 5 <0-99> | SYS | | 4 |
| 867-1 | | | Reproduction ratio 41-80% | SCN | 5 <0-99> | SYS | | 4 |
| 867-2 | | | Reproduction ratio 81% or larger | SCN | 5 <0-99> | SYS | | 4 |
| 913 | Image | Range correction on original manually set on the original glass | Custom Mode 1 | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Set whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 914 | | | Custom Mode 2 | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 915 | | | Custom Mode 3 | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |

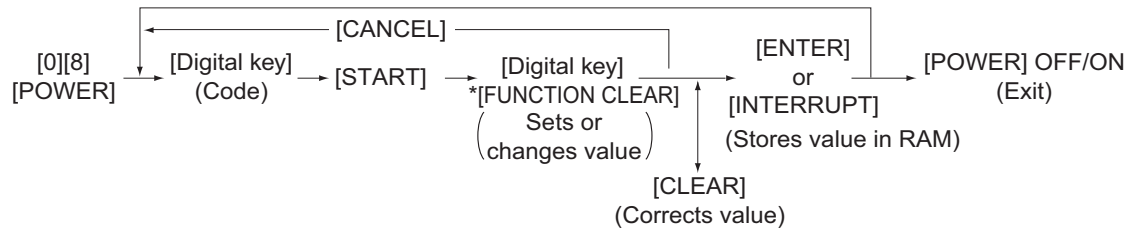
| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|---------------|----------------------------|--|----------|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 916 | Image | Range correction on original set on the RADF | Custom Mode 1 | PPC | EUR:12 UC:12 JPN:22 <11-14, 21-24, 31-34, 41-44> | SYS | Set whether the values of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak | 1 |
| 917 | | | Custom Mode 2 | PPC | 22 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 918 | | | Custom Mode 3 | PPC | 12 <11-14, 21-24, 31-34, 41-44> | SYS | | 1 |
| 919 | Image | Range correction Background peak adjustment | Custom Mode 1 | PPC | 40 <0-255> | SYS | When the value increases, the background becomes more brightened. | 1 |
| 920 | | | Custom Mode 2 | PPC | 64 <0-255> | SYS | | 1 |
| 921 | | | Custom Mode 3 | PPC | 16 <0-255> | SYS | | 1 |
| 922 | Image | Sharpness adjustment | Custom Mode 1 | PPC | 1 <0-99> | SYS | When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. One's place: Fixed value (05-922 is "1", 05-923 is "5", 05-924 is "2") Ten's place: Adjustable from 0 to 9 regarding the default value as the standard (The larger the value is, the sharper the image becomes.) * When entering "0" on the ten's place, this value is not displayed on the entry screen. | 1 |
| 923 | | | Custom Mode 2 | PPC | EUR:45 UC:45 JPN:45 <0-99> | SYS | | 1 |
| 924 | | | Custom Mode 3 | PPC | 2 <0-99> | SYS | | 1 |
| 928 | Image | Adjustment of smudged/faint text | Custom Mode 1 | PPC | 2 <0-4> | SYS | Adjustment of the smudged/faint text. With increasing the value, the faint text is suppressed, and with decreasing it, the smudged text is suppressed. | 1 |

| Adjustment mode (05) <e-STUDIO202L/232/282> | | | | | | | | |
|---|----------------|--|---------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 931 | Image | Density adjustment Fine adjustment of "manual density"/ Center value | Custom Mode 1 | PPC | 128 <0-255> | SYS | When the value increases, the image of the center step becomes darker. | 1 |
| 932 | | | Custom Mode 2 | PPC | 128 <0-255> | SYS | | 1 |
| 933 | | | Custom Mode 3 | PPC | 128 <0-255> | SYS | | 1 |
| 934 | Image | Density adjustment Fine adjustment of "manual density"/ Light step value | Custom Mode 1 | PPC | 20 <0-255> | SYS | When the value increases, the image of the "light" step density becomes lighter. | 1 |
| 935 | | | Custom Mode 2 | PPC | 20 <0-255> | SYS | | 1 |
| 936 | | | Custom Mode 3 | PPC | 20 <0-255> | SYS | | 1 |
| 937 | Image | Density adjustment Fine adjustment of "manual density"/ Dark step value | Custom Mode 1 | PPC | 20 <0-255> | SYS | When the value increases, the image of the "dark" step density becomes darker. | 1 |
| 938 | | | Custom Mode 2 | PPC | 20 <0-255> | SYS | | 1 |
| 939 | | | Custom Mode 3 | PPC | 20 <0-255> | SYS | | 1 |
| 940 | Image | Density adjustment Fine adjustment of "automatic density" | Custom Mode 1 | PPC | 128 <0-255> | SYS | When the value increases, the image becomes darker. | 1 |
| 941 | | | Custom Mode 2 | PPC | 128 <0-255> | SYS | | 1 |
| 942 | | | Custom Mode 3 | PPC | 128 <0-255> | SYS | | 1 |
| 943 | Image | Gamma data slope adjustment | Custom Mode 1 | PPC | 0 <0-99> | SYS | One's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of Gamma curve (The larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of low density (The smaller the value is, the darker the background becomes.) 00: Use default value | 1 |
| 944 | | | Custom Mode 2 | PPC | 0 <0-99> | SYS | | 1 |
| 945 | | | Custom Mode 3 | PPC | 0 <0-99> | SYS | | 1 |
| 976 | Maintenance | Equipment number (serial number) entry | | ALL | - | SYS | When this adjustment is performed with this code, the setting code (08-995) is also performed automatically (10 digits). | 1 |

2.2.7 Setting mode (08) (e-STUDIO200L/230/280)

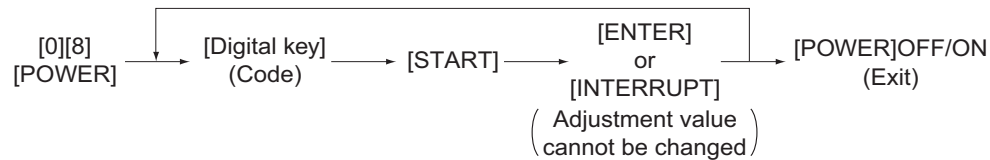
The items in the setting code list can be set or changed in this setting mode (08).

Procedure 1

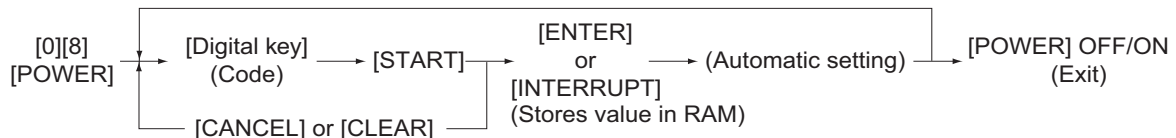


* Press [FUNCTION CLEAR] to enter minus (-).

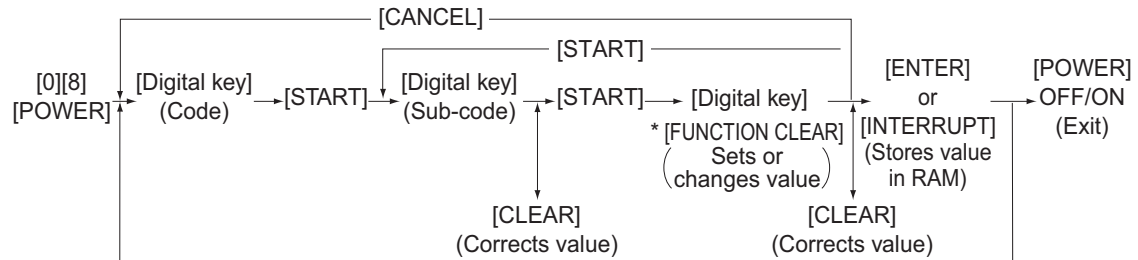
Procedure 2



Procedure 3

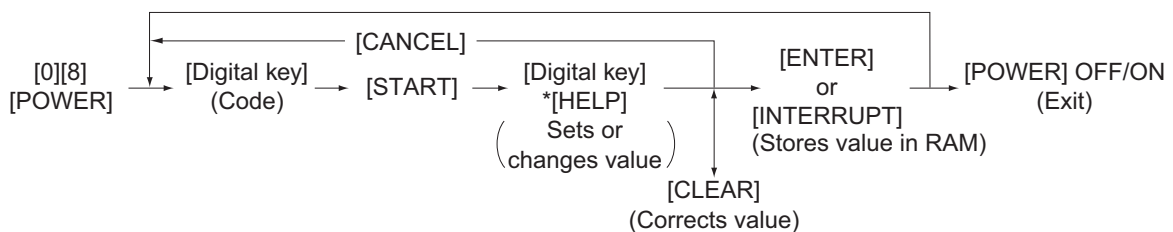


Procedure 4



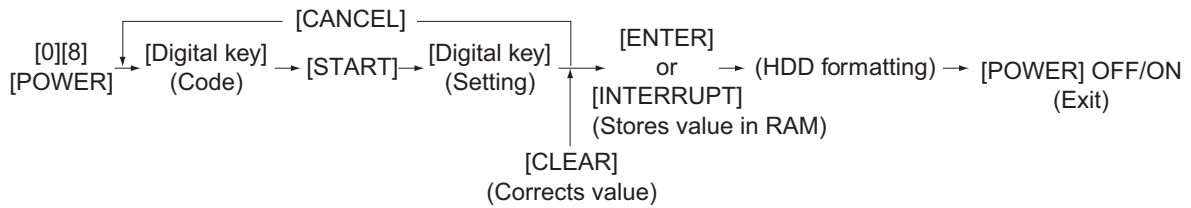
* Press [FUNCTION CLEAR] to enter minus (-).

Procedure 5

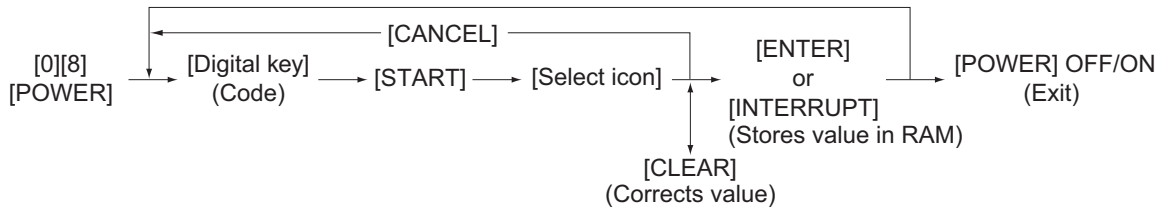


* Press [HELP] to enter "-".

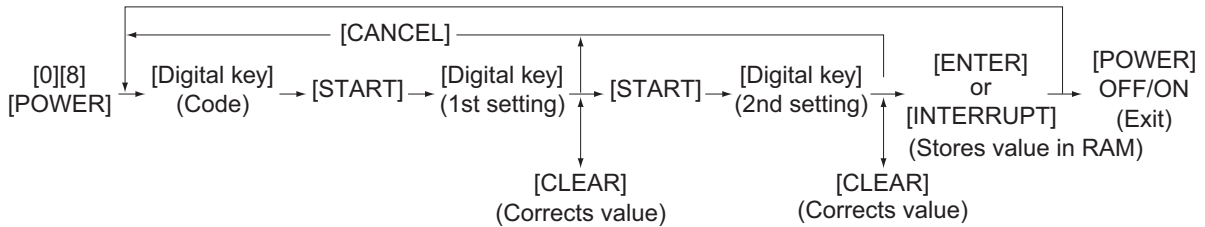
Procedure 7



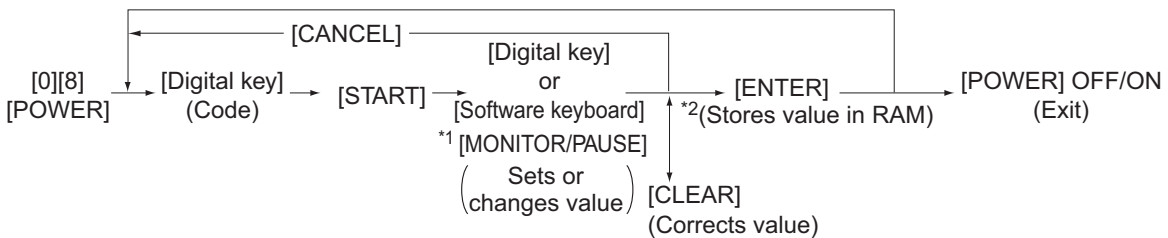
Procedure 9



Procedure 10



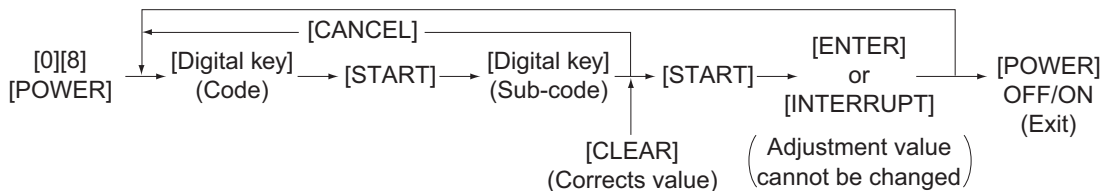
Procedure 11 and 12



*1. Press [MONITOR/PAUSE] to enter "-", when entering telephone number.

*2. The data are stored in SYS-RAM in procedure 11 and stored in NIC-RAM in procedure 12.

Procedure 14



Notes:

- The digit after the hyphen in “Code” of the following table is a sub code.
- e-STUDIO200L/230/280: In “RAM”, the NVRAM of the board in which the data of each code is stored is indicated. “M” stands for the LGC board, “SYS” and “UTY” stands for the SYS board and “NIC” stands for the NIC board.

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------|---------------------------------------|----------|---|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 200 | General | Date and time setting | ALL | - <13 digits> | - | Year/month/date/day/ hour/minute/second Example: 03 07 0 13 13 27 48 “Day” - “0” is for “Sunday”. Proceeds Monday through Saturday from “1” to “6”. | 5 |
| 201 | General | Destination selection | ALL | EUR: 0 UC: 1 JPN: 2 <0-2> | M | 0: EUR 1: UC 2: JPN | 1 |
| 202 | User interface | Counter installed externally | ALL | 0 <0-3> | M | 0: No external counter 1: Coin controller 2: Copy key card 3: Key copy counter | 1 |
| 203 | General | Line adjustment mode | ALL | 0 <0-1> | M | 0: For factory shipment 1: For line * Field: “0” must be selected | 1 |
| 204 | User interface | Auto-clear timer setting | ALL | 3 <0-10> | SYS | Timer to return the equipment to the default settings when the [START] button is not pressed after the function and the mode are set 0: Not cleared 1 to 10: Set number x 15 sec. | 1 |
| 205 | User interface | Auto power save mode timer setting | ALL | EUR: 11 UC: 11 JPN: 6 Others: 11 <0, 6-15> | SYS | Timer to automatically switch to the Auto power save mode when the equipment has not been used 0: Invalid 6: 3min. 7: 4min. 8: 5min. 9: 7min. 10: 10min. 11: 15min. 12: 20min. 13: 30min. 14: 45min. 15: 60min. | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|------------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 206 | User interface | Auto Shut Off Mode timer setting (Auto Shut Off Mode/Sleep Mode) | ALL | Refer to content <0-20> | SYS | Timer to turn OFF the power or to enter the Sleep Mode automatically when the equipment has not been used (Refer to 08-601) 0: 3min. 1: 5min. 2: 10min. 3: 15min. 4: 20min. 5: 25min. 6: 30min. 7: 40min. 8: 50min. 9: 60min. 10: 70min. 11: 80min. 12: 90min. 13: 100min. 14: 110min. 15: 120min. 16: 150min. 17: 180min. 18: 210min. 19: 240min. 20: Not used <Default value> The models except e-STUDIO200L: EUR: 7 UC: 9 JPN: 0 Others: 9 e-STUDIO200L: EUR: 7 UC: 6 JPN: 0 Others: 6 | 1 |
| 207 | User interface | Highlighting display on LCD | ALL | 0 <0-1> | SYS | 0: Black letter on white background 1: White letter on black background | 1 |
| 209 | User interface | Default setting of filing format when E-mailing | ALL | 0 <0-1> | SYS | 0: TIFF (Multi) 1: PDF | 1 |
| 210 | Paper feeding | Paper size (A6-R) feeding/widthwise direction | PRT | 148/105 <148-432/105-297> | M | | 10 |
| 219 | User interface | Default setting of filing format when storing files | SCN | 0 <0-3> | SYS | 0: TIFF (Multi) 1: PDF 2: Not used 3: TIFF (Single) | 1 |
| 220 | User interface | Language displayed at power-ON | ALL | EUR: 0 UC: 0 JPN: 5 <0-6> | SYS | 0: Language 1 1: Language 2 2: Language 3 3: Language 4 4: Language 5 5: Language 6 6: Language 7 | 1 |
| 221 | User interface | Language selection in UI data at Web power ON | ALL | EUR: 0 UC: 0 JPN: 5 <0-6> | SYS | 0: Language 1 1: Language 2 2: Language 3 3: Language 4 4: Language 5 5: Language 6 6: Language 7 | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|---|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 224 | Paper feeding | Paper size for bypass feed | PPC | UNDEF | SYS | Press the button on the LCD to select the size. | 9 |
| 225 | Paper feeding | Paper size for upper drawer | ALL | EUR: A4 UC: LT JPN: A4 | M | Press the button on the LCD to select the size. | 9 |
| 226 | Paper feeding | Paper size for lower drawer | ALL | EUR: A3 UC: LD JPN: A3 | M | Press the button on the LCD to select the size. | 9 |
| 227 | Paper feeding | Paper size for PFP upper drawer | ALL | EUR: A4-R UC: LT-R JPN: A4-R | M | Press the button on the LCD to select the size. | 9 |
| 228 | Paper feeding | Paper size for PFP lower drawer | ALL | EUR: A4 UC: LG JPN: B4 | M | Press the button on the LCD to select the size. | 9 |
| 229 | Paper feeding | Paper size (A3) feeding/ widthwise direction | ALL | 420/297 <182- 432/140- 297> | M | | 10 |
| 230 | Paper feeding | Paper size (A4-R) feeding/ widthwise direction | ALL | 297/210 <182- 432/140- 297> | M | | 10 |
| 231 | Paper feeding | Paper size (A5-R) feeding/ widthwise direction | ALL | 210/148 <182- 432/140- 297> | M | | 10 |
| 232 | Paper feeding | Paper size (B4) feeding/ widthwise direction | ALL | 364/257 <182- 432/140- 297> | M | | 10 |
| 233 | Paper feeding | Paper size (B5-R) feeding/ widthwise direction | ALL | 257/182 <182- 432/140- 297> | M | | 10 |
| 234 | Paper feeding | Paper size (LT-R) feeding/ widthwise direction | ALL | 279/216 <182- 432/140- 297> | M | | 10 |
| 235 | Paper feeding | Paper size (LD) feeding/ widthwise direction | ALL | 432/279 <182- 432/140- 297> | M | | 10 |
| 236 | Paper feeding | Paper size (LG) feeding/ widthwise direction | ALL | 356/216 <182- 432/140- 297> | M | | 10 |
| 237 | Paper feeding | Paper size (ST-R) feeding/ widthwise direction | ALL | 216/140 <182- 432/140- 297> | M | | 10 |
| 238 | Paper feeding | Paper size (COMPUTER) feeding/widthwise direction | ALL | 356/257 <182- 432/140- 297> | M | | 10 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|-----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 239 | Paper feeding | Paper size (FOLIO) feeding/widthwise direction | ALL | 330/210 <182-432/140-297> | M | | 10 |
| 240 | Paper feeding | Paper size (13" LG) feeding/widthwise direction | ALL | 330/216 <182-432/140-297> | M | | 10 |
| 241 | Paper feeding | Paper size (8.5"X8.5") feeding/widthwise direction | ALL | 216/216 <182-432/140-297> | M | | 10 |
| 242 | Paper feeding | Paper size (Non-standard) feeding/widthwise direction | ALL | 432/279 <148-432/105-297> | SYS | | 10 |
| 243 | Paper feeding | Memory 1 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 1]. | 10 |
| 244 | Paper feeding | Paper size (8K) feeding/widthwise direction | ALL | 390/270 <182-432/140-297> | M | | 10 |
| 245 | Paper feeding | Paper size (16K-R) feeding/widthwise direction | ALL | 270/195 <182-432/140-297> | M | | 10 |
| 247 | Paper feeding | Memory 2 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 2]. | 10 |
| 248 | Paper feeding | Memory 3 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 3]. | 10 |
| 249 | Paper feeding | Memory 4 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 4]. | 10 |
| 250 | Maintenance | Service technician telephone number | ALL | 0 <32 digits> | SYS | A telephone number can be entered up to 32 digits. Use the [Monitor/ Pause] button to enter a hyphen (-). | 11 |
| 251 | Maintenance | Setting value of PM counter | ALL | Refer to content <8 digits> | M | <Default> e-STUDIO200L UC, EUR: 64,000 JPN: 0 e-STUDIO 230 UC, EUR: 74,000 JPN: 0 e-STUDIO 280 UC, EUR: 90,000 JPN: 0 | 1 |
| 252 | Maintenance | Current value of PM counter Display/0 clearing | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 253 | Maintenance | Error history display | ALL | - | SYS | Displaying of the latest 20 errors data | 2 |
| 254 | Paper feeding | LT <-> A4/LD <-> A3 | PRT | 0 <0-1> | SYS | Sets whether the data is printed on the different but similar size paper or not when the paper of corresponding size is not available. 0: Valid (The data is printed on A4/A3 when LT/LD is selected or vice versa.) 1: Invalid (The message to use the selected paper size is displayed.) | 1 |
| 255 | Paper feeding | PPF/LCF installation | ALL | 0 <0-4> | M | 0: Automatic 1: PFP single-drawer type installed 2: PFP dual-drawer type installed 3: LCF installed 4: Not installed | 1 |
| 256 | Paper feeding | Paper size setting /LCF | ALL | EUR: A4 UC: LT JPN: A4 | M | Press the button on the LCD to select the size. | 9 |
| 257 | Counter | Counter copy | ALL | - <1-2> | - | 1) Electrical counter → Backup counter 2) Backup counter → Electrical counter (P. 2-150 "Fig. 2-4") | - |
| 258 | Maintenance | FSMS acceptance | ALL | 1 <0-2> | SYS | Sets whether the FSMS connection is accepted or not. 0: Prohibited 1: Accepted (USB normal connection) 2: Accepted (USB forcible connection) | 1 |
| 259 | Network | Storage period trial and private | PRT | 14 <0-30> | SYS | 0: No limits 1 to 30: 1 to 30 days | 1 |
| 260 | Network | Web data retention period | SCN | 10 <3 digits> | SYS | When a certain period of time has passed without operation after accessing TopAccess, the data being registered is automatically reset. This period is set at this code. (Unit: Minute) | 1 |
| 263 | User interface | Administrator's password (Maximum 10 digits) | ALL | 123456 <10 digits> | - | The password can be entered in alphabets and figures (A-Z, a-z, 0-9) within 10 digits. | 11 |
| 264 | Network | File retention period | SCN | 30 <0-999> | SYS | 0: No limits 1 to 999: 1 to 999 days | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 265 | Network | Maximum data capacity at E-mailing | SCN | 30 <2-30> | SYS | 2 to 30 M bytes | 1 |
| 266 | Network | Maximum data capacity at Internet FAX | ALL | 30 <2-30> | SYS | 2 to 30 M bytes | 1 |
| 267 | Electronic Filing | Full guarantee of documents in Electronic Filing when HDD is full | ALL | 0 <0-1> | SYS | Sets the file retention level when editing the files in the Electronic Filing (at CutDoc/SaveDoc command execution). 0: Not full retained 1: Fully retained - Retains the source file until CutDoc/SaveDoc command is completed. * The file is not deleted even if the HDD has become full during the execution of command when "1" is set. | 1 |
| 270 | Electronic Filing | Default value for user box retention period | ALL | 0 <0-999> | SYS | Sets the data retention period when creating a user box. 0: Not deleted 1 to 999: Retention period (Unit: Day) | 1 |
| 271 | General | Warning display of the HDD capacity to be filled | ALL | 90 <0-100> | SYS | Sets the percentage of the HDD capacity filled which warning is displayed 0 to 100: 0 to 100% | 1 |
| 272 | Scanning | Notification setting of E-mail saving time limit | ALL | 3 <0-99> | SYS | Sets the days left the notification of E-mail saving time limit appears 0 to 99: 0 to 99 days | 1 |
| 273 | Scanning | Default setting of partial size when transmitting E-mail | ALL | 0 <0-6> | SYS | Sets the default value for the partial size of E-mail to be transmitted when creating a template. 0: Not divided 1: 64 2: 128 3: 256 4: 512 5: 1024 6: 2048 (Unit: KB) | 1 |
| 274 | FAX | Default setting of page by page when transmitting Internet FAX | FAX | 0 <0-4> | SYS | Sets the default value for the page by page of Internet FAX to be transmitted when creating a template. 0: Not divide 1: 128 2: 512 3: 1024 4: 2048 (Unit: KB) | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|--------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 276 | User interface | Default setting for density adjustment | SCN | 0 <0-11> | SYS | 0: Automatic density 1: Step -5 2: Step -4 3: Step -3 4: Step -2 5: Step -1 6: Step 0 (center) 7: Step +1 8: Step +2 9: Step +3 10: Step +4 11: Step +5 (1 to 11: Manual density) | 1 |
| 281 | User interface | Default setting of resolution | SCN | 1 <0-4> | SYS | 0: 150 dpi 1: 200 dpi 2: 300 dpi 3: 400dpi 4: 600 dpi | 1 |
| 283 | User interface | Default setting of original mode | SCN | 0 <0-2> | SYS | 0: Text 1: Text/Photo 2: Photo | 1 |
| 284 | User interface | Default setting of scanning mode | SCN | 0 <0-2> | SYS | 0: Single 1: Book 2: Tablet | 1 |
| 285 | User interface | Default setting of rotation angle of original | SCN | 0 <0-3> | SYS | 0: 0 degree 1: 90 degrees 2: 180 degrees 3: 270 degrees | 1 |
| 286 | User interface | Default setting of original paper size | SCN | 0 <0-22> | SYS | 0: Automatic 1: A3 2: A4 3: LD 4: LT 5: A4-R 6: A5-R 7: LT-R 8: LG 9: B4 10: B5 11: ST-R 12: COMP 13: B5-R 14: FOLIO 15: 13"LG 16: 8.5" x 8.5" 18: A6-R 19: Size mixed 20: 8K 21: 16K 22: 16K-R | 1 |
| 288 | General | Searching interval of deleting expired files | ALL | 12 <1-24> | SYS | Sets the search interval of expired files. Deletes if expired file is found. (Unit: Hour) | 1 |
| 290 | Network | Raw printing job (Duplex) | PRT | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 291 | Network | Raw printing job (Paper size) | PRT | EUR: 6 UC: 2 JPN: 6 <0 -13> | SYS | 0: LD 1: LG 2: LT 3: COMP 4: ST 5: A3 6: A4 7: A5 8: A6 9: B4 10: B5 11: FOLIO 12: 13"LG 13: 8.5" x 8.5" | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------|--|----------|------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 292 | Network | Raw printing job (Paper type) | PRT | 0 <0-4> | SYS | 0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 4: OHP film | 1 |
| 293 | Network | Raw printing job (Paper direction) | PRT | 0 <0-1> | SYS | 0: Portrait 1: Landscape | 1 |
| 294 | Network | Raw printing job (Staple) | PRT | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 295 | Network | Raw printing job (receiving tray) | PRT | 0 <0-5> | SYS | 0: Inner tray 1: Finisher tray 1 2: Finisher tray 2 3: Not used 4: Job Separator upper tray 5: Job Separator lower tray * The settings 4 and 5 are effective only when the Job Sepa- rator (MJ-5004) is installed. | 1 |
| 296 | Network | Raw printing job (Number of form lines) | PRT | 1200 <500- 12800> | SYS | Sets the number of form lines from 5 to 128. (A hundredfold of the number of form lines is defined as the setting value.) | 1 |
| 297 | Network | Raw printing job (PCL font pitch) | PRT | 1000 <44- 9999> | SYS | Sets the font pitch from 0.44 to 99.99. (A hun- dredfold of the font pitch is defined as the setting value.) | 1 |
| 298 | Network | Raw printing job (PCL font size) | PRT | 1200 <400- 99975> | SYS | Sets the font size from 4 to 999.75. (A hun- dredfold of the font size is defined as the setting value.) | 1 |
| 299 | Network | Raw printing job (PCL font number) | PRT | 0 <0-79> | SYS | Sets the PCL font num- ber. | 1 |
| 300 | User interface | Maximum number of copy volume (MAX9) | PPC | 0 <0-2> | SYS | 0: 999 1: 99 2: 9 | 1 |
| 302 | User interface | Original counter display | ALL | EUR: 2 UC: 0 JPN: 0 <0,2> | SYS | Sets whether the origi- nal counter is dis- played or not. 0: Not displayed 2: Displayed | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|-------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 305-0 | Counter | Number of output pages in copier func- tion | A3 | PPC | 0 <8 digits> | SYS | Counts the output pages in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 305-1 | | | A4 | | | | | |
| 305-2 | | | A5 | | | | | |
| 305-3 | | | A6 | | | | | |
| 305-4 | | | B4 | | | | | |
| 305-5 | | | B5 | | | | | |
| 305-6 | | | FOLIO | | | | | |
| 305-7 | | | LD | | | | | |
| 305-8 | | | LG | | | | | |
| 305-9 | | | LT | | | | | |
| 305-10 | | | ST | | | | | |
| 305-11 | | | COMP | | | | | |
| 305-12 | | | 13"LG | | | | | |
| 305-13 | | | 8.5" x 8.5" | | | | | |
| 305-14 | | | 16K | | | | | |
| 305-15 | | | 8K | | | | | |
| 305-16 | | | Others | | | | | |
| 306-0 | Counter | Number of output pages in printer func- tion | A3 | PRT | 0 <8 digits> | SYS | Counts the output pages in the printer function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 306-1 | | | A4 | | | | | |
| 306-2 | | | A5 | | | | | |
| 306-3 | | | A6 | | | | | |
| 306-4 | | | B4 | | | | | |
| 306-5 | | | B5 | | | | | |
| 306-6 | | | FOLIO | | | | | |
| 306-7 | | | LD | | | | | |
| 306-8 | | | LG | | | | | |
| 306-9 | | | LT | | | | | |
| 306-10 | | | ST | | | | | |
| 306-11 | | | COMP | | | | | |
| 306-12 | | | 13"LG | | | | | |
| 306-13 | | | 8.5" x 8.5" | | | | | |
| 306-14 | | | 16K | | | | | |
| 306-15 | | | 8K | | | | | |
| 306-16 | | | Others | | | | | |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|-------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 307-0 | Counter | Number of output pages at list print mode | A3 | PRT | 0 <8 digits> | SYS | Counts the output pages at the list print mode for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 307-1 | | | A4 | | | | | |
| 307-2 | | | A5 | | | | | |
| 307-3 | | | A6 | | | | | |
| 307-4 | | | B4 | | | | | |
| 307-5 | | | B5 | | | | | |
| 307-6 | | | FOLIO | | | | | |
| 307-7 | | | LD | | | | | |
| 307-8 | | | LG | | | | | |
| 307-9 | | | LT | | | | | |
| 307-10 | | | ST | | | | | |
| 307-11 | | | COMP | | | | | |
| 307-12 | | | 13"LG | | | | | |
| 307-13 | | | 8.5" x 8.5" | | | | | |
| 307-14 | | | 16K | | | | | |
| 307-15 | | | 8K | | | | | |
| 307-16 | | | Others | | | | | |
| 308-0 | Counter | Number of output pages in FAX func- tion | A3 | FAX | 0 <8 digits> | SYS | Counts the output pages in the FAX func- tion for each paper size according to the setting for the count setting of large-sized paper (08- 352) and the definition setting of large-sized paper (08-353). | 4 |
| 308-1 | | | A4 | | | | | |
| 308-2 | | | A5 | | | | | |
| 308-3 | | | A6 | | | | | |
| 308-4 | | | B4 | | | | | |
| 308-5 | | | B5 | | | | | |
| 308-6 | | | FOLIO | | | | | |
| 308-7 | | | LD | | | | | |
| 308-8 | | | LG | | | | | |
| 308-9 | | | LT | | | | | |
| 308-10 | | | ST | | | | | |
| 308-11 | | | COMP | | | | | |
| 308-12 | | | 13"LG | | | | | |
| 308-13 | | | 8.5" x 8.5" | | | | | |
| 308-14 | | | 16K | | | | | |
| 308-15 | | | 8K | | | | | |
| 308-16 | | | Others | | | | | |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|----|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 312-0 | Counter | Number of scanning pages in copier function | A3 | PPC | 0 <8 digits> | SYS | Counts the scanning pages in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 312-1 | | | | | | | | |
| 312-2 | | | | | | | | |
| 312-3 | | | | | | | | |
| 312-4 | | | | | | | | |
| 312-5 | | | | | | | | |
| 312-6 | | | | | | | | |
| 312-7 | | | | | | | | |
| 312-8 | | | | | | | | |
| 312-9 | | | | | | | | |
| 312-10 | | | | | | | | |
| 312-11 | | | | | | | | |
| 312-12 | | | | | | | | |
| 312-13 | | | | | | | | |
| 312-14 | | | | | | | | |
| 312-15 | | | | | | | | |
| 312-16 | | | | | | | | |
| 313-0 | Counter | Number of scanning pages in scanning function | A3 | SCN | 0 <8 digits> | SYS | Counts the scanning pages in the scanning function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 313-1 | | | | | | | | |
| 313-2 | | | | | | | | |
| 313-3 | | | | | | | | |
| 313-4 | | | | | | | | |
| 313-5 | | | | | | | | |
| 313-6 | | | | | | | | |
| 313-7 | | | | | | | | |
| 313-8 | | | | | | | | |
| 313-9 | | | | | | | | |
| 313-10 | | | | | | | | |
| 313-11 | | | | | | | | |
| 313-12 | | | | | | | | |
| 313-13 | | | | | | | | |
| 313-14 | | | | | | | | |
| 313-15 | | | | | | | | |
| 313-16 | | | | | | | | |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|----|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 314-0 | Counter | Number of scanning pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the scanning pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 314-1 | | | | | | | | |
| 314-2 | | | | | | | | |
| 314-3 | | | | | | | | |
| 314-4 | | | | | | | | |
| 314-5 | | | | | | | | |
| 314-6 | | | | | | | | |
| 314-7 | | | | | | | | |
| 314-8 | | | | | | | | |
| 314-9 | | | | | | | | |
| 314-10 | | | | | | | | |
| 314-11 | | | | | | | | |
| 314-12 | | | | | | | | |
| 314-13 | | | | | | | | |
| 314-14 | | | | | | | | |
| 314-15 | | | | | | | | |
| 314-16 | | | | | | | | |
| 315-0 | Counter | Number of transmitted pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the transmitted pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 315-1 | | | | | | | | |
| 315-2 | | | | | | | | |
| 315-3 | | | | | | | | |
| 315-4 | | | | | | | | |
| 315-5 | | | | | | | | |
| 315-6 | | | | | | | | |
| 315-7 | | | | | | | | |
| 315-8 | | | | | | | | |
| 315-9 | | | | | | | | |
| 315-10 | | | | | | | | |
| 315-11 | | | | | | | | |
| 315-12 | | | | | | | | |
| 315-13 | | | | | | | | |
| 315-14 | | | | | | | | |
| 315-15 | | | | | | | | |
| 315-16 | | | | | | | | |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----------------|----------|--|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 316-0 | Counter | Number of received pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the received pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 316-1 | | | | | | | | |
| 316-2 | | | | | | | | |
| 316-3 | | | | | | | | |
| 316-4 | | | | | | | | |
| 316-5 | | | | | | | | |
| 316-6 | | | | | | | | |
| 316-7 | | | | | | | | |
| 316-8 | | | | | | | | |
| 316-9 | | | | | | | | |
| 316-10 | | | | | | | | |
| 316-11 | | | | | | | | |
| 316-12 | | | | | | | | |
| 316-13 | | | | | | | | |
| 316-14 | | | | | | | | |
| 316-15 | | | | | | | | |
| 316-16 | | | | | | | | |
| 320-0 | Counter | Display of number of output pages in copier function | Large | PPC | 0 <8 digits> | SYS | Counts the number of output pages in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 320-1 | Counter | | Small | PPC | 0 <8 digits> | SYS | | 14 |
| 320-2 | Counter | | Total | PPC | 0 <8 digits> | SYS | | 14 |
| 321-0 | Counter | Display of number of output pages in printer function | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 321-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 321-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|----------|----------------------------|-----------------|----------|--|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 322-0 | Counter | Display of number of output pages at list print mode | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages at the List Print Mode Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 322-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 322-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |
| 323-0 | Counter | Display of number of output pages in FAX function | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 323-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 323-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |
| 327-0 | Counter | Display of number of scanning pages in copier function | Large | PPC | 0 <8 digits> | SYS | Counts the number of scanning pages in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 327-1 | Counter | | Small | PPC | 0 <8 digits> | SYS | | 14 |
| 327-2 | Counter | | Total | PPC | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----------------|----------|---|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 328-0 | Counter | Display of number of scanning pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of scanning pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 328-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 328-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |
| 329-0 | Counter | Display of number of scanning pages in scanning function | Large | SCN | 0 <8 digits> | SYS | Counts the number of scanning pages in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 329-1 | Counter | | Small | SCN | 0 <8 digits> | SYS | | 14 |
| 329-2 | Counter | | Total | SCN | 0 <8 digits> | SYS | | 14 |
| 330-0 | Counter | Display of number of transmitted pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of transmitted pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 330-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 330-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|-------|----------|------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 331 | User interface | Default setting of screen | | ALL | 0 <0-3> | SYS | Sets the screen to be displayed after the auto-clear time has passed or it has recovered from the energy saving mode or sleep mode. 0: Copier 1: Fax 2: Scan 3: Box | 1 |
| 332-0 | Counter | Display of number of received pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of received pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 332-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 332-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |
| 335-0 | Counter | Display of total number of pages | Large | ALL | 0 <8 digits> | SYS | Displays the total number of pages in the copier/printer/scanning/FAX functions. | 14 |
| 335-1 | Counter | | Small | ALL | 0 <8 digits> | SYS | | 14 |
| 335-2 | Counter | | Total | ALL | 0 <8 digits> | SYS | | 14 |
| 337 | Paper feeding | Paper size (#10-R) feeding/widthwise direction | | ALL | 241/105 <148-432/105-297> | M | | 10 |
| 338 | Paper feeding | Paper size (DL-R) feeding/widthwise direction | | ALL | 220/110 <148-432/105-297> | M | | 10 |
| 339 | Paper feeding | Paper size (Envelope: Monarch-R) feeding/widthwise direction | | ALL | 191/98 <148-432/98-297> | M | | 10 |
| 340 | Paper feeding | Paper size (Envelope: CHO-3-R) feeding/widthwise direction | | ALL | 235/120 <148-432/105-297> | M | | 10 |
| 341 | Paper feeding | Paper size (Envelope: YOU-4-R) feeding/widthwise direction | | ALL | 235/105 <148-432/105-297> | M | | 10 |
| 345 | Counter | Count setting of envelope (PM) | | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 346 | Counter | Count setting of large-sized paper (PM) | | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 347 | Counter | Definition setting of large-sized paper (PM) | ALL | 1 <0-1> | M | 0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP | 1 |
| 348 | Counter | Count setting of thick paper (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 349 | Counter | Count setting of OHP film (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 352 | Counter | Count setting of large-sized paper (Fee charging system counter) | ALL | JPN: 0 OTHER: 1 <0-2> | M | 0: Counted as 1 1: Counted as 2 2: Counted as 1 (Mechanical counter is double counter) | 1 |
| 353 | Counter | Definition setting of large-sized paper (Fee charging system counter) | ALL | 0 <0-1> | M | 0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP/8K | 1 |
| 356 | Counter | Counter for upper drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from upper drawer | 2 |
| 357 | Counter | Counter for lower drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from lower drawer | 2 |
| 358 | Counter | Counter for bypass feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from bypass feed | 2 |
| 359 | Counter | Counter for LCF feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from LCF | 2 |
| 360 | Counter | Counter for PFP upper drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from PFP upper drawer | 2 |
| 370 | Counter | Counter for PFP lower drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from PFP lower drawer | 2 |
| 372 | Counter | Counter for ADU | ALL | 0 <8 digits> | M | Counts the number of output pages of duplex printing. | 2 |
| 374 | Counter | Counter for RADF | ALL | 0 <8 digits> | SYS | Counts the number of originals fed from RADF | 2 |
| 381 | Counter | Setting for counter installed externally | ALL | 1 <0-7> | M | Selects the job to count up for the external counter. 0: Not selected 1: Copier 2: FAX 3: Copier/FAX 4: Printer 5: Copier/Printer 6: Printer/FAX 7: Copier/Printer/FAX | 1 |
| 390 | Counter | Number of errors in HDD (Copier) | PPC | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 391 | Counter | Number of errors in HDD (FAX) | FAX | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 392 | Counter | Number of errors in HDD (Scanning) | SCN | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|-----------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 393 | Counter | Number of errors in HDD (Printer) | | PRT | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 398 | Laser | Number of polygonal motor rotational speed switching | | ALL | 0 <8 digits> | M | Counts the number of time the polygonal motor has switched its rotational speed between normal rotation and standby rotation. | 2 |
| 399 | Laser | Accumulated time of polygonal motor at normal rotation | | ALL | 0 <8 digits> | M | Accumulates the time the polygonal motor has rotated at normal rotation. | 2 |
| 400 | Fuser | Fuser unit error status counter | | ALL | 0 <0-19> | M | 0: No error 1: C410 (Once) 2: C410 (consecutively occurred) 3: - 4: - 5: C440 6: C450 7: C440 8: C450 9: C440 10: C470 11: C470 12: C480 13: C490 14: C470 15: C480 16: C490 17: C470 18: C480 19: C490 | 1 |
| 404-0 | Fuser | Temperature drop setting in ready status (Center thermistor) | The first drop | ALL | 1 <0-10> | M | This code is valid only when "20" is set to 08-886. Setting value x -5°C: from 0°C to -50°C | 4 |
| 404-1 | | | The second drop | ALL | 1 <0-10> | M | | 4 |
| 404-2 | | | The third drop | ALL | 1 <0-10> | M | | 4 |
| 404-3 | | | The fourth drop | ALL | 1 <0-10> | M | | 4 |
| 405-0 | Fuser | Temperature drop setting in ready status (Side thermistor) | The first drop | ALL | 4 <0-10> | M | | 4 |
| 405-1 | | | The second drop | ALL | 4 <0-10> | M | | 4 |
| 405-2 | | | The third drop | ALL | 4 <0-10> | M | | 4 |
| 405-3 | | | The fourth drop | ALL | 4 <0-10> | M | | 4 |
| 407 | Fuser | Fuser roller temperature in ready status (Side thermistor) | | ALL | 8 <0-12> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 409 | Fuser | Fuser roller temperature at energy saver mode (Center thermistor) | ALL | 0 <0-13> | M | 0: OFF 1: 40°C 2: 50°C 3: 60°C 4: 70°C 5: 80°C 6: 90°C 7: 100°C 8: 110°C 9: 120°C 10: 130°C 11: 140°C 12: 150°C 13: 160°C | 1 |
| 410 | Fuser | Fuser roller temperature during printing (Center thermistor/Plain paper) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 411 | Fuser | Fuser roller temperature on standby (Center thermistor) | ALL | 8 <0-12> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C | 1 |
| 412 | Fuser | Fuser roller temperature during printing (Center thermistor/Thick paper 3) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 413 | Fuser | Fuser roller temperature during printing (Center thermistor/Thick paper 1) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|-------------------|----------------------------------|--------------|---|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 414 | Developer | Toner density life correction switching | ALL | 0 <0-7> | M | 0: Unchanged (Default) 1: Approx. 0.3 wt% higher 2: Approx. 0.6 wt% higher 3: Approx. 0.9 wt% higher 4: Approx. 0.2 wt% lower 5: Approx. 0.4 wt% lower 6: Approx. 0.6 wt% lower 7: Approx. 0.9 wt% lower | 1 | |
| 417 | Fuser | Pre-running time for first printing (Thick paper 3) | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 | |
| 424-0 | Fuser | Temperature drop switching time setting in ready status (Center thermistor) | The first drop | ALL | 15 <2-60> | M | This code is valid only when "20" is set to 08-886. Setting value x 1 min.: from 2 to 60 min. later | 4 |
| 424-1 | | | The second drop | ALL | 15 <2-60> | M | | 4 |
| 424-2 | | | The third drop | ALL | 15 <2-60> | M | | 4 |
| 424-3 | | | The fourth drop | ALL | 15 <2-60> | M | | 4 |
| 425-0 | Fuser | Temperature drop switching time setting in ready status (Side thermistor) | The first drop | ALL | 15 <2-60> | M | | 4 |
| 425-1 | | | The second drop | ALL | 15 <2-60> | M | | 4 |
| 425-2 | | | The third drop | ALL | 15 <2-60> | M | | 4 |
| 425-3 | | | The fourth drop | ALL | 15 <2-60> | M | | 4 |
| 433-0 | Fuser | Temperature control lower limit (Plain paper/ at ordinary temperature) | Center thermistor | ALL | 7 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 433-1 | | | Side thermistor | ALL | 5 <0-12> | M | | 4 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 437 | Fuser | Fuser roller temperature during printing (Center thermistor /Thick paper 2) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 438 | Fuser | Fuser roller temperature during printing (Center thermistor/OHP film) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 439 | Fuser | Pre-running time for first printing (Thick paper 2) | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 440 | Fuser | Pre-running time for first printing (Plain paper) | ALL | 0 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 441 | Fuser | Pre-running time for first printing (Thick paper 1) | ALL | 0 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|------------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 448 | Fuser | Fuser roller temperature in Energy Saving Mode (Side thermistor) | ALL | 0 <0-13> | M | 0: OFF 1: 40°C 2: 50°C 3: 60°C 4: 70°C 5: 80°C 6: 90°C 7: 100°C 8: 110°C 9: 120°C 10: 130°C 11: 140°C 12: 150°C 13: 160°C | 1 |
| 450 | Fuser | Fuser roller temperature during printing (Side thermistor/Plain paper) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 451 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 1) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 452 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 2) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 453 | Fuser | Fuser roller temperature during printing (Side thermistor/OHP film) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 455 | Image processing | Toner supply amount correction/Toner motor control | ALL | 0 <0-5> | M | Corrects the supply amount of the fresh toner (driving period of the toner motor) into the developer unit. 0: x1.0 1: x0.75 2: x0.5 3: x0.3 4: x2.0 5: x1.5 | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|-------------|------------------------------|------------|--|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 462 | RADF | Setting for switchback operation to copy mixed-sized original on RADF | ALL | 0 <0-1> | SYS | Sets whether or not detecting the original length by transporting without scanning in reverse when finding A4-R/FOLIO paper. 0: Invalid- Judges as A4-R without transporting in reverse with no scanning. 1: Valid- Judges whether it is A4-R or FOLIO size by transporting in reverse with no scanning. * The original is transported in reverse with no scanning when detecting LT-LG size-paper in LT, regardless of this setting. | 1 | |
| 463-0 | Paper feeding | Feeding retry number setting (upper drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the upper drawer. | 4 |
| 463-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 464-0 | Paper feeding | Feeding retry number setting (lower drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the lower drawer. | 4 |
| 464-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 465-0 | Paper feeding | Feeding retry number setting (PFP upper drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the PFP upper drawer. | 4 |
| 465-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 466-0 | Paper feeding | Feeding retry number setting (PFP lower drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the PFP lower drawer. | 4 |
| 466-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 467-0 | Paper feeding | Feeding retry number setting (bypass feed) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the bypass tray. | 4 |
| 467-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 468-0 | Paper feeding | Feeding retry number setting (LCF) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the LCF. | 4 |
| 468-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 471 | Paper feeding | Paper size (Postcard) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | M | * Postcard is supported only for JPN model. | 10 | |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 477 | General | Machine identification information | ALL | Refer to content <0-1> | M | <Default value> Lower drawer reference: 0 Upper drawer reference: 1 | 2 |
| 478 | Laser | Judged number of polygonal motor rotation error (Normal rotation) | ALL | 0 <0-1> | M | Displays the error [CA10] when the set number of rotation error has been detected. 0: 2 times 1: 12 times | 1 |
| 479 | Laser | Judged number of polygonal motor rotation error (At acceleration/deceleration) | ALL | 0 <0-1> | M | 0: Waiting time for polygonal motor rotation overshooting 0.6 sec. 1: Waiting time for polygonal motor rotation overshooting 2.2 sec. | 1 |
| 480 | Paper feeding | Default setting of paper source | PPC | 0 <0-5> | SYS | 0: A4/LT 1: LCF 2: Upper drawer 3: Lower drawer 4: PFP upper drawer 5: PFP lower drawer | 1 |
| 481 | Paper feeding | Automatic change of paper source | PPC | 1 <0-2> | SYS | Sets whether or not changing the drawer automatically to the other drawer with the paper of the same size when paper in the selected drawer has run out. 0: OFF 1: ON (Changes to the drawer with the same paper direction and size: ex. A4 to A4) 2: ON (Changes to the drawer with the same paper size. Paper with the different direction is acceptable as long as the size is the same: ex., A4 to A4-R, LT-R to LT. "1" is applied when the staple/hole-punch is specified.) | 1 |
| 482 | Paper feeding | Feeding retry setting | ALL | 0 <0-1> | M | 0: ON 1: OFF | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 483 | Laser | Pre-running rotation of polygonal motor | ALL | 0 <0-2> | SYS | Sets whether or not switching the polygonal motor from the standby rotation to the normal rotation when the original is set on the RADF or the platen cover is opened. 0: Valid (when using RADF and the original is set manually) 1: Invalid 2: Valid (when using RADF only) | 1 |
| 484 | Laser | Polygonal motor rotational status switching at the Auto Clear Mode | ALL | 0 <0-1> | SYS | Sets whether or not switching the polygonal motor from the normal rotation to the standby rotation at the Auto Clear Mode. 0: Valid 1: Invalid | 1 |
| 485 | Laser | Rotational status of polygonal motor on standby | ALL | JPN: 1 Others: 0 <0-1> | SYS | Sets the rotational status of polygonal motor on standby. 0: Rotated (The rotational speed is set at 08-490.) 1: Stopped | 1 |
| 486 | Laser | Timing of auto-clearing of polygonal motor pre-running rotation | ALL | 0 <0-2> | SYS | Switches the polygonal motor to the standby rotation when a certain period of time has passed from the pre-running. At this code, the period to switch the status to the standby rotation is set. 0: 15 sec. 1: 30 sec. 2: 45 sec. * This setting is effective when "0" or "2" is set at 08-483. | 1 |
| 488 | Laser | Setting of polygonal motor type | ALL | 0 <0-3> | M | Set the type of polygonal motor. 0: 2-clock type 1: 3-clock type 2: 4-clock type 3: 4-clock type | 1 |
| 489 | Laser | Polygonal motor rotation number on standby | ALL | 5 <0-5> | M | 0: 38,090.55 rpm 1: 35,000 rpm 2: 30,000 rpm 3: 25,000 rpm 4: 20,000 rpm 5: 10,000 rpm | 1 |
| 490 | Laser | Polygonal motor rotation in the energy saving mode | ALL | 0 <0-1> | M | 0: Stopped 1: 10,000 rpm | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 491 | Transfer | Transfer charger bias correction (H) at duplexing | ALL | 149 <0-255> | M | Corrects the transfer charger bias output value of the leading edge area of paper at duplexing. | 1 |
| 492 | Transfer | Transfer charger bias correction (C) at duplexing | ALL | 139 <0-255> | M | Corrects the transfer charger bias output value of the center area of paper at duplexing. | 1 |
| 493 | Transfer | Transfer charger bias correction (L) at duplexing | ALL | 128 <0-255> | M | Corrects the transfer charger bias output value of the trailing edge area of paper at duplexing. | 1 |
| 502 | Image | Error diffusion and dither setting at photo mode | PPC | 1 <0-1> | SYS | Sets the image reproduction method at photo mode. 0: Error diffusion 1: Dither | 1 |
| 503 | User interface | Default setting of density adjustment | PPC | 0 <0-1> | SYS | 0: Automatic 1: Manual (Center) | 1 |
| 508 | Image | Custom Mode setting | PPC | 0 <0-3> | SYS | 0: Not used 1: Custom Mode 1 when Text/Photo is set as a base 2: Custom Mode 2 when Text is set as a base 3: Custom Mode 3 when Photo is set as a base | 1 |
| 509 | Image | Error diffusion and dither setting at a photo mode (Custom Mode) | PPC | 1 <0-1> | SYS | Switches the image processing method when Custom Mode 3 is set. 0: Error diffusion 1: Dither | 1 |
| 515 | Fuser | Temperature setting of warming-up (Center thermistor) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 516 | Fuser | Temperature setting of warming-up (Side thermistor) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|-----------------|----------------------------------|---------------|--|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 518 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 3) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 | |
| 520 | Fuser | Fuser roller temperature during printing (Center thermistor/Envelope) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 | |
| 521 | Fuser | Fuser roller temperature during printing (Side thermistor/Envelope) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 | |
| 523 | Fuser | Pre-running time for first printing (Envelope) | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 | |
| 525-0 | Fuser | Temperature drop switching time setting during printing (Center thermistor) | The first drop | ALL | 20 <0-200> | M | This code is valid only when "20" is set to 08-535. Setting value x 5 sec.: from 0 to 1,000 sec. later | 4 |
| 525-1 | | | The second drop | ALL | 38 <0-200> | M | | 4 |
| 525-2 | | | The third drop | ALL | 75 <0-200> | M | | 4 |
| 525-3 | | | The fourth drop | ALL | 75 <0-200> | M | | 4 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|-----------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 526 | Fuser | Pre-running time for first printing (OHP film) | | ALL | 0 <0-15> | M | 0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 527-0 | Fuser | Temperature drop switching time setting during printing (Side thermistor) | The first drop | ALL | 20 <0-200> | M | This code is valid only when "20" is set to 08-535. Setting value x 5 sec.: from 0 to 1,000 sec. later | 4 |
| 527-1 | | | The second drop | ALL | 30 <0-200> | M | | 4 |
| 527-2 | | | The third drop | ALL | 48 <0-200> | M | | 4 |
| 527-3 | | | The fourth drop | ALL | 75 <0-200> | M | | 4 |
| 535 | Fuser | Temperature drop control setting during printing (Temperature/Time) | | ALL | 2 <0-20> | M | 0: None 1: Pattern 1 2: Pattern 2 3: Pattern 3 4: Pattern 4 5: Pattern 5 6: Pattern 6 7: Pattern 7 8: Pattern 8 9: Pattern 9 10: Pattern 10 11: Pattern 11 12: Pattern 12 13: Pattern 13 14: Pattern 14 15: Pattern 15 16: Pattern 16 17: Pattern 17 18: Pattern 18 19: Pattern 19 20: Manual adjustment | 1 |
| 536-0 | Fuser | Temperature drop setting during printing (Center thermistor) | The first drop | ALL | 1 <0-10> | M | This code is valid only when "20" is set to 08-535. Setting value x -5°C: from 0°C to -50°C | 4 |
| 536-1 | | | The second drop | ALL | 2 <0-10> | M | | 4 |
| 536-2 | | | The third drop | ALL | 3 <0-10> | M | | 4 |
| 536-3 | | | The fourth drop | ALL | 3 <0-10> | M | | 4 |
| 537-0 | Fuser | Temperature drop setting during printing (Side thermistor) | The first drop | ALL | 1 <0-10> | M | | 4 |
| 537-1 | | | The second drop | ALL | 2 <0-10> | M | | 4 |
| 537-2 | | | The third drop | ALL | 3 <0-10> | M | | 4 |
| 537-3 | | | The fourth drop | ALL | 5 <0-10> | M | | 4 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|--|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 550 | Image | Default setting of original mode | PPC | 0 <0-3> | SYS | 0: Text/Photo 1: Photo 2: Text 3: Custom Mode | 1 |
| 601 | User interface | Setting for the Energy Saving Mode | ALL | 0 <0-1> | SYS | 0: Auto Shut Off Mode 1: Sleep Mode | 1 |
| 602 | User interface | Screen setting for Auto power Save Mode and Auto Shut OFF Mode | ALL | EUR: 0 UC: 1 JPN: 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 603 | User interface | Setting for automatic duplexing mode | PPC | 0 <0-3> | SYS | 0: Invalid 1: Single-sided to duplex copying 2: Double-sided to duplex copying 3: User selection | 1 |
| 604 | User interface | Default setting for APS/AMS | PPC | 0 <0-2> | SYS | 0: APS (Automatic Paper Selection) 1: AMS (Automatic Magnification Selection) 2: Not selected | 1 |
| 605 | User interface | Centering printing of primary/secondary direction at AMS | PPC | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 607 | User interface | Default setting of RADF mode | PPC | 0 <0-1> | SYS | 0: Continuous feeding (by pressing the [START] button) 1: Single feeding (by setting original on the tray) | 1 |
| 610 | User interface | Key touch sound of control panel | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 611 | User interface | Book type original priority | PPC | 0 <0-1> | SYS | 0: Left page to right page 1: Right page to left page | 1 |
| 612 | General | Summer time mode | ALL | 0 <0-1> | SYS | 0: Not summer time 1: Summer time | 1 |
| 613 | User interface | Paper size selection for [OTHER] button | PPC | EUR: FOLIO UC: COMP JPN: A5-R | SYS | Press the button on the LCD to select the size. | 9 |
| 614 | Network | Local I/F time-out period | PRT | 6 <1-50> | SYS | Sets the period of time when the job is judged as completed in local I/F printing (USB or parallel). 1: 1.0 sec. 2: 1.5 sec. -50: 25.5 sec. (in increments of 0.5 sec.) | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|--------------------|---|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 615 | General | Size information of main memory and page memory | ALL | - | SYS | Displays the sizes of the main memory and page memory. Enables to check if each memory is properly recognized. | 2 |
| 617 | User interface | Print setting without department code | ALL | 0 <0-1> | SYS | 0: Printed 1: Not printed | 1 |
| 618 | User interface | Default setting when mixed size originals are set on RADF | PPC | 0 <0-1> | SYS | 0: Scanned as all in same size 1: Scanned as each original size | 1 |
| 619 | Paper feeding | Time lag before Auto Job Start of bypass feeding | ALL | 4 <0-10> | SYS | Sets the time taken to add paper feeding when paper in the bypass tray has run out during the bypass feed copying. 0: Paper is not drawn in unless the [START] button is pressed. 1-10: Setting value x 0.5 sec. | 1 |
| 620 | User interface | Department management setting (Copier) | PPC | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 621 | User interface | Department management setting (FAX) | FAX | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 622 | User interface | Department management setting (Printer) | PRT | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 623 | User interface | Department management setting (Scanner) | SCN | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 624 | User interface | Department management setting (List print) | PRT | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 625 | User interface | Blank copying prevention mode during RADF jamming | PPC | 0 <0-1> | SYS | 0: OFF 1: ON (Start printing when the scanning of each page is finished) | 1 |
| 627 | User interface | Rotation printing at the non-sorting | ALL | 0 <0-1> | SYS | 0: Not rotating 1: Rotating | 1 |
| 628 | User interface | Direction priority of original image | PPC | 0 <0-1> | SYS | 0: Automatic 1: Portrait | 1 |
| 629 | User interface | Department management setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 633 | Data overwrite kit | Releasing F200 service call | ALL | 0 <0-2> | SYS | 0: Not used 1: Board installed (GP-1050) 2: Service call | 1 |
| 634 | User interface | Inner receiving tray priority at Non-sort Mode | ALL | 0 <0-1> | SYS | 0: Normal 1: Inner receiving tray | 1 |
| 636 | User interface | Width setting for image shift copying (linkage of front side and back side) | PPC | 0 <0-1> | SYS | 0: ON 1: OFF | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|---------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 638 | General | Time differences | ALL | EUR: 24 UC: 40 JPN: 6 <0-47> | SYS | 0: +12.0h 1: +11.5h 2: +11.0h 3: +10.5h 4: +10.0h 5: +9.5h 6: +9.0h 7: +8.5h 8: +8.0h 9: +7.5h 10: +7.0h 11: +6.5h 12: +6.0h 13: +5.5h 14: +5.0h 15: +4.5h 16: +4.0h 17: +3.5h 18: +3.0h 19: +2.5h 20: +2.0h 21: +1.5h 22: +1.0h 23: +0.5h 24: 0.0h 25: -0.5h 26: -1.0h 27: -1.5h 28: -2.0h 29: -2.5h 30: -3.0h 31: -3.5h 32: -4.0h 33: -4.5h 34: -5.0h 35: -5.5h 36: -6.0h 37: -6.5h 38: -7.0h 39: -7.5h 40: -8.0h 41: -8.5h 42: -9.0h 43: -9.5h 44: -10.0h 45: -10.5h 46: -11.0h 47: -11.5h | 1 |
| 640 | User interface | Date display format | ALL | EUR: 1 UC: 2 JPN: 0 <0-2> | SYS | 0: YYYY.MM.DD. 1: DD.MM.YYYY 2: MM.DD.YYYY | 1 |
| 641 | User interface | Automatic Sorting Mode setting (RADF) | PPC | 2 <0-4> | SYS | 0: Invalid 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT | 1 |
| 642 | User interface | Default setting of Sorter Mode | PPC | 0 <0-4> | SYS | 0: NON-SORT 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT | 1 |
| 645 | User interface | Correction of reproduction ratio in editing copy | PPC | 10 <0-10> | SYS | Sets the reproduction ratio for the "X in 1" printing (including magazine sort) to the "Reproduction ratio x Correction ratio". 0: 90% 1: 91% 2: 92% 3: 93% 4: 94% 5: 95% 6: 96% 7: 97% 8: 98% 9: 99% 10: 100% | 1 |
| 646 | User interface | Image position in editing | PPC | 0 <0-1> | SYS | Sets the page pasted position for "X in 1" to the upper left corner/center. 0: Cornering 1: Centering | 1 |
| 647 | User interface | Rotation of paper direction for BOX printing | ALL | 1 <0-1> | SYS | 0: Rotation OFF 1: Rotation ON | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 648 | User interface | Returning finisher tray when printing is finished | ALL | 0 <0-1> | SYS | Sets whether or not returning the finisher tray to the bin 1 when printing is finished. 0: Not returned 1: Returned | 1 |
| 649 | User interface | Magazine sort setting | PPC | 0 <0-1> | SYS | 0: Left page to right page 1: Right page to left page | 1 |
| 650 | User interface | 2 in 1/4 in 1 page allocating order setting | PPC | 0 <0-1> | SYS | 0: Horizontal 1: Vertical | 1 |
| 651 | User interface | Printing format setting for Time stamp and Page Number | PPC | 2 <0-3> | SYS | Hyphen (with page number) /Dropout (with date, time and page number) 0: OFF/OFF 1: ON/OFF 2: OFF/ON 3: ON/ON Note: Hyphen printing format ON: -1- OFF: 1 | 1 |
| 652 | User interface | Cascade operation setting | PPC | 0 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 653 | User interface | Cascade operation setting | PRT | 0 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 657 | User interface | Direction priority for date and time stamp printing | PPC | 0 <0-1> | SYS | 0: Short edge 1: Long edge | 1 |
| 658 | User interface | Auto Job Start setting for bypass feed printing | PRT | 0 <0-1> | SYS | Sets whether or not feeding a paper automatically into the equipment when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding) | 1 |
| 659 | User interface | Auto Job start setting for bypass feed printing | PPC | 1 <0-1> | SYS | Sets whether or not feeding a paper automatically into the equipment when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding) | 1 |
| 660 | Network | Auto-forwarding setting of received FAX | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 661 | Network | Auto-forwarding setting of received E-mail | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 662 | General | Clearing of SMS partition | ALL | - | SYS | Clears SMS partition. (Performs when the service call [F106] has occurred.) | 3 |
| 666 | General | /SHR partition clearing | ALL | - | SYS | Initializes the Electronic Filing. | 3 |
| 667 | General | /SHA partition clearing | ALL | - | SYS | Initializes the shared folder. | 3 |
| 670 | General | HDD diagnostic menu display | ALL | - | SYS | Display the HDD information | 2 |
| 671 | User interface | Size indicator | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 672 | General | Initialization of department management information | - | - | SYS | Initializing of the department management information * Key in the code and press the [INITIALIZE] button to perform the initialization. If the area storing the department management information is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management function is not set on. In this case, initialize the area with this code. This area is normally initialized at the factory. | 3 |
| 673 | General | Trial period setting | PRT/SCN | 254 <1-60> | SYS | Sets the trial period from 1 to 60 days. This setting is effective only when the default value is "254". Once the default value is set, this value is only used for a reference. | 1 |
| 678 | General | Setting of banner advertising display | ALL | 0 <0-1> | SYS | Sets whether or not displaying the banner advertising. The setting contents of 08-679 and 08-680 are displayed at the time display section on the right top of the screen. When both are set, each content is displayed alternately. 0: Not displayed 1: Displayed | 1 |
| 679 | General | Banner advertising display 1 | ALL | - | SYS | Maximum 27 letters (one-byte character) | 11 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 680 | General | Banner advertising display 2 | ALL | - | SYS | Maximum 27 letters (one-byte character) | 11 |
| 681 | General | Display of [BANNER MESSAGE] button | ALL | 0 <0-1> | SYS | 0: Not displayed 1: Displayed * This button enables the entry of "Banner advertising display 1 (08-679)" and "Banner advertising display 2 (08-680)" on the control panel. | 1 |
| 682 | User interface | Offsetting between jobs | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 683 | General | Duplex printing setting when coin controller is used | ALL | 1 <0-1> | SYS | When the duplex printing is short paid with a coin controller, reverse side of the original is not printed and is considered as a defect (printing job may be cleared). To solve this problem, the selection of printing method is enabled with this setting. 0: Invalid (Both sides printed) 1: Valid (Only one side printed) | 1 |
| 684 | General | Rebuilding all databases | ALL | - | SYS | Rebuilds all databases. | 3 |
| 685 | General | Rebuilding all databases related to address book | ALL | - | SYS | Rebuilds all databases related to the Address Book. | 3 |
| 686 | General | Rebuilding all databases related to log | ALL | - | SYS | Rebuilds all databases related to the log. | 3 |
| 689 | FAX | Adaptation of paper source priority selection | FAX | 0 <0-1> | SYS | 0: Not subjected for APS judgment 1: Subjected for APS judgment | 1 |
| 690 | General | HDD formatting | ALL | - <2> | SYS | 2: Normal formatting | 7 |
| 691 | General | HDD type display | ALL | - <0-2> | SYS | 0: Not formatted 1: Not used 2: Normal format | 7 |
| 692 | Maintenance | Performing panel calibration | ALL | - | SYS | Performs the calibration of the pressing position on the touch panel (LCD screen). The calibration is performed by pressing 2 reference positions after this code is started up. | 1 |
| 693 | General | Initialization of NIC information | ALL | - | SYS | Returns the value to the factory shipping default value. | 3 |
| 694 | General | Performing HDD testing | ALL | - | SYS | Checks the bad sector. | 3 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-----------------|---|----------|---|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 695 | General | Notifying condition of trial period end | PRT/SCN | 3 <0-59> | SYS | Sets when the end of trial period is notified. 0: On the day it ends 1 to 59: n days before | 1 |
| 696 | Scrambler board | Installation of scrambler board (Option) | ALL | 0 <0-1> | - | 0: Not installed 1: Installed | 2 |
| 697 | Paper feeding | Paper type priority | PPC | 1 <1-2> | SYS | Sets the paper type priority during copying. 1: Plain paper 2: Thick paper 1 | 1 |
| 698 | Scrambler board | Entering the key code for scrambler board | ALL | - | - | Start up this code and have the user enter the key code. Once the key code has been set, this code cannot be set again on security grounds. | 5 |
| 699 | Scrambler board | Erasing all data in HDD | ALL | - | - | This setting is effective only when the scrambler board is installed. | 3 |
| 701 | FAX | Destination setting for FAX | FAX | EUR: 5 UC: 4 JPN: 0 Other: 1 <0-25> | SYS | 0: Japan 1: Asia 2: Australia 3: Hong Kong 4: U.S.A./Canada 5: Germany 6: U.K. 7: Italy 8: Belgium 9: Netherlands 10: Finland 11: Spain 12: Austria 13: Switzerland 14: Sweden 15: Denmark 16: Norway 17: Portugal 18: France 19: Greece 20: Poland 21: Hungary 22: Czech 23: Turkey 24: South Africa 25: Taiwan | 1 |
| 702 | Maintenance | Remote-controlled service function | ALL | 2 <0-2> | SYS | 0: Valid (Remote-controlled server) 1: Valid (L2) 2: Invalid | 1 |
| 703 | Maintenance | Remote-controlled service HTTP server URL setting | ALL | - | SYS | Maximum 256 Bytes | 11 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------------|---|----------|---|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 707 | Maintenance | Remote-controlled service HTTP initially-registered server URL setting | ALL | https:// device. mfp-support.com:443/ device/ firstregist. ashx | SYS | Maximum 256 Bytes | 11 |
| 710 | Maintenance (Remote) | Short time interval setting of recovery from Emergency Mode | ALL | 24 <1-48> | SYS | Sets the time interval to recover from the Emergency Mode to the Normal Mode. (Unit: Hour) | 1 |
| 711 | Maintenance (Remote) | Short time interval setting of Emergency Mode | ALL | 60 <30-360> | SYS | Unit: Minute | 1 |
| 715 | Maintenance | Remote-controlled service periodical polling timing (Hour/Hour/Minute/Minute) | ALL | 1230 | SYS | 0 (0:00) to 2359 (23:59) | 1 |
| 716 | Maintenance | Remote-controlled service Writing data of self-diagnostic code | ALL | 0 <0-1> | SYS | 0: Prohibited 1: Accepted | 1 |
| 717 | Maintenance | Remote-controlled service response waiting time (Timeout) | ALL | 3 <1-30> | SYS | Unit: Minute | 1 |
| 718 | Maintenance | Remote-controlled service initial registration | ALL | 0 <0-2> | SYS | 0: OFF 1: Start 2: Only certification is scanned | 1 |
| 719 | Maintenance | Remote-controlled service tentative password | ALL | - | SYS | Maximum 10 letters | 11 |
| 720 | Maintenance | Status of remote-controlled service initial registration (Display only) | ALL | 0 <0-1> | SYS | 0: Not registered 1: Registered | 2 |
| 721 | Maintenance | Service center call function | ALL | 2 <0-2> | SYS | 0: OFF 1: Notifies all service calls 2: Notifies all but paper jams | 1 |
| 723 | Maintenance | Service center call HTTP server URL setting | ALL | - | SYS | Maximum 256 letters | 11 |
| 726 | Maintenance | HTTP proxy setting | ALL | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 727 | Maintenance | HTTP proxy IP address setting | ALL | - | SYS | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 11 |
| 728 | Maintenance | HTTP proxy port number setting | ALL | 0 <0-65535> | SYS | | 1 |
| 729 | Maintenance | HTTP proxy ID setting | ALL | - | SYS | Maximum 30 letters | 11 |
| 730 | Maintenance | HTTP proxy password setting | ALL | - | SYS | Maximum 30 letters | 11 |
| 731 | Maintenance | HTTP proxy panel display | ALL | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 732 | Maintenance (Remote) | Automatic ordering function of supplies | ALL | 3 <0-3> | SYS | 0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF | 1 |
| 733 | Maintenance (Remote) | Automatic ordering function of supplies FAX number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 734 | Maintenance (Remote) | Automatic ordering function of supplies E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 738 | Maintenance (Remote) | Automatic ordering function of supplies User's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 739 | Maintenance (Remote) | Automatic ordering function of supplies User's telephone number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 740 | Maintenance (Remote) | Automatic ordering function of supplies User's E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 741 | Maintenance (Remote) | Automatic ordering function of supplies User's address | ALL | - | SYS | Maximum 100 letters | 11 |
| 742 | Maintenance (Remote) | Automatic ordering function of supplies Service number | ALL | 0 <5 digits> | SYS | Maximum 5 digits | 11 |
| 743 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 744 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's telephone number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 745 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 746 | Maintenance (Remote) | Automatic ordering function of supplies Supplier's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 747 | Maintenance (Remote) | Automatic ordering function of supplies Supplier's address | ALL | - | SYS | Maximum 100 letters | 11 |
| 748 | Maintenance (Remote) | Automatic ordering function of supplies Notes | ALL | - | SYS | Maximum 128 letters | 11 |
| 758 | Maintenance (Remote) | Information about supplies Part number of toner cartridge | ALL | - | SYS | Maximum 20 digits | 11 |
| 759 | Maintenance (Remote) | Information about supplies Order quantity of toner cartridge | ALL | 1 <1-99> | SYS | | 1 |
| 760 | Maintenance (Remote) | Information about supplies Condition number of toner cartridge | ALL | 1 <1-99> | SYS | | 1 |
| 764 | Maintenance (Remote) | Automatic ordering supplies Result table printout | ALL | 1 <0-2> | SYS | 0: OFF 1: Always 2: ON Error | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 765 | Maintenance (Remote) | Automatic ordering supplies Display | ALL | 2 <0-2> | SYS | 0: Valid (FAX/Internet FAX) 1: Valid (FAX/Internet FAX/HTTP) 2: Invalid | 1 |
| 767 | Maintenance (Remote) | Service Notification setting | ALL | 0 <0-2> | SYS | Enables to set up to 3 E-mail addresses to be sent.(08-768, 777, 778) 0: Invalid 1: Valid (E-mail) 2: Valid (FAX) | 1 |
| 768 | Maintenance (Remote) | Destination E-mail address | ALL | - | SYS | Maximum 192 letters | 11 |
| 769 | Maintenance (Remote) | Total counter information transmission setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 770 | Maintenance (Remote) | Total counter transmission date setting | ALL | 1 <1-31> | SYS | 1 to 31 | 1 |
| 771 | Maintenance (Remote) | PM counter notification setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 772 | Maintenance | Dealer's name | ALL | - | SYS | Maximum 100 letters Needed at initial registration | 11 |
| 773 | Maintenance | Login name | ALL | - | SYS | Maximum 20 letters Needed at initial registration | 11 |
| 774 | Maintenance (Remote) | Display setting of [Service Notification] button | ALL | 0 <0-1> | SYS | 0: Not displayed 1: displayed | 1 |
| 775 | Maintenance (Remote) | Sending error contents of equipment | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 776 | Maintenance (Remote) | Setting total counter transmission interval (Hour/Hour/Minute/Minute) | ALL | - | SYS | | 1 |
| 777 | Maintenance (Remote) | Destination E-mail address 2 | ALL | - | SYS | Maximum 192 letters | 11 |
| 778 | Maintenance (Remote) | Destination E-mail address 3 | ALL | - | SYS | Maximum 192 letters | 11 |
| 779 | Maintenance (Remote) | Notification format selection | ALL | 0 <0-1> | SYS | 0: Text 1: Text + XML data | 1 |
| 780 | Maintenance | Remote-controlled service polling day selection Day-1 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 781 | Maintenance | Remote-controlled service polling day selection Day-2 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 782 | Maintenance | Remote-controlled service polling day selection Day-3 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|------------------|-------------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 783 | Maintenance | Remote-controlled service polling day selection Day-4 | | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 784 | Maintenance | Remote-controlled service polling day selection Sunday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 785 | Maintenance | Remote-controlled service polling day selection Monday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 786 | Maintenance | Remote-controlled service polling day selection Tuesday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 787 | Maintenance | Remote-controlled service polling day selection Wednesday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 788 | Maintenance | Remote-controlled service polling day selection Thursday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 789 | Maintenance | Remote-controlled service polling day selection Friday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 790 | Maintenance | Remote-controlled service polling day selection Saturday | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 794 | Maintenance | Information of supplies setting of toner cartridge | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 796 | Maintenance | Remote-controlled service lengthened interval polling (End of month) | | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 797 | Maintenance | Firmware download | | ALL | 0 <0-1> | SYS | 0: Accepted 1: Prohibited | 1 |
| 798 | General | Notifying address of trial period end | | PRT/ SCN | 3 <0-3> | SYS | Sets where the end of the trial period is to be notified. 0: OFF 1: User 2: Service center 3: User and service center | 1 |
| 799 | General | Forcible end of trial period | | PRT/ SCN | - | SYS | [CANCEL]: Cancel [EXECUTION]: Forcible end When the "Forcible end of trial period" is performed, "0" is set in the code (08-673) to end up the trial period forcibly. | 3 |
| 800-0 | Fuser | Temperature control lower limit (OHP film) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C | 4 |
| 800-1 | | | Side themistor | ALL | 6 <0-12> | M | 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | | |
|--|----------------|---|-------------------|----------|----------------------------------|-----|--|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | | Procedure |
| 801-0 | Fuser | Temperature control lower limit (Thick paper 1) | Center thermistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 | |
| 801-1 | | | Side thermistor | ALL | 6 <0-12> | M | | | |
| 802-0 | Fuser | Temperature control lower limit (Thick paper 2) | Center thermistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 | |
| 802-1 | | | Side thermistor | ALL | 9 <0-12> | M | | | |
| 803-0 | Fuser | Temperature control lower limit (Thick paper 3) | Center thermistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 | |
| 803-1 | | | Side thermistor | ALL | 10 <0-12> | M | | | |
| 804-0 | Fuser | Temperature control lower limit (Envelope) | Center thermistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 | |
| 804-1 | | | Side thermistor | ALL | 10 <0-12> | M | | | |
| 805 | Charger | Main charger bias correction (Text/Photo/OHP film) | | PRT | 98 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 | |
| 806 | Charger | Main charger bias correction (Toner Saving Mode/OHP film) | | PRT | 98 <0-255> | M | | 1 | |
| 807 | Charger | Main charger bias correction (Text/Photo/OHP film) | | PPC | 98 <0-255> | M | | 1 | |
| 808 | Charger | Main charger bias correction (Text/OHP film) | | PPC | 98 <0-255> | M | | 1 | |
| 809 | Charger | Main charger bias correction (Photo/OHP film) | | PPC | 98 <0-255> | M | | 1 | |
| 826 | Charger | Main charger bias correction (Toner saving mode) | | PRT | 128 <0-255> | M | | 1 | |
| 830 | Transfer | Transfer transformer DC correction (C) | | ALL | 128 <0-255> | M | | Corrects the value of the transfer transformer DC output adjustment (05-221). | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 831 | Separation | Separation transformer DC correction (C) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-234). | 1 |
| 833 | Developer | Developer bias DC correction (Text/Photo/OHP film) | PRT | 108 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 834 | Developer | Developer bias DC correction (Toner Saving Mode/OHP film) | PRT | 108 <0-255> | M | | 1 |
| 835 | Developer | Developer bias DC correction (Text/Photo/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 836 | Developer | Developer bias DC correction (Text/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 837 | Developer | Developer bias DC correction (Photo/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 838 | Image processing | Switching of recycled toner saving control | ALL | 0 <0-1> | M | 0: Switched 1: Not switched | 1 |
| 839 | Image processing | Correction by temperature/humidity | ALL | 0 <0-3> | M | Sets the correction by temperature/humidity. 0: All valid 1: All invalid 2: Valid only in auto-toner sensor 3: All valid except transfer and separation | 1 |
| 849 | General | Power source setting for destination | ALL | SAD: 1 Others: 0 <0-1> | M | 0: Other than SAD 1: SAD | 1 |
| 859 | Developer | Developer bias DC correction (Toner saving mode) | PRT | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 860 | Developer | Developer bias DC correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 861 | Developer | Developer bias DC correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 862 | Developer | Developer bias DC correction (Text) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 863 | Developer | Developer bias DC correction (Photo) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 864 | Charger | Main charger bias correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 865 | Charger | Main charger bias correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 866 | Charger | Main charger bias correction (Text) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 867 | Charger | Main charger bias correction (Photo) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 868 | Transfer | Transfer transformer DC correction (H) | ALL | 128 <0-255> | M | Corrects the value of the transfer transformer DC output adjustment (05-220). | 1 |
| 869 | Transfer | Transfer transformer DC correction (L) | ALL | 128 <0-255> | M | Corrects the value of the transfer transformer DC output adjustment (05-222). | 1 |
| 870 | Separation | Separation transformer DC correction (H) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-233). | 1 |
| 871 | Separation | Separation transformer DC correction (L) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-235). | 1 |
| 872 | Laser | Laser power correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 873 | Laser | Laser power correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 875 | Laser | Laser power correction (Toner saving mode) | PRT | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 876 | Laser | Laser power correction (Text) | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 877 | Laser | Laser power correction (Photo) | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|---|------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 886 | Fuser | Temperature drop control setting in ready status (Temperature/Time) | | ALL | 2 <0-20> | M | 0: None 1: Pattern 1 2: Pattern 2 3: Pattern 3 4: Pattern 4 5: Pattern 5 6: Pattern 6 7: Pattern 7 8: Pattern 8 9: Pattern 9 10: Pattern 10 11: Pattern 11 12: Pattern 12 13: Pattern 13 14: Pattern 14 15: Pattern 15 16: Pattern 16 17: Pattern 17 18: Pattern 18 19: Pattern 19 20: Manual adjustment | 1 |
| 896-0 | Fuser | Temperature control lower limit (Plain paper/ Low temperature) | Center themistor | ALL | 7 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C | 4 |
| 896-1 | | | Side themistor | ALL | 5 <0-12> | M | 10: 180°C 11: 185°C 12: 120°C | 4 |
| 900 | Version | System firmware ROM version | | ALL | - | - | JPN: T371SY0JXXX UC: T371SY0UXXX EUR: T371SY0EXXX Others: T371SY0XXXX | 2 |
| 903 | Version | Engine ROM version | | ALL | - | - | 371M-XXX | 2 |
| 905 | Version | Scanner ROM version | | ALL | - | - | 371S-XXX | 2 |
| 907 | Version | RADF ROM version | | ALL | - | - | DF-XXXX | 2 |
| 908 | Version | Finisher ROM version | | ALL | - | - | SDL-XX FIN-XX | 2 |
| 915 | Version | Fax board ROM version | | FAX | - | - | F562-XXX | 2 |
| 916 | Version | NIC board ROM version | | ALL | - | - | X.XXX | 2 |
| 920 | Version | FROM basic section software version | | ALL | - | - | VX.XX/X.XX | 2 |
| 921 | Version | FROM internal program | | ALL | - | - | VXXX.XXX X | 2 |
| 922 | Version | UI data fixed section version | | ALL | - | - | VXXX.XXX X | 2 |
| 923 | Version | UI data common section version | | ALL | - | - | VXXX.XXX X | 2 |
| 924 | Version | Version of UI data language 1 in HDD | | ALL | - | - | VXXX.XXX X | 2 |
| 925 | Version | Version of UI data language 2 in HDD | | ALL | - | - | VXXX.XXX X | 2 |
| 926 | Version | Version of UI data language 3 in HDD | | ALL | - | - | VXXX.XXX X | 2 |
| 927 | Version | Version of UI data language 4 in HDD | | ALL | - | - | VXXX.XXX X | 2 |
| 928 | Version | Version of UI data language 5 in HDD | | ALL | - | - | VXXX.XXX X | 2 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 929 | Version | Version of UI data language 6 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 930 | Version | Version of UI data in FROM displayed at power-ON | ALL | - | - | VXXX.XXX X | 2 |
| 931 | Version | Version of UI data language 7 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 933 | Version | Web data whole version | ALL | - | - | VXXX.XXX X | 2 |
| 934 | Version | Web UI data in HDD Version: Language 1 | ALL | - | - | VXXX.XXX X | 2 |
| 935 | Version | Web UI data in HDD Version: Language 2 | ALL | - | - | VXXX.XXX X | 2 |
| 936 | Version | Web UI data in HDD Version: Language 3 | ALL | - | - | VXXX.XXX X | 2 |
| 937 | Version | Web UI data in HDD Version: Language 4 | ALL | - | - | VXXX.XXX X | 2 |
| 938 | Version | Web UI data in HDD Version: Language 5 | ALL | - | - | VXXX.XXX X | 2 |
| 939 | Version | Web UI data in HDD Version: Language 6 | ALL | - | - | VXXX.XXX X | 2 |
| 944 | Version | HD version | ALL | - | - | JPN: T371HD0JXXX UC: T371HD0UXXX EUR: T371HD0EXXX Others: T371HD0XXXX | 2 |
| 945 | Network | Two-way setting of RawPort 9100 | ALL | 1 <1-2> | UTY | 1: Valid 2: Invalid | 12 |
| 947 | General | Initialization after software version upgrade | ALL | - | - | Perform this code when the software in this equipment has been upgraded. | 3 |
| 948 | General | Mode setting by pressing [Energy Saver] button for a while | ALL | 0 <0-1> | SYS | Sets the mode to enter when the [Energy Saver] button is pressed for a while. 0: Sleep Mode 1: Auto Shut Off Mode | 1 |
| 949 | General | Automatic interruption page setting during printing | ALL | 0 <0-100> | SYS | Sets the number of pages to interrupt the printing automatically. 0-100: 0 to 100 pages | 1 |
| 950 | Electronic Filing | Start-up method of Electronic Filing | ALL | 0 <0-2> | SYS | Sets the start-up method of the Electronic Filing. 0: Standard 1: Forced start-up (Not recovered) 2: Forced start-up (Recovered) | 1 |
| 953 | User interface | Access code entry for Electronic Filing printing | ALL | 0 <0-1> | SYS | 0: Renewed automatically 1: Enter every time | 1 |
| 954 | User interface | Clearing timing for files and Electronic Filing Agent | ALL | 1 <0-1> | SYS | 0: Immediately after the completion of scanning 1: Cleared by Auto Clear | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 969 | User interface | Error sound | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 970 | User interface | Sound setting when switching to Energy Saving Mode | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 973 | Network | PCL line feed code setting | PRT | 0 <0-3> | SYS | Sets the PCL line feed code. 0: Automatic setting 1: CR=CR, LF=LF 2: CR=CR+LF, LF=LF 3: CR=CR, LF=CR+LF | 1 |
| 975 | General | Job handling when printing is short paid with coin controller | ALL | 1 <0-1> | SYS | Sets whether pause or stop the printing job when it is short paid using a coin controller. 0: Pause the job 1: Stop the job | 1 |
| 976 | Electronic Filing | Equipment name setting to a folder when saving files | ALL | 0 <0-1> | SYS | Sets whether or not adding the equipment name to the folder when saving files. 0: Not add 1: Add | 1 |
| 977 | Network | Switching of extended ASCII code in catFs file-system | ALL | 0 <0-1> | SYS | 0: ISO8859-1 1: ISO8859-2 | 1 |
| 978 | Network | Raw printing job (Paper feeding drawer) | PRT | 0 <0-5> | SYS | 0: AUTO 1: Upper drawer 2: Lower drawer 3: PFP upper drawer 4: PFP lower drawer 5: LCF | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|-----------------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 979 | Network | Raw printing job (PCL symbol set) | PRT | 0 <0-39> | SYS | 0: Roman-8 1: ISO 8859/1 Latin 1 2: ISO 8859/2 Latin 2 3: ISO 8859/9 Latin 5 4: PC-8,Code Page 437 5: PC-8 D/N, Danish/ Norwegian 6: PC-850,Multilingual 7: PC-852, Latin2 8: PC-8 Turkish 9: Windows 3.1 Latin 1 10: Windows 3.1 Latin 2 11: Windows 3.1 Latin 5 12: DeskTop 13: PS Text 14: Ventura Interna- tional 15: Ventura US 16: Microsoft Publishing 17: Math-8 18: PS Math 19: Ventura Math 20: Pi Font 21: Legal 22: ISO 4: United King- dom 23: ISO 6: ASCII 24: ISO 11 25: ISO 15: Italian 26: ISO 17 27: ISO 21: German 28: ISO 60: Danish/Nor- wegian 29: ISO 69: French 30: Windows 3.0 Latin 1 31: MC Text 32: PC Cyrillic 33: ITC Zapf Dingbats 34: ISO 8859/10 Latin 6 35: PC-775 36: PC-1004 37: Symbol 38: Windows Baltic 39: Wingdings | 1 |
| 980 | Elec- tronic Fil- ing | Electronic Filing data retention period when NIC board is not installed (Public Box) | ALL | 0 <0-999> | SYS | 0: Retention OFF 1 to 999: 1 to 999 days | 1 |
| 981 | Elec- tronic Fil- ing | Electronic Filing data retention period when NIC board is not installed (User Box) | ALL | 0 <0-999> | SYS | 0: Retention OFF 1 to 999: 1 to 999 days | 1 |
| 985 | Elec- tronic Fil- ing | Print mode setting of mixed input source of Electronic Filing | ALL | 0 <0-1> | SYS | 0: Image quality prior- ity mode 1: Function priority mode | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 986 | General | Copy function setting | PPC | 0 <0-1> | SYS | Sets the copy function to be invalid. 0: Valid 1: Invalid | 1 |
| 988 | Paper feeding | Setting of paper size switching to 13" LG | ALL | 0 <0-2> | SYS | 0: Not switched 1: LG → 13"LG 2: FOLIO → 13"LG | 1 |
| 995 | Version | Equipment number (serial number) display | ALL | 0 <10 digits> | SYS | This code can be also keyed in from the adjustment mode (05-976). 10 digits | 11 |
| 999 | Maintenance | FSMS total counter | ALL | 0 <8 digits> | SYS | Refers to values of total counter | 1 |
| 1001 | Maintenance | Reset of NIC board | ALL | 3 <1-3> | NIC | 1: Cold 2: Warm 3: Not reset | 12 |
| 1002 | Network | Selection of NIC board status information | ALL | 1 <1-2> | NIC | 1: Not printed out when the equipment is restarted 2: Printed out when the equipment is restarted | 12 |
| 1003 | Network | Speed setting of Ethernet | ALL | 3 <1-3> | NIC | 1: 10 MBPS 2: 100 MBPS 3: Automatic | 12 |
| 1004 | Network | NIC Web password | ALL | - | NIC | Writing only (Current setting is not displayed.) Maximum 31 letters | 12 |
| 1005 | Network | Availability of IP | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1006 | Network | Address Mode | ALL | 2 <1-5> | NIC | 1: Fixed IP address 2: Dynamic IP address 3: Dynamic IP address without AutoIP 4: Dynamic IP address without BOOTP 5: Dynamic IP address without DHCP | 12 |
| 1007 | Network | Domain name | ALL | - | NIC | Maximum 96 letters | 12 |
| 1008 | Network | IP address | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1009 | Network | Subnet mask | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1010 | Network | Gateway | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1011 | Network | Availability of IPX | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1012 | Network | Network frame type | ALL | 1 <1-5> | NIC | 1: Automatic 2: IEEE802.3 3: Ethernet II 4: IEEE802.3SNAP 5: IEEE802.2 | 12 |
| 1013 | Network | Availability of NCP Burst | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1014 | Network | Availability of AppleTalk | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1015 | Network | Zone setting of AppleTalk | ALL | * | NIC | Maximum 32 letters *: Wildcard character | 12 |
| 1016 | Network | Availability of LDAP | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1017 | Network | Availability of DNS | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1018 | Network | IP address to DNS server (Primary) | ALL | - | NIC | 000.000.000.000- 255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1019 | Network | IP address to DNS server (Secondary) | ALL | - | NIC | 000.000.000.000- 255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1020 | Network | DDNS Desired level | ALL | 1 <1-5> | NIC | 1: Invalid 2: Via DHCP 3: Insecure DDNS 4: Secure DDNS 5: Multi-secure DDNS | 12 |
| 1021 | Network | Availability of SLP | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1023 | Network | NetBios name | ALL | - | UTY | Maximum 15 letters | 12 |
| 1024 | Network | Name of WINS server or IP address (Primary) | ALL | - | UTY | Maximum 128 letters | 12 |
| 1025 | Network | Name of WINS server or IP address (Secondary) | ALL | - | UTY | Maximum 128 letters | 12 |
| 1026 | Network | Availability of Bindery | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1027 | Network | Availability of NDS | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1028 | Network | Directory service context | ALL | - | NIC | Maximum 127 letters | 12 |
| 1029 | Network | Directory service tree | ALL | - | NIC | Maximum 47 letters | 12 |
| 1030 | Network | Availability of HTTP server | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1031 | Network | Port number to NIC HTTP server | ALL | 80 <1- 65535> | NIC | | 12 |
| 1032 | Network | Port number to system HTTP server | ALL | 8080 <1- 65535> | SYS | | 1 |
| 1033 | Network | Availability of NIC HTTP client | ALL | 2 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1034 | Network | TCP port number to Con- troller HTTP client | ALL | 80 <1- 65535> | UTY | | 12 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1035 | Network | IP address to HTTP server (Primary) | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1037 | Network | Availability of SMTP client | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1038 | Network | FQDN or IP address to SMTP server | ALL | - | NIC | Maximum 128 Bytes | 12 |
| 1039 | Network | TCP port number of SMTP client | ALL | 25 <1-65535> | NIC | | 12 |
| 1040 | Network | Availability of SMTP server | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1041 | Network | TCP port number of SMTP server | ALL | 25 <1-65535> | UTY | | 12 |
| 1042 | Network | E-mail box name to SMTP server | ALL | - | UTY | Maximum 192 letters | 12 |
| 1043 | Network | Availability of Offramp | ALL | 2 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1044 | Network | Offramp security | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1045 | Network | Printing at Offramp | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1046 | Network | Availability of POP3 clients | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1047 | Network | FQDN or IP address to POP3 server | ALL | - | NIC | Maximum 128 Bytes | 12 |
| 1048 | Network | Types of POP3 server | ALL | 1 <1-3> | NIC | 1: Automatic 2: POP3 3: APOP | 12 |
| 1049 | Network | Login name to POP3 server | ALL | - | NIC | Maximum 96 letters | 12 |
| 1050 | Network | Login password to POP3 | ALL | - | NIC | Maximum 96 letters | 12 |
| 1051 | Network | E-mail reception interval (Unit: Minute) | ALL | 5 <0-4096> | NIC | | 12 |
| 1052 | Network | TCP port number of POP3 client | ALL | 110 <1-65535> | NIC | | 12 |
| 1053 | Network | Availability of FTP client | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1054 | Network | FQDN or IP address to FTP server | ALL | - | NIC | Maximum 128 letters | 12 |
| 1055 | Network | TCP port number of FTP client | ALL | 21 <1-65535> | UTY | | 12 |
| 1056 | Network | Data port number of FTP client | ALL | 0 <0-65535> | UTY | | 12 |
| 1057 | Network | Login name to FTP server | ALL | - | SYS | Maximum 31 letters | 11 |
| 1058 | Network | Login password to FTP server | ALL | - | SYS | Maximum 31 letters | 11 |
| 1059 | Network | Availability of FTP server | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--------------------------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1060 | Network | TCP port number of FTP server | ALL | 21 <1-65535> | UTY | | 12 |
| 1061 | Network | Login name to FTP client | ALL | - | SYS | Maximum 31 letters | 11 |
| 1062 | Network | Login password to FTP client | ALL | - | SYS | Maximum 31 letters | 11 |
| 1063 | Network | MIB function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1065 | Network | Setting of read Community | ALL | public | NIC | Maximum 31 letters | 12 |
| 1066 | Network | Setting of read/Write Community | ALL | private | NIC | Maximum 31 letters | 12 |
| 1067 | Network | Authentication TRAP function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1068 | Network | ALERTS TRAP function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1069 | Network | TRAP destination IP address | ALL | - | UTY | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1070 | Network | Community setting of TRAP (via IP) | ALL | public | NIC | Maximum 31 letters | 12 |
| 1073 | Network | Availability of Raw/TCP | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1074 | Network | TCP port number of Raw | ALL | 9100 <1-65535> | NIC | | 12 |
| 1075 | Network | Availability of LPD client | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1076 | Network | TCP port number of LPD | ALL | 515 <1-65535> | NIC | | 12 |
| 1077 | Network | LPD queue name | ALL | - | NIC | Maximum 31 letters | 12 |
| 1078 | Network | Availability of IPP | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1079 | Network | Availability of IPP port number "80" | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1080 | Network | TCP port number of IPP | ALL | 631 <1-65535> | NIC | | 12 |
| 1081 | Network | IPP printer name | ALL | - | NIC | Maximum 127 letters | 12 |
| 1082 | Network | IPP printer location | ALL | - | NIC | Maximum 127 letters | 12 |
| 1083 | Network | IPP printer information | ALL | - | NIC | Maximum 127 letters | 12 |
| 1084 | Network | IPP printer information (more) | ALL | - | NIC | Maximum 127 letters | 12 |
| 1085 | Network | Installer of IPP printer driver | ALL | - | NIC | Maximum 127 letters | 12 |
| 1086 | Network | IPP printer "Make and Model" | ALL | - | NIC | Maximum 127 letters | 12 |
| 1087 | Network | IPP printer information (more) MFGR | ALL | - | NIC | Maximum 127 letters | 12 |
| 1088 | Network | IPP message from operator | ALL | - | NIC | Maximum 127 letters | 12 |
| 1089 | Network | Availability of FTP print | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1090 | Network | Printer user name of FTP | ALL | print | NIC | Maximum 31 letters | 12 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1091 | Network | Printer user password of FTP | ALL | - | NIC | Maximum 31 letters | 12 |
| 1092 | Network | TCP port number to FTP print server | ALL | 21 <1-65535> | NIC | | 12 |
| 1093 | Network | Login name to Novell print server | ALL | - | NIC | Maximum 47 letters | 12 |
| 1094 | Network | Login password to Novell print server | ALL | - | NIC | Maximum 31 letters | 12 |
| 1095 | Network | Name of SearchRoot server | ALL | - | NIC | Maximum 31 letters | 12 |
| 1096 | Network | Scan rate setting of print queue | ALL | 5 <1-255> | NIC | Unit: Second | 12 |
| 1097 | Network | Page number limitation for printing text of received E-mail | ALL | 5 <1-99> | UTY | | 12 |
| 1098 | Network | MDN return mail setting when receiving E-mail | ALL | 2 <1-2> | UTY | 1: Valid 2: Invalid | 12 |
| 1099 | Network | Trap destination of IPX | ALL | - | UTY | Maximum 24 letters (Valid from 0 to 9 and from A to F) | 12 |
| 1100 | Network | Method of SMTP server authentication | ALL | 5 <1-5> | NIC | 1: Plain 2: Login 3: Cram-MD5 4: Digest MD5 5: Disable | 12 |
| 1101 | Network | Login name for SMTP server authentication | ALL | - | NIC | Maximum 64 letters | 12 |
| 1102 | Network | Login password for SMTP server authentication | ALL | - | NIC | Maximum 64 letters | 12 |
| 1103 | Network | Rendezvous setting | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1104 | Network | Link local host name | ALL | MFP_serial | NIC | Maximum 127 letters | 12 |
| 1105 | Network | Service name setting | ALL | Refer to content | NIC | Maximum 63 letters <Default value> e-STUDIO230: TOSHIBA e-STUDIO230 e-STUDIO280: TOSHIBA e-STUDIO280 | 12 |
| 1112 | Network | Host name | ALL | MFP_serial | NIC | Maximum 63 letters | 12 |
| 1114 | Network | Sending mail text of InternetFAX | ALL | 1 <0-1> | SYS | 0: Invalid (Not sending the mail text) 1: Valid (Sending the mail text) | 1 |
| 1117 | Network | SMB time-out period | ALL | 300 <1-9999> | SYS | Unit: Second | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1120 | Network | Backup/Restore of NIC setting information | ALL | 0 <0-1> | SYS | 0: Read (Reads all of the setting information in NIC and create a file NAM1B (no extension) in USB) 1: Write (Writes all of the setting information read from a file NAM1B (no extension) in USB) | 1 |
| 1124 | Network | Workgroup name | ALL | work-group | UTY | Maximum 15 letters | 12 |
| 1126 | Counter | Validity of interrupt copying when external counters are installed | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 1130 | User interface | Job Build Function | ALL | 1 <0-1> | SYS | Sets the Job Build Function. 0: Invalid 1: Valid | 1 |
| 1131 | User interface | Maximum number of time job build performed | ALL | 1000 <5-1000> | SYS | Sets the maximum number of time a job build has been performed. 5-1000: 5 to 1000 times | 1 |
| 1132 | General | Default screen selection of the User Function menu | ALL | 1 <0-1> | SYS | Selects the default screen when entering the User Function menu by pressing the [USER FUNCTIONS] button. 0: ADDRESS 1: COUNTER | 1 |
| 1133 | Paper feeding | Feeding direction setting of envelope | ALL | 0 <0-1> | SYS | Sets the feeding direction of envelopes. 0: Envelope flap comes on its trailing edge (front side of the equipment) 1: Envelope flap comes on its leading edge (rear side of the equipment) | 1 |
| 1135 | Paper feeding | Default setting of drawers (Printer/BOX) | PRT | 1 <1-5> | SYS | 1: LCF 2: Upper drawer 3: Lower drawer 4: PFP upper drawer 5: PFP lower drawer | 1 |
| 1136 | Network | Number of lines simultaneously connectable when using SMB | ALL | 8 <0-16> | SYS | | 1 |
| 1137 | Network | Memory partition size when using Samba | ALL | 12 <8-20> | SYS | 8-20 M bytes | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1138 | Network | LDAP search method setting | ALL | 0 <0-3> | SYS | Sets the search method when performing a LDAP search. 0: Partial match 1: Prefix match 2: Suffix match 3: Full match | 1 |
| 1139 | Network | LDAP authentication setting | ALL | 0 <0-1> | SYS | 0: Not authenticated 1: Authenticated | 1 |
| 1140 | User interface | Restriction of the template function with the administrator privilege | ALL | 0 <0-1> | SYS | Selects the restriction of the template function usage setting. 0: No restriction 1: Only available with the administrator privilege. | 1 |
| 1145 | Maintenance (Remote) | Counter notification Remote FAX setting | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [MONITOR/PAUSE] button. | 11 |
| 1372 | Counter | Heater and energizing time accumulating counter Display/0 clearing | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when power of the equipment is ON) but does not count at the Sleep Mode. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at the PM support mode. | 1 |
| 1376 | Counter | Toner cartridge drive counter | ALL | 0 <8 digits> | M | Counts the rotation number of the toner cartridge. | 1 |
| 1378 | Counter | Counter for period of time fuser unit is at ready temperature | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when the equipment is at ready status). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |
| 1380 | Counter | Counter for period of time fuser unit is at printing temperature | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (during printing). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1382 | Counter | Counter for period of time fuser unit is at energy saving temperature/Counter reset | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when the equipment is in the Energy Saving Mode). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |
| 1385 | Image processing | Number of output pages (Thick paper 1) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at the PM support mode. | 1 |
| 1386 | Image processing | Number of output pages (Thick paper 2) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |
| 1387 | Image processing | Number of output pages (Thick paper 3) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |
| 1388 | Image processing | Number of output pages (OHP film) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |
| 1390 | Paper feeding | Feeding retry counter (upper drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the upper drawer. | 1 |
| 1391 | Paper feeding | Feeding retry counter (lower drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the lower drawer. | 1 |
| 1392 | Paper feeding | Feeding retry counter (PFP upper drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the PFP upper drawer. | 1 |
| 1393 | Paper feeding | Feeding retry counter (PFP lower drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the PFP lower drawer. | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|--------------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1394 | Paper feeding | Feeding retry counter (bypass feed) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the bypass tray. | 1 |
| 1395 | Paper feeding | Feeding retry counter (LCF) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the LCF. | 1 |
| 1396 | Paper feeding | Feeding retry counter upper limit value (Upper drawer) | ALL | 0 <8 digits> | M | When the number of feeding retry (08-1390 to 08-1395) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value. | 1 |
| 1397 | Paper feeding | Feeding retry counter upper limit value (Lower drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1398 | Paper feeding | Feeding retry counter upper limit value (PFP upper drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1399 | Paper feeding | Feeding retry counter upper limit value (PFP lower drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1400 | Paper feeding | Feeding retry counter upper limit value (Bypass feed) | ALL | 0 <8 digits> | M | | 1 |
| 1401 | Paper feeding | Feeding retry counter upper limit value (LCF) | ALL | 0 <8 digits> | M | | 1 |
| 1410 | Counter | Counter for period of toner cartridge rotation time | ALL | 0 <8 digits> | M | Counts up the period of rotation time of the toner cartridge. | 1 |
| 1411 | Counter | Counter for envelope | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is reset, this counter is reset in sync at the PM support mode. | 1 |
| 1422 | Data overwrite kit | HDD data overwriting type setting | ALL | 3 <0-4> | SYS | HDD data is cleared by overwriting the type of value set in this code. (This setting is enabled only when the GP-1050 is installed.) 0: "00" overwriting only 1: "FF" overwriting only 2: Random number overwriting only 3: "00" + "FF" + random number overwriting (validation ON) 4: "00" + "FF" + random number overwriting (validation OFF) | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|--------------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1424 | Data overwrite kit | HDD data clearing type setting (forcible clearing) | ALL | 3 <0-4> | SYS | HDD data is cleared by overwriting the type of value set in this code. (This setting is enabled only when the GP-1050 is installed.) 0: "00" overwriting only 1: "FF" overwriting only 2: Random number overwriting only 3: "00" + "FF" + ran- dom number over- writing (validation ON) 4: "00" + "FF" + ran- dom number over- writing (validation OFF) | 1 |
| 1426 | Data overwrite kit | Forcible HDD data clearing | ALL | - | - | HDD data is cleared in the procedure set in 08- 1424. * This setting is enabled only when the GP-1050 is installed. | 3 |
| 1427 | Data overwrite kit | Forcible NVRAM data all clearing | ALL | - | - | When this code is per- formed, the equipment cannot be started up. * This setting is enabled only when the GP-1050 is installed. | 3 |
| 1428 | Data overwrite kit | Forcible SRAM backup data all clearing | ALL | - | - | When this code is per- formed, the equipment cannot be started up. * This setting is enabled only when the GP-1050 is installed. | 3 |
| 1432 | Network | Mode only for Private Print | ALL | 0 <0-1> | SYS | 0: Normal mode 1: Mode for Private Print | 1 |
| 1433 | Network | "Disable e-Filing" function | ALL | 0 <0-1> | SYS | 0: Function OFF (no restriction on data saving or other operations) 1: Function ON (Data saving or other operations are restricted) | 1 |
| 1434 | Network | "Disable local file save" function | ALL | 0 <0-1> | SYS | 0: Function OFF (no restriction on data saving or other operations) 1: Function ON (Data saving or other operations are restricted) | 1 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1484 | Network | Authentication method of "Scan to Email" | ALL | 0 <0-2> | SYS | 0: Disable 1: SMTP authentication 2: LDAP authentication | 1 |
| 1485 | Network | Setting whether use of Internet FAX is permitted or not when it is given an authentication | ALL | 0 <0-1> | SYS | 0: Not permitted 1: Permitted | 1 |
| 1486 | Network | Server setting for LDAP user authentication | ALL | 0 <0-4294967 295> | SYS | | 2 |
| 1487 | Network | "From" address assignment method when it is given an authentication | ALL | 0 <0-2> | SYS | 0: "User name" + @ + "Domain name" 1: LDAP search 2: Use the address registered in "From" field of E-mail setting | 1 |
| 1488 | Network | ID setting of LDAP server for "From" address assignment | ALL | 0 <0-4294967 295> | SYS | | 2 |
| 1489 | Network | Setting for "From" address edit at "Scan to Email" | ALL | 0 <0-1> | SYS | 0: Not permitted 1: Permitted | 1 |
| 1491 | Network | E-mail domain name | ALL | - | SYS | 96+2 (delimiter) character ASCII sequence only | 11 |

<<Pixel counter related code>> (Chap. 2.2.9)

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1500 | Pixel counter | Standard paper size setting | ALL | EUR: 0 UC: 1 JPN: 0 | SYS | Selects the standard paper size to convert it into the pixel count (%). 0: A4 1: LT | 1 |
| 1501 | Pixel counter | Pixel counter all clearing | ALL | - | SYS | Clears all information related to the pixel counter. | 3 |
| 1502 | Pixel counter | Service technician reference counter clearing | ALL | - | SYS | Clears all information related to the service technician reference pixel counter. | 3 |
| 1503 | Pixel counter | Toner cartridge reference counter clearing | ALL | - | SYS | Clears all information related to the toner cartridge reference pixel counter. | 3 |
| 1504 | Pixel counter | Pixel counter display setting | ALL | 1 <0-1> | SYS | Selects whether or not to display the pixel counter on the LCD screen. 0: Displayed 1: Not displayed | 1 |
| 1505 | Pixel counter | Displayed reference setting | ALL | 0 <0-1> | SYS | Selects the reference when displaying the pixel counter on the LCD screen. 0: Service technician reference 1: Toner cartridge reference | 1 |
| 1506 | Pixel counter | Toner empty determination counter setting | ALL | 0 <0-1> | SYS | Selects the counter to determine toner empty. 0: Output pages 1: Pixel counter | 1 |
| 1507 | Pixel counter | Threshold setting for toner empty determination (Output pages) | ALL | 800 <0-999> | SYS | Sets the number of output pages to determine toner empty. This setting is valid when "0" is set at 08-1506. | 1 |
| 1508 | Pixel counter | Threshold setting for toner empty determination (Pixel count) | ALL | 35100 <0-60000> | SYS | Sets the pixel count to determine the toner empty status. This setting is valid when "1" is set at 08-1506. | 1 |
| 1509 | Pixel counter | Pixel counter clear flag/Service technician reference | ALL | 0 <0-1> | SYS | Becomes "1" when 08-1502 is performed. | 2 |
| 1510 | Pixel counter | Service technician reference cleared date | ALL | - | SYS | Displays the date on which 08-1502 was performed. | 2 |
| 1514 | Pixel counter | Toner cartridge reference cleared date | ALL | - | SYS | Displays the date on which 08-1503 was performed. | 2 |
| 1518 | Pixel counter | Toner cartridge reference count started date | ALL | - | SYS | Displays the date on which 08-1503 was performed. | 2 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1548 | Pixel counter | Number of output pages (Service technician reference) | PPC | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the copy function and service technician reference. [Unit. page] | 2 |
| 1550 | Pixel counter | Number of output pages (Service technician reference) | PRT | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the printer function and service technician reference. [Unit. page] | 2 |
| 1551 | Pixel counter | Number of output pages (Service technician reference) | FAX | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the FAX function and service technician reference. [Unit. page] | 2 |
| 1553 | Pixel counter | Number of output pages (Toner cartridge reference) | PPC | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the copy function and toner cartridge reference. [Unit. page] | 2 |
| 1555 | Pixel counter | Number of output pages (Toner cartridge reference) | PRT | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the printer function and toner cartridge reference. [Unit. page] | 2 |
| 1556 | Pixel counter | Number of output pages (Toner cartridge reference) | FAX | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the FAX function and toner cartridge reference. [Unit. page] | 2 |
| 1566 | Pixel counter | Toner cartridge replacement counter | ALL | <3 digits> | SYS | Counts the number of time of the toner cartridge replacement. | 2 |
| 1592 | Pixel counter | Average pixel count (Service technician reference) | PPC | 0 <0-10000> | SYS | Displays the average pixel count in the copy function and service technician reference. [Unit: 0.01%] | 2 |
| 1593 | Pixel counter | Average pixel count (Service technician reference) | PRT | 0 <0-10000> | SYS | Displays the average pixel count in the printer function and service technician reference. [Unit: 0.01%] | 2 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | |
|--|----------------|--|---------------------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1594 | Pixel counter | Average pixel count (Service technician reference) | FAX | 0 <0-10000> | SYS | Displays the average pixel count in the FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1595 | Pixel counter | Average pixel count (Service technician reference) | PPC/ PRT/ FAX | 0 <0-10000> | SYS | Displays the average pixel count in the copy/printer/FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1606 | Pixel counter | Latest pixel count (Service technician reference) | PPC | 0 <0-10000> | SYS | Displays the latest pixel count in the copy function and service technician reference. [Unit: 0.01%] | 2 |
| 1607 | Pixel counter | Latest pixel count (Service technician reference) | PRT | 0 <0-10000> | SYS | Displays the latest pixel count in the printer function and service technician reference. [Unit: 0.01%] | 2 |
| 1608 | Pixel counter | Latest pixel count (Service technician reference) | FAX | 0 <0-10000> | SYS | Displays the latest pixel count in the FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1613 | Pixel counter | Average pixel count (Toner cartridge reference) | PPC | 0 <0-10000> | SYS | Displays the average pixel count in the copy function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1619 | Pixel counter | Average pixel count (Toner cartridge reference) | PRT | 0 <0-10000> | SYS | Displays the average pixel count in the printer function, and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1624 | Pixel counter | Average pixel count (Toner cartridge reference) | PPC/ PRT/ FAX | 0 <0-10000> | SYS | Displays the average pixel count in the copy/printer/FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1625 | Pixel counter | Average pixel count (Toner cartridge reference) | FAX | 0 <0-10000> | SYS | Displays the average pixel count in the FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1634 | Pixel counter | Latest pixel count (Toner cartridge reference) | FAX | 0 <0-10000> | SYS | Displays the latest pixel count in the FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1639 | Pixel counter | Latest pixel count (Toner cartridge reference) | PPC | 0 <0-10000> | SYS | Displays the latest pixel count in the copy function and toner cartridge reference. [Unit: 0.01%] | 2 |

| Setting mode (08) <e-STUDIO200L/230/280> | | | | | | | | |
|--|----------------|--|-----------|----------------------------------|------------|---|--|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 1640 | Pixel counter | Latest pixel count (Toner cartridge reference) | PRT | 0 <0-10000> | SYS | Displays the latest pixel count in the printer function and toner cartridge reference. [Unit: 0.01%] | 2 | |
| 1649-0 | Pixel counter | Pixel count distribution | 0-5% | PPC | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function are displayed. [Unit: page] | 14 |
| 1649-1 | | | 5.1-10% | PPC | <8 digits> | SYS | | 14 |
| 1649-2 | | | 10.1-15% | PPC | <8 digits> | SYS | | 14 |
| 1649-3 | | | 15.1-20% | PPC | <8 digits> | SYS | | 14 |
| 1649-4 | | | 20.1-25% | PPC | <8 digits> | SYS | | 14 |
| 1649-5 | | | 25.1-30% | PPC | <8 digits> | SYS | | 14 |
| 1649-6 | | | 30.1-40% | PPC | <8 digits> | SYS | | 14 |
| 1649-7 | | | 40.1-60% | PPC | <8 digits> | SYS | | 14 |
| 1649-8 | | | 60.1-80% | PPC | <8 digits> | SYS | | 14 |
| 1649-9 | | | 80.1-100% | PPC | <8 digits> | SYS | | 14 |
| 1650-0 | Pixel counter | Pixel count distribution | 0-5% | PRT | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function are displayed. [Unit: page] | 14 |
| 1650-1 | | | 5.1-10% | PRT | <8 digits> | SYS | | 14 |
| 1650-2 | | | 10.1-15% | PRT | <8 digits> | SYS | | 14 |
| 1650-3 | | | 15.1-20% | PRT | <8 digits> | SYS | | 14 |
| 1650-4 | | | 20.1-25% | PRT | <8 digits> | SYS | | 14 |
| 1650-5 | | | 25.1-30% | PRT | <8 digits> | SYS | | 14 |
| 1650-6 | | | 30.1-40% | PRT | <8 digits> | SYS | | 14 |
| 1650-7 | | | 40.1-60% | PRT | <8 digits> | SYS | | 14 |
| 1650-8 | | | 60.1-80% | PRT | <8 digits> | SYS | | 14 |
| 1650-9 | | | 80.1-100% | PRT | <8 digits> | SYS | | 14 |
| 1651-0 | Pixel counter | Pixel count distribution | 0-5% | FAX | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function are displayed. [Unit: page] | 14 |
| 1651-1 | | | 5.1-10% | FAX | <8 digits> | SYS | | 14 |
| 1651-2 | | | 10.1-15% | FAX | <8 digits> | SYS | | 14 |
| 1651-3 | | | 15.1-20% | FAX | <8 digits> | SYS | | 14 |
| 1651-4 | | | 20.1-25% | FAX | <8 digits> | SYS | | 14 |
| 1651-5 | | | 25.1-30% | FAX | <8 digits> | SYS | | 14 |
| 1651-6 | | | 30.1-40% | FAX | <8 digits> | SYS | | 14 |
| 1651-7 | | | 40.1-60% | FAX | <8 digits> | SYS | | 14 |
| 1651-8 | | | 60.1-80% | FAX | <8 digits> | SYS | | 14 |
| 1651-9 | | | 80.1-100% | FAX | <8 digits> | SYS | | 14 |

<<PM support mode related code>>

- The management items at PM support mode can also be operated at setting mode (08).
The following items are displayed or set by using sub-codes at PM management setting in the table below.

<Sub-codes>

- 0: Present number of output pages
 - Means the present number of output pages.
- 1: Recommended number of output pages for replacement
 - Means the recommended number of output pages for replacement.
- 2: Number of output pages at the last replacement
 - Means the number of output pages at the last replacement.
- 3: Present driving counts
 - Means the present drive counts (1 count = 2 seconds).
- 4: Recommended driving counts to be replaced
 - Means the recommended drive counts for replacement (1 count = 2 seconds).
- 5: Driving counts at the last replacement
 - Means the drive counts at the last replacement.
- 6: Present output pages for control
 - Means the present number of output pages for controlling.
- 7: Present driving counts for control
 - Means the present drive counts for controlling (1 count = 2 seconds).
- 8: Number of times replaced
 - Counts up when clearing the counter of each unit in the PM Support Mode Screen.

Notes:

- Sub-code 3 is equivalent to sub-code 7.
- When the value of sub-code 3 is changed, the value of sub-code 7 is also updated and vice versa.
- When "0" is set at one of sub-codes 0, 3, 6 and 7, the rest of them are automatically updated to "0".

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|-------------------------|---|---|--|
| Photoconductive drum | 1150-0 to 8 | 1151 | <Default values of code 1150 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Drum cleaning blade | 1158-0 to 8 | 1159 | <Default values of code 1158 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Drum separation finger | 1172-0 to 8 | 1173 | <Default values of code 1172 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Main charger grid | 1174-0 to 8 | 1175 | <Default values of code 1174 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Needle electrode | 1182-0 to 8 | 1183 | <Default values of code 1182 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Ozone filter | 1198-0 to 8 | 1199 | <Default values of code 1198 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Developer material | 1200-0 to 8 | 1201 | <Default values of code 1200 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Transfer charger wire | 1214-0 to 8 | 1215 | <Default values of code 1214 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Separation charger wire | 1224-0 to 8 | 1225 | <Default values of code 1224 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Fuser roller | 1246-0 to 8 | 1247 | <Default values of code 1246 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Pressure roller | 1250-0 to 8 | 1251 | <Default values of code 1250 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|----------------------------------|---|---|--|
| Cleaning roller | 1266-0 to 8 | 1267 | <Default values of code 1266 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Fuser roller separation finger | 1268-0 to 8 | 1269 | <Default values of code 1268 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Pickup roller (RADF) | 1282-0,1,2,8 | 1283 | <Default values of code 1282 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Feed roller (RADF) | 1284-0,1,2,8 | 1285 | <Default values of code 1284 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Separation roller (RADF) | 1286-0,1,2,8 | 1287 | <Default values of code 1286 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Pickup roller (Upper drawer) | 1290-0,1,2,8 | 1291 | <Default values of code 1290 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (Lower drawer) | 1292-0,1,2,8 | 1293 | <Default values of code 1292 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (LCF) | 1294-0,1,2,8 | 1295 | <Default values of code 1294 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Feed roller (Upper drawer) | 1298-0,1,2,8 | 1299 | <Default values of code 1298 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (Lower drawer) | 1300-0,1,2,8 | 1301 | <Default values of code 1300 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (LCF) | 1302-0,1,2,8 | 1303 | <Default values of code 1302 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Separation roller (Upper drawer) | 1306-0,1,2,8 | 1307 | <Default values of code 1306 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (Lower drawer) | 1308-0,1,2,8 | 1309 | <Default values of code 1308 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|--------------------------------------|---|---|---|
| Separation roller (LCF) | 1310-0,1,2,8 | 1311 | <Default values of code 1310 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Separation roller (PFP upper drawer) | 1312-0,1,2,8 | 1313 | <Default values of code 1312 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (PFP lower drawer) | 1314-0,1,2,8 | 1315 | <Default values of code 1314 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (Bypass unit) | 1316-0,1,2,8 | 1317 | <Default values of code 1316 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (PFP upper drawer) | 1320-0,1,2,8 | 1321 | <Default values of code 1320 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (PFP lower drawer) | 1322-0,1,2,8 | 1323 | <Default values of code 1322 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (Bypass unit) | 1324-0,1,2,8 | 1325 | <Default values of code 1324 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (PFP upper drawer) | 1328-0,1,2,8 | 1329 | <Default values of code 1328 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (PFP lower drawer) | 1330-0,1,2,8 | 1331 | <Default values of code 1330 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (Bypass unit) | 1332-0,1,2,8 | 1333 | <Default values of code 1332 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Recovery blade | 1336-0 to 8 | 1337 | <Default values of code 1336 (e-STUDIO200L/230/280)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |

<<Procedure to copy the total counter value (08-257)>>

- (1) Turn ON the power while [0] and [8] are pressed simultaneously.
- (2) Key in the code "257" with the digital keys and press the [START] button (the following is displayed).

Note:

Before performing the following operations, note the current counter values.

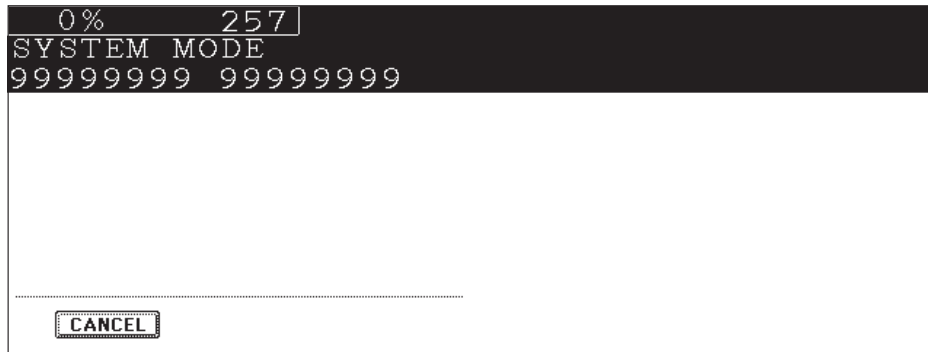


Fig. 2-4

- (3) Key in the value "1" or "2" with the digital key and press the [START] button. The value entered is displayed on the left of the "%", and the [ENTER] button is displayed.

Note:

The value can be erased by pressing the [CLEAR] button to change as long as the [START] button is not pressed. (The value on the left of the "%" is reset to "0" by pressing the [CLEAR] button.)

- Key in "1" to copy the value of the total counter (LGC board) (A) onto the value of the backup counter (SYS board) (B).

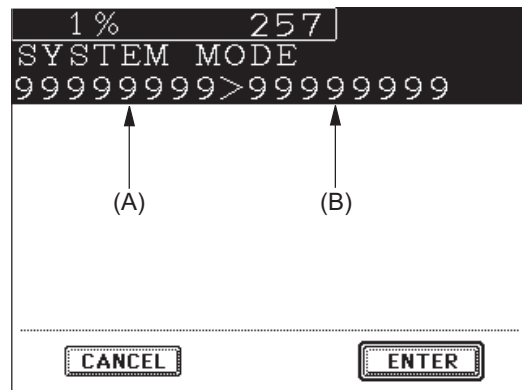


Fig. 2-5

- Key in "2" to copy the value of the backup counter (SYS board) (B) onto the value of the total counter (LGC board) (A).

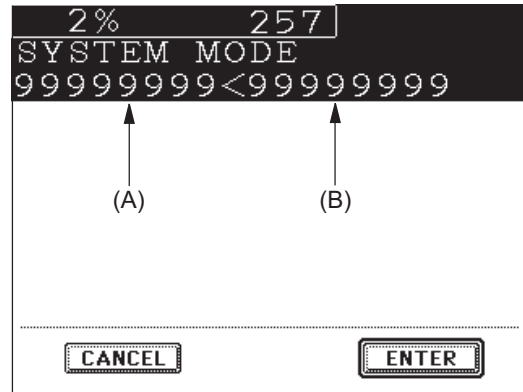


Fig. 2-6

- (4) Press the [ENTER] button to complete overwriting of the counter value.

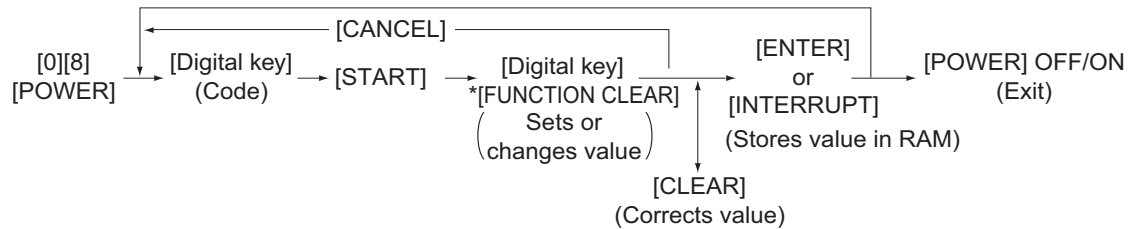
Note:

The screen returns to the code entry screen without copying (overwriting) the value when the [CANCEL] button is pressed.

2.2.8 Setting mode (08) (e-STUDIO202L/232/282)

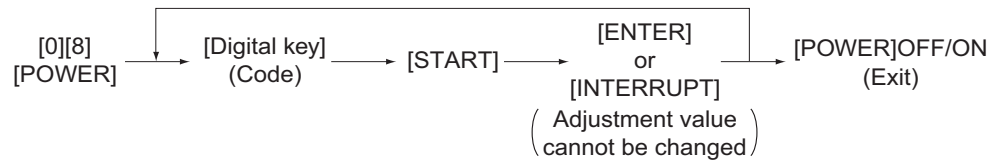
The items in the setting code list can be set or changed in this setting mode (08).

Procedure 1

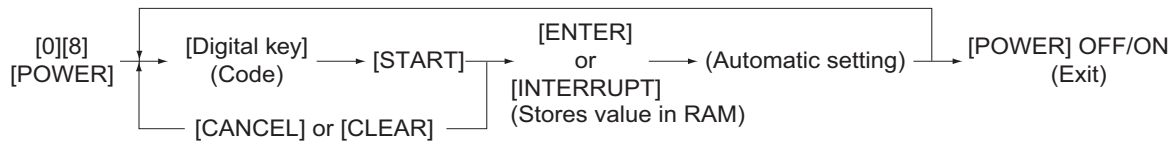


* Press [FUNCTION CLEAR] to enter minus (-).

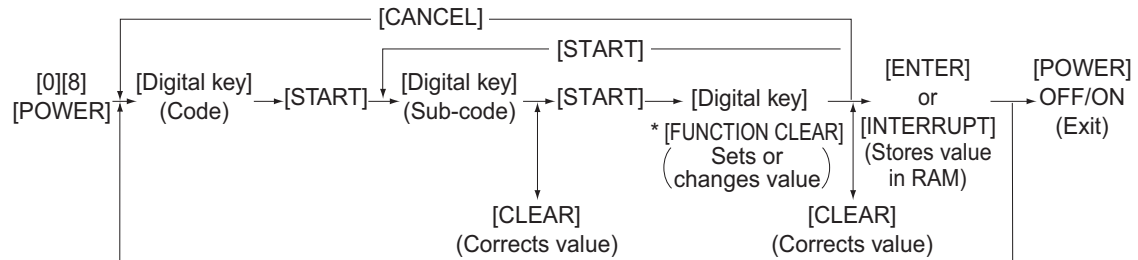
Procedure 2



Procedure 3

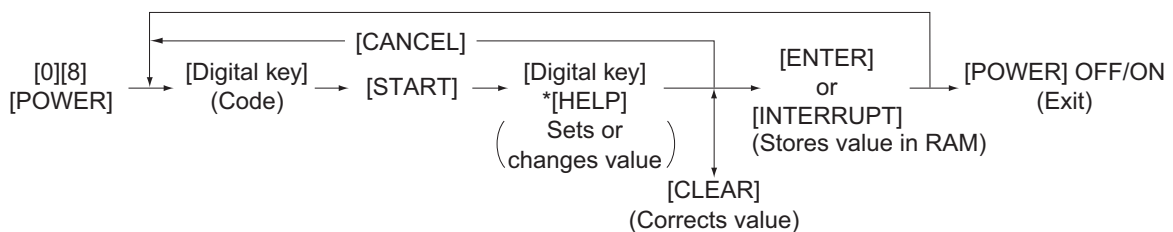


Procedure 4



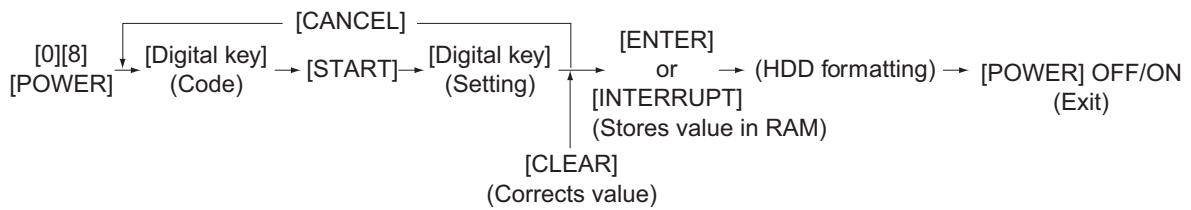
* Press [FUNCTION CLEAR] to enter minus (-).

Procedure 5

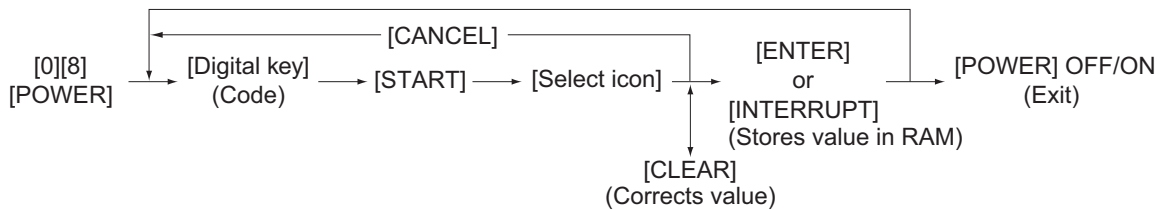


* Press [HELP] to enter "-".

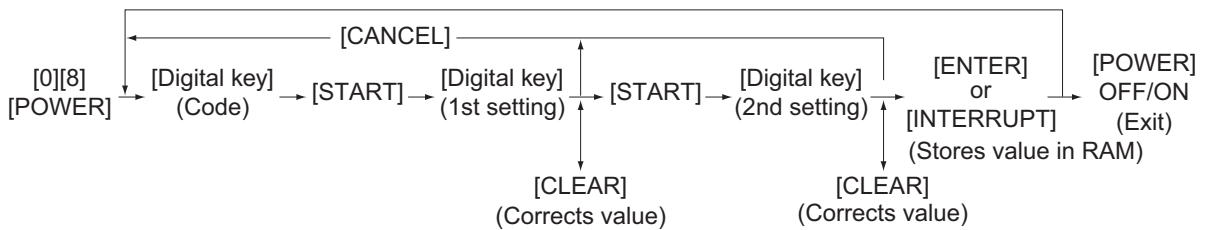
Procedure 7



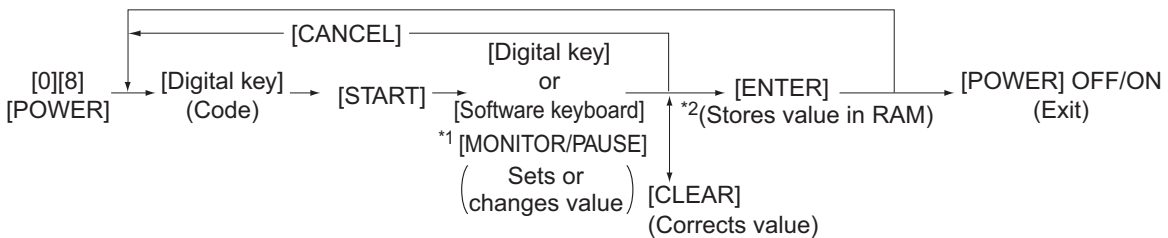
Procedure 9



Procedure 10



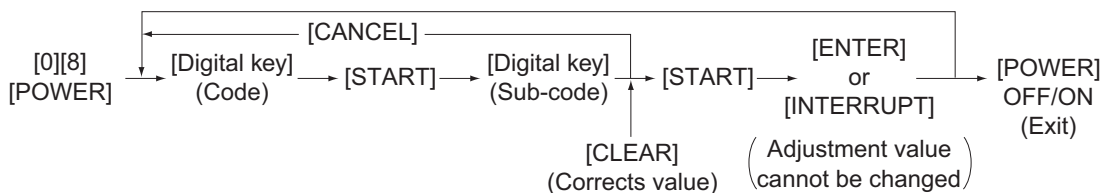
Procedure 11 and 12



*1. Press [MONITOR/PAUSE] to enter "-", when entering telephone number.

*2. The data are stored in SYS-RAM in procedure 11 and stored in NIC-RAM in procedure 12.

Procedure 14



Notes:

- The digit after the hyphen in “Code” of the following table is a sub code.
- e-STUDIO202L/232/282: In “RAM”, the NVRAM of the board in which the data of each code is stored is indicated. “M” stands for the LGC board, “SYS”, “NIC” and “UTY” stands for the SYS board.

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|------------------------------------|----------|--|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 200 | General | Date and time setting | ALL | - <13 digits> | - | Year/month/date/day/hour/minute/second Example: 03 07 0 13 13 27 48 “Day” - “0” is for “Sunday”. Proceeds Monday through Saturday from “1” to “6”. | 5 |
| 201 | General | Destination selection | ALL | EUR: 0 UC: 1 JPN: 2 <0-2> | M | 0: EUR 1: UC 2: JPN | 1 |
| 202 | User interface | Counter installed externally | ALL | 0 <0-3> | M | 0: No external counter 1: Coin controller 2: Copy key card 3: Key copy counter | 1 |
| 203 | General | Line adjustment mode | ALL | 0 <0-1> | M | 0: For factory shipment 1: For line * Field: “0” must be selected | 1 |
| 204 | User interface | Auto-clear timer setting | ALL | 3 <0-10> | SYS | Timer to return the equipment to the default settings when the [START] button is not pressed after the function and the mode are set 0: Not cleared 1 to 10: Set number x 15 sec. | 1 |
| 205 | User interface | Auto power save mode timer setting | ALL | EUR: 11 UC: 11 JPN: 6 Others: 11 <0, 6-15> | SYS | Timer to automatically switch to the Auto power save mode when the equipment has not been used 0: Invalid 6: 3min. 7: 4min. 8: 5min. 9: 7min. 10: 10min. 11: 15min. 12: 20min. 13: 30min. 14: 45min. 15: 60min. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 206 | User interface | Auto Shut Off Mode timer setting (Auto Shut Off Mode/Sleep Mode) | ALL | Refer to content <0-20> | SYS | Timer to turn OFF the power or to enter the Sleep Mode automatically when the equipment has not been used (Refer to 08-601) 0: 3min. 1: 5min. 2: 10min. 3: 15min. 4: 20min. 5: 25min. 6: 30min. 7: 40min. 8: 50min. 9: 60min. 10: 70min. 11: 80min. 12: 90min. 13: 100min. 14: 110min. 15: 120min. 16: 150min. 17: 180min. 18: 210min. 19: 240min. 20: Not used <Default value> e-STUDIO232/282: EUR: 7 UC: 9 JPN: 0 Others: 9 e-STUDIO202L: 6 | 1 |
| 207 | User interface | Highlighting display on LCD | ALL | 0 <0-1> | SYS | 0: Black letter on white background 1: White letter on black background | 1 |
| 209 | User interface | Default setting of filing format when E-mailing | ALL | 0 <0-4> | SYS | 0: TIFF (Multi) 1: PDF (Multi) 2: Not used 3: TIFF (Single) 4: PDF (Single) | 1 |
| 210 | Paper feeding | Paper size (A6-R) feeding/widthwise direction | PRT | 148/105 <148-432/105-297> | M | | 10 |
| 213 | User interface | Display of [REVERSE ORDER] button | ALL | 0 <0-1> | SYS | 0: Not displayed 1: Displayed | 1 |
| 219 | User interface | Default setting of filing format when storing files | SCN | 0 <0-4> | SYS | 0: TIFF (Multi) 1: PDF (Multi) 2: Not used 3: TIFF (Single) 4: PDF (Single) | 1 |
| 220 | User interface | Language displayed at power-ON | ALL | EUR: 0 UC: 0 JPN: 5 <0-6> | SYS | 0: Language 1 1: Language 2 2: Language 3 3: Language 4 4: Language 5 5: Language 6 6: Language 7 | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|---|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 221 | User interface | Language selection in UI data at Web power ON | ALL | EUR: 0 UC: 0 JPN: 5 <0-6> | SYS | 0: Language 1 1: Language 2 2: Language 3 3: Language 4 4: Language 5 5: Language 6 6: Language 7 | 1 |
| 224 | Paper feeding | Paper size for bypass feed | PPC | UNDEF | SYS | Press the button on the LCD to select the size. | 9 |
| 225 | Paper feeding | Paper size for upper drawer | ALL | EUR: A4 UC: LT JPN: A4 | M | Press the button on the LCD to select the size. | 9 |
| 226 | Paper feeding | Paper size for lower drawer | ALL | EUR: A3 UC: LD JPN: A3 | M | Press the button on the LCD to select the size. | 9 |
| 227 | Paper feeding | Paper size for PFP upper drawer | ALL | EUR: A4-R UC: LT-R JPN: A4-R | M | Press the button on the LCD to select the size. | 9 |
| 228 | Paper feeding | Paper size for PFP lower drawer | ALL | EUR: A4 UC: LG JPN: B4 | M | Press the button on the LCD to select the size. | 9 |
| 229 | Paper feeding | Paper size (A3) feeding/ widthwise direction | ALL | 420/297 <182- 432/140- 297> | M | | 10 |
| 230 | Paper feeding | Paper size (A4-R) feeding/ widthwise direction | ALL | 297/210 <182- 432/140- 297> | M | | 10 |
| 231 | Paper feeding | Paper size (A5-R) feeding/ widthwise direction | ALL | 210/148 <182- 432/140- 297> | M | | 10 |
| 232 | Paper feeding | Paper size (B4) feeding/ widthwise direction | ALL | 364/257 <182- 432/140- 297> | M | | 10 |
| 233 | Paper feeding | Paper size (B5-R) feeding/ widthwise direction | ALL | 257/182 <182- 432/140- 297> | M | | 10 |
| 234 | Paper feeding | Paper size (LT-R) feeding/ widthwise direction | ALL | 279/216 <182- 432/140- 297> | M | | 10 |
| 235 | Paper feeding | Paper size (LD) feeding/ widthwise direction | ALL | 432/279 <182- 432/140- 297> | M | | 10 |
| 236 | Paper feeding | Paper size (LG) feeding/ widthwise direction | ALL | 356/216 <182- 432/140- 297> | M | | 10 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 237 | Paper feeding | Paper size (ST-R) feeding/widthwise direction | ALL | 216/140 <182-432/140-297> | M | | 10 |
| 238 | Paper feeding | Paper size (COMPUTER) feeding/widthwise direction | ALL | 356/257 <182-432/140-297> | M | | 10 |
| 239 | Paper feeding | Paper size (FOLIO) feeding/widthwise direction | ALL | 330/210 <182-432/140-297> | M | | 10 |
| 240 | Paper feeding | Paper size (13" LG) feeding/widthwise direction | ALL | 330/216 <182-432/140-297> | M | | 10 |
| 241 | Paper feeding | Paper size (8.5"X8.5") feeding/widthwise direction | ALL | 216/216 <182-432/140-297> | M | | 10 |
| 242 | Paper feeding | Paper size (Non-standard) feeding/widthwise direction | ALL | 432/279 <148-432/105-297> | SYS | | 10 |
| 243 | Paper feeding | Memory 1 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 1]. | 10 |
| 244 | Paper feeding | Paper size (8K) feeding/widthwise direction | ALL | 390/270 <182-432/140-297> | M | | 10 |
| 245 | Paper feeding | Paper size (16K-R) feeding/widthwise direction | ALL | 270/195 <182-432/140-297> | M | | 10 |
| 247 | Paper feeding | Memory 2 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 2]. | 10 |
| 248 | Paper feeding | Memory 3 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 3]. | 10 |
| 249 | Paper feeding | Memory 4 Paper size (bypass feeding/non-standard type) feeding/widthwise direction | ALL | 148/100 <148-432/100-297> | SYS | Registers the paper size of bypass feed (non-standard type) into [MEMORY 4]. | 10 |
| 250 | Maintenance | Service technician telephone number | ALL | 0 <32 digits> | SYS | A telephone number can be entered up to 32 digits. Use the [Monitor/Pause] button to enter a hyphen (-). | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 251 | Maintenance | Setting value of PM counter | ALL | Refer to content <8 digits> | M | <Default> e-STUDIO200L UC, EUR: 64,000 JPN: 0 e-STUDIO 230 UC, EUR: 74,000 JPN: 0 e-STUDIO 280 UC, EUR: 90,000 JPN: 0 | 1 |
| 252 | Maintenance | Current value of PM counter Display/0 clearing | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. | 1 |
| 253 | Maintenance | Error history display | ALL | - | SYS | Displaying of the latest 20 errors data | 2 |
| 254 | Paper feeding | LT <-> A4/LD <-> A3 | PRT | 0 <0-1> | SYS | Sets whether the data is printed on the different but similar size paper or not when the paper of corresponding size is not available. 0: Valid (The data is printed on A4/A3 when LT/LD is selected or vice versa.) 1: Invalid (The message to use the selected paper size is displayed.) | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|-------------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 255 | Paper feeding | PFP/LCF installation | ALL | 0 <0-4, 16-20, 32-36> | M | <p>Sets the installation status of the PFP or LCF, and also disables its functions and the lower drawer of the equipment.</p> <p>When "0" is set at 08-477, specify the value from 1 to 4 or 16 to 20, and when "1" is set at 08-477, specify the value only from 32 to 36.</p> <p>0: Auto When only the upper drawer is installed as the paper feeder of the equipment.</p> <p>1: PFP upper-drawer type installed 2: PFP upper-drawer and lower-drawer type installed 3: LCF installed 4: Disables PFP or LCF</p> <p>When the upper and lower drawers are installed as the paper feeder of the equipment.</p> <p>16: PFP and LCF not installed 17: PFP upper-drawer type installed 18: PFP upper-drawer and lower-drawer type installed 19: LCF installed 20: Disables functions of PFP or LCF</p> <p>Disables the lower drawer when the upper and lower drawers are installed as the paper feeder of the equipment.</p> <p>32: PFP and LCF not installed 33: PFP upper-drawer type installed 34: PFP upper-drawer and lower-drawer type installed 35: LCF installed 36: Disables functions of PFP or LCF</p> | 1 |
| 256 | Paper feeding | Paper size setting /LCF | ALL | EUR: A4 UC: LT JPN: A4 | M | Press the button on the LCD to select the size. | 9 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-----------------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 257 | Counter | Counter copy | ALL | - <1-2> | - | 1) Electrical counter → Backup counter 2) Backup counter → Electrical counter (P. 2-239 "Fig. 2-7") | - |
| 258 | Maintenance | FSMS acceptance | ALL | 1 <0-2> | SYS | Sets whether the FSMS connection is accepted or not. 0: Prohibited 1: Accepted (USB nor- mal connection) 2: Accepted (USB forcible connection) | 1 |
| 259 | Network | Storage period trial and pri- vate | PRT | 14 <0-35> | SYS | 0: No limits 1 to 30: 1 to 30 days 31: 1hour 32: 2hours 33: 4hours 34: 8hours 35: 12hours | 1 |
| 260 | Network | Web data retention period | SCN | 10 <3 digits> | SYS | When a certain period of time has passed without operation after accessing TopAccess, the data being regis- tered is automatically reset. This period is set at this code. (Unit: Minute) | 1 |
| 263 | User interface | Administrator's password (Maximum 10 digits) | ALL | 123456 <10 digits> | - | The password can be entered in alphabets and figures (A-Z, a-z, 0- 9) within 10 digits. | 11 |
| 264 | Network | File retention period | SCN | 30 <0-999> | SYS | 0: No limits 1 to 999: 1 to 999 days | 1 |
| 265 | Network | Maximum data capacity at E-mailing | SCN | 30 <2-30> | SYS | 2 to 30 M bytes | 1 |
| 266 | Network | Maximum data capacity at Internet FAX | ALL | 30 <2-30> | SYS | 2 to 30 M bytes | 1 |
| 267 | Elec- tronic Fil- ing | Full guarantee of docu- ments in Electronic Filing when HDD is full | ALL | 0 <0-1> | SYS | Sets the file retention level when editing the files in the Electronic Filing (at CutDoc/Save- Doc command execu- tion). 0: Not full retained 1: Fully retained - Retains the source file until CutDoc/ SaveDoc command is completed. * The file is not deleted even if the HDD has become full during the exe- cution of command when "1" is set. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 270 | Electronic Filing | Default value for user box retention period | ALL | 0 <0-999> | SYS | Sets the data retention period when creating a user box. 0: Not deleted 1 to 999: Retention period (Unit: Day) | 1 |
| 271 | General | Warning notification of the File Share and e-Filing partitions are filled | ALL | 90 <0-100> | SYS | Sets the percentage of HDD partition filled when warning notification is sent. 0 to 100: 0 to 100% * Related code 08-288 | 1 |
| 272 | Scanning | Notification setting of E-mail saving time limit | ALL | 3 <0-99> | SYS | Sets the days left the notification of E-mail saving time limit appears 0 to 99: 0 to 99 days | 1 |
| 273 | Scanning | Default setting of partial size when transmitting E-mail | ALL | 0 <0-6> | SYS | Sets the default value for the partial size of E-mail to be transmitted when creating a template. 0: Not divided 1: 64 2: 128 3: 256 4: 512 5: 1024 6: 2048 (Unit: KB) | 1 |
| 274 | FAX | Default setting of page by page when transmitting Internet FAX | FAX | 0 <0-4> | SYS | Sets the default value for the page by page of Internet FAX to be transmitted when creating a template. 0: Not divide 1: 128 2: 512 3: 1024 4: 2048 (Unit: KB) | 1 |
| 276 | User interface | Default setting for density adjustment | SCN | 0 <0-11> | SYS | 0: Automatic density 1: Step -5 2: Step -4 3: Step -3 4: Step -2 5: Step -1 6: Step 0 (center) 7: Step +1 8: Step +2 9: Step +3 10: Step +4 11: Step +5 (1 to 11: Manual density) | 1 |
| 281 | User interface | Default setting of resolution | SCN | 1 <0-4> | SYS | 0: 150 dpi 1: 200 dpi 2: 300 dpi 3: 400dpi 4: 600 dpi | 1 |
| 283 | User interface | Default setting of original mode | SCN | 0 <0-3> | SYS | 0: Text 1: Text/Photo 2: Photo 3: Gray scale | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|-------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 284 | User interface | Default setting of scanning mode | SCN | 0 <0-2> | SYS | 0: Single 1: Book 2: Tablet | 1 |
| 285 | User interface | Default setting of rotation angle of original | SCN | 0 <0-3> | SYS | 0: 0 degree 1: 90 degrees 2: 180 degrees 3: 270 degrees | 1 |
| 286 | User interface | Default setting of original paper size | SCN | 0 <0-22> | SYS | 0: Automatic 1: A3 2: A4 3: LD 4: LT 5: A4-R 6: A5-R 7: LT-R 8: LG 9: B4 10: B5 11: ST-R 12: COMP 13: B5-R 14: FOLIO 15: 13"LG 16: 8.5" x 8.5" 18: A6-R 19: Size mixed 20: 8K 21: 16K 22: 16K-R | 1 |
| 288 | General | Searching interval of deleting expired files and checking capacity of HDD partitions | ALL | 12 <1-24> | SYS | Sets the search interval of deleting expired files and checking capacity of HDD partition. (Unit: Hour) * Related code 08-271 | 1 |
| 290 | Network | Raw printing job (Duplex) | PRT | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 291 | Network | Raw printing job (Paper size) | PRT | EUR: 6 UC: 2 JPN: 6 <0-13> | SYS | 0: LD 1: LG 2: LT 3: COMP 4: ST 5: A3 6: A4 7: A5 8: A6 9: B4 10: B5 11: FOLIO 12: 13"LG 13: 8.5" x 8.5" | 1 |
| 292 | Network | Raw printing job (Paper type) | PRT | 0 <0-5> | SYS | 0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 4: OHP film 5: Tab paper | 1 |
| 293 | Network | Raw printing job (Paper direction) | PRT | 0 <0-1> | SYS | 0: Portrait 1: Landscape | 1 |
| 294 | Network | Raw printing job (Staple) | PRT | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------|--|----------|--------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 295 | Network | Raw printing job (receiving tray) | PRT | 0 <0-5> | SYS | 0: Inner tray 1: Finisher tray 1 2: Finisher tray 2 3: Not used 4: Job Separator upper tray 5: Job Separator lower tray * The settings 4 and 5 are effective only when the Job Separator (MJ-5004) is installed. | 1 |
| 296 | Network | Raw printing job (Number of form lines) | PRT | 1200 <500- 12800> | SYS | Sets the number of form lines from 5 to 128. (A hundredfold of the number of form lines is defined as the setting value.) | 1 |
| 297 | Network | Raw printing job (PCL font pitch) | PRT | 1000 <44- 9999> | SYS | Sets the font pitch from 0.44 to 99.99. (A hundredfold of the font pitch is defined as the setting value.) | 1 |
| 298 | Network | Raw printing job (PCL font size) | PRT | 1200 <400- 99975> | SYS | Sets the font size from 4 to 999.75. (A hundredfold of the font size is defined as the setting value.) | 1 |
| 299 | Network | Raw printing job (PCL font number) | PRT | 0 <0-79> | SYS | Sets the PCL font number. | 1 |
| 300 | User interface | Maximum number of copy volume (MAX9) | PPC | 0 <0-2> | SYS | 0: 999 1: 99 2: 9 | 1 |
| 302 | User interface | Original counter display | ALL | EUR: 2 UC: 0 JPN: 0 <0,2,4> | SYS | Sets whether the original counter is displayed or not. 0: Not displayed 2: Displayed 4: Displayed (Double- sized original is counted as 2.) | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 305-0 | Counter | Number of output pages in copier func- tion | PPC | 0 <8 digits> | SYS | Counts the output pages in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 305-1 | | | | | | | |
| 305-2 | | | | | | | |
| 305-3 | | | | | | | |
| 305-4 | | | | | | | |
| 305-5 | | | | | | | |
| 305-6 | | | | | | | |
| 305-7 | | | | | | | |
| 305-8 | | | | | | | |
| 305-9 | | | | | | | |
| 305-10 | | | | | | | |
| 305-11 | | | | | | | |
| 305-12 | | | | | | | |
| 305-13 | | | | | | | |
| 305-14 | | | | | | | |
| 305-15 | | | | | | | |
| 305-16 | | | | | | | |
| 306-0 | Counter | Number of output pages in printer func- tion | PRT | 0 <8 digits> | SYS | Counts the output pages in the printer function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 306-1 | | | | | | | |
| 306-2 | | | | | | | |
| 306-3 | | | | | | | |
| 306-4 | | | | | | | |
| 306-5 | | | | | | | |
| 306-6 | | | | | | | |
| 306-7 | | | | | | | |
| 306-8 | | | | | | | |
| 306-9 | | | | | | | |
| 306-10 | | | | | | | |
| 306-11 | | | | | | | |
| 306-12 | | | | | | | |
| 306-13 | | | | | | | |
| 306-14 | | | | | | | |
| 306-15 | | | | | | | |
| 306-16 | | | | | | | |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|----|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 307-0 | Counter | Number of output pages at list print mode | A3 | PRT | 0 <8 digits> | SYS | Counts the output pages at the list print mode for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08- 353). | 4 |
| 307-1 | | | | | | | | |
| 307-2 | | | | | | | | |
| 307-3 | | | | | | | | |
| 307-4 | | | | | | | | |
| 307-5 | | | | | | | | |
| 307-6 | | | | | | | | |
| 307-7 | | | | | | | | |
| 307-8 | | | | | | | | |
| 307-9 | | | | | | | | |
| 307-10 | | | | | | | | |
| 307-11 | | | | | | | | |
| 307-12 | | | | | | | | |
| 307-13 | | | | | | | | |
| 307-14 | | | | | | | | |
| 307-15 | | | | | | | | |
| 307-16 | | | | | | | | |
| 308-0 | Counter | Number of output pages in FAX func- tion | A3 | FAX | 0 <8 digits> | SYS | Counts the output pages in the FAX func- tion for each paper size according to the setting for the count setting of large-sized paper (08- 352) and the definition setting of large-sized paper (08-353). | 4 |
| 308-1 | | | | | | | | |
| 308-2 | | | | | | | | |
| 308-3 | | | | | | | | |
| 308-4 | | | | | | | | |
| 308-5 | | | | | | | | |
| 308-6 | | | | | | | | |
| 308-7 | | | | | | | | |
| 308-8 | | | | | | | | |
| 308-9 | | | | | | | | |
| 308-10 | | | | | | | | |
| 308-11 | | | | | | | | |
| 308-12 | | | | | | | | |
| 308-13 | | | | | | | | |
| 308-14 | | | | | | | | |
| 308-15 | | | | | | | | |
| 308-16 | | | | | | | | |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|----|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 312-0 | Counter | Number of scanning pages in copier function | A3 | PPC | 0 <8 digits> | SYS | Counts the scanning pages in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 312-1 | | | | | | | | |
| 312-2 | | | | | | | | |
| 312-3 | | | | | | | | |
| 312-4 | | | | | | | | |
| 312-5 | | | | | | | | |
| 312-6 | | | | | | | | |
| 312-7 | | | | | | | | |
| 312-8 | | | | | | | | |
| 312-9 | | | | | | | | |
| 312-10 | | | | | | | | |
| 312-11 | | | | | | | | |
| 312-12 | | | | | | | | |
| 312-13 | | | | | | | | |
| 312-14 | | | | | | | | |
| 312-15 | | | | | | | | |
| 312-16 | | | | | | | | |
| 313-0 | Counter | Number of scanning pages in scanning function | A3 | SCN | 0 <8 digits> | SYS | Counts the scanning pages in the scanning function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 313-1 | | | | | | | | |
| 313-2 | | | | | | | | |
| 313-3 | | | | | | | | |
| 313-4 | | | | | | | | |
| 313-5 | | | | | | | | |
| 313-6 | | | | | | | | |
| 313-7 | | | | | | | | |
| 313-8 | | | | | | | | |
| 313-9 | | | | | | | | |
| 313-10 | | | | | | | | |
| 313-11 | | | | | | | | |
| 313-12 | | | | | | | | |
| 313-13 | | | | | | | | |
| 313-14 | | | | | | | | |
| 313-15 | | | | | | | | |
| 313-16 | | | | | | | | |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|-------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 314-0 | Counter | Number of scanning pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the scanning pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 314-1 | | | A4 | | | | | |
| 314-2 | | | A5 | | | | | |
| 314-3 | | | A6 | | | | | |
| 314-4 | | | B4 | | | | | |
| 314-5 | | | B5 | | | | | |
| 314-6 | | | FOLIO | | | | | |
| 314-7 | | | LD | | | | | |
| 314-8 | | | LG | | | | | |
| 314-9 | | | LT | | | | | |
| 314-10 | | | ST | | | | | |
| 314-11 | | | COMP | | | | | |
| 314-12 | | | 13"LG | | | | | |
| 314-13 | | | 8.5" x 8.5" | | | | | |
| 314-14 | | | 16K | | | | | |
| 314-15 | | | 8K | | | | | |
| 314-16 | | | Others | | | | | |
| 315-0 | Counter | Number of transmitted pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the transmitted pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 315-1 | | | A4 | | | | | |
| 315-2 | | | A5 | | | | | |
| 315-3 | | | A6 | | | | | |
| 315-4 | | | B4 | | | | | |
| 315-5 | | | B5 | | | | | |
| 315-6 | | | FOLIO | | | | | |
| 315-7 | | | LD | | | | | |
| 315-8 | | | LG | | | | | |
| 315-9 | | | LT | | | | | |
| 315-10 | | | ST | | | | | |
| 315-11 | | | COMP | | | | | |
| 315-12 | | | 13"LG | | | | | |
| 315-13 | | | 8.5" x 8.5" | | | | | |
| 315-14 | | | 16K | | | | | |
| 315-15 | | | 8K | | | | | |
| 315-16 | | | Others | | | | | |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----------------|----------|--|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 316-0 | Counter | Number of received pages in FAX function | A3 | FAX | 0 <8 digits> | SYS | Counts the received pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). | 4 |
| 316-1 | | | | | | | | |
| 316-2 | | | | | | | | |
| 316-3 | | | | | | | | |
| 316-4 | | | | | | | | |
| 316-5 | | | | | | | | |
| 316-6 | | | | | | | | |
| 316-7 | | | | | | | | |
| 316-8 | | | | | | | | |
| 316-9 | | | | | | | | |
| 316-10 | | | | | | | | |
| 316-11 | | | | | | | | |
| 316-12 | | | | | | | | |
| 316-13 | | | | | | | | |
| 316-14 | | | | | | | | |
| 316-15 | | | | | | | | |
| 316-16 | | | | | | | | |
| 320-0 | Counter | Display of number of output pages in copier function | Large | PPC | 0 <8 digits> | SYS | Counts the number of output pages in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 320-1 | Counter | | Small | PPC | 0 <8 digits> | SYS | | 14 |
| 320-2 | Counter | | Total | PPC | 0 <8 digits> | SYS | | 14 |
| 321-0 | Counter | Display of number of output pages in printer function | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 321-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 321-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----------------|----------|--|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 322-0 | Counter | Display of number of output pages at list print mode | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages at the List Print Mode Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 322-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 322-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |
| 323-0 | Counter | Display of number of output pages in FAX function | Large | PRT | 0 <8 digits> | SYS | Counts the number of output pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 323-1 | Counter | | Small | PRT | 0 <8 digits> | SYS | | 14 |
| 323-2 | Counter | | Total | PRT | 0 <8 digits> | SYS | | 14 |
| 327-0 | Counter | Display of number of scanning pages in copier function | Large | PPC | 0 <8 digits> | SYS | Counts the number of scanning pages in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 327-1 | Counter | | Small | PPC | 0 <8 digits> | SYS | | 14 |
| 327-2 | Counter | | Total | PPC | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----------------|----------|---|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 328-0 | Counter | Display of number of scanning pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of scanning pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 328-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 328-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |
| 329-0 | Counter | Display of number of scanning pages in scanning function | Large | SCN | 0 <8 digits> | SYS | Counts the number of scanning pages in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 329-1 | Counter | | Small | SCN | 0 <8 digits> | SYS | | 14 |
| 329-2 | Counter | | Total | SCN | 0 <8 digits> | SYS | | 14 |
| 330-0 | Counter | Display of number of transmitted pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of transmitted pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 330-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 330-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|-------|----------|------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 331 | User interface | Default setting of screen | | ALL | 0 <0-3> | SYS | Sets the screen to be displayed after the auto-clear time has passed or it has recovered from the energy saving mode or sleep mode. 0: Copier 1: Fax 2: Scan 3: Box | 1 |
| 332-0 | Counter | Display of number of received pages in FAX function | Large | FAX | 0 <8 digits> | SYS | Counts the number of received pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes. | 14 |
| 332-1 | Counter | | Small | FAX | 0 <8 digits> | SYS | | 14 |
| 332-2 | Counter | | Total | FAX | 0 <8 digits> | SYS | | 14 |
| 335-0 | Counter | Display of total number of pages | Large | ALL | 0 <8 digits> | SYS | Displays the total number of pages in the copier/printer/scanning/FAX functions. | 14 |
| 335-1 | Counter | | Small | ALL | 0 <8 digits> | SYS | | 14 |
| 335-2 | Counter | | Total | ALL | 0 <8 digits> | SYS | | 14 |
| 337 | Paper feeding | Paper size (#10-R) feeding/widthwise direction | | ALL | 241/105 <148-432/105-297> | M | | 10 |
| 338 | Paper feeding | Paper size (DL-R) feeding/widthwise direction | | ALL | 220/110 <148-432/105-297> | M | | 10 |
| 339 | Paper feeding | Paper size (Envelope: Monarch-R) feeding/widthwise direction | | ALL | 191/98 <148-432/98-297> | M | | 10 |
| 340 | Paper feeding | Paper size (Envelope: CHO-3-R) feeding/widthwise direction | | ALL | 235/120 <148-432/105-297> | M | | 10 |
| 341 | Paper feeding | Paper size (Envelope: YOU-4-R) feeding/widthwise direction | | ALL | 235/105 <148-432/105-297> | M | | 10 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 342 | User interface | Displaying number of original pages placed on original glass | PPC | 0 <0-1> | SYS | This setting is whether the number of pages of originals placed on the original glass is displayed or not. 0: Not displayed 1: Displayed | 1 |
| 345 | Counter | Count setting of envelope (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 346 | Counter | Count setting of large-sized paper (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 347 | Counter | Definition setting of large-sized paper (PM) | ALL | 1 <0-1> | M | 0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP | 1 |
| 348 | Counter | Count setting of thick paper (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 349 | Counter | Count setting of OHP film (PM) | ALL | 1 <0-1> | M | 0: Counted as 1 1: Counted as 2 | 1 |
| 352 | Counter | Count setting of large-sized paper (Fee charging system counter) | ALL | JPN: 0 OTHER: 1 <0-2> | M | 0: Counted as 1 1: Counted as 2 2: Counted as 1 (Mechanical counter is double counter) | 1 |
| 353 | Counter | Definition setting of large-sized paper (Fee charging system counter) | ALL | 0 <0-1> | M | 0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP/8K | 1 |
| 356 | Counter | Counter for upper drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from upper drawer | 2 |
| 357 | Counter | Counter for lower drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from lower drawer | 2 |
| 358 | Counter | Counter for bypass feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from bypass feed | 2 |
| 359 | Counter | Counter for LCF feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from LCF | 2 |
| 360 | Counter | Counter for PFP upper drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from PFP upper drawer | 2 |
| 370 | Counter | Counter for PFP lower drawer feeding | ALL | 0 <8 digits> | M | Counts the number of sheets fed from PFP lower drawer | 2 |
| 372 | Counter | Counter for ADU | ALL | 0 <8 digits> | M | Counts the number of output pages of duplex printing. | 2 |
| 374 | Counter | Counter for RADF | ALL | 0 <8 digits> | SYS | Counts the number of originals fed from RADF | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 381 | Counter | Setting for counter installed externally | ALL | 1 <0-7> | M | Selects the job to count up for the external counter. 0: Not selected 1: Copier 2: FAX 3: Copier/FAX 4: Printer 5: Copier/Printer 6: Printer/FAX 7: Copier/Printer/FAX | 1 |
| 390 | Counter | Number of errors in HDD (Copier) | PPC | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 391 | Counter | Number of errors in HDD (FAX) | FAX | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 392 | Counter | Number of errors in HDD (Scanning) | SCN | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 393 | Counter | Number of errors in HDD (Printer) | PRT | 0 <8 digits> | SYS | The number of error is reset at HDD formatting. | 2 |
| 398 | Laser | Number of polygonal motor rotational speed switching | ALL | 0 <8 digits> | M | Counts the number of time the polygonal motor has switched its rotational speed between normal rotation and standby rotation. | 2 |
| 399 | Laser | Accumulated time of polygonal motor at normal rotation | ALL | 0 <8 digits> | M | Accumulates the time the polygonal motor has rotated at normal rotation. | 2 |
| 400 | Fuser | Fuser unit error status counter | ALL | 0 <0-19> | M | 0: No error 1: C410 (Once) 2: C410 (consecutively occurred) 3: - 4: - 5: C440 6: C450 7: C440 8: C450 9: C440 10: C470 11: C470 12: C480 13: C490 14: C470 15: C480 16: C490 17: C470 18: C480 19: C490 | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|-----------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 404-0 | Fuser | Temperature drop setting in ready status (Center thermistor) | The first drop | ALL | 1 <0-10> | M | This code is valid only when "20" is set to 08-886. Setting value x -5°C: from 0°C to -50°C | 4 |
| 404-1 | | | The second drop | ALL | 1 <0-10> | M | | 4 |
| 404-2 | | | The third drop | ALL | 1 <0-10> | M | | 4 |
| 404-3 | | | The fourth drop | ALL | 1 <0-10> | M | | 4 |
| 405-0 | Fuser | Temperature drop setting in ready status (Side thermistor) | The first drop | ALL | 4 <0-10> | M | | 4 |
| 405-1 | | | The second drop | ALL | 4 <0-10> | M | | 4 |
| 405-2 | | | The third drop | ALL | 4 <0-10> | M | | 4 |
| 405-3 | | | The fourth drop | ALL | 4 <0-10> | M | | 4 |
| 407 | Fuser | Fuser roller temperature in ready status (Side thermistor) | | ALL | 8 <0-12> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C | 1 |
| 409 | Fuser | Fuser roller temperature at energy saver mode (Center thermistor) | | ALL | 0 <0-13> | M | 0: OFF 1: 40°C 2: 50°C 3: 60°C 4: 70°C 5: 80°C 6: 90°C 7: 100°C 8: 110°C 9: 120°C 10: 130°C 11: 140°C 12: 150°C 13: 160°C | 1 |
| 410 | Fuser | Fuser roller temperature during printing (Center thermistor/Plain paper) | | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 411 | Fuser | Fuser roller temperature on standby (Center thermistor) | | ALL | 8 <0-12> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 412 | Fuser | Fuser roller temperature during printing (Center thermistor/Thick paper 3) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 413 | Fuser | Fuser roller temperature during printing (Center thermistor/Thick paper 1) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 414 | Developer | Toner density life correction switching | ALL | 0 <0-7> | M | 0: Unchanged (Default) 1: Approx. 0.3 wt% higher 2: Approx. 0.6 wt% higher 3: Approx. 0.9 wt% higher 4: Approx. 0.2 wt% lower 5: Approx. 0.4 wt% lower 6: Approx. 0.6 wt% lower 7: Approx. 0.9 wt% lower | 1 |
| 417 | Fuser | Pre-running time for first printing (Thick paper 3) | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|-------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 424-0 | Fuser | Temperature drop switching time setting in ready status (Center thermistor) | The first drop | ALL | 15 <2-60> | M | This code is valid only when "20" is set to 08-886. Setting value x 1 min.: from 2 to 60 min. later | 4 |
| 424-1 | | | The second drop | ALL | 15 <2-60> | M | | 4 |
| 424-2 | | | The third drop | ALL | 15 <2-60> | M | | 4 |
| 424-3 | | | The fourth drop | ALL | 15 <2-60> | M | | 4 |
| 425-0 | Fuser | Temperature drop switching time setting in ready status (Side thermistor) | The first drop | ALL | 15 <2-60> | M | | 4 |
| 425-1 | | | The second drop | ALL | 15 <2-60> | M | | 4 |
| 425-2 | | | The third drop | ALL | 15 <2-60> | M | | 4 |
| 425-3 | | | The fourth drop | ALL | 15 <2-60> | M | | 4 |
| 433-0 | Fuser | Temperature control lower limit (Plain paper/ at ordinary temperature) | Center thermistor | ALL | 7 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 433-1 | | | Side thermistor | ALL | 5 <0-12> | M | | 4 |
| 437 | Fuser | Fuser roller temperature during printing (Center thermistor /Thick paper 2) | | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 438 | Fuser | Fuser roller temperature during printing (Center thermistor/OHP film) | | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 439 | Fuser | Pre-running time for first printing (Thick paper 2) | | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 440 | Fuser | Pre-running time for first printing (Plain paper) | ALL | 0 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 441 | Fuser | Pre-running time for first printing (Thick paper 1) | ALL | 0 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 448 | Fuser | Fuser roller temperature in Energy Saving Mode (Side thermistor) | ALL | 0 <0-13> | M | 0: OFF 1: 40°C 2: 50°C 3: 60°C 4: 70°C 5: 80°C 6: 90°C 7: 100°C 8: 110°C 9: 120°C 10: 130°C 11: 140°C 12: 150°C 13: 160°C | 1 |
| 449 | Paper feeding | Incorrect paper size jam detection switching | ALL | 0 <0-1> | M | 0: Enabled 1: Disabled | 1 |
| 450 | Fuser | Fuser roller temperature during printing (Side thermistor/Plain paper) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 451 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 1) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|------------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 452 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 2) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 453 | Fuser | Fuser roller temperature during printing (Side thermistor/OHP film) | ALL | 8 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 455 | Image processing | Toner supply amount correction/Toner motor control | ALL | 0 <0-5> | M | Corrects the supply amount of the fresh toner (driving period of the toner motor) into the developer unit. 0: x1.0 1: x0.75 2: x0.5 3: x0.3 4: x2.0 5: x1.5 | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|-------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 462 | RADF | Setting for switchback operation in mixed-size copying using RADF | | ALL | 0 <0-2> | M | <p>This setting is whether the original length is detected or not by transporting without scanning in reverse when A4-R/FOLIO paper or LT-R/LG paper is detected in a mixed-size copying.</p> <p>0: Disabled - AMS: A series - Judges as A4-R without transporting in reverse with no scanning. LT series - Judges whether it is LT-R or LG by its length without transporting in reverse with no scanning.</p> <p>APS: A series - Judges whether it is A4-R or FOLIO without transporting in reverse with no scanning. LT series - Judges whether it is LT-R or LG without transporting in reverse with no scanning.</p> <p>1: Enable 1 AMS: A series - Judges whether it is A4-R or FOLIO by transporting without scanning in reverse to detect its length. LT series - Judges whether it is LT-R or LG by transporting without scanning in reverse to detect its length.</p> <p>APS: The same as that of APS in 0: Disabled.</p> <p>2: Enable 2 AMS/APS: The same as that of AMS in 1: Enable 1.</p> | 1 |
| 463-0 | Paper feeding | Feeding retry number setting (upper drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the upper drawer. | 4 |
| 463-1 | | | Others | ALL | 5 <0-5> | M | | 4 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|-------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 464-0 | Paper feeding | Feeding retry number setting (lower drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the lower drawer. | 4 |
| 464-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 465-0 | Paper feeding | Feeding retry number setting (PFP upper drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the PFP upper drawer. | 4 |
| 465-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 466-0 | Paper feeding | Feeding retry number setting (PFP lower drawer) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the PFP lower drawer. | 4 |
| 466-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 467-0 | Paper feeding | Feeding retry number setting (bypass feed) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the bypass tray. | 4 |
| 467-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 468-0 | Paper feeding | Feeding retry number setting (LCF) | Plain paper | ALL | 5 <0-5> | M | Sets the number of times of the feeding retry from the LCF. | 4 |
| 468-1 | | | Others | ALL | 5 <0-5> | M | | 4 |
| 471 | Paper feeding | Paper size (Postcard) feeding/widthwise direction | | ALL | 148/100 <148-432/100-297> | M | * Postcard is supported only for JPN model. | 10 |
| 477 | General | Machine identification information | | ALL | Refer to content <0-1> | M | <Default value> Lower drawer model: 0 Upper drawer model: 1 | 2 |
| 478 | Laser | Judged number of polygonal motor rotation error (Normal rotation) | | ALL | 0 <0-1> | M | Displays the error [CA10] when the set number of rotation error has been detected. 0: 2 times 1: 12 times | 1 |
| 479 | Laser | Judged number of polygonal motor rotation error (At acceleration/deceleration) | | ALL | 0 <0-1> | M | 0: Waiting time for polygonal motor rotation overshooting 0.6 sec. 1: Waiting time for polygonal motor rotation overshooting 2.2 sec. | 1 |
| 480 | Paper feeding | Default setting of paper source | | PPC | 0 <0-5> | SYS | 0: A4/LT 1: LCF 2: Upper drawer 3: Lower drawer 4: PFP upper drawer 5: PFP lower drawer | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 481 | Paper feeding | Automatic change of paper source | PPC | 1 <0-2> | SYS | Sets whether or not changing the drawer automatically to the other drawer with the paper of the same size when paper in the selected drawer has run out. 0: OFF 1: ON (Changes to the drawer with the same paper direction and size: ex. A4 to A4) 2: ON (Changes to the drawer with the same paper size. Paper with the different direction is acceptable as long as the size is the same: ex., A4 to A4-R, LT-R to LT. "1" is applied when the staple/hole-punch is specified.) | 1 |
| 482 | Paper feeding | Feeding retry setting | ALL | 0 <0-1> | M | 0: ON 1: OFF | 1 |
| 483 | Laser | Pre-running rotation of polygonal motor | ALL | 0 <0-2> | SYS | Sets whether or not switching the polygonal motor from the standby rotation to the normal rotation when the original is set on the RADF or the platen cover is opened. 0: Valid (when using RADF and the original is set manually) 1: Invalid 2: Valid (when using RADF only) | 1 |
| 484 | Laser | Polygonal motor rotational status switching at the Auto Clear Mode | ALL | 0 <0-1> | SYS | Sets whether or not switching the polygonal motor from the normal rotation to the standby rotation at the Auto Clear Mode. 0: Valid 1: Invalid | 1 |
| 485 | Laser | Rotational status of polygonal motor on standby | ALL | 1 <0-1> | SYS | Sets the rotational status of polygonal motor on standby. 0: Rotated (The rotational speed is set at 08-490.) 1: Stopped | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 486 | Laser | Timing of auto-clearing of polygonal motor pre-running rotation | ALL | 0 <0-2> | SYS | Switches the polygonal motor to the standby rotation when a certain period of time has passed from the pre-running. At this code, the period to switch the status to the standby rotation is set. 0: 15 sec. 1: 30 sec. 2: 45 sec. * This setting is effective when "0" or "2" is set at 08-483. | 1 |
| 488 | Laser | Setting of polygonal motor type | ALL | 0 <0-3> | M | Set the type of polygonal motor. 0: 2-clock type 1: 3-clock type 2: 4-clock type 3: 4-clock type | 1 |
| 489 | Laser | Polygonal motor rotation number on standby | ALL | 5 <0-5> | M | 0: 38,090.55 rpm 1: 35,000 rpm 2: 30,000 rpm 3: 25,000 rpm 4: 20,000 rpm 5: 10,000 rpm | 1 |
| 490 | Laser | Polygonal motor rotation in the energy saving mode | ALL | 0 <0-1> | M | 0: Stopped 1: 10,000 rpm | 1 |
| 491 | Transfer | Transfer charger bias correction (H) at duplexing | ALL | 149 <0-255> | M | Corrects the transfer charger bias output value of the leading edge area of paper at duplexing. | 1 |
| 492 | Transfer | Transfer charger bias correction (C) at duplexing | ALL | 139 <0-255> | M | Corrects the transfer charger bias output value of the center area of paper at duplexing. | 1 |
| 493 | Transfer | Transfer charger bias correction (L) at duplexing | ALL | 128 <0-255> | M | Corrects the transfer charger bias output value of the trailing edge area of paper at duplexing. | 1 |
| 502 | Image | Error diffusion and dither setting at photo mode | PPC | 1 <0-1> | SYS | Sets the image reproduction method at photo mode. 0: Error diffusion 1: Dither | 1 |
| 503 | User interface | Default setting of density adjustment | PPC | 0 <0-1> | SYS | 0: Automatic 1: Manual (Center) | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 508 | Image | Custom Mode setting | PPC | 0 <0-3> | SYS | 0: Not used 1: Custom Mode 1 when Text/Photo is set as a base 2: Custom Mode 2 when Text is set as a base 3: Custom Mode 3 when Photo is set as a base | 1 |
| 509 | Image | Error diffusion and dither setting at a photo mode (Custom Mode) | PPC | 1 <0-1> | SYS | Switches the image processing method when Custom Mode 3 is set. 0: Error diffusion 1: Dither | 1 |
| 515 | Fuser | Temperature setting of warming-up (Center thermistor) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 516 | Fuser | Temperature setting of warming-up (Side thermistor) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 518 | Fuser | Fuser roller temperature during printing (Side thermistor/Thick paper 3) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 520 | Fuser | Fuser roller temperature during printing (Center thermistor/Enve- lope) | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|-----------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 521 | Fuser | Fuser roller temperature during printing (Side thermistor/Envelope) | | ALL | 9 <0-14> | M | 0: 140°C 1: 145°C 2: 150°C 3: 155°C 4: 160°C 5: 165°C 6: 170°C 7: 175°C 8: 180°C 9: 185°C 10: 190°C 11: 195°C 12: 200°C 13: 205°C 14: 210°C | 1 |
| 523 | Fuser | Pre-running time for first printing (Envelope) | | ALL | 10 <0-15> | M | 0: Invalid 1: 1 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 525-0 | Fuser | Temperature drop switching time setting during printing (Center thermistor) | The first drop | ALL | 20 <0-200> | M | This code is valid only when "20" is set to 08-535. Setting value x 5 sec.: from 0 to 1,000 sec. later | 4 |
| 525-1 | | | The second drop | ALL | 38 <0-200> | M | | 4 |
| 525-2 | | | The third drop | ALL | 75 <0-200> | M | | 4 |
| 525-3 | | | The fourth drop | ALL | 75 <0-200> | M | | 4 |
| 526 | Fuser | Pre-running time for first printing (OHP film) | | ALL | 0 <0-15> | M | 0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 9 sec. 10: 10 sec. 11: 12 sec. 12: 14 sec. 13: 16 sec. 14: 18 sec. 15: 20 sec. | 1 |
| 527-0 | Fuser | Temperature drop switching time setting during printing (Side thermistor) | The first drop | ALL | 20 <0-200> | M | This code is valid only when "20" is set to 08-535. Setting value x 5 sec.: from 0 to 1,000 sec. later | 4 |
| 527-1 | | | The second drop | ALL | 30 <0-200> | M | | 4 |
| 527-2 | | | The third drop | ALL | 48 <0-200> | M | | 4 |
| 527-3 | | | The fourth drop | ALL | 75 <0-200> | M | | 4 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|-----------------|------------------------------------|-------------|--|---|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 535 | Fuser | Temperature drop control setting during printing (Temperature/Time) | ALL | 2 <0-20> | M | 0: None 1: Pattern 1 2: Pattern 2 3: Pattern 3 4: Pattern 4 5: Pattern 5 6: Pattern 6 7: Pattern 7 8: Pattern 8 9: Pattern 9 10: Pattern 10 11: Pattern 11 12: Pattern 12 13: Pattern 13 14: Pattern 14 15: Pattern 15 16: Pattern 16 17: Pattern 17 18: Pattern 18 19: Pattern 19 20: Manual adjustment | 1 | |
| 536-0 | Fuser | Temperature drop setting during printing (Center thermistor) | The first drop | ALL | 1 <0-10> | M | This code is valid only when "20" is set to 08-535. Setting value x -5°C: from 0°C to -50°C | 4 |
| 536-1 | | | The second drop | ALL | 2 <0-10> | M | | 4 |
| 536-2 | | | The third drop | ALL | 3 <0-10> | M | | 4 |
| 536-3 | | | The fourth drop | ALL | 3 <0-10> | M | | 4 |
| 537-0 | Fuser | Temperature drop setting during printing (Side thermistor) | The first drop | ALL | 1 <0-10> | M | | 4 |
| 537-1 | | | The second drop | ALL | 2 <0-10> | M | | 4 |
| 537-2 | | | The third drop | ALL | 3 <0-10> | M | | 4 |
| 537-3 | | | The fourth drop | ALL | 5 <0-10> | M | | 4 |
| 550 | Image | Default setting of original mode | PPC | 0 <0-3> | SYS | 0: Text/Photo 1: Photo 2: Text 3: Custom Mode | 1 | |
| 601 | User interface | Setting for the Energy Saving Mode | ALL | 0 <0-1> | SYS | 0: Auto Shut Off Mode 1: Sleep Mode | 1 | |
| 602 | User interface | Screen setting for Auto power Save Mode and Auto Shut OFF Mode | ALL | EUR: 0 UC: 1 JPN: 1 <0-1> | SYS | 0: OFF 1: ON | 1 | |
| 603 | User interface | Setting for automatic duplexing mode | PPC | 0 <0-3> | SYS | 0: Invalid 1: Single-sided to duplex copying 2: Double-sided to duplex copying 3: User selection | 1 | |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|--|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 604 | User interface | Default setting for APS/AMS | PPC | 0 <0-2> | SYS | 0: APS (Automatic Paper Selection) 1: AMS (Automatic Magnification Selection) 2: Not selected | 1 |
| 605 | User interface | Centering printing of primary/secondary direction at AMS | PPC | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 607 | User interface | Default setting of RADF mode | PPC | 0 <0-1> | SYS | 0: Continuous feeding (by pressing the [START] button) 1: Single feeding (by setting original on the tray) | 1 |
| 610 | User interface | Key touch sound of control panel | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 611 | User interface | Book type original priority | PPC | 0 <0-1> | SYS | 0: Left page to right page 1: Right page to left page | 1 |
| 612 | General | Summer time mode | ALL | 0 <0-1> | SYS | 0: Not summer time 1: Summer time | 1 |
| 613 | User interface | Paper size selection for [OTHER] button | PPC | EUR: FOLIO UC: COMP JPN: A5-R | SYS | Press the button on the LCD to select the size. | 9 |
| 614 | Network | Local I/F time-out period | PRT | 6 <1-50> | SYS | Sets the period of time when the job is judged as completed in local I/F printing (USB or parallel). 1: 1.0 sec. 2: 1.5 sec. -50: 25.5 sec. (in increments of 0.5 sec.) | 1 |
| 615 | General | Size information of main memory and page memory | ALL | - | SYS | Displays the sizes of the main memory and page memory. Enables to check if each memory is properly recognized. | 2 |
| 617 | User interface | Print setting without department code | ALL | 1 <0-2> | SYS | 0: Printed 1: Not printed (pooled in the invalid queue) 2: Deleted forcibly | 1 |
| 618 | User interface | Default setting when mixed size originals are set on RADF | PPC | 0 <0-1> | SYS | 0: Scanned as all in same size 1: Scanned as each original size | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|--------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 619 | Paper feeding | Time lag before Auto Job Start of bypass feeding | ALL | 4 <0-10> | SYS | Sets the time taken to add paper feeding when paper in the bypass tray has run out during the bypass feed copying. 0: Paper is not drawn in unless the [START] button is pressed. 1-10: Setting value x 0.5 sec. | 1 |
| 620 | User interface | Department management setting (Copier) | PPC | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 621 | User interface | Department management setting (FAX) | FAX | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 622 | User interface | Department management setting (Printer) | PRT | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 623 | User interface | Department management setting (Scanner) | SCN | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 624 | User interface | Department management setting (List print) | PRT | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 625 | User interface | Blank copying prevention mode during RADF jamming | PPC | 0 <0-1> | SYS | 0: OFF 1: ON (Start printing when the scanning of each page is finished) | 1 |
| 627 | User interface | Rotation printing at the non-sorting | ALL | 0 <0-1> | SYS | 0: Not rotating 1: Rotating | 1 |
| 628 | User interface | Direction priority of original image | PPC | 0 <0-1> | SYS | 0: Automatic 1: Portrait | 1 |
| 629 | User interface | Department management setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 633 | Data overwrite kit | Releasing F200 service call | ALL | 0 <0-2> | SYS | 0: Not used 1: Board installed (GP-1060) 2: Service call | 1 |
| 634 | User interface | Inner receiving tray priority at Non-sort Mode | ALL | 0 <0-1> | SYS | 0: Normal 1: Inner receiving tray | 1 |
| 636 | User interface | Width setting for image shift copying (linkage of front side and back side) | PPC | 0 <0-1> | SYS | 0: ON 1: OFF | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|---------------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 638 | General | Time differences | ALL | EUR: 24 UC: 40 JPN: 6 <0-47> | SYS | 0: +12.0h 1: +11.5h 2: +11.0h 3: +10.5h 4: +10.0h 5: +9.5h 6: +9.0h 7: +8.5h 8: +8.0h 9: +7.5h 10: +7.0h 11: +6.5h 12: +6.0h 13: +5.5h 14: +5.0h 15: +4.5h 16: +4.0h 17: +3.5h 18: +3.0h 19: +2.5h 20: +2.0h 21: +1.5h 22: +1.0h 23: +0.5h 24: 0.0h 25: -0.5h 26: -1.0h 27: -1.5h 28: -2.0h 29: -2.5h 30: -3.0h 31: -3.5h 32: -4.0h 33: -4.5h 34: -5.0h 35: -5.5h 36: -6.0h 37: -6.5h 38: -7.0h 39: -7.5h 40: -8.0h 41: -8.5h 42: -9.0h 43: -9.5h 44: -10.0h 45: -10.5h 46: -11.0h 47: -11.5h | 1 |
| 640 | User interface | Date display format | ALL | EUR: 1 UC: 2 JPN: 0 <0-2> | SYS | 0: YYYY.MM.DD. 1: DD.MM.YYYY 2: MM.DD.YYYY | 1 |
| 641 | User interface | Automatic Sorting Mode setting (RADF) | PPC | 2 <0-4> | SYS | 0: Invalid 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT | 1 |
| 642 | User interface | Default setting of Sorter Mode | PPC | 0 <0-4> | SYS | 0: NON-SORT 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT | 1 |
| 645 | User interface | Correction of reproduction ratio in editing copy | PPC | 10 <0-10> | SYS | Sets the reproduction ratio for the "X in 1" printing (including magazine sort) to the "Reproduction ratio x Correction ratio". 0: 90% 1: 91% 2: 92% 3: 93% 4: 94% 5: 95% 6: 96% 7: 97% 8: 98% 9: 99% 10: 100% | 1 |
| 646 | User interface | Image position in editing | PPC | 0 <0-1> | SYS | Sets the page pasted position for "X in 1" to the upper left corner/center. 0: Cornering 1: Centering | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 648 | User interface | Returning finisher tray when printing is finished | ALL | 0 <0-1> | SYS | Sets whether or not returning the finisher tray to the bin 1 when printing is finished. 0: Not returned 1: Returned | 1 |
| 649 | User interface | Magazine sort setting | PPC | 0 <0-1> | SYS | 0: Left page to right page 1: Right page to left page | 1 |
| 650 | User interface | 2 in 1/4 in 1 page allocating order setting | PPC | 0 <0-1> | SYS | 0: Horizontal 1: Vertical | 1 |
| 651 | User interface | Printing format setting for Time stamp and Page Number | PPC | 2 <0-3> | SYS | Hyphen (with page number) /Dropout (with date, time and page number) 0: OFF/OFF 1: ON/OFF 2: OFF/ON 3: ON/ON Note: Hyphen printing format ON: -1- OFF: 1 | 1 |
| 652 | User interface | Cascade operation setting | PPC | 0 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 653 | User interface | Cascade operation setting | PRT | 0 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 657 | User interface | Direction priority for date and time stamp printing | PPC | 0 <0-1> | SYS | 0: Short edge 1: Long edge | 1 |
| 658 | User interface | Auto Job Start setting for bypass feed printing | PRT | 0 <0-1> | SYS | Sets whether or not feeding a paper automatically into the equipment when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding) | 1 |
| 659 | User interface | Auto Job start setting for bypass feed printing | PPC | 1 <0-1> | SYS | Sets whether or not feeding a paper automatically into the equipment when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding) | 1 |
| 660 | Network | Auto-forwarding setting of received FAX | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 661 | Network | Auto-forwarding setting of received E-mail | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 662 | General | Clearing of SMS partition | ALL | - | SYS | Clears SMS partition. (Performs when the service call [F106] has occurred.) | 3 |
| 666 | General | /SHR partition clearing | ALL | - | SYS | Initializes the Electronic Filing. | 3 |
| 667 | General | /SHA partition clearing | ALL | - | SYS | Initializes the shared folder. | 3 |
| 670 | General | HDD diagnostic menu display | ALL | - | SYS | Display the HDD information | 2 |
| 671 | User interface | Size indicator | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 672 | General | Initialization of department management information | - | - | SYS | Initializing of the department management information * Key in the code and press the [INITIALIZE] button to perform the initialization. If the area storing the department management information is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management function is not set on. In this case, initialize the area with this code. This area is normally initialized at the factory. | 3 |
| 673 | General | Trial period setting | PRT/SCN | 254 <1-60> | SYS | Sets the trial period from 1 to 60 days. This setting is effective only when the default value is "254". Once the default value is set, this value is only used for a reference. | 1 |
| 678 | General | Setting of banner advertising display | ALL | 0 <0-1> | SYS | Sets whether or not displaying the banner advertising. The setting contents of 08-679 and 08-680 are displayed at the time display section on the right top of the screen. When both are set, each content is displayed alternately. 0: Not displayed 1: Displayed | 1 |
| 679 | General | Banner advertising display 1 | ALL | - | SYS | Maximum 27 letters (one-byte character) | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 680 | General | Banner advertising display 2 | ALL | - | SYS | Maximum 27 letters (one-byte character) | 11 |
| 681 | General | Display of [BANNER MESSAGE] button | ALL | 0 <0-1> | SYS | 0: Not displayed 1: Displayed * This button enables the entry of "Banner advertising display 1 (08-679)" and "Banner advertising display 2 (08-680)" on the control panel. | 1 |
| 682 | User interface | Offsetting between jobs | ALL | 1 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 683 | General | Duplex printing setting when coin controller is used | ALL | 1 <0-1> | SYS | When the duplex printing is short paid with a coin controller, reverse side of the original is not printed and is considered as a defect (printing job may be cleared). To solve this problem, the selection of printing method is enabled with this setting. 0: Invalid (Both sides printed) 1: Valid (Only one side printed) | 1 |
| 684 | General | Rebuilding all databases | ALL | - | SYS | Rebuilds all databases. | 3 |
| 685 | General | Rebuilding all databases related to address book | ALL | - | SYS | Rebuilds all databases related to the Address Book. | 3 |
| 686 | General | Rebuilding all databases related to log | ALL | - | SYS | Rebuilds all databases related to the log. | 3 |
| 689 | FAX | Adaptation of paper source priority selection | FAX | 0 <0-1> | SYS | 0: Not subjected for APS judgment 1: Subjected for APS judgment | 1 |
| 690 | General | HDD formatting | ALL | - <2> | SYS | 2: Normal formatting | 7 |
| 691 | General | HDD type display | ALL | - <0-2> | SYS | 0: Not formatted 1: Not used 2: Normal format | 7 |
| 692 | Maintenance | Performing panel calibration | ALL | - | SYS | Performs the calibration of the pressing position on the touch panel (LCD screen). The calibration is performed by pressing 2 reference positions after this code is started up. | 1 |
| 693 | General | Initialization of NIC information | ALL | - | SYS | Returns the value to the factory shipping default value. | 3 |
| 694 | General | Performing HDD testing | ALL | - | SYS | Checks the bad sector. | 3 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-----------------|---|----------|---|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 695 | General | Notifying condition of trial period end | PRT/SCN | 3 <0-59> | SYS | Sets when the end of trial period is notified. 0: On the day it ends 1 to 59: n days before | 1 |
| 696 | Scrambler board | Installation of scrambler board (Option) | ALL | 0 <0-1> | - | 0: Not installed 1: Installed | 2 |
| 697 | Paper feeding | Paper type priority | PPC | 1 <1-2> | SYS | Sets the paper type priority during copying. 1: Plain paper 2: Thick paper 1 | 1 |
| 698 | Scrambler board | Entering the key code for scrambler board | ALL | - | - | Start up this code and have the user enter the key code. Once the key code has been set, this code cannot be set again on security grounds. | 5 |
| 699 | Scrambler board | Erasing all data in HDD | ALL | - | - | This setting is effective only when the scrambler board is installed. | 3 |
| 701 | FAX | Destination setting for FAX | FAX | EUR: 5 UC: 4 JPN: 0 Other: 1 <0-25> | SYS | 0: Japan 1: Asia 2: Australia 3: Hong Kong 4: U.S.A./Canada 5: Germany 6: U.K. 7: Italy 8: Belgium 9: Netherlands 10: Finland 11: Spain 12: Austria 13: Switzerland 14: Sweden 15: Denmark 16: Norway 17: Portugal 18: France 19: Greece 20: Poland 21: Hungary 22: Czech 23: Turkey 24: South Africa 25: Taiwan | 1 |
| 702 | Maintenance | Remote-controlled service function | ALL | 2 <0-2> | SYS | 0: Valid (Remote-controlled server) 1: Valid (L2) 2: Invalid | 1 |
| 703 | Maintenance | Remote-controlled service HTTP server URL setting | ALL | - | SYS | Maximum 256 Bytes | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------------|---|-------------------------|----------|--|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 704-0 | User interface | Interruption of stapling operation (no staple) | Copying | ALL | 1 <0-1> | SYS | 0: Continues printing by switching sort setting 1: Interrupts printing | 4 |
| 704-1 | | | Printing / BOX printing | ALL | 1 <0-1> | SYS | 0: Continues printing by switching sort setting 1: Interrupts printing | 4 |
| 707 | Maintenance | Remote-controlled service HTTP initially-registered server URL setting | | ALL | https:// device. mfp-support. com:443/ device/ firstregist. ashx | SYS | Maximum 256 Bytes | 11 |
| 710 | Maintenance (Remote) | Short time interval setting of recovery from Emergency Mode | | ALL | 24 <1-48> | SYS | Sets the time interval to recover from the Emergency Mode to the Normal Mode. (Unit: Hour) | 1 |
| 711 | Maintenance (Remote) | Short time interval setting of Emergency Mode | | ALL | 60 <30-360> | SYS | Unit: Minute | 1 |
| 715 | Maintenance | Remote-controlled service periodical polling timing (Hour/Hour/Minute/Minute) | | ALL | 1230 | SYS | 0 (0:00) to 2359 (23:59) | 1 |
| 716 | Maintenance | Remote-controlled service Writing data of self-diagnostic code | | ALL | 0 <0-1> | SYS | 0: Prohibited 1: Accepted | 1 |
| 717 | Maintenance | Remote-controlled service response waiting time (Timeout) | | ALL | 3 <1-30> | SYS | Unit: Minute | 1 |
| 718 | Maintenance | Remote-controlled service initial registration | | ALL | 0 <0-2> | SYS | 0: OFF 1: Start 2: Only certification is scanned | 1 |
| 719 | Maintenance | Remote-controlled service tentative password | | ALL | - | SYS | Maximum 10 letters | 11 |
| 720 | Maintenance | Status of remote-controlled service initial registration (Display only) | | ALL | 0 <0-1> | SYS | 0: Not registered 1: Registered | 2 |
| 721 | Maintenance | Service center call function | | ALL | 2 <0-2> | SYS | 0: OFF 1: Notifies all service calls 2: Notifies all but paper jams | 1 |
| 723 | Maintenance | Service center call HTTP server URL setting | | ALL | - | SYS | Maximum 256 letters | 11 |
| 726 | Maintenance | HTTP proxy setting | | ALL | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 727 | Maintenance | HTTP proxy IP address setting | | ALL | - | SYS | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 728 | Maintenance | HTTP proxy port number setting | ALL | 0 <0-65535> | SYS | | 1 |
| 729 | Maintenance | HTTP proxy ID setting | ALL | - | SYS | Maximum 30 letters | 11 |
| 730 | Maintenance | HTTP proxy password setting | ALL | - | SYS | Maximum 30 letters | 11 |
| 731 | Maintenance | HTTP proxy panel display | ALL | 1 <0-1> | SYS | 0: Valid 1: Invalid | 1 |
| 732 | Maintenance (Remote) | Automatic ordering function of supplies | ALL | 3 <0-3> | SYS | 0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF | 1 |
| 733 | Maintenance (Remote) | Automatic ordering function of supplies FAX number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 734 | Maintenance (Remote) | Automatic ordering function of supplies E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 738 | Maintenance (Remote) | Automatic ordering function of supplies User's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 739 | Maintenance (Remote) | Automatic ordering function of supplies User's telephone number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 740 | Maintenance (Remote) | Automatic ordering function of supplies User's E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 741 | Maintenance (Remote) | Automatic ordering function of supplies User's address | ALL | - | SYS | Maximum 100 letters | 11 |
| 742 | Maintenance (Remote) | Automatic ordering function of supplies Service number | ALL | 0 <5 digits> | SYS | Maximum 5 digits | 11 |
| 743 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 744 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's telephone number | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [Monitor/Pause] button | 11 |
| 745 | Maintenance (Remote) | Automatic ordering function of supplies Service technician's E-mail address | ALL | - | SYS | Maximum 192 letters List: 256 digits | 11 |
| 746 | Maintenance (Remote) | Automatic ordering function of supplies Supplier's name | ALL | - | SYS | Maximum 50 letters | 11 |
| 747 | Maintenance (Remote) | Automatic ordering function of supplies Supplier's address | ALL | - | SYS | Maximum 100 letters | 11 |
| 748 | Maintenance (Remote) | Automatic ordering function of supplies Notes | ALL | - | SYS | Maximum 128 letters | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 758 | Maintenance (Remote) | Information about supplies Part number of toner cartridge | ALL | - | SYS | Maximum 20 digits | 11 |
| 759 | Maintenance (Remote) | Information about supplies Order quantity of toner cartridge | ALL | 1 <1-99> | SYS | | 1 |
| 760 | Maintenance (Remote) | Information about supplies Condition number of toner cartridge | ALL | 1 <1-99> | SYS | | 1 |
| 764 | Maintenance (Remote) | Automatic ordering supplies Result table printout | ALL | 1 <0-2> | SYS | 0: OFF 1: Always 2: ON Error | 1 |
| 765 | Maintenance (Remote) | Automatic ordering supplies Display | ALL | 2 <0-2> | SYS | 0: Valid (FAX/Internet FAX) 1: Valid (FAX/Internet FAX/HTTP) 2: Invalid | 1 |
| 767 | Maintenance (Remote) | Service Notification setting | ALL | 0 <0-2> | SYS | Enables to set up to 3 E-mail addresses to be sent.(08-768, 777, 778) 0: Invalid 1: Valid (E-mail) 2: Valid (FAX) | 1 |
| 768 | Maintenance (Remote) | Destination E-mail address | ALL | - | SYS | Maximum 192 letters | 11 |
| 769 | Maintenance (Remote) | Total counter information transmission setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 770 | Maintenance (Remote) | Total counter transmission date setting | ALL | 1 <1-31> | SYS | 1 to 31 | 1 |
| 771 | Maintenance (Remote) | PM counter notification setting | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 772 | Maintenance | Dealer's name | ALL | - | SYS | Maximum 100 letters Needed at initial registration | 11 |
| 773 | Maintenance | Login name | ALL | - | SYS | Maximum 20 letters Needed at initial registration | 11 |
| 774 | Maintenance (Remote) | Display setting of [Service Notification] button | ALL | 0 <0-1> | SYS | 0: Not displayed 1: displayed | 1 |
| 775 | Maintenance (Remote) | Sending error contents of equipment | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 776 | Maintenance (Remote) | Setting total counter transmission interval (Hour/Hour/Minute/Minute) | ALL | - | SYS | | 1 |
| 777 | Maintenance (Remote) | Destination E-mail address 2 | ALL | - | SYS | Maximum 192 letters | 11 |
| 778 | Maintenance (Remote) | Destination E-mail address 3 | ALL | - | SYS | Maximum 192 letters | 11 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------------|--|-------------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 779 | Maintenance (Remote) | Notification format selection | ALL | 0 <0-1> | SYS | 0: Text 1: Text + XML data | 1 |
| 780 | Maintenance | Remote-controlled service polling day selection Day-1 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 781 | Maintenance | Remote-controlled service polling day selection Day-2 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 782 | Maintenance | Remote-controlled service polling day selection Day-3 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 783 | Maintenance | Remote-controlled service polling day selection Day-4 | ALL | 0 <0-31> | SYS | 0: OFF 1 to 31: 1st to 31st of a month | 1 |
| 784 | Maintenance | Remote-controlled service polling day selection Sunday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 785 | Maintenance | Remote-controlled service polling day selection Monday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 786 | Maintenance | Remote-controlled service polling day selection Tuesday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 787 | Maintenance | Remote-controlled service polling day selection Wednesday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 788 | Maintenance | Remote-controlled service polling day selection Thursday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 789 | Maintenance | Remote-controlled service polling day selection Friday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 790 | Maintenance | Remote-controlled service polling day selection Saturday | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 794 | Maintenance | Information of supplies setting of toner cartridge | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 796 | Maintenance | Remote-controlled service lengthened interval polling (End of month) | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 797 | Maintenance | Firmware download | ALL | 0 <0-1> | SYS | 0: Accepted 1: Prohibited | 1 |
| 798 | General | Notifying address of trial period end | PRT/ SCN | 3 <0-3> | SYS | Sets where the end of the trial period is to be notified. 0: OFF 1: User 2: Service center 3: User and service center | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|------------------|-------------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 799 | General | Forcible end of trial period | | PRT/ SCN | - | SYS | [CANCEL]: Cancel [EXECUTION]: Forcible end When the "Forcible end of trial period" is performed, "0" is set in the code (08-673) to end up the trial period forcibly. | 3 |
| 800-0 | Fuser | Temperature control lower limit (OHP film) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 800-1 | | | Side themistor | ALL | 6 <0-12> | M | | 4 |
| 801-0 | Fuser | Temperature control lower limit (Thick paper 1) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 801-1 | | | Side themistor | ALL | 6 <0-12> | M | | 4 |
| 802-0 | Fuser | Temperature control lower limit (Thick paper 2) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 802-1 | | | Side themistor | ALL | 9 <0-12> | M | | 4 |
| 803-0 | Fuser | Temperature control lower limit (Thick paper 3) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 803-1 | | | Side themistor | ALL | 10 <0-12> | M | | 4 |
| 804-0 | Fuser | Temperature control lower limit (Envelope) | Center themistor | ALL | 8 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 804-1 | | | Side themistor | ALL | 10 <0-12> | M | | 4 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|------------------|--|----------|----------------------------------|-----|---|--------------------------------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 805 | Charger | Main charger bias correction (Text/Photo/OHP film) | PRT | 98 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 806 | Charger | Main charger bias correction (Toner Saving Mode/OHP film) | PRT | 98 <0-255> | M | | 1 |
| 807 | Charger | Main charger bias correction (Text/Photo/OHP film) | PPC | 98 <0-255> | M | | 1 |
| 808 | Charger | Main charger bias correction (Text/OHP film) | PPC | 98 <0-255> | M | | 1 |
| 809 | Charger | Main charger bias correction (Photo/OHP film) | PPC | 98 <0-255> | M | | 1 |
| 826 | Charger | Main charger bias correction (Toner saving mode) | PRT | 128 <0-255> | M | | 1 |
| 830 | Transfer | Transfer transformer DC correction (C) | ALL | 128 <0-255> | M | Corrects the value of the transfer transformer DC output adjustment (05-221). | 1 |
| 831 | Separation | Separation transformer DC correction (C) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-234). | 1 |
| 833 | Developer | Developer bias DC correction (Text/Photo/OHP film) | PRT | 108 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 834 | Developer | Developer bias DC correction (Toner Saving Mode/OHP film) | PRT | 108 <0-255> | M | | 1 |
| 835 | Developer | Developer bias DC correction (Text/Photo/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 836 | Developer | Developer bias DC correction (Text/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 837 | Developer | Developer bias DC correction (Photo/OHP film) | PPC | 108 <0-255> | M | | 1 |
| 838 | Image processing | Switching of recycled toner saving control | ALL | 0 <0-1> | M | | 0: Switched 1: Not switched |
| 839 | Image processing | Correction by temperature/humidity | ALL | 0 <0-3> | M | Sets the correction by temperature/humidity. 0: All valid 1: All invalid 2: Valid only in auto-toner sensor 3: All valid except transfer and separation | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 849 | General | Power source setting for destination | ALL | SAD: 1 Others: 0 <0-1> | M | 0: Other than SAD 1: SAD | 1 |
| 859 | Developer | Developer bias DC correction (Toner saving mode) | PRT | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 860 | Developer | Developer bias DC correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 861 | Developer | Developer bias DC correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 862 | Developer | Developer bias DC correction (Text) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 863 | Developer | Developer bias DC correction (Photo) | PPC | 128 <0-255> | M | Corrects the value of the developer bias adjustment (05-205). | 1 |
| 864 | Charger | Main charger bias correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 865 | Charger | Main charger bias correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 866 | Charger | Main charger bias correction (Text) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 867 | Charger | Main charger bias correction (Photo) | PPC | 128 <0-255> | M | Corrects the value of the main charger bias adjustment (05-210). | 1 |
| 868 | Transfer | Transfer transformer DC correction (H) | ALL | 128 <0-255> | M | Corrects the value of the transfer transformer DC output adjustment (05-220). | 1 |
| 869 | Transfer | Transfer transformer DC correction (L) | ALL | 128 <0-255> | M | Corrects the value of the transfer transformer DC output adjustment (05-222). | 1 |
| 870 | Separation | Separation transformer DC correction (H) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-233). | 1 |
| 871 | Separation | Separation transformer DC correction (L) | ALL | 128 <0-255> | M | Corrects the value of the separation transformer DC output adjustment (05-235). | 1 |
| 872 | Laser | Laser power correction (Normal) | PRT | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 873 | Laser | Laser power correction (Text/Photo) | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|------------------|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 875 | Laser | Laser power correction (Toner saving mode) | | PRT | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 876 | Laser | Laser power correction (Text) | | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 877 | Laser | Laser power correction (Photo) | | PPC | 128 <0-255> | M | Corrects the value of the laser power adjustment (05-286). | 1 |
| 886 | Fuser | Temperature drop control setting in ready status (Temperature/Time) | | ALL | 2 <0-20> | M | 0: None 1: Pattern 1 2: Pattern 2 3: Pattern 3 4: Pattern 4 5: Pattern 5 6: Pattern 6 7: Pattern 7 8: Pattern 8 9: Pattern 9 10: Pattern 10 11: Pattern 11 12: Pattern 12 13: Pattern 13 14: Pattern 14 15: Pattern 15 16: Pattern 16 17: Pattern 17 18: Pattern 18 19: Pattern 19 20: Manual adjustment | 1 |
| 896-0 | Fuser | Temperature control lower limit (Plain paper/ Low temperature) | Center themistor | ALL | 7 <0-12> | M | 0: 130°C 1: 135°C 2: 140°C 3: 145°C 4: 150°C 5: 155°C 6: 160°C 7: 165°C 8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C | 4 |
| 896-1 | | | Side themistor | ALL | 5 <0-12> | M | | 4 |
| 900 | Version | System firmware ROM version | | ALL | - | - | JPN: T377SY0JXXX UC: T377SY0UXXX EUR: T377SY0EXXX Others: T377SY0XXXX | 2 |
| 903 | Version | Engine ROM version | | ALL | - | - | 377M-XXX | 2 |
| 905 | Version | Scanner ROM version | | ALL | - | - | 377S-XXX | 2 |
| 907 | Version | RADF ROM version | | ALL | - | - | DF-XXXX | 2 |
| 908 | Version | Finisher ROM version | | ALL | - | - | SDL-XX FIN-XX | 2 |
| 915 | Version | Fax board ROM version | | FAX | - | - | F562-XXX | 2 |
| 920 | Version | FROM basic section software version | | ALL | - | - | VX.XX/X.XX | 2 |
| 921 | Version | FROM internal program | | ALL | - | - | VXXX.XXX X | 2 |
| 922 | Version | UI data fixed section version | | ALL | - | - | VXXX.XXX X | 2 |
| 923 | Version | UI data common section version | | ALL | - | - | VXXX.XXX X | 2 |
| 924 | Version | Version of UI data language 1 in HDD | | ALL | - | - | VXXX.XXX X | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 925 | Version | Version of UI data language 2 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 926 | Version | Version of UI data language 3 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 927 | Version | Version of UI data language 4 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 928 | Version | Version of UI data language 5 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 929 | Version | Version of UI data language 6 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 930 | Version | Version of UI data in FROM displayed at power-ON | ALL | - | - | VXXX.XXX X | 2 |
| 931 | Version | Version of UI data language 7 in HDD | ALL | - | - | VXXX.XXX X | 2 |
| 933 | Version | Web data whole version | ALL | - | - | VXXX.XXX X | 2 |
| 934 | Version | Web UI data in HDD Version: Language 1 | ALL | - | - | VXXX.XXX X | 2 |
| 935 | Version | Web UI data in HDD Version: Language 2 | ALL | - | - | VXXX.XXX X | 2 |
| 936 | Version | Web UI data in HDD Version: Language 3 | ALL | - | - | VXXX.XXX X | 2 |
| 937 | Version | Web UI data in HDD Version: Language 4 | ALL | - | - | VXXX.XXX X | 2 |
| 938 | Version | Web UI data in HDD Version: Language 5 | ALL | - | - | VXXX.XXX X | 2 |
| 939 | Version | Web UI data in HDD Version: Language 6 | ALL | - | - | VXXX.XXX X | 2 |
| 944 | Version | HD version | ALL | - | - | JPN: T377HD0JXXX UC: T377HD0UXXX EUR: T377HD0EXXX Others: T377HD0XXXX | 2 |
| 945 | Network | Two-way setting of RawPort 9100 | ALL | 2 <1-2> | UTY | 1: Valid 2: Invalid | 12 |
| 947 | General | Initialization after software version upgrade | ALL | - | - | Perform this code when the software in this equipment has been upgraded. | 3 |
| 949 | General | Automatic interruption page setting during printing | ALL | 0 <0-100> | SYS | Sets the number of pages to interrupt the printing automatically. 0-100: 0 to 100 pages | 1 |
| 950 | Electronic Filing | Start-up method of Electronic Filing | ALL | 0 <0-2> | SYS | Sets the start-up method of the Electronic Filing. 0: Standard 1: Forced start-up (Not recovered) 2: Forced start-up (Recovered) | 1 |
| 953 | User interface | Access code entry for Electronic Filing printing | ALL | 0 <0-1> | SYS | 0: Renewed automatically 1: Enter every time | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-------------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 954 | User interface | Clearing timing for files and Electronic Filing Agent | ALL | 1 <0-1> | SYS | 0: Immediately after the completion of scanning 1: Cleared by Auto Clear | 1 |
| 969 | User interface | Error sound | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 970 | User interface | Sound setting when switching to Energy Saving Mode | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 972 | User interface | Enables/disables the display that the toner is nearly empty | ALL | 0 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 973 | Network | PCL line feed code setting | PRT | 0 <0-3> | SYS | Sets the PCL line feed code. 0: Automatic setting 1: CR=CR, LF=LF 2: CR=CR+LF, LF=LF 3: CR=CR, LF=CR+LF | 1 |
| 975 | General | Job handling when printing is short paid with coin controller | ALL | 1 <0-1> | SYS | Sets whether pause or stop the printing job when it is short paid using a coin controller. 0: Pause the job 1: Stop the job | 1 |
| 976 | Electronic Filing | Equipment name and user name setting to a folder when saving files | ALL | 0 <0-2> | SYS | Sets whether or not adding the equipment name and user name to the folder when saving files. 0: Not add 1: Add the equipment name 2: Add the user name | 1 |
| 977 | Network | Switching of extended ASCII code in catFs file-system | ALL | 0 <0-1> | SYS | 0: ISO8859-1 1: ISO8859-2 | 1 |
| 978 | Network | Raw printing job (Paper feeding drawer) | PRT | 0 <0-5> | SYS | 0: AUTO 1: Upper drawer 2: Lower drawer 3: PFP upper drawer 4: PFP lower drawer 5: LCF | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|-----------------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 979 | Network | Raw printing job (PCL symbol set) | PRT | 0 <0-39> | SYS | 0: Roman-8 1: ISO 8859/1 Latin 1 2: ISO 8859/2 Latin 2 3: ISO 8859/9 Latin 5 4: PC-8,Code Page 437 5: PC-8 D/N, Danish/ Norwegian 6: PC-850,Multilingual 7: PC-852, Latin2 8: PC-8 Turkish 9: Windows 3.1 Latin 1 10: Windows 3.1 Latin 2 11: Windows 3.1 Latin 5 12: DeskTop 13: PS Text 14: Ventura Interna- tional 15: Ventura US 16: Microsoft Publishing 17: Math-8 18: PS Math 19: Ventura Math 20: Pi Font 21: Legal 22: ISO 4: United King- dom 23: ISO 6: ASCII 24: ISO 11 25: ISO 15: Italian 26: ISO 17 27: ISO 21: German 28: ISO 60: Danish/Nor- wegian 29: ISO 69: French 30: Windows 3.0 Latin 1 31: MC Text 32: PC Cyrillic 33: ITC Zapf Dingbats 34: ISO 8859/10 Latin 6 35: PC-775 36: PC-1004 37: Symbol 38: Windows Baltic 39: Wingdings | 1 |
| 980 | Elec- tronic Fil- ing | Electronic Filing data retention period when NIC board is not installed (Public Box) | ALL | 0 <0-999> | SYS | 0: Retention OFF 1 to 999: 1 to 999 days | 1 |
| 981 | Elec- tronic Fil- ing | Electronic Filing data retention period when NIC board is not installed (User Box) | ALL | 0 <0-999> | SYS | 0: Retention OFF 1 to 999: 1 to 999 days | 1 |
| 985 | Elec- tronic Fil- ing | Print mode setting of mixed input source of Electronic Filing | ALL | 0 <0-1> | SYS | 0: Image quality prior- ity mode 1: Function priority mode | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 986 | General | Copy function setting | PPC | 0 <0-1> | SYS | Sets the copy function to be invalid. 0: Valid 1: Invalid | 1 |
| 988 | Paper feeding | Setting of paper size switching to 13" LG | ALL | 0 <0-2> | SYS | 0: Not switched 1: LG → 13"LG 2: FOLIO → 13"LG | 1 |
| 995 | Version | Equipment number (serial number) display | ALL | 0 <10 digits> | SYS | This code can be also keyed in from the adjustment mode (05-976). 10 digits | 11 |
| 999 | Maintenance | FSMS total counter | ALL | 0 <8 digits> | SYS | Refers to values of total counter | 1 |
| 1002 | Network | Selection of NIC board status information | ALL | 1 <1-2> | NIC | 1: Not printed out when the equipment is restarted 2: Printed out when the equipment is restarted | 12 |
| 1003 | Network | Communication speed and settings of Ethernet | ALL | 1 <1-5> | NIC | 1: Auto 2: 10MBPS Half Duplex 3: 10MBPS Full Duplex 4: 100MBPS Half Duplex 5: 100MBPS Full Duplex | 12 |
| 1006 | Network | Address Mode | ALL | 2 <1-3> | NIC | 1: Fixed IP address 2: Dynamic IP address (DHCP) 3: Dynamic IP address (DHCP) without AutoIP | 12 |
| 1007 | Network | Domain name | ALL | - | NIC | Maximum 96 letters | 12 |
| 1008 | Network | IP address | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1009 | Network | Subnet mask | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1010 | Network | Gateway | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1011 | Network | Availability of IPX | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1012 | Network | Network frame type | ALL | 1 <1-5> | NIC | 1: Automatic 2: IEEE802.3 3: Ethernet II 4: IEEE802.3SNAP 5: IEEE802.2 | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1013 | Network | Availability of NCP Burst | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1014 | Network | Availability of AppleTalk | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1015 | Network | Zone setting of AppleTalk | ALL | * | NIC | Maximum 32 letters *: Wildcard character | 12 |
| 1016 | Network | Availability of LDAP | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1017 | Network | Availability of DNS | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1018 | Network | IP address to DNS server (Primary) | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1019 | Network | IP address to DNS server (Secondary) | ALL | - | NIC | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1020 | Network | DDNS Desired level | ALL | 1 <1-5> | NIC | 1: Invalid 2: Via DHCP 3: Insecure DDNS 4: Secure DDNS 5: Multi-secure DDNS | 12 |
| 1023 | Network | NetBios name | ALL | MFP_serial | UTY | Maximum 15 letters The Network-related serial number of the equipment appears at "serial" | 12 |
| 1024 | Network | Name of WINS server or IP address (Primary) | ALL | - | UTY | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1025 | Network | Name of WINS server or IP address (Secondary) | ALL | - | UTY | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1026 | Network | Availability of Bindery | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1027 | Network | Availability of NDS | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1028 | Network | Directory service context | ALL | - | NIC | Maximum 127 letters | 12 |
| 1029 | Network | Directory service tree | ALL | - | NIC | Maximum 47 letters | 12 |
| 1030 | Network | Availability of HTTP server | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1031 | Network | Port number to NIC HTTP server | ALL | 80 <1-65535> | NIC | | 12 |
| 1032 | Network | Port number to system HTTP server | ALL | 8080 <1-65535> | SYS | | 1 |
| 1037 | Network | Availability of SMTP client | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1038 | Network | FQDN or IP address to SMTP server | ALL | - | NIC | Maximum 128 Bytes | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|------------------------------------|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1039 | Network | TCP port number of SMTP client | ALL | 25 <1-65535> | NIC | | 12 |
| 1040 | Network | Availability of SMTP server | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1041 | Network | TCP port number of SMTP server | ALL | 25 <1-65535> | UTY | | 12 |
| 1042 | Network | E-mail box name to SMTP server | ALL | - | UTY | Maximum 192 letters | 12 |
| 1043 | Network | Availability of Offramp | ALL | 2 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1044 | Network | Offramp security | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1045 | Network | Printing at Offramp | ALL | 1 <1-2> | UTY | 1: Available 2: Not available | 12 |
| 1046 | Network | Availability of POP3 clients | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1047 | Network | FQDN or IP address to POP3 server | ALL | - | NIC | Maximum 128 Bytes | 12 |
| 1048 | Network | Types of POP3 server | ALL | 1 <1-3> | NIC | 1: Automatic 2: POP3 3: APOP | 12 |
| 1049 | Network | Login name to POP3 server | ALL | - | NIC | Maximum 96 letters | 12 |
| 1050 | Network | Login password to POP3 | ALL | - | NIC | Maximum 96 letters | 12 |
| 1051 | Network | E-mail reception interval (Unit: Minute) | ALL | 5 <0-4096> | NIC | | 12 |
| 1052 | Network | TCP port number of POP3 client | ALL | 110 <1-65535> | NIC | | 12 |
| 1055 | Network | TCP port number of FTP client | ALL | 21 <1-65535> | UTY | | 12 |
| 1057 | Network | Login name to FTP server | ALL | - | SYS | Maximum 31 letters | 11 |
| 1058 | Network | Login password to FTP server | ALL | - | SYS | Maximum 31 letters | 11 |
| 1059 | Network | Availability of FTP server | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1060 | Network | TCP port number of FTP server | ALL | 21 <1-65535> | UTY | | 12 |
| 1061 | Network | Login name to FTP client | ALL | - | SYS | Maximum 31 letters | 11 |
| 1062 | Network | Login password to FTP client | ALL | - | SYS | Maximum 31 letters | 11 |
| 1063 | Network | MIB function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1065 | Network | Setting of read Community | ALL | public | NIC | Maximum 31 letters | 12 |
| 1066 | Network | Setting of read/Write Community | ALL | private | NIC | Maximum 31 letters | 12 |
| 1067 | Network | Authentication TRAP function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1068 | Network | ALERTS TRAP function | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--------------------------------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1069 | Network | TRAP destination IP address | ALL | - | UTY | 000.000.000.000-255.255.255.255 (Default value 000.000.000.000) | 12 |
| 1070 | Network | Community setting of TRAP (via IP) | ALL | public | NIC | Maximum 31 letters | 12 |
| 1073 | Network | Availability of Raw/TCP | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1074 | Network | TCP port number of Raw | ALL | 9100 <1-65535> | NIC | | 12 |
| 1075 | Network | Availability of LPD client | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1076 | Network | TCP port number of LPD | ALL | 515 <1-65535> | NIC | | 12 |
| 1077 | Network | LPD queue name | ALL | - | NIC | Maximum 31 letters | 12 |
| 1078 | Network | Availability of IPP | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1079 | Network | Availability of IPP port number "80" | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1080 | Network | TCP port number of IPP | ALL | 631 <1-65535> | NIC | | 12 |
| 1081 | Network | IPP printer name | ALL | MFP_ serial | NIC | Maximum 127 letters The Network-related serial number of the equipment appears at "serial" | 12 |
| 1082 | Network | IPP printer location | ALL | - | NIC | Maximum 127 letters | 12 |
| 1083 | Network | IPP printer information | ALL | - | NIC | Maximum 127 letters | 12 |
| 1084 | Network | IPP printer information (more) | ALL | - | NIC | Maximum 127 letters | 12 |
| 1085 | Network | Installer of IPP printer driver | ALL | - | NIC | Maximum 127 letters | 12 |
| 1086 | Network | IPP printer "Make and Model" | ALL | - | NIC | Maximum 127 letters | 12 |
| 1087 | Network | IPP printer information (more) MFGR | ALL | - | NIC | Maximum 127 letters | 12 |
| 1088 | Network | IPP message from operator | ALL | - | NIC | Maximum 127 letters | 12 |
| 1089 | Network | Availability of FTP print | ALL | 1 <1-2> | NIC | 1: Available 2: Not available | 12 |
| 1090 | Network | Printer user name of FTP | ALL | print | NIC | Maximum 31 letters | 12 |
| 1091 | Network | Printer user password of FTP | ALL | - | NIC | Maximum 31 letters | 12 |
| 1092 | Network | TCP port number to FTP print server | ALL | 21 <1-65535> | NIC | | 12 |
| 1093 | Network | Login name to Novell print server | ALL | MFP_ serial | NIC | Maximum 47 letters The Network-related serial number of the equipment appears at "serial" | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1094 | Network | Login password to Novell print server | ALL | - | NIC | Maximum 31 letters | 12 |
| 1095 | Network | Name of SearchRoot server | ALL | - | NIC | Maximum 31 letters | 12 |
| 1096 | Network | Scan rate setting of print queue | ALL | 5 <1-255> | NIC | Unit: Second | 12 |
| 1097 | Network | Page number limitation for printing text of received E-mail | ALL | 5 <1-99> | UTY | | 12 |
| 1098 | Network | MDN return mail setting when receiving E-mail | ALL | 2 <1-2> | UTY | 1: Valid 2: Invalid | 12 |
| 1099 | Network | Trap destination of IPX | ALL | - | UTY | Maximum 24 letters (Valid from 0 to 9 and from A to F) | 12 |
| 1100 | Network | Method of SMTP server authentication | ALL | 5 <1-6,10> | NIC | 1: Disable 2: Plain 3: Login 4: Cram-MD5 5: Digest MD5 6: Kerberos 10: Auto | 12 |
| 1101 | Network | Login name for SMTP server authentication | ALL | - | NIC | Maximum 64 letters | 12 |
| 1102 | Network | Login password for SMTP server authentication | ALL | - | NIC | Maximum 64 letters | 12 |
| 1103 | Network | Rendezvous setting | ALL | 1 <1-2> | NIC | 1: Valid 2: Invalid | 12 |
| 1104 | Network | Link local host name | ALL | MFP_serial | NIC | Maximum 127 letters The Network-related serial number of the equipment appears at "serial" | 12 |
| 1105 | Network | Service name setting | ALL | Refer to content | NIC | Maximum 63 letters The Network-related serial number of the equipment appears at "serial" <Default value> e-STUDIO232: TOSHIBA e-STUDIO232_serial e-STUDIO282: TOSHIBA e-STUDIO282_serial | 12 |
| 1112 | Network | Host name | ALL | MFP_serial | NIC | Maximum 63 letters The Network-related serial number of the equipment appears at "serial" | 12 |
| 1113 | Network | Windows domain No.1 of user authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1114 | Network | Sending mail text of InternetFAX | ALL | 1 <0-1> | SYS | 0: Invalid (Not sending the mail text) 1: Valid (Sending the mail text) | 1 |
| 1117 | Network | SMB time-out period | ALL | 300 <1-9999> | SYS | Unit: Second | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1118 | General | Clearing of TAT partition | ALL | - | SYS | | 3 |
| 1119 | Network | Initialization of NIC information | ALL | - | - | Initializes only the information of the Network setting items. | 3 |
| 1121 | Network | PDC (Primary Domain Controller) name | ALL | - | UTY | Maximum 128 letters | 12 |
| 1122 | Network | BDC (Backup Domain Controller) name | ALL | - | UTY | Maximum 128 letters | 12 |
| 1123 | Network | NT domain ON/OFF setting | ALL | 4 <3-4> | UTY | 3: ON (Domain selected) 4: OFF (Work group selected) | 12 |
| 1124 | Network | Workgroup name | ALL | work-group | UTY | Maximum 15 letters | 12 |
| 1125 | General | Data writing of address book data import (overwriting method) | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 1126 | Counter | Validity of interrupt copying when external counters are installed | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid | 1 |
| 1128 | Network | NetwareUserAuthTree Name1 | ALL | - | UTY | Maximum 47 letters | 12 |
| 1129 | Network | NetwareUserAuthContext Name1 | ALL | - | UTY | Maximum 127 letters | 12 |
| 1130 | User interface | Job Build Function | ALL | 1 <0-1> | SYS | Sets the Job Build Function. 0: Invalid 1: Valid | 1 |
| 1131 | User interface | Maximum number of time job build performed | ALL | 2000 <5-2000> | SYS | Sets the maximum number of time a job build has been performed. 5-2000: 5 to 2000 times | 1 |
| 1132 | General | Default screen selection of the User Function menu | ALL | 1 <0-1> | SYS | Selects the default screen when entering the User Function menu by pressing the [USER FUNCTIONS] button. 0: ADDRESS 1: COUNTER | 1 |
| 1133 | Paper feeding | Feeding direction setting of envelope | ALL | 0 <0-1> | SYS | Sets the feeding direction of envelopes. 0: Envelope flap comes on its trailing edge (front side of the equipment) 1: Envelope flap comes on its leading edge (rear side of the equipment) | 1 |
| 1134 | Network | NetwareUserAuthTree Name2 | ALL | - | UTY | Maximum 47 letters | 12 |
| 1135 | Paper feeding | Default setting of drawers (Printer/BOX) | PRT | 1 <1-5> | SYS | 1: LCF 2: Upper drawer 3: Lower drawer 4: PFP upper drawer 5: PFP lower drawer | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1136 | Network | Number of lines simultaneously connectable when using SMB | ALL | 8 <0-16> | SYS | | 1 |
| 1137 | Network | Memory partition size when using Samba | ALL | 12 <8-20> | SYS | 8-20 M bytes | 1 |
| 1138 | Network | LDAP search method setting | ALL | 0 <0-3> | SYS | Sets the search method when performing a LDAP search. 0: Partial match 1: Prefix match 2: Suffix match 3: Full match | 1 |
| 1139 | Network | LDAP authentication setting | ALL | 0 <0-1> | SYS | 0: Not authenticated 1: Authenticated | 1 |
| 1140 | User interface | Restriction of the template function with the administrator privilege | ALL | 0 <0-1> | SYS | Selects the restriction of the template function usage setting. 0: No restriction 1: Only available with the administrator privilege. | 1 |
| 1141 | Network | Display of MAC address | ALL | - | SYS | (**.*.*.*.*.*.*.*) The address is displayed as above (6-byte data is divided by a colon at every 2 bytes). | 2 |
| 1143 | Network | NetwareUserAuthContext Name2 | ALL | - | UTY | Maximum 127 letters | 12 |
| 1144 | Network | NetwareUserAuthTree Name3 | ALL | - | UTY | Maximum 47 letters | 12 |
| 1145 | Maintenance (Remote) | Counter notification Remote FAX setting | ALL | - | SYS | Maximum 32 digits Enter hyphen with the [MONITOR/PAUSE] button. | 11 |
| 1148 | Network | NetwareUserAuthContext Name3 | ALL | - | UTY | Maximum 127 letters | 12 |
| 1149 | General | Enhanced bold for PCL6 | ALL | 0 <0-1> | SYS | 0:OFF 1:ON | 1 |
| 1372 | Counter | Heater and energizing time accumulating counter Display/0 clearing | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when power of the equipment is ON) but does not count at the Sleep Mode. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at the PM support mode. | 1 |
| 1376 | Counter | Toner cartridge drive counter | ALL | 0 <8 digits> | M | Counts the rotation number of the toner cartridge. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|------------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1378 | Counter | Counter for period of time fuser unit is at ready temperature | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when the equipment is at ready status). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |
| 1380 | Counter | Counter for period of time fuser unit is at printing temperature | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (during printing). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |
| 1382 | Counter | Counter for period of time fuser unit is at energy saving temperature/Counter reset | ALL | 0 <8 digits> | M | Counts up the heater control time accumulated (when the equipment is in the Energy Saving Mode). When the counter value of the fuser roller is reset, this counter is also reset in sync at the PM support mode. | 1 |
| 1385 | Image processing | Number of output pages (Thick paper 1) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at the PM support mode. | 1 |
| 1386 | Image processing | Number of output pages (Thick paper 2) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |
| 1387 | Image processing | Number of output pages (Thick paper 3) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |
| 1388 | Image processing | Number of output pages (OHP film) | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is cleared, this counter value is also cleared in sync at PM support mode. | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1390 | Paper feeding | Feeding retry counter (upper drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the upper drawer. | 1 |
| 1391 | Paper feeding | Feeding retry counter (lower drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the lower drawer. | 1 |
| 1392 | Paper feeding | Feeding retry counter (PFP upper drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the PFP upper drawer. | 1 |
| 1393 | Paper feeding | Feeding retry counter (PFP lower drawer) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the PFP lower drawer. | 1 |
| 1394 | Paper feeding | Feeding retry counter (bypass feed) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the bypass tray. | 1 |
| 1395 | Paper feeding | Feeding retry counter (LCF) | ALL | 0 <8 digits> | M | Counts the number of times of the feeding retry from the LCF. | 1 |
| 1396 | Paper feeding | Feeding retry counter upper limit value (Upper drawer) | ALL | 0 <8 digits> | M | When the number of feeding retry (08-1390 to 08-1395) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value. | 1 |
| 1397 | Paper feeding | Feeding retry counter upper limit value (Lower drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1398 | Paper feeding | Feeding retry counter upper limit value (PFP upper drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1399 | Paper feeding | Feeding retry counter upper limit value (PFP lower drawer) | ALL | 0 <8 digits> | M | | 1 |
| 1400 | Paper feeding | Feeding retry counter upper limit value (Bypass feed) | ALL | 0 <8 digits> | M | | 1 |
| 1401 | Paper feeding | Feeding retry counter upper limit value (LCF) | ALL | 0 <8 digits> | M | | 1 |
| 1410 | Counter | Counter for period of toner cartridge rotation time | ALL | 0 <8 digits> | M | Counts up the period of rotation time of the toner cartridge. | 1 |
| 1411 | Counter | Counter for envelope | ALL | 0 <8 digits> | M | Counts up when the registration sensor is ON. When the counter value of the fuser roller is reset, this counter is reset in sync at the PM support mode. | 1 |

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|--|--------------------------|---|----------|---|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1422 | Data overwrite kit | HDD data overwriting type setting | ALL | 0 <0-2> | SYS | Select the type of the overwriting level; LOW, MEDIUM, or HIGH for deleting HDD data. (This setting is enabled only when the GP-1060 is installed.) 0: LOW 1: MEDIUM 2: HIGH | 1 |
| 1424 | Data overwrite kit | HDD data clearing type setting (forcible clearing) | ALL | 0 <0-2> | SYS | Select the type of the overwriting level; LOW, MEDIUM, or HIGH for deleting HDD data. (This setting is enabled only when the GP-1060 is installed.) 0: LOW 1: MEDIUM 2: HIGH | 1 |
| 1426 | Data overwrite kit | Forcible HDD data clearing | ALL | - | - | HDD data is cleared in the procedure set in 08- 1424. * This setting is enabled only when the GP-1060 is installed. | 3 |
| 1427 | Data overwrite kit | Forcible NVRAM data all clearing | ALL | - | - | When this code is per- formed, the equipment cannot be started up. * This setting is enabled only when the GP-1060 is installed. | 3 |
| 1428 | Data overwrite kit | Forcible SRAM backup data all clearing | ALL | - | - | When this code is per- formed, the equipment cannot be started up. * This setting is enabled only when the GP-1060 is installed. | 3 |
| 1429 | User interface | Margin width (Top/Bottom, Left/Right) | ALL | Front: 7/ Back: 7 <2-100/ 100-100> | SYS | This setting is not reflected in "Right", even if the value less than 2 is set for "Back". | 10 |
| 1430 | User interface | Margin width (Bookbinding margin) | ALL | 14 <2-30> | SYS | | 1 |
| 1431 | Network | ACC (AT_CASSETTE_CHANGE) for Printer/Box printing | ALL | 1 <0-2> | SYS | 0: ACC prohibited 1: Only in the same paper direction 2: In both same direc- tion and different directions | 1 |
| 1432 | Network | Mode only for Private Print | ALL | 0 <0-1> | SYS | 0: Normal mode 1: Mode for Private Print | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1433 | Network | "Disable e-Filing" function | ALL | 0 <0-1> | SYS | 0: Function OFF (no restriction on data saving or other operations) 1: Function ON (Data saving or other operations are restricted) | 1 |
| 1435 | Network | "Disable private and proof print save" function | ALL | 0 <0-1> | SYS | 0: Function OFF (no restriction on data saving or other operations) 1: Function ON (Data saving or other operations are restricted) | 1 |
| 1436 | Network | "Disable fax save" function | ALL | 0 <0-1> | SYS | 0: Function OFF (no restriction on data saving or other operations) 1: Function ON (Data saving or other operations are restricted) | 1 |
| 1437 | Paper feeding | Hole punch on tab paper | ALL | 0 <0-1> | SYS | 0: No hole punch 1: Hole punch | 1 |
| 1438 | Paper feeding | Automatic feed setting of tab paper and insertion sheet (Remote) | ALL | 1 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 1439 | Paper feeding | Automatic feed setting of tab paper and insertion sheet (Local) | ALL | 1 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 1440 | Network | IP Conflict Detect | ALL | 1 <1-2> | - | OFF/ON 1: Valid 2: Invalid | 12 |
| 1441 | Network | SNTP Enable | ALL | 2 <1-2> | - | OFF/ON 1: Valid 2: Invalid | 12 |
| 1442 | Network | SNTP Polling rate | ALL | 24 <1-168> | - | Data obtaining interval (Unit: Hour) | 12 |
| 1444 | Network | Primary SNTP Address | ALL | - | - | SNTP server IP Address (Primary) | 12 |
| 1445 | Network | Secondary SNTP Address | ALL | - | - | SNTP server IP Address (Secondary) | 12 |
| 1446 | Network | Port number to SNTP | ALL | 123 <1-65535> | - | | 12 |
| 1447 | Network | IPP administrator name | ALL | - | - | This should be an account which can control all IPP jobs. | 12 |
| 1448 | Network | IPP administrator password | ALL | - | - | This should be the password of an account which can control all IPP jobs. | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|------------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1449 | Network | IPP authentication method | ALL | 1 <1-4> | - | 1: Disabled 2: Basic 3: Digest 4: Basic Digest | 12 |
| 1450 | Network | User name for IPP authentication | ALL | - | - | This should be the account at the time IPP authentication was performed. | 12 |
| 1451 | Network | Password for IPP authentication | ALL | - | - | This should be the password of the account at the time IPP authentication was performed. | 12 |
| 1464 | Network | Samba server ON/OFF setting | ALL | 1 <1-4> | NIC | 1: Samba enabled 2: Samba disabled 3: Print Share disabled 4: File Share disabled | 12 |
| 1470 | General | Device authentication function setting | ALL | 0 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 1471 | General | User authentication method | ALL | 0 <0-5> | SYS | 0: Local 1: NTLM (NT Domain) 2: LDAP 3: Kerberos (Active Directory) 4: Netware | 1 |
| 1472 | General | User data management automatic registration function setting | ALL | 0 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 1473 | General | User data management limitation setting | ALL | 0 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 1474 | General | User data management limitation Setting by number of print-outs | ALL | 0 <7 digits> | SYS | 0-9,999,999: 0-9,999,999 sheets | 1 |
| 1476 | Network | Restriction on Address book operation by administrator | ALL | 0 <0-1> | SYS | Some restrictions can be given on the administrator for operating the Address book. 0: No restriction 1: Can be operated only under the administrator's authorization | 1 |
| 1477 | Network | Restriction on "To" ("cc") address | ALL | 0 <0-3> | SYS | 0: No restriction 1: Can be set from both of the Address book and LDAP server 2: Can be set only from the Address book 3: Can be set only from the LDAP server | 1 |
| 1478 | User interface | Display of paper size setting by installation operation of drawers | ALL | JPN: 0 UC: 1 EUR: 0 <0-1> | SYS | 0: Not displayed 1: Displayed | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1479 | User interface | Default setting of sharpness | ALL | 5 <1-9> | SYS | 1: -4 2: -3 3: -2 4: -1 5: 0 6: +1 7: +2 8: +3 9: +4 | 1 |
| 1481 | General | User data management clearing | ALL | - | - | All the user data in the database and backup files can be deleted. | 3 |
| 1482 | General | User data department management | ALL | 0 <0-1> | SYS | 0: Invalid 1: Valid * When this code is set to "1" (Valid), the department management setting (08-629) should be "1" (Valid). | 1 |
| 1483 | General | User data recovery | ALL | - | - | The data in the database is overwritten with the data in the backup file. | 3 |
| 1484 | Network | Authentication method of "Scan to Email" | ALL | 0 <0-2> | SYS | 0: Disable 1: SMTP authentication 2: LDAP authentication | 1 |
| 1485 | Network | Setting whether use of Internet FAX is permitted or not when it is given an authentication | ALL | 0 <0-1> | SYS | 0: Not permitted 1: Permitted | 1 |
| 1486 | Network | Server setting for LDAP user authentication | ALL | 0 <0-4294967 295> | SYS | | 2 |
| 1487 | Network | "From" address assignment method when it is given an authentication | ALL | 0 <0-2> | SYS | 0: "User name" + @ + "Domain name" 1: LDAP search 2: Use the address registered in "From" field of E-mail setting | 1 |
| 1488 | Network | ID setting of LDAP server for "From" address assignment | ALL | 0 <0-4294967 295> | SYS | | 2 |
| 1489 | Network | Setting for "From" address edit at "Scan to Email" | ALL | 0 <0-1> | SYS | 0: Not permitted 1: Permitted | 1 |
| 1491 | Network | E-mail domain name | ALL | - | SYS | 96+2 (delimiter) character ASCII sequence only | 11 |
| 1492 | Paper feeding | Detection method of 13" LG for single-size document | ALL | 0 <0-1> | SYS | 0: Disabled 1: Enabled | 1 |
| 1494 | General | Limitation check method | ALL | 0 <0-1> | SYS | 0: Checked at every page printed 1: Checked at every job printed | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|-------------------------|----------------------------------|-----------------|---|--|---|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 1495 | Maintenance | Service call checking period setting | ALL | 6 <0-12> | - | 0: No checking period specified (= Calls service technician immediately) 0: 10 minutes 1: 30 minutes 3: 1 hour 4: 6 hours 5: 12 hours 6: 24 hours 7: 48 hours 8: 7 days 9: 1 month 10: 1 year 11: 5 years 12: Not limited (= Calls service technician if such error has occurred in the past even once or more) | 12 | |
| 1496 | General | Operation setting for User authentication/registration | ALL | 1 <0-1> | SYS | 0 : Disables operation setting for User authentication/registration 1 : Enables operation setting for User authentication/registration | 1 | |
| 1497 | Network | e-Filing Access Mode (for Client) | ALL | 0 <0-2> | SYS | 0: Mode 1 1: Mode 2 2: Mode 3 | 1 | |
| 1498 | FAX | Inbound FAX function (Forwarding by TSI) | | 1 <0-1> | SYS | 0: OFF (Function disabled) 1: ON (Function enabled) | 1 | |
| 1530-0 | Counter | Number of output pages | 1-UP / Duplex printing | PPC | 0 <8 digits> | SYS | Counts the number of output pages. | 4 |
| 1530-1 | | | 2-UP / Duplex printing | PPC | 0 <8 digits> | SYS | Counts the number of output pages using [2IN1] or [MAGAZINE SORT]. | 4 |
| 1530-2 | | | 2-UP / Simplex printing | PPC | 0 <8 digits> | SYS | Counts the number of sheets using [2IN1] or [MAGAZINE SORT]. | 4 |
| 1530-3 | | | 4-UP / Duplex printing | PPC | 0 <8 digits> | SYS | Counts the number of output pages using [4IN1]. | 4 |
| 1530-4 | | | 4-UP / Simplex printing | PPC | 0 <8 digits> | SYS | Counts the number of sheets using [4IN1]. | 4 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|------------------------|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1533-0 | Counter | Number of output pages of the printer or BOX | 1-UP / Duplex printing | PRT | 0 <8 digits> | SYS | Counts the number of output pages. | 4 |
| 1533-1 | | | 2-UP / Duplex printing | PRT | 0 <8 digits> | SYS | Counts the number of output pages using [2IN1] or [MAGAZINE SORT]. * When printing is performed using a Windows driver, the 1-UP image will be output. | 4 |
| 1535 | Counter | Number of output pages of the FAX printing (1-UP / Duplex printing) | | FAX | 0 <8 digits> | SYS | Counts the number of output pages in the default settings. | 1 |
| 1660 | Wireless LAN | Wireless LAN driver Radio ON/OFF setting | | ALL | 1 <1-2> | - | 1: OFF 2: ON | 12 |
| 1661 | Wireless LAN | Wireless LAN driver SSID | | ALL | - | - | Maximum 32 letters | 12 |
| 1662 | Wireless LAN | Wireless LAN driver Network type | | ALL | 1 <1-2> | - | 1: Infrared wireless LAN 2: Ad-hoc network | 12 |
| 1663 | Wireless LAN | Wireless LAN driver Security | | ALL | 4 <1-7> | - | 1: 802.1x 2: WPA-PSK 3: WEP 4: NONE 5: WPA 6: WPA2 7: WPA2PSK | 12 |
| 1664 | Wireless LAN | Wireless LAN driver Encryption system | | ALL | 1 <1-3> | - | 1: TKIP 2: AES 3: Dynamic WEP | 12 |
| 1665 | Wireless LAN | Wireless LAN driver Transmission output power | | ALL | 1 <1-5> | - | 1: 100% 2: 50% 3: 25% 4: 12.5% 5: min | 12 |
| 1666 | Wireless LAN | Wireless LAN driver Transmission rate | | ALL | 1 <1-2> | - | 1: Auto 2: Manual | 12 |
| 1667 | Wireless LAN | Wireless LAN driver Transmission rate value | | ALL | 1 <1-12> | - | 1: 1 2: 2 3: 5.5 4: 11 5: 6 6: 9 7: 12 8: 18 9: 24 10: 36 11: 48 12: 54 | 12 |
| 1668 | Wireless LAN | Wireless LAN driver Operation channel | | ALL | 1 <1-2> | - | 1: Auto 2: Manual | 12 |
| 1669 | Wireless LAN | Wireless LAN driver Operation channel value | | ALL | 1 <1-11> | - | | 12 |
| 1670 | Wireless LAN | Wireless LAN driver WEP bit number | | ALL | 1 <1-3> | - | 1: 64 2: 128 3: 152 | 12 |
| 1671 | Wireless LAN | Wireless LAN driver WEP key entry system | | ALL | 2 <1-2> | - | 1: Hex 2: ASCII | 12 |
| 1672 | Wireless LAN | Wireless LAN driver WEP key value | | ALL | - | - | Maximum 32 letters | 12 |
| 1673 | Wireless LAN | Wireless LAN driver WPA-PSK passphrase | | ALL | - | - | Maximum 64 letters | 12 |
| 1674 | Wireless LAN | Wireless LAN driver Sleep mode setting | | ALL | 1 <1-3> | - | 1: Off 2: Max 3: Normal | 12 |
| 1675 | Wireless LAN | Wireless LAN driver Slot-time limitation | | ALL | 1 <1-2> | - | 1: Long 2: Short | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1676 | Wireless LAN | Wireless LAN driver Number of times of software retry | ALL | 5 <0-1000> | - | | 12 |
| 1677 | Wireless LAN | Wireless LAN driver Preamble | ALL | 1 <1-2> | - | 1: Long 2: Longshort | 12 |
| 1678 | Wireless LAN | Wireless LAN driver Operation mode | ALL | 1 <1-3> | - | 1: All 2: 11b 3: 11g | 12 |
| 1679 | Wireless LAN | Wireless LAN supplicant Wireless LAN setting | ALL | 1 <1-3> | - | This setting is whether the wireless LAN connection is enabled or disabled. 1: Unset 2: Enabled 3: Disabled | 12 |
| 1680 | Wireless LAN | Wireless LAN supplicant Path name for configuration file | ALL | - | - | Maximum 255 letters | 12 |
| 1681 | Wireless LAN | Wireless LAN supplicant Path name for client certificate | ALL | - | - | This should be the path name in full where the client certificate is located. (Maximum 255 letters) | 12 |
| 1682 | Wireless LAN | Wireless LAN supplicant Path name for secret key of client certificate | ALL | - | - | This should be the path name in full where the client certificate is located. (Maximum 255 letters) | 12 |
| 1684 | Wireless LAN | Wireless LAN supplicant Path name for CA self-certificate | ALL | - | - | This should be the path name in full where the CA self-certificate is located. (Maximum 255 letters) | 12 |
| 1685 | Wireless LAN | Wireless LAN supplicant EAP user name | ALL | - | - | This should be the user name when the EAP-TLS is used. | 12 |
| 1686 | Wireless LAN | Wireless LAN supplicant EAP user name | ALL | - | - | This should be the user name when the PEAP is used. | 12 |
| 1688 | Wireless LAN | Wireless LAN supplicant Log file output | ALL | - | - | This should be the path name to which the log file is output. (Maximum 255 letters) | 12 |
| 1689 | Wireless LAN | Wireless LAN supplicant Authentication interval | ALL | 30 <30-65535> | - | This should be the timeout interval between EAP responses. 30: 30 seconds | 12 |
| 1690 | Wireless LAN | Wireless LAN supplicant Holding interval | ALL | 60 <60-65535> | - | The EAP authentication will start after having been waited in this period when an EAP failure was received. 60: 60 seconds | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1691 | Wireless LAN | Wireless LAN supplicant EAPOL-Start Number of times of packet retry | ALL | 3 <1- 65535> | - | When an EAPOL-Start packet has been sent and the request ID can- not be received, this EAPOL-Start packet will be re-sent for the num- ber of times set in this code. 3: 3 times | 12 |
| 1692 | Wireless LAN | Wireless LAN supplicant Session resume | ALL | 2 <1-2> | - | This setting is whether the pre-master key should be updated or not upon a TLS re- negotiation. 1: Session is resumed 2: Session is not resumed | 12 |
| 1693 | Wireless LAN | Wireless LAN supplicant MAC Frame size | ALL | 1398 <1-1398> | - | This is a MAC frame size used in the wire- less LAN connection. The data is fragmented into this size. 1398: 1398 bytes | 12 |
| 1696 | Wireless LAN | Wireless LAN supplicant Device file setting for obtaining random number | ALL | /dev/ urandom | - | This should be the device file name which can obtain a seed to ini- tialize the WEP PRNG for xsupplicant. (Maximum 255 letters) | 12 |
| 1697 | Wireless LAN | Wireless LAN supplicant CRL directory designation | ALL | - | - | This should be the path name of the directory in full where the CRL file is located. (Maximum 255 letters) | 12 |
| 1699 | Wireless LAN | Wireless LAN supplicant EAP authentication type | ALL | 1 <1-3> | - | This setting is for the EAP authentication type which xsupplicant can authenticate. 1: EAP-TLS 2: PEAP 3: EAP-TLS and PEAP | 12 |
| 1700 | Wireless LAN | Wireless LAN supplicant CN name | ALL | - | - | This should be an authentication server name (basically a domain name in full). (Maximum 255 letters) | 12 |
| 1701 | Wireless LAN | Wireless LAN supplicant CN name check | ALL | 1 <1-2> | - | 1: NO 2: YES | 12 |
| 1702 | Wireless LAN | Wireless LAN supplicant Debugging level | ALL | 0 <0-7> | - | 0-7: Setting of log file output level | 12 |
| 1703 | Wireless LAN | Wireless LAN supplicant Ethereal log file output | ALL | 1 <1-2> | - | This setting is whether the Ethereal log file is output or not. 1: NO 2: YES | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1704 | Wireless LAN | Wireless LAN supplicant Update interval of PTK (Pairwise Transient Key) | ALL | 0 <0-720> | - | The update interval of a secret key across AP (Access Point) and STA (Station) can be set. This interval is for updating the secret key from STA. 0: Not updated 1-720: 1-720 minutes of interval | 12 |
| 1705 | Wireless LAN | Wireless LAN supplicant Strict packet check | ALL | 1 <1-2> | - | The Ack bit and request bit of EAPOL-Key is checked. 1: Not checked 2: Checked | 12 |
| 1706 | Wireless LAN | Wireless LAN supplicant Priority change at 4-way handshake | ALL | 1 <1-2> | - | A higher priority is given to the xsupplicant task when a 4-way handshake is started. 1: Priority not changed 2: Priority changed | 12 |
| 1707 | Wireless LAN | Wireless LAN supplicant Security level | ALL | 1 <1-3> | - | The encryption capability output in TLS clientHello message can be selected. 1: LOW 2: MIDDLE 3: HIGH | 12 |
| 1708 | User interface | Selectable security level (EAP-TLS) | ALL | 1 <1-3> | - | These are the security level which can be selected from the user interface. This setting is not applied in case of PEAP. ("LOW" and "MIDDLE" is mandatory for PEAP) 1: LOW + MIDDLE + HIGH 2: MIDDLE + HIGH 3: HIGH | 12 |
| 1709 | Bluetooth | Bluetooth Installation status of option | ALL | 0 <0-1> | SYS | 0: Not installed 1: Installed | 1 |
| 1710 | Bluetooth | Bluetooth ON/OFF setting | ALL | 1 <0-1> | SYS | 0: OFF 1: ON | 1 |
| 1711 | Bluetooth | Bluetooth Device name | ALL | MFP | SYS | Maximum 32 letters | 11 |
| 1712 | Bluetooth | Bluetooth Discovery | ALL | 1 <0-1> | SYS | 0: Not allowed 1: Allowed | 1 |
| 1713 | Bluetooth | Bluetooth Security | ALL | 1 <0-1> | SYS | 0: Security function OFF 1: Security function ON | 1 |
| 1714 | Bluetooth | Bluetooth PIN | ALL | 0000 | SYS | Maximum 8 digits (8-digit sequence) This setting is valid only when the bluetooth security function is ON. | 11 |

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|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1715 | Bluetooth | Bluetooth Data encryption | ALL | 1 <0-1> | SYS | 0: Not encrypted 1: Encrypted This setting is valid only when the bluetooth security function is ON. | 1 |
| 1716 | Bluetooth | Bluetooth HCRP reception time-out period | ALL | 6 <1-50> | SYS | Setting value ~ 0.5 sec. | 1 |
| 1717 | Bluetooth | Bluetooth HCRP transmission time- out period | ALL | 6 <1-50> | SYS | Setting value ~ 0.5 sec. | 1 |
| 1720 | Network | IP address range for IP fil- ter (Minimum area 1) | ALL | - | - | IP filter minimum area 1 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1721 | Network | IP address range for IP fil- ter (Maximum area 1) | ALL | - | - | IP filter maximum area 1 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1722 | Network | IP address range for IP fil- ter I (Minimum area 2) | ALL | - | - | IP filter minimum area 2 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1723 | Network | IP address range for IP fil- ter (Maximum area 2) | ALL | - | - | IP filter maximum area 2 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1724 | Network | IP address range for IP fil- ter (Minimum area 3) | ALL | - | - | IP filter minimum area 3 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1725 | Network | IP address range for IP fil- ter (Maximum area 3) | ALL | - | - | IP filter maximum area 3 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1726 | Network | IP address range for IP fil- ter (Minimum area 4) | ALL | - | - | IP filter minimum area 4 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1727 | Network | IP address range for IP fil- ter (Maximum area 4) | ALL | - | - | IP filter maximum area 4 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |

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|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1728 | Network | IP address range for IP filter (Minimum area 5) | ALL | - | - | IP filter minimum area 5 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1729 | Network | IP address range for IP filter (Maximum area 5) | ALL | - | - | IP filter maximum area 5 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1730 | Network | IP address range for IP filter (Minimum area 6) | ALL | - | - | IP filter minimum area 6 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1731 | Network | IP address range for IP filter (Maximum area 6) | ALL | - | - | IP filter maximum area 6 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1732 | Network | IP address range for IP filter (Minimum area 7) | ALL | - | - | IP filter minimum area 7 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1733 | Network | IP address range for IP filter (Maximum area 7) | ALL | - | - | IP filter maximum area 7 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1734 | Network | IP address range for IP filter (Minimum area 8) | ALL | - | - | IP filter minimum area 8 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1735 | Network | IP address range for IP filter (Maximum area 8) | ALL | - | - | IP filter maximum area 8 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1736 | Network | IP address range for IP filter (Minimum area 9) | ALL | - | - | IP filter minimum area 9 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1737 | Network | IP address range for IP filter (Maximum area 9) | ALL | - | - | IP filter maximum area 9 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1738 | Network | IP address range for IP filter (Minimum area 10) | ALL | - | - | IP filter minimum area 10 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1739 | Network | IP address range for IP filter (Maximum area 10) | ALL | - | - | IP filter maximum area 10 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1740 | Network | SSL setting HTTP server OFF/ON setting | ALL | 2 <1-2> | - | 1: Enabled 2: Disabled | 12 |
| 1741 | Network | SSL setting HTTP server port number | ALL | 10443 <1- 65535> | - | SSL HTTP server port number | 12 |
| 1742 | Network | SSL setting IPP server OFF/ON setting | ALL | 2 <1-2> | - | 1: Enabled 2: Disabled | 12 |
| 1743 | Network | SSL setting IPP server port number | ALL | 443 <1- 65535> | - | SSL IPP server port number | 12 |
| 1744 | Network | SSL setting SSL ftp server OFF/ON | ALL | 2 <1-2> | - | OFF/ON 1: Valid 2: Invalid | 12 |
| 1745 | Network | SSL setting SSL ftp server Port | ALL | 990 <1- 65535> | - | Port number to FTP Server | 12 |
| 1746 | Network | SSL setting SSL LDAP Client OFF/ON | ALL | 2 <1-2> | - | OFF/ON 1: Valid 2: Invalid | 12 |
| 1747 | Network | SSL setting SSL LDAP Client Port | ALL | 636 <1- 65535> | - | Port number to LDAP Server | 12 |
| 1748 | Network | SSL setting SSL POP3 Client OFF/ON | ALL | 2 <1-2> | - | OFF/ON 1: Valid 2: Invalid | 12 |
| 1749 | Network | SSL setting SSL POP3 Client Port | ALL | 995 <1- 65535> | - | Port number to POP3 Server | 12 |
| 1750 | Network | SSL setting SSL SMTP Client OFF/ON | ALL | 2 <2-4> | - | 2: Invalid 3: SMTP with TLS (STARTTLS) 4: SMTPS (SMTP OverSSL) | 12 |
| 1751 | Network | SSL setting SSL SMTP Client Port | ALL | 465 <1- 65535> | - | Port number to SMTP Server | 12 |
| 1755 | Network | Enabling server's IP address acquired by DHCP | ALL | 2 <1-2> | - | Domain Name Server option (6) 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1756 | Network | Enabling server's IP address acquired by DHCP | ALL | 2 <1-2> | - | NetBIOS over TCP/IP Name Server option (44) = Primary and Secondary Wins NAME 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1757 | Network | Enabling server's IP address acquired by DHCP | ALL | 1 <1-2> | - | The Host Name Vendor Extension option (12) 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1759 | Network | Enabling server's IP address acquired by DHCP | ALL | 2 <1-2> | - | SMTP Server Option (69) Simple Mail Server Address 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1760 | Network | Enabling server's IP address acquired by DHCP | ALL | 2 <1-2> | - | POP3 Server Option (70) Post Office Server Address 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1762 | Network | Enabling server's IP address acquired by DHCP | ALL | 2 <1-2> | - | SNTP Server Option (42) NTP Server Address 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1763 | Wireless LAN | Wireless LAN supplicant Direction of Ethereal log file output | ALL | - | - | Maximum 63 letters | 12 |
| 1764 | Wireless LAN | Wireless LAN supplicant Control sequence setting of "Cipher Suite" | ALL | - | - | Maximum 255 letters | 12 |
| 1765 | Wireless LAN | Wireless LAN supplicant Path name for user certificate | ALL | - | - | Maximum 63 letters | 12 |
| 1766 | Wireless LAN | Wireless LAN supplicant Path name entered for CA self-certificate | ALL | - | - | Maximum 63 letters | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|---|--------------------|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1767 | Network | Enabling server's IP address acquired by DHCP | | ALL | 2 <1-2> | SYS | DNS domain name Option (15) DNS domain name of the client 1: Enabled 2: Disabled * This value is used only when DHCP is enabled. | 12 |
| 1768 | Network | Previous IP address | | ALL | - | - | 000.000.000.000-255.255.255.255 (Default value: 000.000.000.000) | 12 |
| 1778 | General | Hang-up period of control panel at the 3rd misentry of administrator's password | | ALL | 1 <0-7> | SYS | 0: No hang-up 1: 0.5 minutes (= 30 seconds) 2: 1 minute 3: 3 minutes 4: 5 minutes 5: 10 minutes 6: 15 minutes 7: 30 minutes | 1 |
| 1779 | Network | Default data saving directory of "Scan to File" | | ALL | 0 <0-2> | SYS | 0: Local directory 1: REMOTE 1 2: REMOTE 2 | 1 |
| 1781-0 | Network | Notification of scan job | When job completed | ALL | 0 <0-1> | SYS | Sets the notification method of scan job completion. 0: Invalid 1: Valid | 4 |
| 1781-1 | | | On error | ALL | 0 <0-1> | SYS | | 4 |
| 1782 | Network | File name format of "Save as file" and Email transmission | | ALL | 0 <0-5> | SYS | Sets the naming method of the file of "Save as file" and Email transmission. 0: [FileName]-[Data]-[Page] 1: [FileName]-[Page]-[Data] 2: [Data]-[FileName]-[Page] 3: [Data]-[Page]-[FileName] 4: [Page]-[FileName]-[Data] 5: [Page]-[Data]-[FileName] | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1783 | Network | Date display format of the file name of "Save as file" and Email transmission | ALL | 0 <0-4> | SYS | Sets the data display format of the file of "Save as file" and Email transmission. 0: [YYYY][MM][DD] [HH][mm][SS] 1: [YY][MM][DD] [HH][mm][SS] 2: [YYYY][MM][DD] 3: [YY][MM][DD] 4: [HH][mm][SS] The order of [YY], [MM] and [DD] varies depending on the setting of the code 08-640 (Data display format). | 1 |
| 1784 | Network | Single page data saving directory at "Save as file" | ALL | 0 <0-1> | SYS | Sets the directory where the file of "Save as file" is saved. 0: Save it under a subfolder 1: Save it without creating a subfolder | 1 |
| 1785 | Network | Page number display format of the file of "Save as file" and Email transmission | ALL | 4 <4-6> | SYS | Sets the digit of a page number attached on the file. 4-6: 4-6 digits | 1 |
| 1786 | Network | Extension (suffix) format of the file of "Save as file" | ALL | 3 <3-6> | SYS | Sets the extension digits of the file to be saved. 3: Auto 4: 4 digits 5: 5 digits 6: 6 digits | 1 |
| 1850 | Network | IPP MaxConnection | ALL | 16 <1-16> | NIC | Number of maximum connections(IPP). | 12 |
| 1851 | Network | IPP ActiveConnection | ALL | 10 <1-16> | NIC | Number of active connections(IPP). | 12 |
| 1852 | Network | LPD MaxConnection | ALL | 10 <1-16> | NIC | Number of maximum connections(LPD). | 12 |
| 1853 | Network | LPD ActiveConnection | ALL | 10 <1-16> | NIC | Number of active connections(LPD). | 12 |
| 1854 | Network | AppleTalk MaxConnection | ALL | 10 <1-16> | NIC | Number of maximum connections(AppleTalk). | 12 |
| 1855 | Network | AppleTalk ActiveConnection | ALL | 10 <1-16> | NIC | Number of active connections(AppleTalk). | 12 |
| 1856 | Network | RawPrint MaxConnection | ALL | 10 <1-16> | NIC | Number of maximum connections(RawPrint). | 12 |
| 1857 | Network | RawPrint ActiveConnection | ALL | 10 <1-16> | NIC | Number of active connections(RawPrint). | 12 |
| 1915 | Network | Filing size for Network scanning function | ALL | 0 <0-1> | SYS | 0: Eliminates 2 mm from circumference (Void: 2 mm) 1: No space eliminated (Void: 0 mm) | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1920 | Network | Device domain name of device authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1921 | Network | Windows domain No. 2 of user authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1922 | Network | Windows domain No. 3 of user authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1923 | Network | LDAP authentication Server type | ALL | 1 <1-2> | NIC | 1: Windows Server 2: Not Windows Server | 12 |
| 1924 | Network | LDAP authentication User attribute | ALL | - | NIC | Sets a user attribute name. | 12 |
| 1925 | Network | Execution of user authentication when the user ID is not entered | ALL | 2 <0-2> | SYS | 0: Forcible execution 1: Execution impossible (pooled in the invalid queue) 2: Forcible deletion | 1 |
| 1926 | FAX | Tab/cover sheet printing at FAX reception Printing stop function | ALL | 0 <0-1> | SYS | Sets on or off of the printing function of special sheets such as tab or cover sheet of FAX, Email or list print. 0: Function off 1: Function on | 1 |
| 1928 | Network | Role Based Access LDAP search index | ALL | 0 <0-4294967295> | SYS | | 5 |
| 1929 | User interface | Keyboard layout for Language 1 | ALL | 0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1930 | User interface | Keyboard layout for Language 2 | ALL | 1 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1931 | User interface | Keyboard layout for Language 3 | ALL | EUR:2 Other:0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1932 | User interface | Keyboard layout for Language 4 | ALL | 0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1933 | User interface | Keyboard layout for Language 5 | ALL | 0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1934 | User interface | Keyboard layout for Language 6 | ALL | 0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |
| 1935 | User interface | Keyboard layout for Language 7 | ALL | 0 <0-2> | SYS | 1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout | 1 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------------|-----|--|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1936 | Network | AppleTalk device name | ALL | MFP_ serial | UTY | Maximum 32 letters The Network-related serial number of the equipment appears at "serial". | 12 |
| 1937 | Network | User name and password at user authentication or "Save as file" | ALL | 0 <0-2> | SYS | 0: User name and password of the device 1: User name and password at the user authentication (Template registra- tion information comes first when a template is retrieved.) 2: User name and password at the user authentication (User information of the authentication comes first when a template is retrieved.) | 1 |
| 1939 | Network | STAGE I/F startup setting | ALL | 0 <0- 4294967 295> | NIC | 32bit definition 0: Disabled bit1: Normal Remote I/F bit2: Remote Scan I/F | 12 |
| 1940 | Network | STAGE port number | ALL | 20080 <1- 65535> | NIC | STAGE port number | 12 |
| 1942 | Network | Device authentication PDC/BDC time-out period | ALL | 60 <1-180> | NIC | Unit: Second | 12 |
| 1943 | Network | User authentication PDC/BDC time-out period | ALL | 30 <1-180> | NIC | Unit: Second | 12 |
| 1944 | Network | Device/User authentication Method of Windows domain authentication | ALL | 1 <1-3> | NIC | 1: Auto 2: Kerberos 3: NTLMv2 | 12 |
| 1950 | Network | SMB signature for SMB server | ALL | 1 <1-3> | UTY | 1: Auto 2: Valid 3: Invalid | 12 |
| 1951 | Network | SMB signature for SMB cli- ent | ALL | 1 <1-3> | UTY | 1: Auto 2: Valid 3: Invalid | 12 |
| 1952 | Network | Device name for device authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1953 | Network | Password for the device name used for device authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1954 | Network | PDC2 of user authentica- tion | ALL | - | UTY | Maximum 128 letters | 12 |
| 1955 | Network | BDC2 of user authentica- tion | ALL | - | UTY | Maximum 128 letters | 12 |
| 1956 | Network | PDC3 of user authentica- tion | ALL | - | UTY | Maximum 128 letters | 12 |
| 1957 | Network | BDC3 of user authentica- tion | ALL | - | UTY | Maximum 128 letters | 12 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|------------------------------|----------|----------------------------------|-----|---------------------|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1958 | Network | PDC of device authentication | ALL | - | UTY | Maximum 128 letters | 12 |
| 1959 | Network | BDC of device authentication | ALL | - | UTY | Maximum 128 letters | 12 |

<<Pixel counter related code>> (Chap. 2.2.9)

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|----------|----------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1500 | Pixel counter | Standard paper size setting | ALL | EUR: 0 UC: 1 JPN: 0 | SYS | Selects the standard paper size to convert it into the pixel count (%). 0: A4 1: LT | 1 |
| 1501 | Pixel counter | Pixel counter all clearing | ALL | - | SYS | Clears all information related to the pixel counter. | 3 |
| 1502 | Pixel counter | Service technician reference counter clearing | ALL | - | SYS | Clears all information related to the service technician reference pixel counter. | 3 |
| 1503 | Pixel counter | Toner cartridge reference counter clearing | ALL | - | SYS | Clears all information related to the toner cartridge reference pixel counter. | 3 |
| 1504 | Pixel counter | Pixel counter display setting | ALL | 1 <0-1> | SYS | Selects whether or not to display the pixel counter on the LCD screen. 0: Displayed 1: Not displayed | 1 |
| 1505 | Pixel counter | Displayed reference setting | ALL | 0 <0-1> | SYS | Selects the reference when displaying the pixel counter on the LCD screen. 0: Service technician reference 1: Toner cartridge reference | 1 |
| 1506 | Pixel counter | Toner empty determination counter setting | ALL | 0 <0-1> | SYS | Selects the counter to determine toner empty. 0: Output pages 1: Pixel counter | 1 |
| 1507 | Pixel counter | Threshold setting for toner empty determination (Output pages) | ALL | 800 <0-999> | SYS | Sets the number of output pages to determine toner empty. This setting is valid when "0" is set at 08-1506. | 1 |
| 1508 | Pixel counter | Threshold setting for toner empty determination (Pixel count) | ALL | 35100 <0-60000> | SYS | Sets the pixel count to determine the toner empty status. This setting is valid when "1" is set at 08-1506. | 1 |
| 1509 | Pixel counter | Pixel counter clear flag/Service technician reference | ALL | 0 <0-1> | SYS | Becomes "1" when 08-1502 is performed. | 2 |
| 1510 | Pixel counter | Service technician reference cleared date | ALL | - | SYS | Displays the date on which 08-1502 was performed. | 2 |
| 1514 | Pixel counter | Toner cartridge reference cleared date | ALL | - | SYS | Displays the date on which 08-1503 was performed. | 2 |
| 1518 | Pixel counter | Toner cartridge reference count started date | ALL | - | SYS | Displays the date on which 08-1503 was performed. | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|---|----------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1548 | Pixel counter | Number of output pages (Service technician reference) | PPC | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the copy function and service technician reference. [Unit. page] | 2 |
| 1550 | Pixel counter | Number of output pages (Service technician reference) | PRT | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the printer function and service technician reference. [Unit. page] | 2 |
| 1551 | Pixel counter | Number of output pages (Service technician reference) | FAX | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the FAX function and service technician reference. [Unit. page] | 2 |
| 1553 | Pixel counter | Number of output pages (Toner cartridge reference) | PPC | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the copy function and toner cartridge reference. [Unit. page] | 2 |
| 1555 | Pixel counter | Number of output pages (Toner cartridge reference) | PRT | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the printer function and toner cartridge reference. [Unit. page] | 2 |
| 1556 | Pixel counter | Number of output pages (Toner cartridge reference) | FAX | <8 digits> | SYS | Counts the number of output pages converted to the standard paper size in the FAX function and toner cartridge reference. [Unit. page] | 2 |
| 1566 | Pixel counter | Toner cartridge replacement counter | ALL | <3 digits> | SYS | Counts the number of time of the toner cartridge replacement. | 2 |
| 1592 | Pixel counter | Average pixel count (Service technician reference) | PPC | 0 <0-10000> | SYS | Displays the average pixel count in the copy function and service technician reference. [Unit: 0.01%] | 2 |
| 1593 | Pixel counter | Average pixel count (Service technician reference) | PRT | 0 <0-10000> | SYS | Displays the average pixel count in the printer function and service technician reference. [Unit: 0.01%] | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | |
|--|----------------|--|---------------------|----------------------------------|-----|---|-----------|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure |
| 1594 | Pixel counter | Average pixel count (Service technician reference) | FAX | 0 <0-10000> | SYS | Displays the average pixel count in the FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1595 | Pixel counter | Average pixel count (Service technician reference) | PPC/ PRT/ FAX | 0 <0-10000> | SYS | Displays the average pixel count in the copy/printer/FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1606 | Pixel counter | Latest pixel count (Service technician reference) | PPC | 0 <0-10000> | SYS | Displays the latest pixel count in the copy function and service technician reference. [Unit: 0.01%] | 2 |
| 1607 | Pixel counter | Latest pixel count (Service technician reference) | PRT | 0 <0-10000> | SYS | Displays the latest pixel count in the printer function and service technician reference. [Unit: 0.01%] | 2 |
| 1608 | Pixel counter | Latest pixel count (Service technician reference) | FAX | 0 <0-10000> | SYS | Displays the latest pixel count in the FAX function and service technician reference. [Unit: 0.01%] | 2 |
| 1613 | Pixel counter | Average pixel count (Toner cartridge reference) | PPC | 0 <0-10000> | SYS | Displays the average pixel count in the copy function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1619 | Pixel counter | Average pixel count (Toner cartridge reference) | PRT | 0 <0-10000> | SYS | Displays the average pixel count in the printer function, and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1624 | Pixel counter | Average pixel count (Toner cartridge reference) | PPC/ PRT/ FAX | 0 <0-10000> | SYS | Displays the average pixel count in the copy/printer/FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1625 | Pixel counter | Average pixel count (Toner cartridge reference) | FAX | 0 <0-10000> | SYS | Displays the average pixel count in the FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1634 | Pixel counter | Latest pixel count (Toner cartridge reference) | FAX | 0 <0-10000> | SYS | Displays the latest pixel count in the FAX function and toner cartridge reference. [Unit: 0.01%] | 2 |
| 1639 | Pixel counter | Latest pixel count (Toner cartridge reference) | PPC | 0 <0-10000> | SYS | Displays the latest pixel count in the copy function and toner cartridge reference. [Unit: 0.01%] | 2 |

| Setting mode (08) <e-STUDIO202L/232/282> | | | | | | | | |
|--|----------------|--|-----------|----------------------------|------------|--|---|----|
| Code | Classification | Items | Function | Default <Acceptable value> | RAM | Contents | Procedure | |
| 1640 | Pixel counter | Latest pixel count (Toner cartridge reference) | PRT | 0 <0-10000> | SYS | Displays the latest pixel count in the printer function and toner cartridge reference. [Unit: 0.01%] | 2 | |
| 1649-0 | Pixel counter | Pixel count distribution | 0-5% | PPC | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function are displayed. [Unit: page] | 14 |
| 1649-1 | | | 5.1-10% | PPC | <8 digits> | SYS | | 14 |
| 1649-2 | | | 10.1-15% | PPC | <8 digits> | SYS | | 14 |
| 1649-3 | | | 15.1-20% | PPC | <8 digits> | SYS | | 14 |
| 1649-4 | | | 20.1-25% | PPC | <8 digits> | SYS | | 14 |
| 1649-5 | | | 25.1-30% | PPC | <8 digits> | SYS | | 14 |
| 1649-6 | | | 30.1-40% | PPC | <8 digits> | SYS | | 14 |
| 1649-7 | | | 40.1-60% | PPC | <8 digits> | SYS | | 14 |
| 1649-8 | | | 60.1-80% | PPC | <8 digits> | SYS | | 14 |
| 1649-9 | | | 80.1-100% | PPC | <8 digits> | SYS | | 14 |
| 1650-0 | Pixel counter | Pixel count distribution | 0-5% | PRT | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function are displayed. [Unit: page] | 14 |
| 1650-1 | | | 5.1-10% | PRT | <8 digits> | SYS | | 14 |
| 1650-2 | | | 10.1-15% | PRT | <8 digits> | SYS | | 14 |
| 1650-3 | | | 15.1-20% | PRT | <8 digits> | SYS | | 14 |
| 1650-4 | | | 20.1-25% | PRT | <8 digits> | SYS | | 14 |
| 1650-5 | | | 25.1-30% | PRT | <8 digits> | SYS | | 14 |
| 1650-6 | | | 30.1-40% | PRT | <8 digits> | SYS | | 14 |
| 1650-7 | | | 40.1-60% | PRT | <8 digits> | SYS | | 14 |
| 1650-8 | | | 60.1-80% | PRT | <8 digits> | SYS | | 14 |
| 1650-9 | | | 80.1-100% | PRT | <8 digits> | SYS | | 14 |
| 1651-0 | Pixel counter | Pixel count distribution | 0-5% | FAX | <8 digits> | SYS | The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function are displayed. [Unit: page] | 14 |
| 1651-1 | | | 5.1-10% | FAX | <8 digits> | SYS | | 14 |
| 1651-2 | | | 10.1-15% | FAX | <8 digits> | SYS | | 14 |
| 1651-3 | | | 15.1-20% | FAX | <8 digits> | SYS | | 14 |
| 1651-4 | | | 20.1-25% | FAX | <8 digits> | SYS | | 14 |
| 1651-5 | | | 25.1-30% | FAX | <8 digits> | SYS | | 14 |
| 1651-6 | | | 30.1-40% | FAX | <8 digits> | SYS | | 14 |
| 1651-7 | | | 40.1-60% | FAX | <8 digits> | SYS | | 14 |
| 1651-8 | | | 60.1-80% | FAX | <8 digits> | SYS | | 14 |
| 1651-9 | | | 80.1-100% | FAX | <8 digits> | SYS | | 14 |

<<PM support mode related code>>

- The management items at PM support mode can also be operated at setting mode (08).
The following items are displayed or set by using sub-codes at PM management setting in the table below.

<Sub-codes>

- 0: Present number of output pages
 - Means the present number of output pages.
- 1: Recommended number of output pages for replacement
 - Means the recommended number of output pages for replacement.
- 2: Number of output pages at the last replacement
 - Means the number of output pages at the last replacement.
- 3: Present driving counts
 - Means the present drive counts (1 count = 2 seconds).
- 4: Recommended driving counts to be replaced
 - Means the recommended drive counts for replacement (1 count = 2 seconds).
- 5: Driving counts at the last replacement
 - Means the drive counts at the last replacement.
- 6: Present output pages for control
 - Means the present number of output pages for controlling.
- 7: Present driving counts for control
 - Means the present drive counts for controlling (1 count = 2 seconds).
- 8: Number of times replaced
 - Counts up when clearing the counter of each unit in the PM Support Mode Screen.

Notes:

- Sub-code 3 is equivalent to sub-code 7.
- When the value of sub-code 3 is changed, the value of sub-code 7 is also updated and vice versa.
- When "0" is set at one of sub-codes 0, 3, 6 and 7, the rest of them are automatically updated to "0".

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|-------------------------|---|---|--|
| Photoconductive drum | 1150-0 to 8 | 1151 | <Default values of code 1150 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Drum cleaning blade | 1158-0 to 8 | 1159 | <Default values of code 1158 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Drum separation finger | 1172-0 to 8 | 1173 | <Default values of code 1172 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Main charger grid | 1174-0 to 8 | 1175 | <Default values of code 1174 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Needle electrode | 1182-0 to 8 | 1183 | <Default values of code 1182 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Ozone filter | 1198-0 to 8 | 1199 | <Default values of code 1198 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Developer material | 1200-0 to 8 | 1201 | <Default values of code 1200 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Transfer charger wire | 1214-0 to 8 | 1215 | <Default values of code 1214 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Separation charger wire | 1224-0 to 8 | 1225 | <Default values of code 1224 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |
| Fuser roller | 1246-0 to 8 | 1247 | <Default values of code 1246 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Pressure roller | 1250-0 to 8 | 1251 | <Default values of code 1250 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|----------------------------------|---|---|--|
| Cleaning roller | 1266-0 to 8 | 1267 | <Default values of code 1266 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Fuser roller separation finger | 1268-0 to 8 | 1269 | <Default values of code 1268 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 128,000/148,000/180,000 Sub-code 4: 240,000/240,000/240,000 |
| Pickup roller (RADF) | 1282-0,1,2,8 | 1283 | <Default values of code 1282 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Feed roller (RADF) | 1284-0,1,2,8 | 1285 | <Default values of code 1284 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Separation roller (RADF) | 1286-0,1,2,8 | 1287 | <Default values of code 1286 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 120,000/120,000/120,000 |
| Pickup roller (Upper drawer) | 1290-0,1,2,8 | 1291 | <Default values of code 1290 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (Lower drawer) | 1292-0,1,2,8 | 1293 | <Default values of code 1292 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (LCF) | 1294-0,1,2,8 | 1295 | <Default values of code 1294 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Feed roller (Upper drawer) | 1298-0,1,2,8 | 1299 | <Default values of code 1298 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (Lower drawer) | 1300-0,1,2,8 | 1301 | <Default values of code 1300 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (LCF) | 1302-0,1,2,8 | 1303 | <Default values of code 1302 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Separation roller (Upper drawer) | 1306-0,1,2,8 | 1307 | <Default values of code 1306 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (Lower drawer) | 1308-0,1,2,8 | 1309 | <Default values of code 1308 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |

| Items | PM management setting <Procedure 4> *Indicated in 8 digits | Date of previous replacement <Procedure 2> | Remarks |
|--------------------------------------|---|---|---|
| Separation roller (LCF) | 1310-0,1,2,8 | 1311 | <Default values of code 1310 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000 |
| Separation roller (PFP upper drawer) | 1312-0,1,2,8 | 1313 | <Default values of code 1312 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (PFP lower drawer) | 1314-0,1,2,8 | 1315 | <Default values of code 1314 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Separation roller (Bypass unit) | 1316-0,1,2,8 | 1317 | <Default values of code 1316 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (PFP upper drawer) | 1320-0,1,2,8 | 1321 | <Default values of code 1320 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (PFP lower drawer) | 1322-0,1,2,8 | 1323 | <Default values of code 1322 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Feed roller (Bypass unit) | 1324-0,1,2,8 | 1325 | <Default values of code 1324 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (PFP upper drawer) | 1328-0,1,2,8 | 1329 | <Default values of code 1328 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (PFP lower drawer) | 1330-0,1,2,8 | 1331 | <Default values of code 1330 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Pickup roller (Bypass unit) | 1332-0,1,2,8 | 1333 | <Default values of code 1332 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000 |
| Recovery blade | 1336-0 to 8 | 1337 | <Default values of code 1336 (e-STUDIO202L/232/282)> Sub-codes 0, 2, 3, 5, 6, 7, 8: 0/0/0 Sub-code 1: 64,000/74,000/90,000 Sub-code 4: 120,000/120,000/120,000 |

<<Procedure to copy the total counter value (08-257)>>

- (1) Turn ON the power while [0] and [8] are pressed simultaneously.
- (2) Key in the code "257" with the digital keys and press the [START] button (the following is displayed).

Note:

Before performing the following operations, note the current counter values.

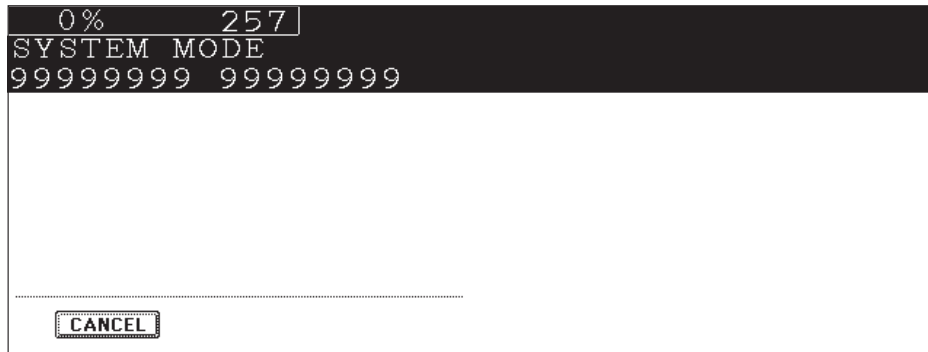


Fig. 2-7

- (3) Key in the value "1" or "2" with the digital key and press the [START] button. The value entered is displayed on the left of the "%", and the [ENTER] button is displayed.

Note:

The value can be erased by pressing the [CLEAR] button to change as long as the [START] button is not pressed. (The value on the left of the "%" is reset to "0" by pressing the [CLEAR] button.)

- Key in "1" to copy the value of the total counter (LGC board) (A) onto the value of the backup counter (SYS board) (B).

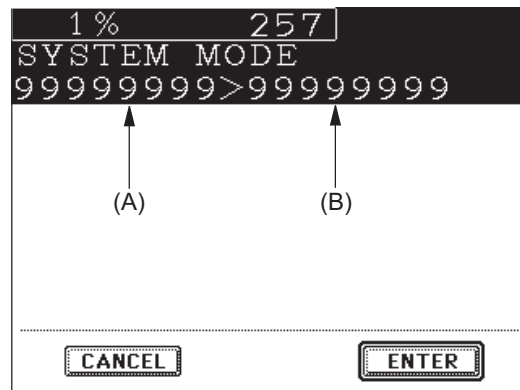


Fig. 2-8

- Key in “2” to copy the value of the backup counter (SYS board) (B) onto the value of the total counter (LGC board) (A).

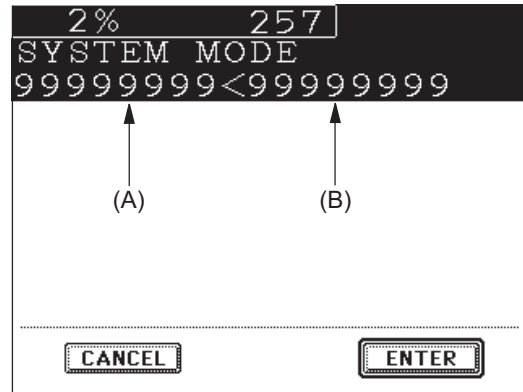


Fig. 2-9

- (4) Press the [ENTER] button to complete overwriting of the counter value.

Note:

The screen returns to the code entry screen without copying (overwriting) the value when the [CANCEL] button is pressed.

2.2.9 Pixel counter

1) Outline

Pixel counter is a function that counts the number of dots emitted by the laser and converts it into the print ratio (%) per standard paper size. This "Print ratio (%) per standard paper size" is called Pixel count (%).

This function enables you to know how each user uses the equipment and to grasp the tendency of toner consumption (number of output pages per cartridge).

2) Factors affecting toner consumption

Standard number of output pages per cartridge shows the average number of output pages under the condition that the data of print ratio 6% is printed on the standard paper size (A4/LT) at a normal temperature and humidity.

However, users do not always print under the above condition. As for the type of original, copy/print mode and environment, each user has different tendency, and as a result, the number of output pages per cartridge becomes different depending on the user.

The major factors affecting toner consumption are as follows:

- Original/Data coverage
- Original/Data density
- Original/Print mode
- Density setting

Also there are other factors in addition to the above, such as environment, individual difference of equipment, difference in lot quality of materials, toner density and drum surface potential.

The general relations between the 4 factors mentioned in the previous page and toner consumption per output page in the Copier Function are as follows:

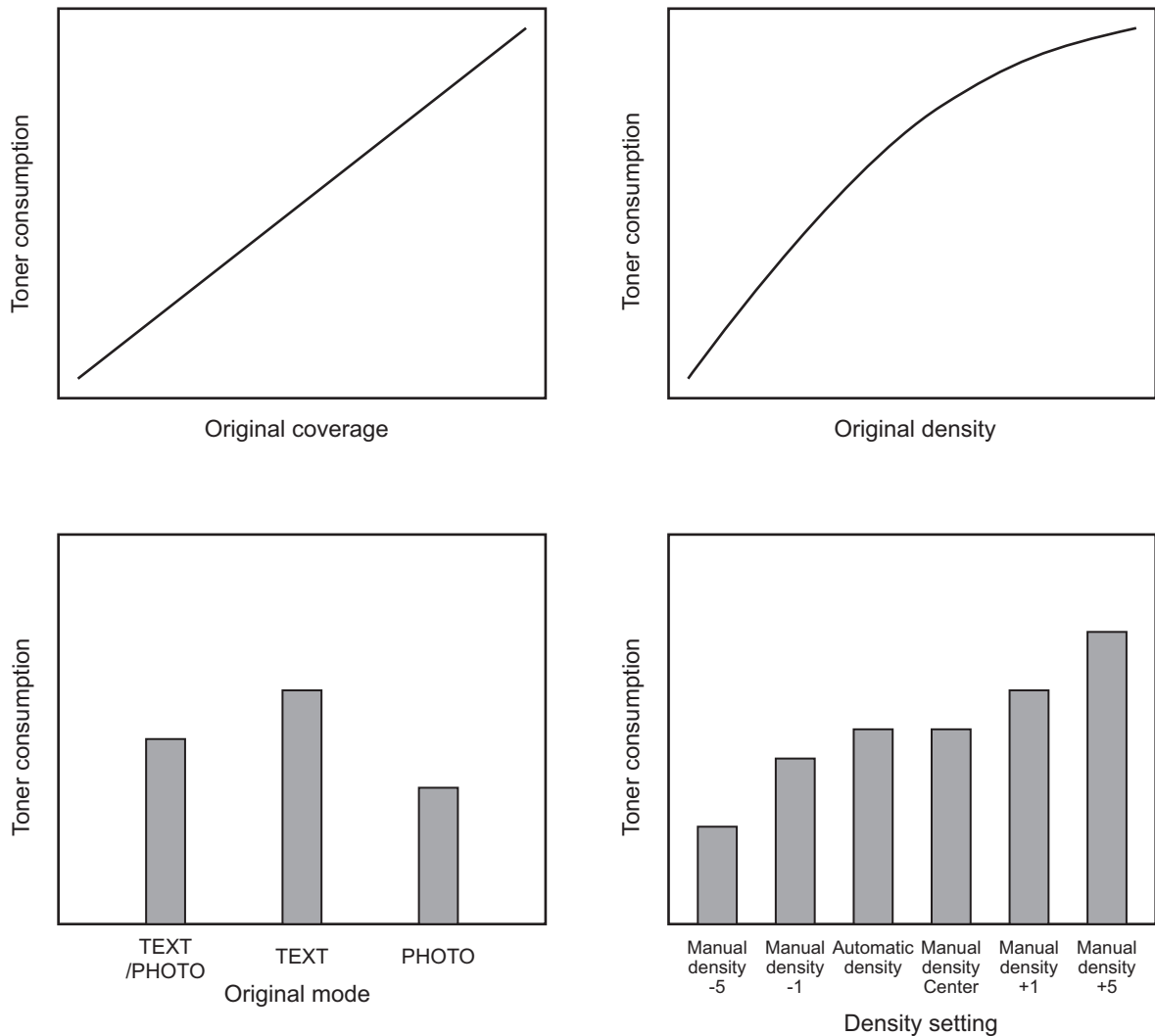


Fig. 2-10 Factors affecting toner consumption and the tendency

3) Details of pixel counter

- Toner cartridge reference and service technician reference
The pixel counter function in this equipment has 2 references, toner cartridge reference and service technician reference.

Toner cartridge reference

This is a system that accumulates data between the installation of a new toner cartridge and next installation.

The installation of new toner cartridge is judged when the total number of pixel count or output pages after the detection of toner empty has exceeded the threshold.

The threshold to be used is selectable in the setting mode (08-1506) between the pixel count and output pages (0: Output pages 1: Pixel counter). The threshold of pixel count is set in the setting mode (08-1508) and that of output pages is set in the setting mode (08-1507). When the new toner cartridge is judged as installed, the data related with the previous cartridge is cleared and replaced with the data after the installation of new cartridge. Clearing of the counter of the toner cartridge reference is performed in the setting mode (08-1503).

Service technician reference

This is a system that accumulates data between clearing the counter of the service technician reference by service technician and subsequently clearing the same counter.

Clearing of the counter of the service technician reference is performed in the setting mode (08-1502).

- Print count (number of output pages)
The number of output pages shown at the pixel counter is counted after converting all paper sizes to the standard paper size (A4/LT). Printing on other than the standard size is converted by paper area ratio. The standard paper size is set in the setting mode (08-1500).
The examples of conversion are as follows:

Ex.)

“1” is added to the print count when printing on A4/LT size.

“2” is added to the print count when printing on A3/LD size. (area ratio to A4/LT: 200%)

“1.49” is added to the print count when printing on B4 size. (area ratio to A4: 149%)

“1.27” is added to the print count when printing on LG size. (area ratio to LT: 127%)

- Pixel count (%)
Pixel count (%) shows the ratio of laser emitting pixels to all pixels on standard paper.
The examples of pixel count are as follows:

Note:

In the following examples, 'solid copy' is considered to be 100%. But since the image has 4 margins, it never becomes 100% actually.

Ex.)

Printing 5 pages on A4/LT size with solid copy (Laser emits to all pixels.)
→ Pixel count: 100%, Print count: 5

Printing 5 pages on A4/LT size with blank copy (Laser never emits.)
→ Pixel count: 0%, Print count: 5

Printing 2 pages on A4/LT size with solid copy (Laser emits to all pixels.)
Printing 2 pages on A4/LT size with blank copy (Laser never emits.)
→ Pixel count: 50%, Print count: 4

Printing 3 pages on A4/LT size with 6% of laser emission
Printing 1 page on A4/LT size with 2% of laser emission
→ Pixel count: 5%, Print count: 4

Printing 2 pages on A3/LD size with solid copy (Laser emits to all pixels.)
→ Pixel count: 100%, Print count: 4

Printing 2 pages on A3/LD size with 6% of laser emission
→ Pixel count: 6%, Print count: 4

- Average pixel count (%) and latest pixel count (%)
There are 2 types of the value calculated as the pixel count, average pixel count (%) and latest pixel count (%).

Average pixel count (%)

The average value of all pixel count data after each reference data is cleared is calculated and displayed.

Latest pixel count (%)

The value is displayed for printing just before the pixel counter is confirmed.

- Type of calculated data
Since this is multifunctional, the data of pixel count is calculated for each function.
The following list is the information that can be confirmed by LCD screen. But actually, more information can be confirmed by the setting mode (08).
See after-mentioned “5)-Display in the setting mode (08)” for details.

○: With data
—: Without data

| | Toner cartridge reference | Service technician reference |
|------------------|---------------------------|------------------------------|
| Copier function | ○ | ○ |
| Printer function | ○ | ○ |
| FAX function | ○ | ○ |
| Total | ○ | ○ |

Table 2-201 Type of calculated data

- Setting related with the pixel counter function

Standard paper size setting

The standard paper size (A4 or LT) to convert it into the pixel count is selected (08-1500).

Pixel counter display setting

Whether or not to display the pixel counter on the LCD screen is selected (08-1504).

Display reference setting

The reference when displaying the pixel counter on the LCD screen (toner cartridge reference or service technician reference) is selected (08-1505).

Determination counter of toner empty

This is the counter to determine the replacement of new toner cartridge after the toner empty is detected.

After the toner empty is detected by the auto-toner sensor, this counter checks if toner empty is not detected one more time while the specified number of pixel count or output pages is counted.

Pixel counter clearing

There are 3 types for the pixel count clear as follows:

08-1501: All information related to the pixel count is cleared.

08-1502: All information related to the service technician reference pixel count is cleared.

08-1503: All information related to the toner cartridge reference pixel count is cleared.

4) Relation between pixel count and toner consumption

The user's printing out the image with large coverage or high density may cause the large value of pixel count. And the setting that toner consumption becomes high in the original mode or density setting may cause it as well.

In this case, the replacement cycle of toner cartridge is faster than the standard number of output pages. Therefore, this trend needs to be grasped for the service.

The relation between pixel count and number of output pages per cartridge is as follows:

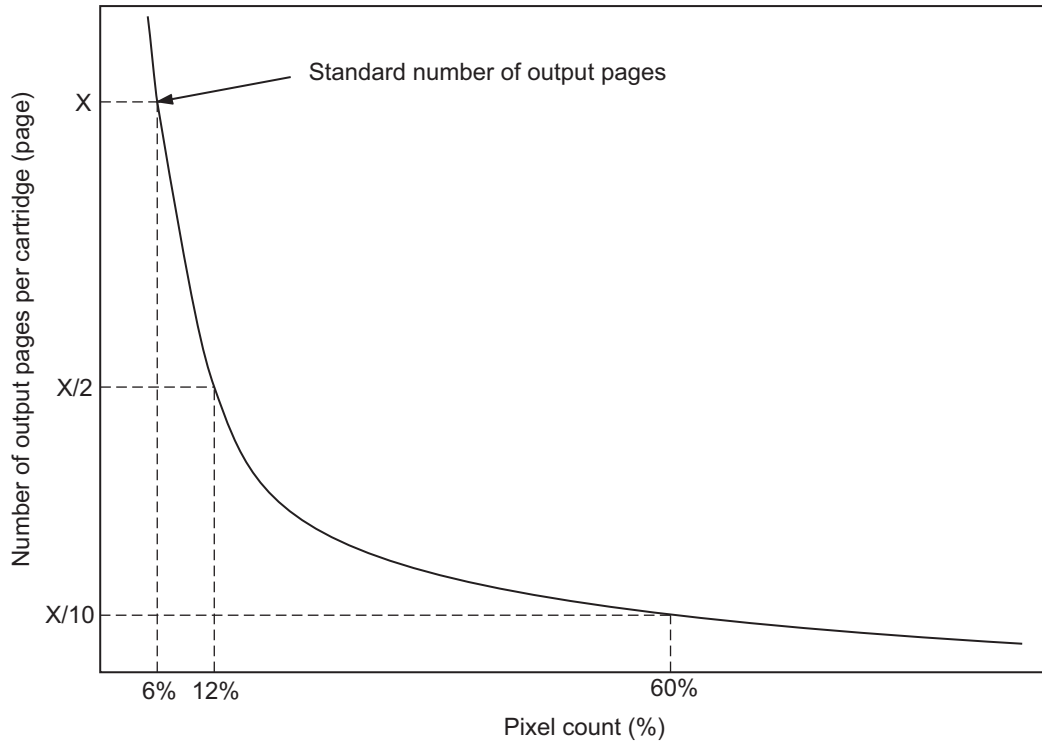


Fig. 2-11 Pixel count and number of output pages per cartridge

5) Pixel counter confirmation

- Display on LCD screen

Whether or not to display the pixel counter on the LCD screen is selected (0: Displayed, 1: Not displayed) in the setting mode (08-1504), and whether or not to display it at the service technician reference or toner cartridge reference is selected (0: Service technician reference, 1: Toner cartridge reference) in the setting mode (08-1505).

The following screen is displayed when the buttons, [USER FUNCTIONS], [COUNTER] and [PIXEL COUNTER] are pressed in this order after "Displayed" is selected with the code above and the power is, as usual, turned ON.

The following screen is displayed when the toner cartridge reference is selected in the setting mode (08-1505).

| 2004.07.11 12:36 | | | | |
|----------------------------------|------|---------|------|-------|
| ADDRESS COUNTER USER ADMIN | | | | |
| TONER CARTRIDGE | | | | |
| | Copy | Printer | Fax | Total |
| Print Count [LT/A4] | 180 | 61 | 0 | 241 |
| Average Pixel Count [%] | 2.76 | 2.80 | 0.00 | 2.76 |
| Latest Pixel Count [%] | 3.08 | 1.10 | 0.00 | 1.10 |

RETURN

Fig. 2-12 Information screen of toner cartridge reference

The following screen is displayed when the service technician reference is selected in the setting mode (08-1505).

| 2004.07.11 12:36 | | | | |
|----------------------------------|------|---------|------|-------|
| ADDRESS COUNTER USER ADMIN | | | | |
| SERVICE | | | | |
| | Copy | Printer | Fax | Total |
| Print Count [LT/A4] | 180 | 61 | 0 | 241 |
| Average Pixel Count [%] | 2.76 | 2.80 | 0.00 | 2.76 |
| Latest Pixel Count [%] | 3.08 | 1.10 | 0.00 | 1.10 |

RETURN

Fig. 2-13 Information screen of service technician reference

- Data list printing
The data for pixel counter can be printed in the list print mode (9S).
9S-104: The data of the toner cartridge reference is printed.
9S-105: The data of service technician reference is printed.

| PIXEL COUNTER CODE LIST | | | | | | |
|-------------------------|----------|-------------------------|-------|-------|-------|-------|
| 2004.7.11 09:55 | | | | | | |
| TONERCARTRIDGE | | | | | | |
| No | DATE | | PPC | PRN | FAX | TOTAL |
| 0 | 20040711 | Print Count [LT/A4] | 12345 | 23456 | 12345 | 45678 |
| 1 | 20040711 | Average Pixel Count [%] | 12345 | 23456 | 12345 | 45678 |
| 2 | 20040711 | Latest Pixel Count [%] | 12345 | 23456 | 12345 | 45678 |

Fig. 2-14 Data list of toner cartridge reference

| PIXEL COUNTER CODE LIST | | | | | | |
|-------------------------|----------|-------------------------|-------|-------|-------|-------|
| 2004.7.11 09:55 | | | | | | |
| SERVICEMAN | | | | | | |
| No | DATE | | PPC | PRN | FAX | TOTAL |
| 0 | 20040711 | Print Count [LT/A4] | 12345 | 23456 | 12345 | 45678 |
| 1 | 20040711 | Average Pixel Count [%] | 12345 | 23456 | 12345 | 45678 |
| 2 | 20040711 | Latest Pixel Count [%] | 12345 | 23456 | 12345 | 45678 |

Fig. 2-15 Data list of service technician reference

- Display in the setting mode (08)
Information of pixel count can be also checked in the setting mode (08).
For details, see P. 2-83 "2.2.7 Setting mode (08) (e-STUDIO200L/230/280)"/ P. 2-152 "2.2.8 Setting mode (08) (e-STUDIO202L/232/282)".

Print count, pixel count

| | | Toner cartridge reference | Service technician reference |
|------------------|-------------------------|----------------------------------|-------------------------------------|
| Copier function | Print count (page) | 1553 | 1548 |
| | Average pixel count (%) | 1613 | 1592 |
| | Latest pixel count (%) | 1639 | 1606 |
| Printer function | Print count (page) | 1555 | 1550 |
| | Average pixel count (%) | 1619 | 1593 |
| | Latest pixel count (%) | 1640 | 1607 |
| FAX function | Print count (page) | 1556 | 1551 |
| | Average pixel count (%) | 1625 | 1594 |
| | Latest pixel count (%) | 1634 | 1608 |
| Total | Average pixel count (%) | 1624 | 1595 |

Table 2-202 Pixel count code table

Pixel count distribution

| | Pixel count distribution (page) |
|------------------|--|
| Copier function | 1649 |
| Printer function | 1650 |
| FAX function | 1651 |

Table 2-203 Pixel count code table

Note:

By entering the sub code at the above code, the pixel count distribution can be displayed dividing into 10 ranges. The sub codes are as follows.

0: 0 - 5% 1: 5.1 - 10% 2: 10.1 - 15% 3: 15.1 - 20% 4: 20.1 - 25%
5: 25.1 - 30% 6: 30.1 - 40% 7: 40.1 - 60% 8: 60.1- 80% 9: 80.1 - 100%



Other information

Toner cartridge replacement counter

The toner cartridge replacement count is displayed. (08-1566)

Toner cartridge reference count started date

The toner cartridge reference count started date is displayed. (08-1518)

Service technician reference cleared date

The service technician reference cleared date is displayed.(08-1510)

The date (08-1502 was performed) is stored.

Toner cartridge reference cleared date

The toner cartridge reference cleared date is displayed.

The date (08-1503 was performed) is stored.

2.2.10 Classification List of Adjustment Mode (05) / Setting Mode (08) (e-STUDIO200L/230/280)

| Classification | e-STUDIO200L/230/280 | |
|----------------|--|---|
| | Adjustment Mode (05) | Setting Mode (08) |
| User interface | | [Date/Time] 200, 638, 640 [Timer] 204, 205, 206, 260 [Screen] 207, 602, 1132 [File] 209, 219, 264, 288 [Language] 220, 221 [Administrator] 263 [Scanning] 265, 266, 273, 274 [Filing] 267, 270, 950, 976, 980, 981, 985 [HDD] 271 [E-mail] 272, 1097, 1098 [default setting] 276, 281, 283, 284, 285, 286, 331, 480, 503, 550, 603, 604, 607, 618, 642, 682, 969, 986, 1135 [Raw printing] 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 973, 978, 979 [Copy volume] 300 [Original counter] 302 [Custom Mode] 508 [Energy saving] 601, 948, 970 [AMS] 605 [Sound] 610 [Book duplexing] 611 [Summer time] 612 [Paper size] 613 [Department management] 617 620, 621, 622, 623, 624, 629, 672 [Sorting] 627, 634, 641, 649 [Original direction] 628 [Image shift] 636 [Edit copying] 645, 646 [Box printing] 647, 953, 954 [X in 1] 650 [Annotation] 651, 657 [Automatic transfer] 660, 661 [Indicator] 671 [Priority drawer] 689 [Media type] 697 [Job Build] 1130, 1131 |
| Scanner | [Position] 305, 306 [Distortion] 308 [Reproduction ratio] 340 [Carriage position] 359 | |
| Image | [Margin] 430, 431, 432, 433, 434-0 to 1, 435, 436, 437, 438 [Image density] 501, 503, 504, 505, 506, 507, 508, 509, 510, 512, 514, 515, 710, 714, 715, 719, 720, 724, 725, 729, 845, 846, 847, 850, 851, 852, 855, 856, 857, 860, 861, 862, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942 [Range correction] 532, 533, 534, 570, 571, 572, 693, 694, 695, 820, 821, 822, 825, 826, 827, 830, 831, 832, 835, 836, 837, 913, 914, 915, 916, 917, 918, 919, 920, 921 [Gamma slope] 593, 594, 595, 943, 944, 945 [Sharpness] 620, 621, 622, 865-0 to 2, 866-0 to 2, 867-0 to 2, 922, 923, 924 [Smudged/Faint text] 653, 654, 655, 928 [Printer density] 667-0 to 4, 672-0 to 4, 676-0 to 4 [Binarizing] 700, 701, 702 | [Error diffusion / Dither] 502, 509 |
| Drive | [Main motor] 421, 422 [Exit motor] 424, 425 | |

| Classification | e-STUDIO200L/230/280 | |
|--------------------------|---|--|
| | Adjustment Mode (05) | Setting Mode (08) |
| Paper feeding | [Aligning amount] 448-0 to 2, 449-0 to 2, 450-0 to 2, 452-0 to 2, 455-0 to 2, 457, 458-0 to 2, 460-0 to 2, 461-0 to 2, 462-0 to 3, 463-0 to 2, 464-0 to 2, 469-0 to 5, 470-0 to 2, 471-0 to 2, 472-0 to 2, 473, 474-0 to 2 [Paper pushing amount] 466-0 to 7 | [paper dimension] 210, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 337, 338, 339, 340, 341, 471 [Paper feeding] 254, 255, 481, 619, 658, 659, 988, 1133 [Retry] 463-0 to 1, 464-0 to 1, 465-0 to 1, 466-0 to 1, 467-0 to 1, 468-0 to 1, 482, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401 [Paper size] 224, 225, 226, 227, 228, 247, 248, 249, 256 [Blank copying prevention] 625 |
| Laser | [Laser power] 286 [Polygonal motor] 401, 405 [Write starting] 410, 411, 440, 441, 442, 443, 444, 445, 498-0 to 1 [Sideways deviation] 497-0 to 5 | [Polygonal motor] 398, 399, 478, 479, 483, 484, 485, 486, 488, 489, 490 [Power correction] 872, 873, 875, 876, 877 |
| Development | [Auto-toner] 200, 201 | [Auto-toner] 414, 455 |
| High-voltage transformer | [Main charger bias] 210 [Developer bias] 205 [Transfer bias] 220, 221, 222 [Separation bias] 233, 234, 235 | [Transfer bias] 491, 492, 493, 830, 868, 869 [Main charger bias] 805, 806, 807, 808, 809, 826, 864, 865, 866, 867 [Developer bias] 833, 834, 835, 836, 837, 859, 860, 861, 862, 863 [Separation bias] 831, 870, 871 |
| Fuser | | [Status counter] 400 [Temperature] 404-0 to 3, 405-0 to 3, 407, 409, 410, 411, 412, 413, 424-0 to 3, 425-0 to 3, 433-0 to 1, 437, 438, 448, 450, 451, 452, 453, 515, 516, 518, 520, 521, 525-0 to 3, 527-0 to 3, 535, 536-0 to 3, 537-0 to 3, 800-0 to 1, 801-0 to 1, 802-0 to 1, 803-0 to 1, 804-0 to 1, 886, 896-0 to 1 [Pre-running] 417, 439, 440, 441, 523, 526 |
| RADF | [Aligning amount] 354, 355 [Sensors/EEPROM] 356, 367, 368 [Transporting] 357, 358, 365, 366 | [Switchback] 462 |
| Finisher | [Folding / Binding position] 468-0 to 2 | [Tray reset] 648 [Cascade] 652, 653 |

| Classification | e-STUDIO200L/230/280 | |
|----------------|----------------------|--|
| | Adjustment Mode (05) | Setting Mode (08) |
| Network | | [NIC] 1001, 1002, 1003, 1004, 1120 [IP address] 1005, 1006, 1007, 1008, 1009, 1010 [IPX] 1011, 1099 [Frame type] 1012 [NCP] 1013 [AppleTalk] 1014, 1015 [LDAP] 1016, 1138, 1139, 1486 [DNS] 1017, 1018, 1019 [DDNS] 1020 [SLP] 1021 [NetBios] 1023 [WINS] 1024, 1025 [Bindery] 1026 [NDS] 1027 [Directory] 1028, 1029 [HTTP] 1030, 1031, 1032, 1033, 1034, 1035 [SMTP] 1037, 1038, 1039, 1040, 1041, 1042, 1100, 1101, 1102 [Offramp] 1043, 1044, 1045 [POP3] 1046, 1047, 1048, 1049, 1050, 1051, 1052 [FTP] 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1089, 1090, 1091, 1092 [MIB] 1063 [Community] 1065, 1066 [TRAP] 1067, 1068, 1069, 1070 [Raw/TCP] 945, 1073, 1074 [LPD] 1075, 1076, 1077 [IPP] 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088 [Novell] 1093, 1094 [SerchRoot] 1095 [Print queue] 1096 [Rendezvous] 1103 [SMB] 1117, 1136 [ASCII code] 977 [Link local host name] 1104 [Service name] 1105 [Host name] 1112 [Internet FAX] 1114, 1485 [Workgroup name] 1124 [Private print] 1432 [Function] 1433, 1434 [Scan to E-mail] 1484 [From Address] 1487, 1488, 1489 [E-mail domain] 1491 |
| Counter | | [External counter] 202, 381, 683, 975, 1126 [Counter copy] 257 [Paper size] 305-0 to 16, 306-0 to 16, 307-0 to 16, 308-0 to 16, 312-0 to 16, 313-0 to 16, 314-0 to 16, 315-0 to 16, 316-0 to 16 [Large/Small size] 320-0 to 2, 321-0 to 2, 322-0 to 2, 323-0 to 2, 327-0 to 2, 328-0 to 2, 329-0 to 2, 330-0 to 2, 332-0 to 2, 335-0 to 2 [Double count] 345, 346, 347, 348, 349, 352, 353 [Paper source] 356, 357, 358, 359, 360, 370, 372, 374 [HDD] 390, 391, 392, 393 [Fuser unit] 1372, 1378, 1380, 1382 [Toner cartridge] 1376, 1410 [Media type] 1385, 1386, 1387, 1388, 1411 |
| Version | | [System firmware] 900, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 933, 934, 935, 936, 937, 938, 939, 944 [Engine firmware] 903, 905, 907, 908 [FAX] 915 [NIC] 916 |

| e-STUDIO200L/230/280 | | |
|-----------------------------|---|--|
| Classification | Adjustment Mode (05) | Setting Mode (08) |
| Maintenance | | [PM counter] 251, 252 [Telephone] 250 [Error history] 253 [FSMS] 258, 999 [Service notification] 702, 703, 707, 715, 716, 717, 718, 719, 720, 721, 723, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 796 [HTTP] 726, 727, 728, 729, 730, 731 [Supply order] 732, 733, 734, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 758, 759, 760, 764, 765, 794, 1145 [Firmware download] 797 [Emergency Mode] 710, 711 |
| Others | [Equipment number] 976 [Toner recycle] 280 | [Destination] 201, 701, 849 [Line] 203 [Private printing] 259 [Local I/F] 614 [Memory] 615 [Partition] 662, 666, 667 [Clear] 693 [Trial period] 673, 695, 798, 799 [Banner] 678, 679, 680, 681 [Database] 684, 685, 686 [HDD] 670, 690, 691, 694, 1422, 1424, 1426 [Control panel] 692 [Scrambler board] 696, 698, 699 [Data overwrite kit] 633 [Equipment number] 995 [Toner recycle] 838 [Machine identification information] 477 [Temperature/humidity] 839 [Initialization] 947 [Mode setting] 949 [Template] 1140 [NVRAM] 1427 [SRAM] 1428 |

2.2.11 Classification List of Adjustment Mode (05) / Setting Mode (08) (e-STUDIO202L/232/282)

| Classification | e-STUDIO202L/232/282 | |
|----------------|---|---|
| | Adjustment Mode (05) | Setting Mode (08) |
| User interface | | [Date/Time] 200, 638, 640 [Timer] 204, 205, 206, 260 [Screen] 207, 602, 1132 [File] 209, 219, 264, 288 [Language] 220, 221 [Administrator] 263 [Scanning] 265, 266, 273, 274 [Filing] 267, 270, 950, 976, 980, 981, 985 [HDD] 271 [E-mail] 272, 1097, 1098 [default setting] 276, 281, 283, 284, 285, 286, 331, 480, 503, 550, 603, 604, 607, 618, 642, 682, 969, 986, 1135 [Raw printing] 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 973, 978, 979, 1856, 1857 [Copy volume] 300 [Original counter] 302 [Custom Mode] 508 [Energy saving] 601, 970 [AMS] 605 [Sound] 610 [Book duplexing] 611 [Summer time] 612 [Paper size] 613 [Department management] 617 620, 621, 622, 623, 624, 629, 672 [Sorting] 627, 634, 641, 649 [Original direction] 628 [Image shift] 636, 1429, 1430 [Edit copying] 645, 646 [Box printing] 953, 954 [X in 1] 650 [Annotation] 651, 657 [Automatic transfer] 660, 661 [Indicator] 671 [Priority drawer] 689 [Media type] 697 [Job Build] 1130, 1131 [Display of REVERSE ORDER] 213 [Displaying number of original pages] 342 [Toner is nearly empty] 972 [Paper size setting (drawers)] 1478 [Selectable security level] 1708 [Keyboard layout] 1929, 1930, 1931, 1932, 1933, 1934, 1935 |
| Scanner | [Position] 305, 306 [Distortion] 308 [Reproduction ratio] 340 [Carriage position] 359 [Shading position] 350, 351 | |

| Classification | e-STUDIO202L/232/282 | |
|--------------------------|---|---|
| | Adjustment Mode (05) | Setting Mode (08) |
| Image | [Margin] 430, 431, 432, 433, 434-0 to 1, 435, 436, 437, 438 [Image density] 501, 503, 504, 505, 506, 507, 508, 509, 510, 512, 514, 515, 710, 714, 715, 719, 720, 724, 725, 729, 845, 846, 847, 850, 851, 852, 855, 856, 857, 860, 861, 862, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942 [Range correction] 532, 533, 534, 570, 571, 572, 693, 694, 695, 820, 821, 822, 825, 826, 827, 830, 831, 832, 835, 836, 837, 913, 914, 915, 916, 917, 918, 919, 920, 921 [Gamma slope] 593, 594, 595, 943, 944, 945 [Gamma balance] 596-0 to 2, 597-0 to 2, 598-0 to 2, 599-0 to 2 [Sharpness] 620, 621, 622, 865-0 to 2, 866-0 to 2, 867-0 to 2, 922, 923, 924 [Smudged/Faint text] 648, 654, 655, 928 [Printer density] 667-0 to 4, 672-0 to 4, 676-0 to 4 [Binarizing] 700, 701, 702 | [Error diffusion / Dither] 502, 509 [Default setting of sharpness] 1479 |
| Drive | [Main motor] 421, 422 [Exit motor] 424, 425 | |
| Paper feeding | [Aligning amount] 448-0 to 2, 449-0 to 2, 450-0 to 2, 452-0 to 2, 455-0 to 2, 457, 458-0 to 2, 460-0 to 2, 461-0 to 2, 462-0 to 3, 463-0 to 2, 464-0 to 2, 469-0 to 5, 470-0 to 2, 471-0 to 2, 472-0 to 2, 473, 474-0 to 2 [Paper pushing amount] 466-0 to 7 | [paper dimension] 210, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 337, 338, 339, 340, 341, 471 [Paper feeding] 254, 255, 481, 619, 658, 659, 988, 1133 [Retry] 463-0 to 1, 464-0 to 1, 465-0 to 1, 466-0 to 1, 467-0 to 1, 468-0 to 1, 482, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401 [Paper size] 224, 225, 226, 227, 228, 247, 248, 249, 256 [Blank copying prevention] 625 [Incorrect paper size jam] 449 [Tab paper] 1437, 1438, 1439 [Detection method of 13" LG] 1492 |
| Laser | [Laser power] 286 [Polygonal motor] 401, 405 [Write starting] 410, 411, 440, 441, 442, 443, 444, 445, 498-0 to 1 [Sideways deviation] 497-0 to 5 | [Polygonal motor] 398, 399, 478, 479, 483, 484, 485, 486, 488, 489, 490 [Power correction] 872, 873, 875, 876, 877 |
| Development | [Auto-toner] 200, 201 | [Auto-toner] 414, 455 |
| High-voltage transformer | [Main charger bias] 210 [Developer bias] 205 [Transfer bias] 220, 221, 222 [Separation bias] 233, 234, 235 | [Transfer bias] 491, 492, 493, 830, 868, 869 [Main charger bias] 805, 806, 807, 808, 809, 826, 864, 865, 866, 867 [Developer bias] 833, 834, 835, 836, 837, 859, 860, 861, 862, 863 [Separation bias] 831, 870, 871 |
| Fuser | | [Status counter] 400 [Temperature] 404-0 to 3, 405-0 to 3, 407, 409, 410, 411, 412, 413, 424-0 to 3, 425-0 to 3, 433-0 to 1, 437, 438, 448, 450, 451, 452, 453, 515, 516, 518, 520, 521, 525-0 to 3, 527-0 to 3, 535, 536-0 to 3, 537-0 to 3, 800-0 to 1, 801-0 to 1, 802-0 to 1, 803-0 to 1, 804-0 to 1, 886, 896-0 to 1 [Pre-running] 417, 439, 440, 441, 523, 526 |

| Classification | e-STUDIO202L/232/282 | |
|----------------|---|---|
| | Adjustment Mode (05) | Setting Mode (08) |
| RADF | [Aligning amount] 354, 355 [Transporting] 357, 358, 365, 366 | [Switchback] 462 |
| Finisher | [Folding / Binding position] 468-0 to 2 | [Tray reset] 648 [Cascade] 652, 653 [Interruption of stapling operation (no staple)] 704-0 to 1 |
| Network | | [NIC] 1002, 1003, 1119 [IP address] 1006, 1007, 1008, 1009, 1010 [IPX] 1011, 1099 [Frame type] 1012 [NCP] 1013 [AppleTalk] 1014, 1015, 1854, 1855, 1936 [LDAP] 1016, 1138, 1139, 1486 [DNS] 1017, 1018, 1019 [DDNS] 1020 [NetBios] 1023 [WINS] 1024, 1025 [Bindery] 1026 [NDS] 1027 [Directory] 1028, 1029 [HTTP] 1030, 1031, 1032 [SMTP] 1037, 1038, 1039, 1040, 1041, 1042, 1100, 1101, 1102 [Offramp] 1043, 1044, 1045 [POP3] 1046, 1047, 1048, 1049, 1050, 1051, 1052 [FTP] 1055, 1057, 1058, 1059, 1060, 1061, 1062, 1089, 1090, 1091, 1092 [MIB] 1063 [Community] 1065, 1066 [TRAP] 1067, 1068, 1069, 1070 [Raw/TCP] 945, 1073, 1074 [LPD] 1075, 1076, 1077, 1852, 1853 [IPP] 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1447, 1448, 1449, 1450, 1451, 1850, 1851 [Novell] 1093, 1094 [SerchRoot] 1095 [Print queue] 1096 [Rendezvous] 1103 [SMB] 1117, 1136, 1950, 1951 [ASCII code] 977 [Link local host name] 1104 [Service name] 1105 [Host name] 1112 [Internet FAX] 1114, 1485 [Workgroup name] 1124 [Samba] 1137, 1464 [Private print] 1432 [Function] 1433 [Scan to E-mail] 1484 [From Address] 1487, 1488, 1489 [E-mail domain] 1491 [User authentication] 1113, 1471, 1496, 1921, 1922, 1925, 1937, 1943, 1954, 1955, 1956, 1957 [PDC] 1121 [BDC] 1122 [NT domain] 1123 [Address book] 1125, 1476, 1477 [Netware] 1128, 1129, 1134, 1143, 1144, 1148 |

| Classification | e-STUDIO202L/232/282 | |
|----------------|----------------------|--|
| | Adjustment Mode (05) | Setting Mode (08) |
| Network | | [MAC address] 1141 [ACC] 1431 [Disable print save] 1435 [Disable fax save] 1436 [IP Conflict] 1440 [SNTP] 1441, 1442, 1444, 1445, 1446 [Device authentication] 1470, 1920, 1952, 1953, 1958, 1959, 1942, 1944 [IP Filter] 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739 [SSL setting] 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751 [Enable server's IP] 1755, 1756, 1757, 1759, 1760, 1762, 1767 [Previous IP address] 1768 [Scan to File] 1779, 1784, 1786 [Notification of scan job] 1781-0 to 1 [Save as file and Email transmission] 1782, 1783, 1785 [Network scanning] 1915 [LDAP authentication] 1923, 1924 [Role Based Access] 1928 [STAGE] 1939, 1940 |
| Wireless LAN | | [Driver] 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678 [Supplicant] 1679, 1680, 1681, 1682, 1684, 1685, 1686, 1688, 1689, 1690, 1691, 1692, 1693, 1696, 1697, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1763, 1764, 1765, 1766, 1763, 1764, 1765, 1766 |
| Bluetooth | | [Bluetooth] 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717 |
| Counter | | [External counter] 202, 381, 683, 975, 1126 [Counter copy] 257 [Paper size] 305-0 to 16, 306-0 to 16, 307-0 to 16, 308-0 to 16, 312-0 to 16, 313-0 to 16, 314-0 to 16, 315-0 to 16, 316-0 to 16 [Large/Small size] 320-0 to 2, 321-0 to 2, 322-0 to 2, 323-0 to 2, 327-0 to 2, 328-0 to 2, 329-0 to 2, 330-0 to 2, 332-0 to 2, 335-0 to 2 [Double count] 345, 346, 347, 348, 349, 352, 353 [Paper source] 356, 357, 358, 359, 360, 370, 372, 374 [HDD] 390, 391, 392, 393 [Fuser unit] 1372, 1378, 1380, 1382 [Toner cartridge] 1376, 1410 [Media type] 1385, 1386, 1387, 1388, 1411 [Number of output pages] 1530-0 to 4, 1531-0 to 1, 1535 |
| Version | | [System firmware] 900, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 933, 934, 935, 936, 937, 938, 939, 944 [Engine firmware] 903, 905, 907, 908 [FAX] 915 |

| Classification | e-STUDIO202L/232/282 | |
|----------------|---|---|
| | Adjustment Mode (05) | Setting Mode (08) |
| Maintenance | | [PM counter] 251, 252 [Telephone] 250 [Error history] 253 [FSMS] 258, 999 [Service notification] 702, 703, 707, 715, 716, 717, 718, 719, 720, 721, 723, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 796 [HTTP] 726, 727, 728, 729, 730, 731 [Supply order] 732, 733, 734, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 758, 759, 760, 764, 765, 794, 1145 [Firmware download] 797 [Emergency Mode] 710, 711 [Service call checking period] 1495 |
| Others | [Equipment number] 976 [Toner recycle] 280 | [Destination] 201, 701, 849 [Line] 203 [Private printing] 259 [Local I/F] 614 [Memory] 615 [Partition] 662, 666, 667 [Clear] 693 [Trial period] 673, 695, 798, 799 [Banner] 678, 679, 680, 681 [Database] 684, 685, 686 [HDD] 670, 690, 691, 694, 1422, 1424, 1426 [Control panel] 692 [Scrambler board] 696, 698, 699 [Data overwrite kit] 633 [Equipment number] 995 [Toner recycle] 838 [Machine identification information] 477 [Temperature/humidity] 839 [Initialization] 947 [Mode setting] 949 [Template] 1140 [NVRAM] 1427 [SRAM] 1428 [TAT partition] 1118 [Enhanced bold] 1149 [User data management] 1472, 1473, 1474, 1481, 1482, 1483 [Limitation check] 1494 [e-Filing Access Mode] 1497 [Inbound FAX] 1498 [Administrator's password] 1778 [FAX reception] 1926 |

3. ADJUSTMENT

3.1 Adjustment of Auto-Toner Sensor

When the developer material is replaced, adjust the auto-toner sensor in the following procedure.

<Procedure> (Adjustment Mode (05-200))

- (1) Install the process unit into the equipment.

Note:

Do not install the toner cartridge.

- (2) While pressing [0] and [5] simultaneously, turn the power ON.
The following message will be displayed.

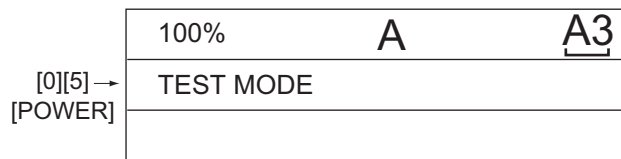


Fig.3-1

- (3) Key in code [200] and press the [START] button.
The display changes as follows.

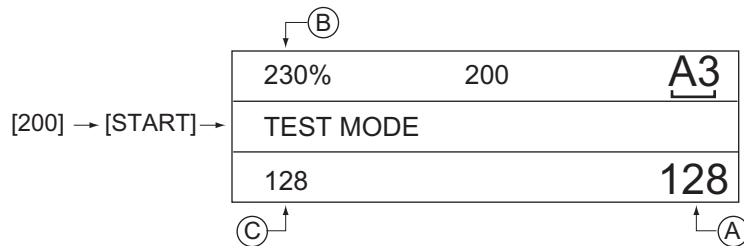


Fig.3-2

Notes:

- A indicates the controlled value of the auto-toner sensor output. Press the Up or Down button to change the value.
- B indicates the output voltage of the auto-toner sensor (2.30 V in the above case).
The drum, developer unit, etc. are in operation.
- C indicates the latest adjustment value.

(4) After about two minutes, the value B automatically starts changing.

| | | |
|-----------|-----|-----------|
| 230% | 200 | <u>A3</u> |
| TEST MODE | | WAIT |
| 128 | | 128 |

Fig.3-3

(5) After a short time, the value B becomes stable and the display changes as follows.

| | | | |
|--------------|-----------------|-----|------------------|
| [ⓑ] | 240% | 200 | <u>A3</u> |
| | ADJUSTMENT MODE | | |
| | 128 | | [Ⓐ] 150 |

Fig.3-4

(6) Check if the value B is within the range of 235 to 245 (the output voltage range of the auto-toner sensor is 2.35 V to 2.45 V).

(7) If the value B is not within the range of 235 to 245, press the Up or Down button to adjust the value manually.

Note:

The relation between the button and the values A and B is as follows.

| Button to be pressed | Value A | Value B |
|----------------------|-----------|-----------|
| Up | Increased | Increased |
| Down | Decreased | Decreased |

(8) Press the [ENTER] or [INTERRUPT] button.
The drum, developer unit, etc. are stopped and the following is displayed.

| | | | |
|-------------|-----------|---|-----------|
| [ENTER] | 100% | A | <u>A3</u> |
| or → | TEST MODE | | |
| [INTERRUPT] | | | |

Fig.3-5

(9) Turn the power OFF.

(10) Install the toner cartridge.

3.2 Image Dimensional Adjustment

3.2.1 General description

There are several adjustment items in the image dimensional adjustment, as listed below. When adjusting these items, the following adjustment order should strictly be observed.

| Item to be adjusted | | Code in mode 05 |
|---------------------|--|---|
| 1 | Paper alignment at the registration roller | 448, 449, 450, 452, 455, 457, 458, 460, 461, 462, 463, 469, 470, 471, 472, 473, 474 |
| 2 | Printer related adjustment | |
| | (a) Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed) | 401 |
| | (b) Primary scanning data laser writing start position | 411 |
| | (c) Reproduction ratio of secondary scanning direction (Fine adjustment of main motor rotation speed) | 421 |
| | (d) Secondary scanning data laser writing start position | 441, 440, 444, 443, 442, 445 |
| | (e) Primary scanning data laser writing start position at duplexing | 498 |
| 3 | Scanner related adjustment | |
| | (a) Image distortion | – |
| | (b) Reproduction ratio of primary scanning direction | 405 |
| | (c) Image location of primary scanning direction | 306 |
| | (d) Reproduction ratio of secondary scanning direction | 340 |
| | (e) Image location of secondary scanning direction | 305 |
| | (f) Top margin | 430 |
| | (g) Right margin | 432 |
| | (h) Bottom margin | 433 |

[Procedure to key in adjustment values]

In accordance with the procedure described below, make adjustment of each adjustment item so that the measured values obtained from test copies satisfy the specification. By pressing the [FAX] button, immediately after starting the Adjustment Mode (05), single-sided test copying can be performed (normal copy mode).

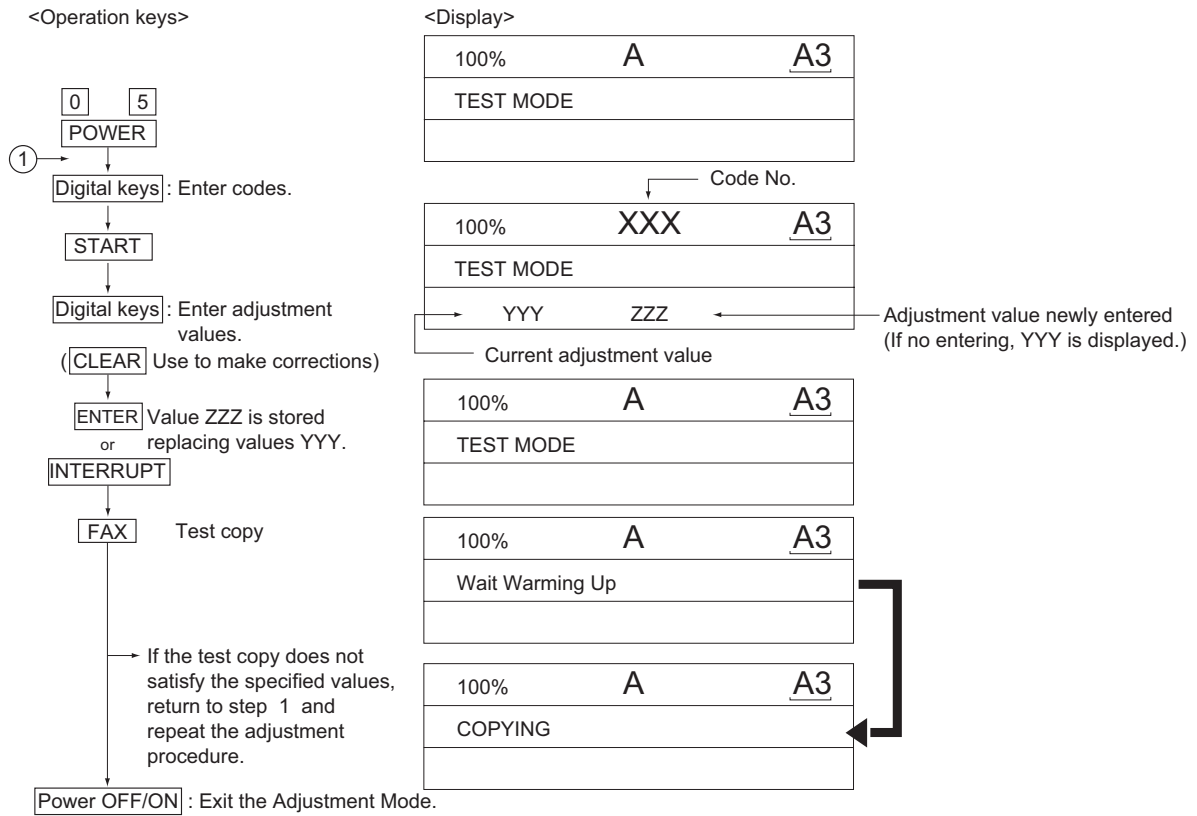


Fig.3-6

3.2.2 Paper alignment at the registration roller

The aligning amount is adjusted by using the following codes in Adjustment Mode (05).

| Paper type | Weight | Upper drawer | Lower drawer | PFP upper drawer | PFP lower drawer | LCF | ADU | Bypass feed |
|---------------|--------------------------------------|--------------|--------------|------------------|------------------|-----|----------|-------------|
| Plain paper | 64-80 g/m ² 17-20 lb. | 450 (*1) | 452 (*1) | 448 (*1) | 449 (*1) | 457 | 455 (*1) | 458 (*1) |
| Thick paper 1 | 81-105g/m ² 21-28 lb. | 469 (*1) | 470 (*1) | 471 (*1) | 472 (*1) | 473 | 474 (*1) | 460 (*1) |
| Thick paper 2 | 106-163g/m ² 29-43 lb. | - | - | - | - | - | - | 461 (*1) |
| Thick paper 3 | 164-209g/m ² 44-55 lb. | - | - | - | - | - | - | 462 (*2) |
| OHP | - | - | - | - | - | - | - | 463 (*3) |

Sub-code

(*1) 0: Long size 1: Middle size 2: Short size

(*2) 0: Long size 1: Middle size 2: Short size 3: Post card

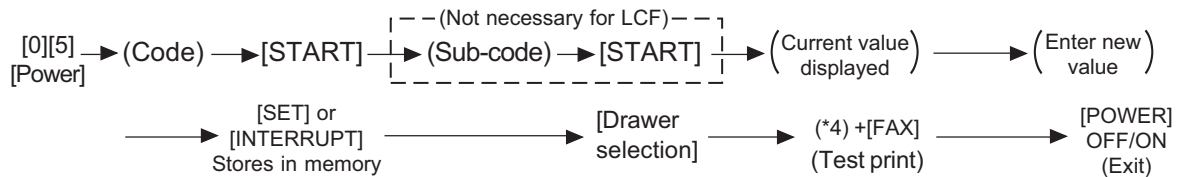
(*3) 0: Long size of OHP film 1: Middle size of OHP film 2: Short size of OHP film

Notes:

1. Long size: 330 mm or longer (13.0 inches or longer)
Middle size: 220-239 mm (8.7-12.9 inches)
Short size: 219 mm or shorter (8.6 inches or shorter)
2. The adjustment of "Post card" is for Japan only.

<Procedure>

- (1) Perform the test print according to the following procedure.



(*4) 1: Single-sided grid pattern 3: Double-sided grid pattern

- (2) Check if any transfer void is occurring. If there is a transfer problem, try the values in descending order as “31” → “30” → “29”... until the transfer void disappears. At the same time, confirm if any paper jam occurs. Also, when the aligning amount has been increased, this may increase the scraping noise caused by the paper and the Mylar sheet as it is transported by the registration roller. If this scraping noise is annoying, try to decrease the value.

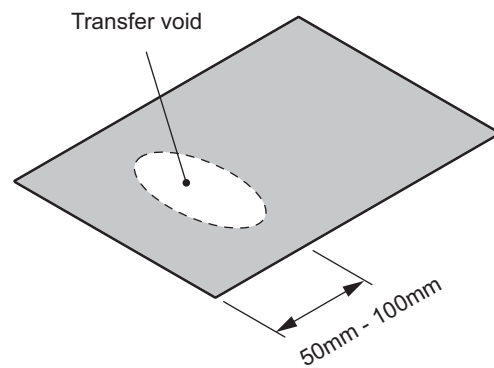


Fig.3-7

- (3) Perform the same procedure for all paper sources.

Note:

When paper thinner than specified is used, paper jams may occur frequently at the registration section. In this case, it is advisable to change (or reduce) the aligning amount. However, if the aligning amount is reduced too much, this may cause the shift of leading edge position. So, when adjusting the aligning amount, try to choose the appropriate amount while confirming the leading edge position is not shifted.

* As a tentative countermeasure, the service life of the feed roller can be extended by increasing the aligning amount.

3.2.3 Printer related adjustment

[A] Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed (Printer))

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [1] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (3) Check the grid pattern on the test chart printed out and measure the distance A from the 1st line to the 21st line of the grid pattern.
- (4) Check if the distance A is within 200 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance A again.

(Adjustment Mode) → (Key in code [401]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [ENTER] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [1] → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance A becomes (approx. 0.125 mm/step).

[B] Primary scanning data laser writing start position (Printer)

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [1] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (3) Check the grid pattern on the test chart printed out and measure the distance B from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance B is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance B again.

(Adjustment Mode) → (Key in the code [411]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [ENTER] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [1] → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance B becomes (approx. 0.05 mm/step).

- (6) After the adjustment for the code 411 is completed, apply the same adjustment value for the code 410.

(Adjustment Mode) → (Key in the code [410]) → [START]
→ (Key in the same value in the step 5 above)
→ Press [ENTER] or [INTERRUPT] (Stored in memory).

Note:

Make sure the first line of the grid pattern is printed out since the line is occasionally vanished.

[C] Reproduction ratio of secondary scanning direction (Fine adjustment of main motor rotation speed (Copier/Printer))

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
- (2) Press [1] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (3) Check the grid pattern on the test chart printed out and measure the distance C from the 10th line at the leading edge of the paper to the 30th line of the grid pattern.
*Normally, the 1st line of the grid pattern is not printed.
- (4) Check if the distance C is within 200 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance C again.

(Adjustment Mode) → (Key in code [421]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ [ENTER] or [INTERRUPT] (Stored in memory)
→ "100% A" is displayed
→ Press [1] → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance C becomes (approx. 0.125 mm/step).

[D] Secondary scanning data laser writing start position

This adjustment has to be performed for each paper source. (If there is no paper source, skip this step.)
The following table shows the order of the paper source to be adjusted, code, paper size and acceptable values.

Perform 08-477 and check the value.

When the value is 0.

| Order for adjustment | Paper source | Code | Paper size | Acceptable value | Remarks |
|----------------------|--------------|---------|------------|------------------|---------------------------------|
| 1 | Lower drawer | 441 | A3/LD | 0 to 40 | |
| 2 | Upper drawer | 440 | A4/LT | 0 to 15 | |
| 3 | PFP or LCF | 444/443 | A4/LT | 0 to 15 | |
| 4 | Bypass feed | 442 | A4/LT | 0 to 15 | |
| 5 | Duplexing | 445 | A3/LD | 0 to 15 | Paper fed from the lower drawer |

When the value is 1.

| Order for adjustment | Paper source | Code | Paper size | Acceptable value | Remarks |
|----------------------|--------------|---------|------------|------------------|---------------------------------|
| 1 | Upper drawer | 440 | A3/LD | 0 to 40 | |
| 2 | Lower drawer | 441 | A4/LT | 0 to 15 | |
| 3 | PFP or LCF | 444/443 | A4/LT | 0 to 15 | |
| 4 | Bypass feed | 442 | A4/LT | 0 to 15 | |
| 5 | Duplexing | 445 | A3/LD | 0 to 15 | Paper fed from the upper drawer |

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [1] ([3] for duplexing) → [FAX]. (A grid pattern with 10 mm squares is printed out.)
- (3) Check the grid pattern on the test chart printed out and measure the distance D from the leading edge of the paper to the 6th line of the grid pattern.
*Normally, the 1st line of the grid pattern is not printed.
*At the duplexing, measure it on the top side of the grid pattern.
- (4) Check if the distance D is within 52±0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance D again.

(Adjustment Mode) → (Key in the code shown above) → [START]

→ (Key in an acceptable value shown above)

→ [ENTER] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [1] ([3] for duplexing) → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance D becomes (approx. 0.4 mm/step).

[E] Primary scanning data laser writing start position at duplexing

Note:

Make sure the first line of the grid pattern is printed out since the line is occasionally vanished.

[E-1] Adjustment for long-sized paper

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (3) Check the grid pattern on the test print and measure the distance E from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance E is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance E again.

(Adjustment Mode) → (Key in code [498]) → [START] → [0] → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [ENTER] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed.

→ Press [3] → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance E becomes (approx. 0.05 mm/step).

[E-2] Adjustment for short-sized paper

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A4/LT from the upper drawer.)
- (3) Check the grid pattern on the test print and measure the distance E from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance E is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance E again.

(Adjustment Mode) → (Key in the code [498]) → [START] → [1] → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [ENTER] or [INTERRUPT] (Stored in memory).

→ "100% A" is displayed

→ Press [3] → [FAX] → (A grid pattern is printed out.)

*The larger the adjustment value is, the longer the distance E becomes (approx. 0.05 mm/step).

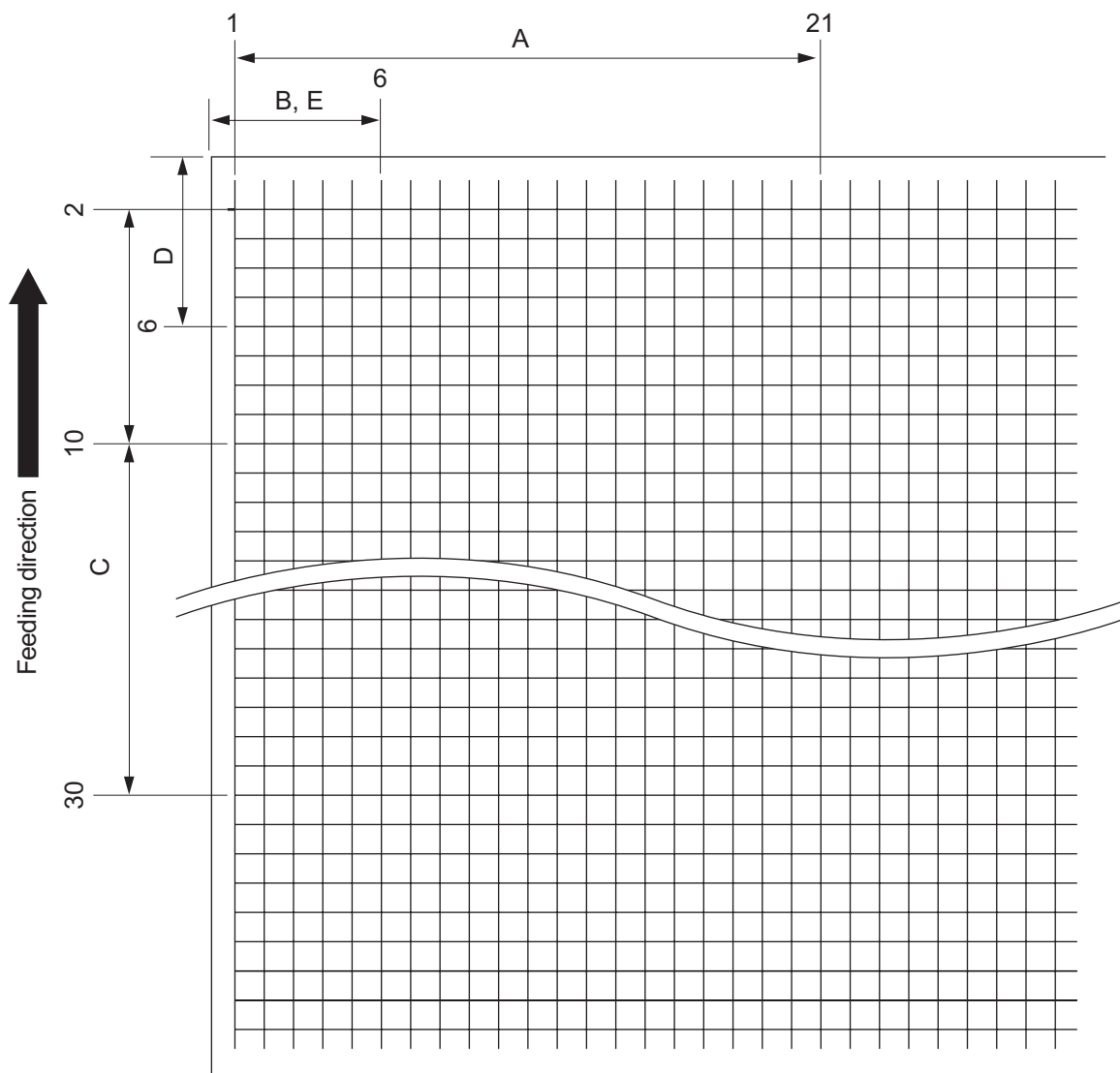


Fig.3-8 Grid pattern

<Procedure>

Perform 08-477 and check the value.

When the value is 0.

[0] [5] [Power ON] → [1] ([3](05-445, 498) for duplexing) → [FAX]

- A: 05-401 (Lower drawer, A3/LD) → 200 ± 0.5 mm (0.125 mm/step)
- B: 05-411 (Lower drawer, A3/LD) → 52 ± 0.5 mm (0.05 mm/step)
→ Key in the same value for 05-410.
- C: 05-421 (Lower drawer, A3/LD) → 200 ± 0.5 mm (0.125 mm/step)
- D: 05-441 (Lower drawer, A3/LD), 440 (Upper drawer, A4/LT), 444 (PFP, A4/LT),
443 (LCF, A4/LT), 442 (Bypass feed, A4/LT), 445 (Duplexing, A3/LD)
→ 52 ± 0.5 mm (0.4 mm/step)
- E: 05-498-0 (Lower drawer, A3/LD), 498-1 (Upper drawer, A4/LT) → 52 ± 0.5 mm (0.05 mm/step)

When the value is 1.

[0] [5] [Power ON] → [1] ([3](05-445, 498) for duplexing) → [FAX]

- A: 05-401 (Upper drawer, A3/LD) → 200±0.5 mm (0.125 mm/step)
- B: 05-411 (Upper drawer, A3/LD) → 52±0.5 mm (0.05 mm/step)
→ Key in the same value for 05-410.
- C: 05-421 (Upper drawer, A3/LD) → 200±0.5 mm (0.125 mm/step)
- D: 05-440 (Upper drawer, A3/LD), 441 (Lower drawer, A4/LT), 444 (PFP, A4/LT),
443 (LCF, A4/LT), 442 (Bypass feed, A4/LT), 445 (Duplexing, A3/LD)
→ 52±0.5 mm(0.4 mm/step)
- E: 05-498-0 (Upper drawer, A3/LD), → 52±0.5 mm (0.05 mm/step)
498-1 (Upper drawer, A4/LT))

Remark:

When the adjustment (05-421) is performed, the same adjustment for FAX (05-422) is automatically and consecutively performed.

3.2.4 Scanner related adjustment

[A] Image distortion

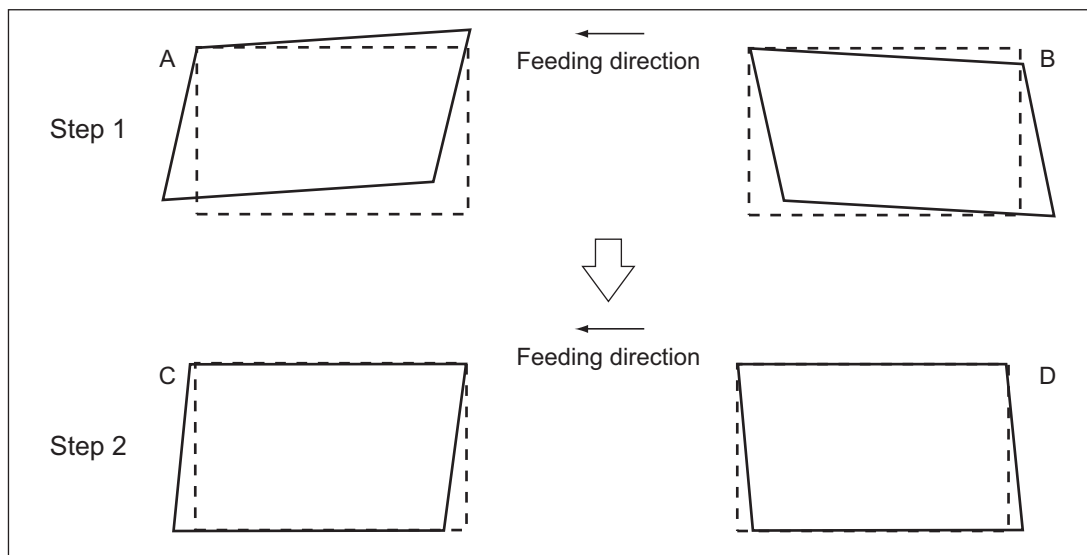


Fig.3-9

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Press [FAX] to make a copy of any image on a sheet of A3/LD paper.
- (3) Key in [308] and press the [START] button to move the carriage to the adjustment position.
- (4) Make an adjustment in the order of step 1 and 2.
 - Step 1
 - In case of A:
Tighten the mirror-3 adjustment screw (CW).
 - In case of B:
Loosen the mirror-3 adjustment screw (CCW).
 - Step 2
 - In case of C:
Tighten the mirror-1 adjustment screw (CW).
 - In case of D:
Loosen the mirror-1 adjustment screw (CCW).
- (5) Apply the screw locking agents to the adjustment screws. (2 areas)
 - Recommended screw lock agent
Manufacturer: Three Bond
Product name: 1401E

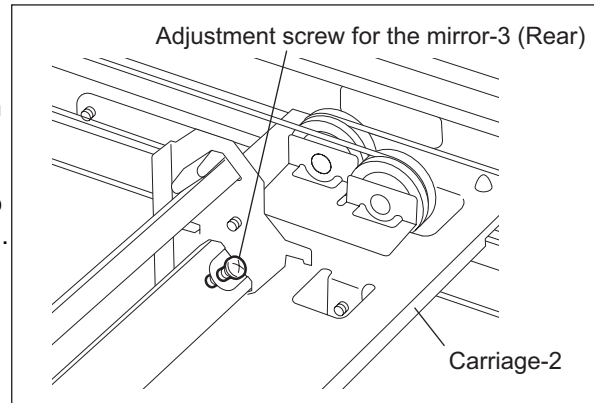


Fig.3-10

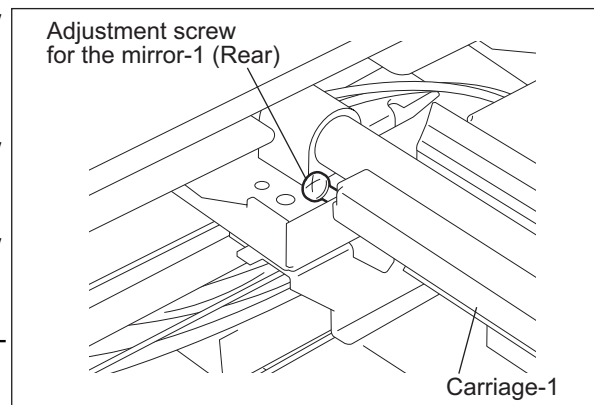


Fig.3-11

[B] Reproduction ratio adjustment of the primary scanning direction
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON → (Adjustment Mode)
- (2) Place a ruler on the original glass (along the direction from the rear to the front of the equipment).
- (3) Press [FAX] to make a copy at the mode of A3 (LD), 100% and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the distance A from 10 mm to 270 mm of the copied image of the ruler.
- (5) Check if the distance A is within the range of 260 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.
(Adjustment Mode) → (Key in the code [405]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).
→ ("100% A" is displayed.)
*The larger the adjustment value is, the higher the reproduction ratio and the longer the distance A become (approx. 0.125 mm/step).

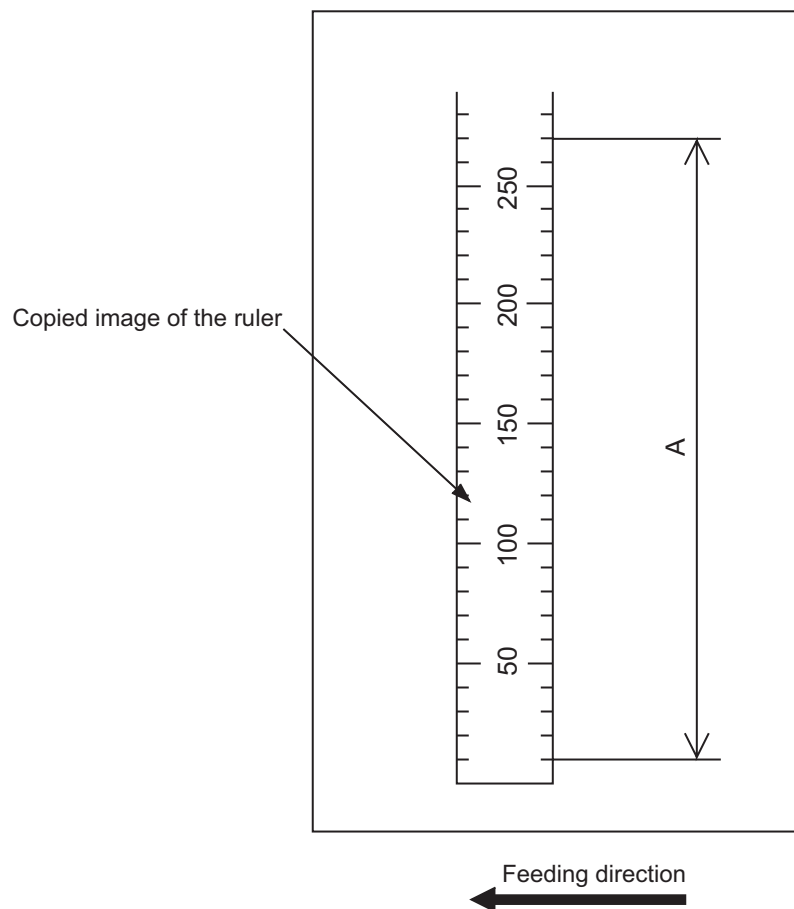


Fig.3-12

[C] Image position adjustment of the primary scanning direction
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place a ruler on the original glass with its leading edge pushed against the rear side and its side along the original scale on the left.
- (3) Press [FAX] to make a copy at the mode of A3 (LD), 100% and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the distance B from the left edge of the paper to 10 mm of the copied image of the ruler.
- (5) Check if the distance B is within the range of 10 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [306]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).
→ ("100% A" is displayed.)

*The smaller the adjustment value is, the more the image is shifted to the left and the distance B becomes narrower (0.085 mm/step).

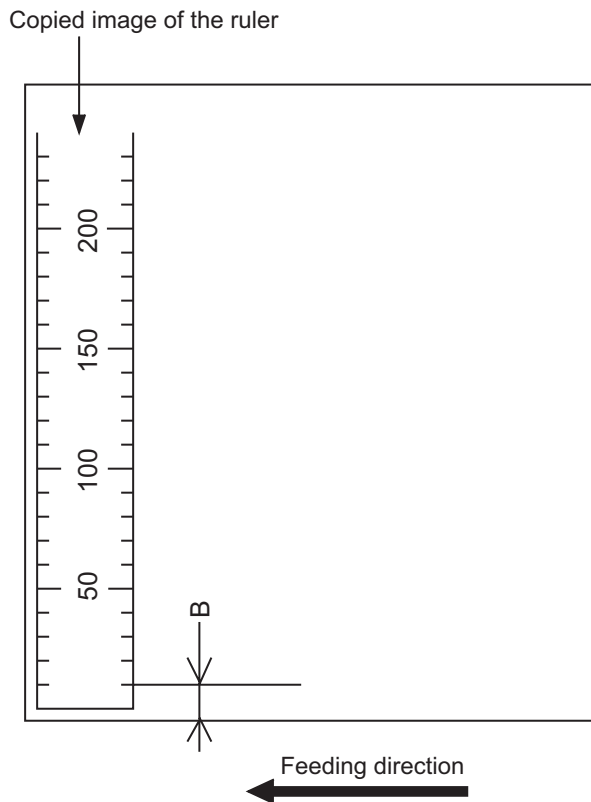


Fig.3-13

[D] Reproduction ratio adjustment of the secondary scanning direction

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place a ruler on the original glass with its leading edge pushed against the original scale on the left.
- (3) Press [FAX] to make a copy at the mode of A3 (LD), 100% and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the distance C from 200 mm to 400 mm of the copied image of the ruler.
- (5) Check if the distance C is within the range of 200 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [340]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).

→ ("100% A" is displayed.)

*The smaller the adjustment value is, the lower the reproduction ratio becomes (0.45 mm/step).

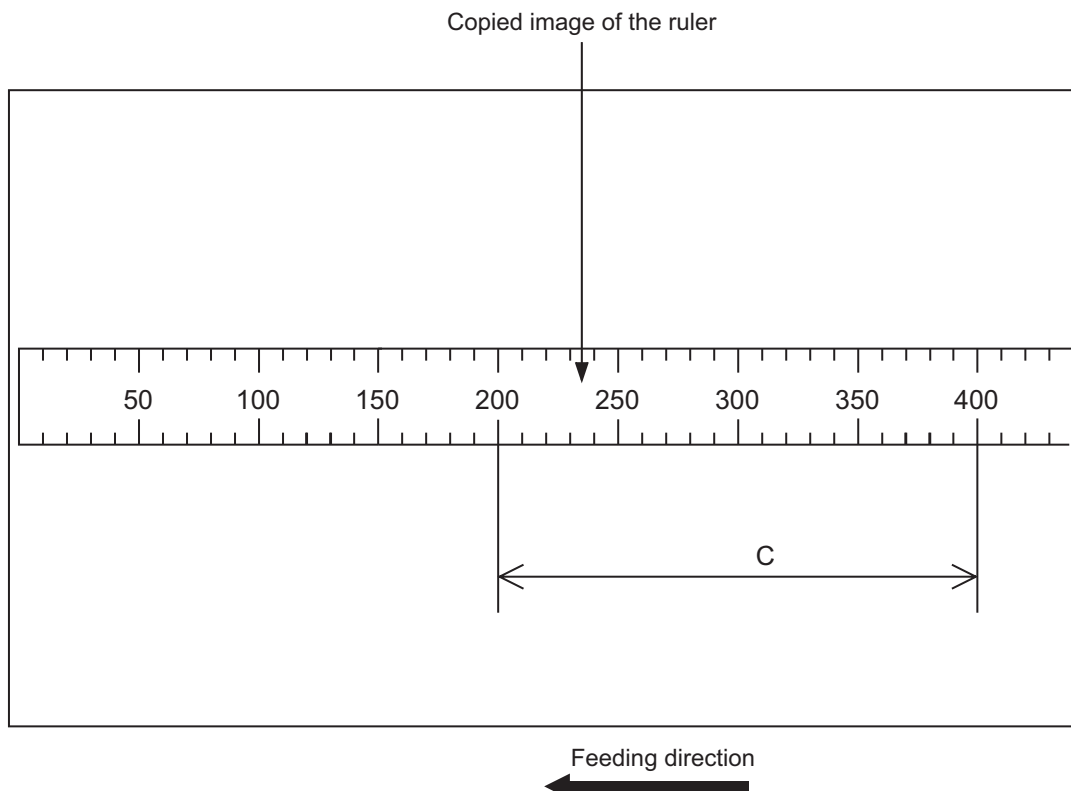


Fig.3-14

[E] Image position adjustment of the secondary scanning direction
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place a ruler on the original glass with its leading edge pushed against the original scale on the left.
- (3) Press [FAX] to make a copy at the mode of A3 (LD), 100% and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the distance D from the leading edge of the paper to 10 mm of the copied image of the ruler.
- (5) Check if the distance D is within the range of 10 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [305]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).

→ ("100% A" is displayed.)

*The larger the adjustment value is, the more the image is shifted to the trailing edge (0.14 mm/step).

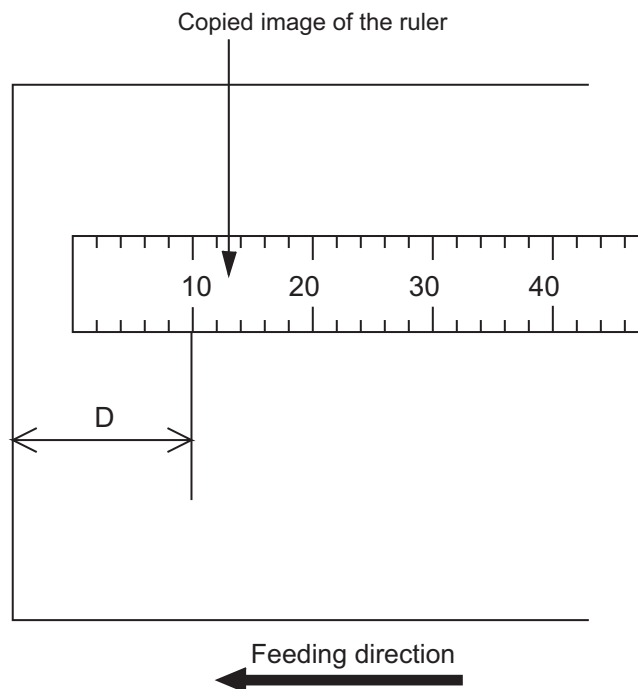


Fig.3-15

[F] Top margin
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open the platen cover or RADF.
- (3) Press [FAX] to make a copy at the mode of A3/LD, 100%, Text/Photo and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the blank area E at the leading edge of the copied image.
- (5) Check if the blank area E is within the range of 3 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [430]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).

→ ("100% A" is displayed.)

*The larger the adjustment value is, the wider the blank area becomes (approx. 0.04 mm/step).

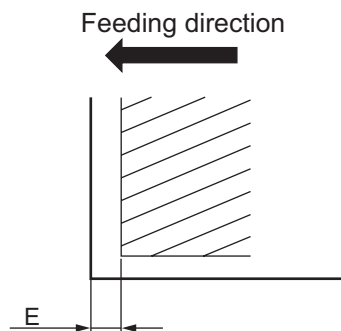


Fig.3-16

[G] Right margin
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open platen cover or RADF.
- (3) Press [FAX] to make a copy at the mode of A3/LD, 100%, Text/Photo and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the blank area F at the right side of the copied image.
- (5) Check if the blank area F is within the range of 2 ± 1.0 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [432]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).

→ ("100% A" is displayed.)

*The larger the adjustment value is, the wider the blank area at the right side becomes (approx. 0.04 mm/step).

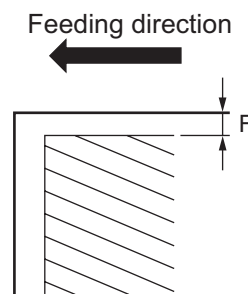


Fig.3-17

[H] Bottom margin

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open platen cover or RADF.
- (3) Press the [FAX] to make a copy at the mode of A3/LD, 100%, Text/Photo and standard drawer of the equipment (Refer to *).
*Perform 08-477 and check the value.
If the value is 0, use the lower drawer.
If the value is 1, use the upper drawer.
- (4) Measure the blank area G at the trailing edge of the copied image.
- (5) Check if the blank area G is within the range of 2 ± 1.0 mm.
- (6) If not, use the following procedure to change values and repeat the steps (3) to (5) above.

(Adjustment Mode) → (Key in the code [433]) → [START]

→ (Key in value (acceptable values: 0 to 255))

→ Press the [ENTER] or the [INTERRUPT] button (stored in memory).

→ ("100% A" is displayed.)

*The larger the adjustment value is, the wider the blank area at the trailing edge becomes (approx. 0.04 mm/step).

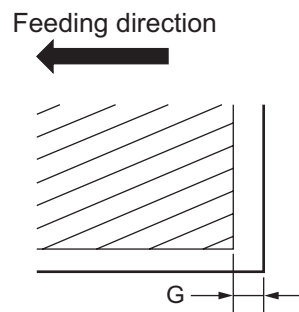


Fig.3-18

3.3 Image Quality Adjustment (Copying Function)

3.3.1 Density adjustment

The center density and the density variation controlled by density adjustment keys can be adjusted as follows.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|--------------|--------------|--------------------------------------|---|
| Text/Photo | Photo | Text | | |
| 503 (931) | 501 (933) | 504 (932) | Manual density mode center value | The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 |
| 505 (934) | 506 (936) | 507 (935) | Manual density mode light step value | The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255 |
| 508 (937) | 509 (939) | 510 (938) | Manual density mode dark step value | The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255 |
| 514 (940) | 512 (942) | 515 (941) | Automatic density mode | The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 |

* The values in "()" are the adjustment codes of the Custom Mode.

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (4) Press the [ENTER] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (5) Let the equipment restarted and perform copying job.
- (6) If the desired image density has not been attained, repeat step (2) to (5).

3.3.2 Gamma slope adjustment

Gamma slope is adjustable with the following codes.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|--------------|--------------|------------------------|---|
| Text/Photo | Photo | Text | | |
| 593 (943) | 594 (945) | 595 (944) | Gamma slope adjustment | One's place: 0: equivalent to the set value 5 1 to 9: Select the gamma slope angle. (The larger the value is, the larger the angle becomes.) Ten's place: 0: equivalent to the set value 5 1 to 9: Select the gamma slope angle of the low density area. (The smaller the value is, the darker the background becomes.) 00: Use default value |

* The values in "()" are the adjustment codes of the Custom Mode.

<Procedure>

Procedure is same as that of  P.3-21 "3.3.1 Density adjustment".

3.3.3 Sharpness adjustment

If you want to make copy images look softer or sharper, perform the following adjustment.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|--------------|--------------|----------------------|--|
| Text/Photo | Photo | Text | | |
| 620 (922) | 621 (924) | 622 (923) | Sharpness adjustment | <p>Key in the following values depending on the original mode.</p> <p>One's place 1: Text/Photo 2: Photo 5: Text Ten's place 0: Use Default value 1 to 9: Change intensity (The larger the value is, the sharper the image becomes.)</p> <ul style="list-style-type: none"> Example of value entry in case the mode is "Text/Photo". <div style="margin-left: 40px;"> </div> <p>Note: When the value "0" is keyed in at the ten's digit, the value is not displayed on LCD screen.</p> |

* The values in "()" are the adjustment codes of the Custom Mode.

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

Procedure is same as that of P.3-21 "3.3.1 Density adjustment".

3.3.4 Setting range correction

The values of the background peak / text peak in the range correction can be switched to “varied” or “fixed” in the following codes.

If they are fixed, the range correction is performed with standard values.

The values of the background peak affect the reproduction of the background density and the values of the text peak affect that of the text density.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks | | | | | | | | | | | | | | | |
|---------------|-----------------|--------------|--|---|--|-----------------|-----------|----|-------|-------|----|--------|-------|----|-------|--------|----|--------|--------|
| Text/Photo | Photo | Text | | | | | | | | | | | | | | | | | |
| 570 (913) | 571 (915) | 572 (914) | Range correction for original manually set on the original glass | The following are the default values set for each original mode. Text/Photo: 12, Photo: 12, Text: 22 Each digit stands for: One's place: Automatic density mode Ten's place: Manual density mode The setting conditions possible are as follows: <table style="margin-left: 40px;"> <tr> <td></td> <td>Background peak</td> <td>Text peak</td> </tr> <tr> <td>1:</td> <td>fixed</td> <td>fixed</td> </tr> <tr> <td>2:</td> <td>varied</td> <td>fixed</td> </tr> <tr> <td>3:</td> <td>fixed</td> <td>varied</td> </tr> <tr> <td>4:</td> <td>varied</td> <td>varied</td> </tr> </table> | | Background peak | Text peak | 1: | fixed | fixed | 2: | varied | fixed | 3: | fixed | varied | 4: | varied | varied |
| | Background peak | Text peak | | | | | | | | | | | | | | | | | |
| 1: | fixed | fixed | | | | | | | | | | | | | | | | | |
| 2: | varied | fixed | | | | | | | | | | | | | | | | | |
| 3: | fixed | varied | | | | | | | | | | | | | | | | | |
| 4: | varied | varied | | | | | | | | | | | | | | | | | |
| 693 (916) | 694 (918) | 695 (917) | Range correction for original set on the RADF | | | | | | | | | | | | | | | | |

* The values in “()” are the adjustment codes of the Custom Mode.

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

Procedure is same as that of  P.3-21 "3.3.1 Density adjustment".

3.3.5 Setting range correction (Adjustment of background peak)

The levels of the background peak for the range correction can be set at the following codes.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|--------------|--------------|--------------------------------------|--|
| Text/Photo | Photo | Text | | |
| 532 (919) | 533 (921) | 534 (920) | Background peak for range correction | When the value increases, the background (low density area) of the image is not output. Acceptable values: 0 to 255 (Default: Text/Photo: 40, Photo: 16, Text: 64) |

* The values in “()” are the adjustment codes of the Custom Mode.

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

Procedure is same as that of  P.3-21 "3.3.1 Density adjustment".

3.3.6 Adjustment of smudged/faint text

The smudged/faint text can be set at the following codes.

< Adjustment Mode (05) >

< e-STUDIO 200L/230/280 >

| Original mode | Item to be adjusted | Remarks |
|---------------|--|---|
| Text/Photo | | |
| 653 (928) | Adjustment of smudged/faint spotted text | When the value increases, the faint text is improved. When the value decreases, the smudged text is improved. Acceptable values: 0 to 255 (Default: 192) Note: Remember the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value. |

< e-STUDIO 202L/232/282 >

| Original mode | Item to be adjusted | Remarks |
|---------------|--|---|
| Text/Photo | | |
| 648 (928) | Adjustment of smudged/faint spotted text | When the value increases, the faint text is improved. When the value decreases, the smudged text is improved. Acceptable values: 0 to 4 (Default: 2) Note: Remember the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value. |

* The values in "()" are the adjustment codes of the Custom Mode.
Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

Procedure is same as that of  P.3-21 "3.3.1 Density adjustment".

3.3.7 Gamma balance adjustment < e-STUDIO 202L/232/282 >

The gamma balance is adjusted by adjusting the density at the Black Mode. The adjustment is performed by selecting its density area from the following: low density, medium density and high density.

< Adjustment Mode (05) >

| Language and screen | | | | Item to be adjusted | Remarks |
|---------------------|-------------|--------------|--------------|---------------------|--|
| Smooth (PS) | Detail (PS) | Smooth (PCL) | Detail (PCL) | | |
| 596-0 | 597-0 | 598-0 | 599-0 | Low density | The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255. (Default: 128) |
| 596-1 | 597-1 | 598-1 | 599-1 | Medium density | |
| 596-2 | 597-2 | 598-2 | 599-2 | High density | |

3.3.8 Adjustment of image density

The image density level can be set at the following codes.

< Adjustment Mode (05) >

| Code | Item to be adjusted | Remarks |
|------------|-----------------------------|---|
| 667-0 to 4 | Adjustment of image density | When the value is decreased, text becomes lighter. Acceptable values: 0 to 10 Notes: 1. Set not to reverse the large and small number of the setting value corresponding to the sub code. Ex.) When substituting the setting value for 667-0 with A0, •••, 667-4 with A4: A0 A1 A2 A3 A4 2. Remember that the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value. |

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code "667" and press the [START] button.
- (3) Key in the sub code (0, 1, 2, 3 or 4), and press the [START] button.
- (4) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (5) Press the [ENTER] or [INTERRUPT] button to store the value in memory. The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Turn the power OFF and then back ON to perform printing job.
- (8) If the desired image density has not been attained, repeat step (2) to (7).

3.4 Image Quality Adjustment (Printing Function)

3.4.1 Adjustment of smudged/faint text

The smudged/faint text can be set at the following codes.

< Adjustment Mode (05) >

| Language | | Remarks |
|----------|-----|---|
| PS | PCL | |
| 654 | 655 | When the value increases, the smudged text is improved. When the value decreases, the faint text is improved. Acceptable values: 0 to 9 (Default: 5) |

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (4) Press the [ENTER] or [INTERRUPT] button to store the value. The equipment goes back to the ready state.
- (5) Turn the power OFF and then back ON to perform printing job.
- (6) If the desired text density has not been attained, repeat step (2) to (5).

3.4.2 Adjustment of image density

The image density level is adjustable both at standard and toner saving modes.

< Adjustment Mode (05) >

| Toner mode | | Item to be adjusted | Remarks |
|------------|--------------|-----------------------------|---|
| Standard | Toner saving | | |
| 672-0 to 4 | 676-0 to 4 | Adjustment of image density | When the value is decreased, text becomes lighter. Acceptable values: 0 to 10 Notes: <ol style="list-style-type: none"> 1. Set not to reverse the large and small number of the setting value corresponding to the sub code. Ex.) When substituting the setting value for 672-0 with A0, . . . , 672-4 with A4: A0 A1 A2 A3 A4 2. Remember that the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value. |

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in the sub code (0, 1, 2, 3 or 4), and press the [START] button.
- (4) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (5) Press the [ENTER] or [INTERRUPT] button to store the value in memory. The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Turn the power OFF and then back ON to perform printing job.
- (8) If the desired image density has not been attained, repeat step (2) to (7).

3.5 Image Quality Adjustment (Scanning Function)

3.5.1 Density adjustment

Adjusts the center density and the variation of density adjustment button.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|-------|------|--------------------------------------|---|
| Text/Photo | Photo | Text | | |
| 845 | 847 | 846 | Manual density mode center value | The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 |
| 850 | 852 | 851 | Manual density mode light step value | The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255 |
| 855 | 857 | 856 | Manual density mode dark step value | The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255 |
| 860 | 862 | 861 | Automatic density mode | The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 |

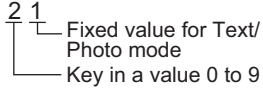
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (4) Press the [ENTER] or [INTERRUPT] button to store the value. The equipment goes back to the ready state.
- (5) Turn the power OFF and then back ON to perform scanning job.
- (6) If the desired image density has not been attained, repeat step (2) to (5).

3.5.2 Sharpness adjustment

If you want to make scan images look softer or sharper, perform the following adjustment.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|-------|-------|------------------------------------|--|
| Text/Photo | Photo | Text | | |
| 865-0 | 867-0 | 866-0 | Reproduction ratio: 25% to 40% | Key in the following values depending on the original mode. One's place 1: Text/Photo 5: Photo 2: Text Ten's place 0: Use Default value 1 to 9: Change intensity • The larger the value is, the sharper the image becomes.) • Example of value entry in case the mode is "Text/Photo".  |
| 865-1 | 867-1 | 866-1 | Reproduction ratio: 41% to 80% | |
| 865-2 | 867-2 | 866-2 | Reproduction ratio: 81% to 400% | |

Note:
When the value "0" is keyed in at the ten's digit, the value is not displayed on LCD screen.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in the sub code (0,1 or 2), and press the [START] button.
- (4) Key in an adjustment value.
(To correct the keyed-in value, press the [CLEAR] button.)
- (5) Press the [ENTER] or [INTERRUPT] button to store the value in memory. The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Turn the power OFF and then back ON to perform scanning job.
- (8) If the desired image density has not been attained, repeat step (2) to (7).

3.5.3 Setting range correction

The values of the background peak / text peak in the range correction can be switched to “varied” or “fixed” in the following codes.

If they are fixed, the range correction is performed with standard values.

The values of the background peak affect the reproduction of the background density and the values of the text peak affect that of the text density.

< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks | | | | | | | | | | |
|-----------------|-----------|------|--|---|-----------------|-----------|----------|-------|-----------|-------|----------|--------|-----------|--------|
| Text/Photo | Photo | Text | | | | | | | | | | | | |
| 825 | 827 | 826 | Range correction for original manually set on the original glass | The following are the default values set for each original mode. Text/Photo: 12, Photo: 12, Text: 12 Each digit stands for: | | | | | | | | | | |
| 830 | 832 | 831 | Range correction for original set on the RADF | One's place: Automatic density mode Ten's place: Manual density mode The setting conditions possible are as follows: <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 20px;">Background peak</td> <td>Text peak</td> </tr> <tr> <td>1: fixed</td> <td>fixed</td> </tr> <tr> <td>2: varied</td> <td>fixed</td> </tr> <tr> <td>3: fixed</td> <td>varied</td> </tr> <tr> <td>4: varied</td> <td>varied</td> </tr> </table> | Background peak | Text peak | 1: fixed | fixed | 2: varied | fixed | 3: fixed | varied | 4: varied | varied |
| Background peak | Text peak | | | | | | | | | | | | | |
| 1: fixed | fixed | | | | | | | | | | | | | |
| 2: varied | fixed | | | | | | | | | | | | | |
| 3: fixed | varied | | | | | | | | | | | | | |
| 4: varied | varied | | | | | | | | | | | | | |

<Procedure>

Procedure is same as that of  P.3-29 "3.5.1 Density adjustment".

3.5.4 Setting range correction (Adjustment of background peak)

The levels of the background peak for the range correction can be set at the following codes.
< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|-------|------|--------------------------------------|--|
| Text/Photo | Photo | Text | | |
| 835 | 837 | 836 | Background peak for range correction | When the value increases, the background (low density area) of the image is not output. Acceptable values: 0 to 255 (Default: text/photo: 48, photo: 40, text: 48) |

<Procedure>

Procedure is same as that of  P.3-29 "3.5.1 Density adjustment".

3.5.5 Setting range correction (Adjustment of text peak)

The levels of the text peak for the range correction can be set at the following codes.
< Adjustment Mode (05) >

| Original mode | | | Item to be adjusted | Remarks |
|---------------|-------|------|--------------------------------|--|
| Text/Photo | Photo | Text | | |
| 820 | 822 | 821 | Text peak for range correction | When the value is increased, text (high image density part) becomes lighter. Acceptable values: 0 to 255 (Default: text/photo: 224, photo: 239, text: 224) |

* The image changes slightly in text mode because it is treated as a simple binary format image.

<Procedure>

Procedure is same as that of  P.3-29 "3.5.1 Density adjustment".

3.6 Adjustment of High-Voltage Transformer

When replacing the high-voltage transformer, checking each output adjustment of main charger, developer bias, transfer charger and separation charger is needed.

3.6.1 Adjustment

[1] Preparation

| Items to check | | Developer Bias | Main Charger | Transfer Charger | Separation Charger |
|------------------------------|--------------------|--|--|---|--------------------|
| Process Unit | | Take off from the equipment. (Not used) | | | |
| High-Voltage Transformer Jig | | Install the high-voltage transformer jig in the equipment. Note: Connect the green cable of the high-voltage transformer jig to ground on the equipment frame. Refer to P.3-34 "[A] Installation of the high-voltage transformer jig". | | | |
| Digital Tester | (+) terminal | Connect with the black cable of the high-voltage transformer jig. | Connect with the red cable (thick line) of the high-voltage transformer jig. | Connect with the red cable (thin line) of the high-voltage transformer jig. | |
| | (-) terminal | Connect with the white cable of the high-voltage transformer jig. | | | |
| | Function switch | DC | | | |
| | Full-scale (range) | 1000 V | | 2 V | |
| | Remarks | Use a digital tester with an input resistance of 10 MΩ (RMS value) or higher. | | | |
| How to turn ON the power | | Attach the door switch jig and start with the adjustment mode [05] while the front cover opened. Then press the front cover opening/closing switch. | | | |
| Note | | Refer to P.3-36 "[B] Connection for developer bias adjustment". | Refer to P.3-36 "[C] Connection for main charger adjustment". | Refer to P.3-37 "[D] Connection for transfer/separation charger adjustment". | |

[A] Installation of the high-voltage transformer jig

- (1) Open the bypass tray, ADU and transfer cover.
- (2) Open the front cover and take off the toner cartridge.
- (3) Disconnect 1 connector. Loosen 2 screws and pull out the process unit.

Note:

Be careful not to let the connector and the harness be caught when installing the process unit after adjustment.

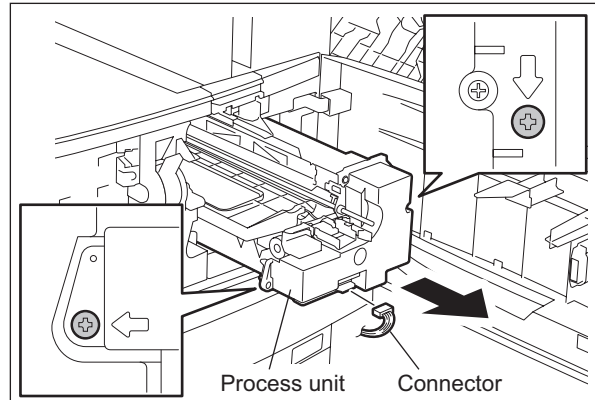


Fig.3-19

- (4) Install the high-voltage transformer jig and fix it with 2 screws.

Note:

Be careful not to let the connector and the harness be caught.

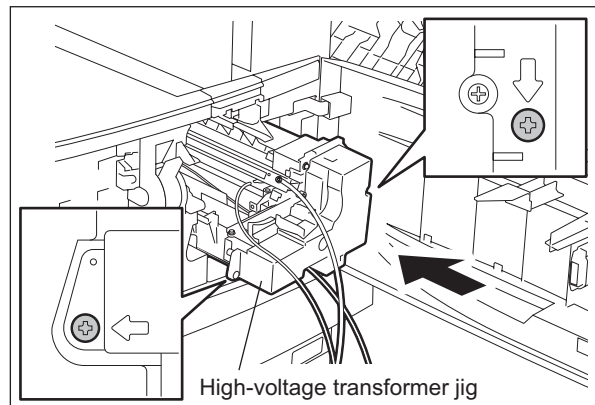


Fig.3-20

- (5) Fix the green cable of the high-voltage transformer jig to the frame of the equipment.

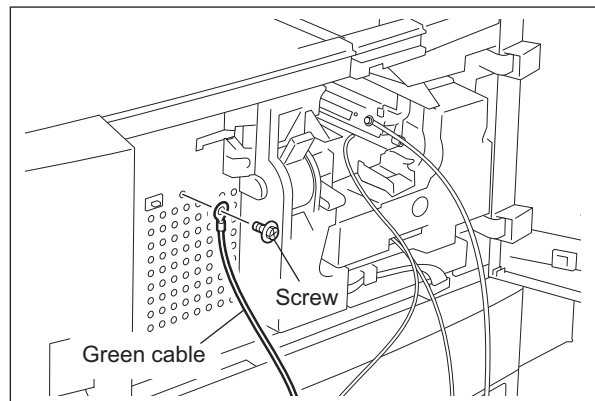


Fig.3-21

- (6) Install the door switch jig.
- (7) Close the transfer cover.

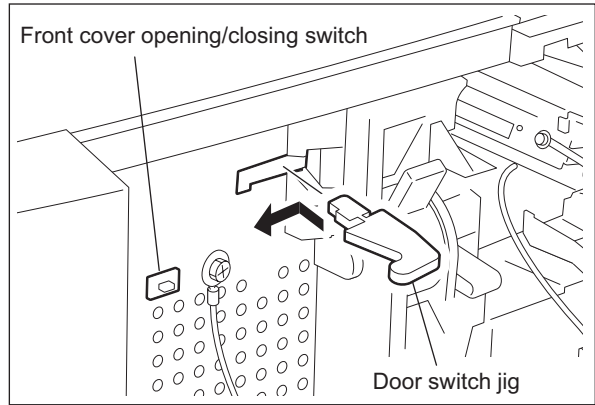


Fig.3-22

[B] Connection for developer bias adjustment

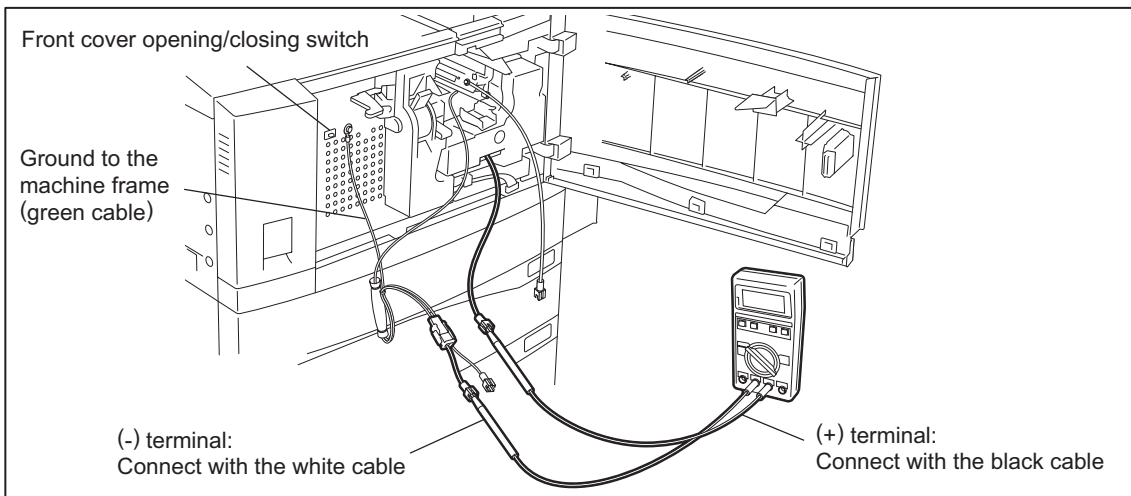


Fig.3-23

[C] Connection for main charger adjustment

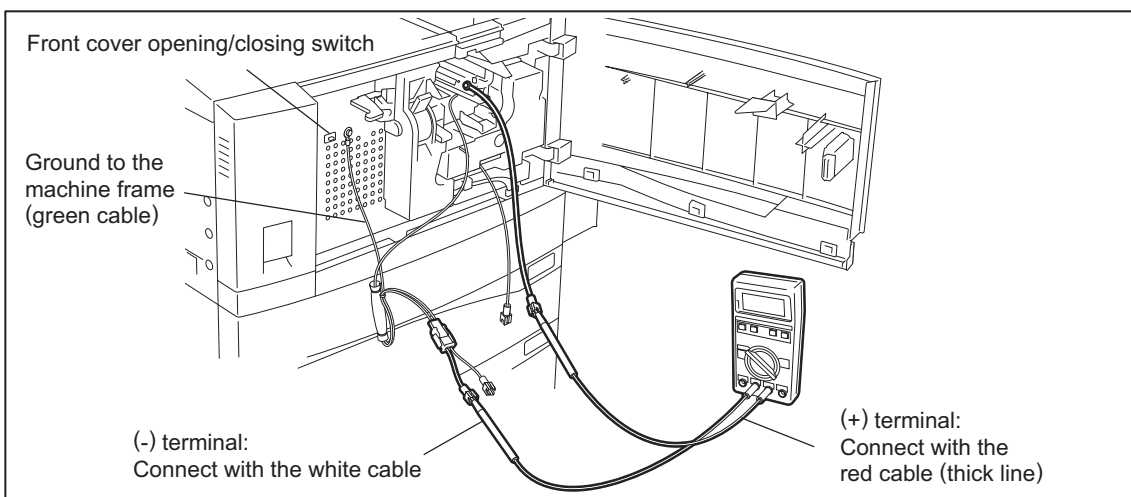


Fig.3-24

[D] Connection for transfer/separation charger adjustment

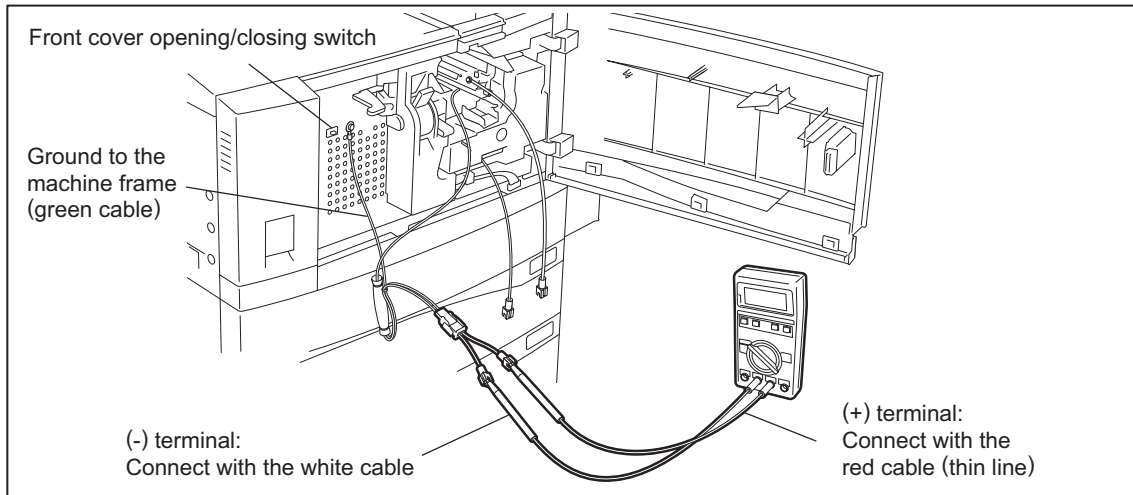


Fig.3-25

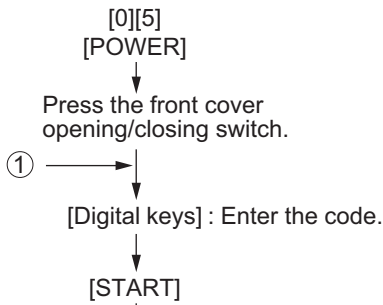
[2] Operation

Note:

When adjusting output of high-voltage transformer, make sure to use the high-voltage transformer jig.

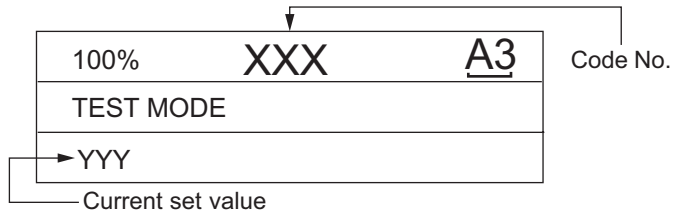
Connect the digital testers as described in "[1] Preparation", and follow the procedure on the next page to adjust the output from the main charger, developer bias charger, transfer charger and separation charger.

<Keys to press>



<Display>

| | | |
|-----------|---|-----------|
| 100% | A | <u>A3</u> |
| TEST MODE | | |
| | | |



[UP] or [DOWN]: Adjust the value "YYY" to satisfy the following table.

| | Developer bias | Main charger |
|------------------|----------------|--------------|
| Code | 205 | 210 |
| Adjustment value | -357±5V | -495±5V |

| | Transfer charger | | |
|------------------|----------------------------|----------------------|-----------------------------|
| | Leading edge area of paper | Center area of paper | Trailing edge area of paper |
| Code | 220 | 221 | 222 |
| Adjustment value | 1326±141mV | 1407±141mV | 1005±106mV |

| | Separation charger | | |
|------------------|----------------------------|----------------------|-----------------------------|
| | Leading edge area of paper | Center area of paper | Trailing edge area of paper |
| Code | 233 | 234 | 235 |
| Adjustment value | -566±72mV | -566±72mV | -391±36mV |

[SET]: Adjusted value "YYY" is stored in memory.

or
[INTERRUPT]

Return to ① to enter the other adjustment code.

[POWER] : OFF/ON

| | | |
|-----------|---|-----------|
| 100% | A | <u>A3</u> |
| TEST MODE | | |
| | | |

Fig.3-26

3.6.2 Precautions

[1] Developer bias

Note for adjustment

Adjust the developer bias if fogging occurs over the entire image even though the main charger grid voltage and toner density are appropriate. However, the following may occur if the developer bias is lowered too much:

- Image contrast becomes low.
- Image is patchy or blurred.
- The carrier in the developer material adheres to the photoconductive drum, causing scratches around the cleaner.

[2] Transfer

Items to check before adjustment

Blotched image or poor transfer can be also caused by matters other than defective adjustment of transfer output. Check the following items before adjusting the transfer charger. If there is no problem, adjust the output of the transfer charger.

- Is the charger wire incorrectly installed or dirty? Is the transfer guide deformed?
- Is the process unit properly installed? Is the developer magnetic brush in contact with the drum? Is the process unit worked correctly? Is the toner density low?
- Is the copy paper fed straight? Is the copy paper abnormally moist?
- Is the rotation of the registration roller normal?
- Is the separation output different from the set value?
- Is the developer bias value an appropriate one?
- Are the transfer/separation charger case grounded? Is the high-voltage transformer grounded?

Note for adjustment

When blotched image appear:

- If blotched image appear in halftone areas, lower the transfer output value. Remember that transfer performance becomes low if the transfer output value is lowered too much.

When poor transfer occurs:

Increase the transfer output value under the following conditions. Remember that blotched image appear if the transfer output value is increased too much.

- Transfer is poor even though the charger wire is not dirty.
- Thick paper has been frequently used.

The adjustment code varies according to where blotched image and poor transfer occur. Select the required adjustment code while referring to the following diagram.

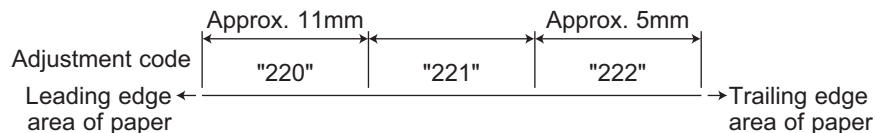


Fig.3-27

[3] Separation

Items to check before adjustment

Poor paper separation from the drum can be also caused by matters other than defective adjustment of the separation output. Check the following items before making an adjustment. If there is no problem, adjust the output of the separation charger.

- Is the charger wire incorrectly installed or dirty?
- Is the process unit installed properly? Is the developer magnetic brush in contact with the drum?
Is the process unit worked correctly? Is the toner density low?
- Is the copy paper fed straight? Is the copy paper abnormally moist?
- Is the rotation of the registration roller normal?
- Is the output of the main charger normal?
- Is the developer bias an appropriate value?
- Is the transfer output different from the set value?
- Is the transfer/separation charger case grounded? Is the high-voltage transformer grounded?
- Is the separation finger in contact with the drum surface?

Note for adjustment

When poor paper separation occurs:

Increase the separation output value under the following conditions. Remember that if the separation output value is increased too much, blotched image occurs and separation performance becomes low.

- Poor separation occurs even though the charger wire is not dirty.
- Thin paper has been frequently used.

When poor transfer occurs:

- Decrease the separation output value when poor transfer occurs. Remember that the separation performance becomes low if the separation output value is decreased too much.

The adjustment code varies according to where poor paper separation and poor transfer occur. Select the required adjustment code while referring to the following diagram.

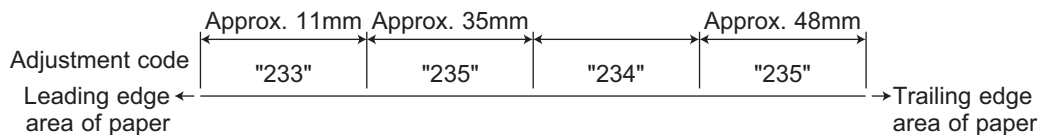


Fig.3-28

- * Adjustment code 235 performs the adjustment for 2 areas.

3.7 Adjustment of the Scanner Section

3.7.1 Carriages

[A] Installing carriage wires

When replacing the carriage wires, refer illustrations below:

[Front side]

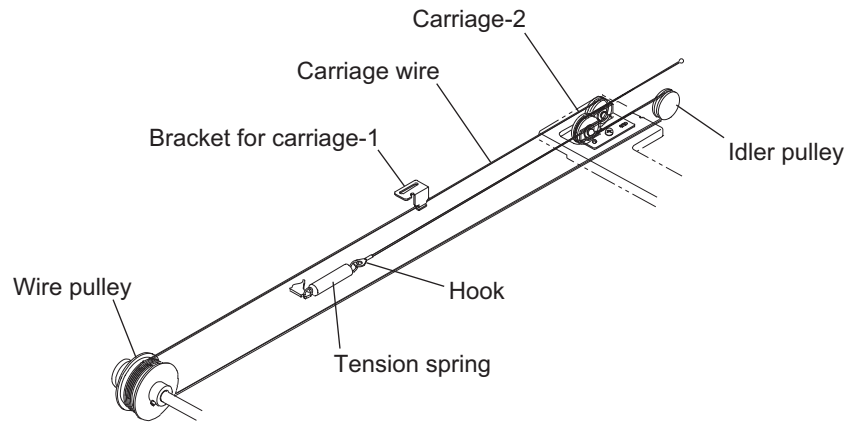


Fig.3-29

[Rear side]

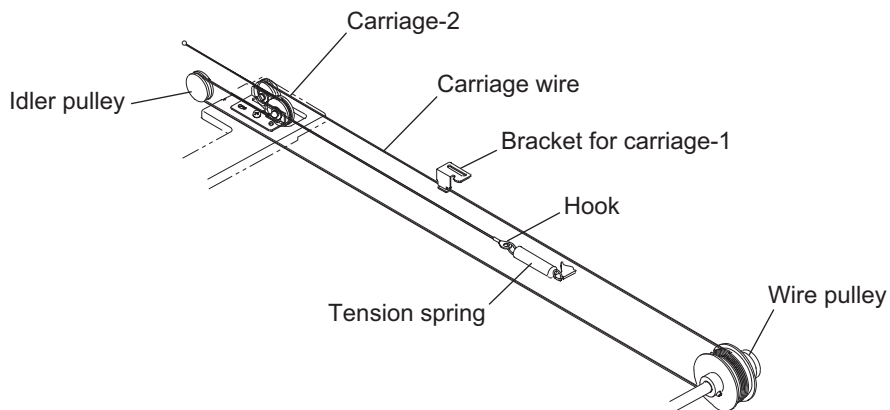


Fig.3-30

Adjustment of the carriage wire tension is not necessary since a certain tension is applied to the carriage wires by the tension springs.

Note:

Make sure the tension applied to the wire is normal.

[B] Adjusting carriages-1 and -2 positions
<Procedure>

- (1) Move the carriage-2 toward the exit side.
- (2) Loosen the screws fixing the front side pulley bracket, make the sections A and B of the carriage-2 touch with the inside of the exit side frame and screw them up.

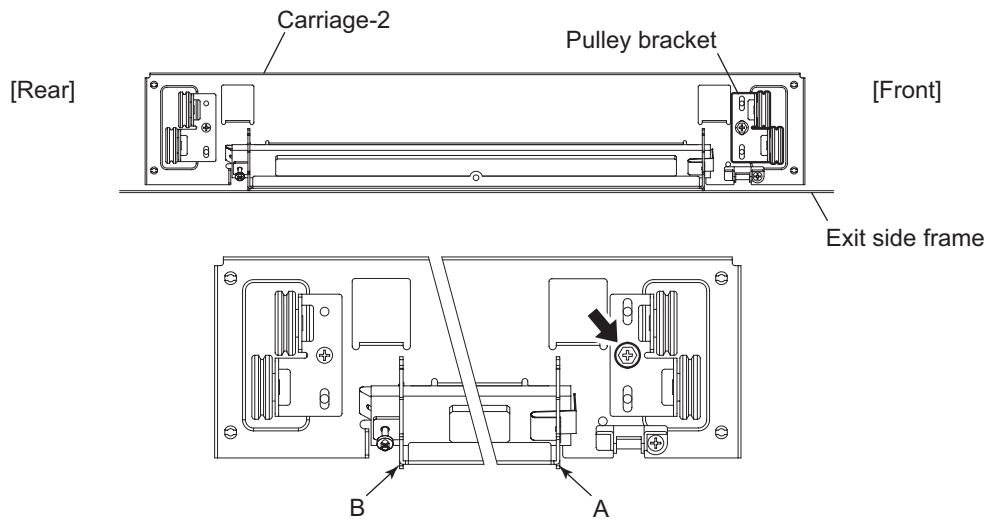


Fig.3-31

- (3) Put the carriage-1 on the rail, make the sections C and D of it touch with the inside of the exit side frame and screw up the front/rear sides of the bracket to fix it.

Note:

Make sure that the sections A and B of the carriage-2 touch with the exit side frame.

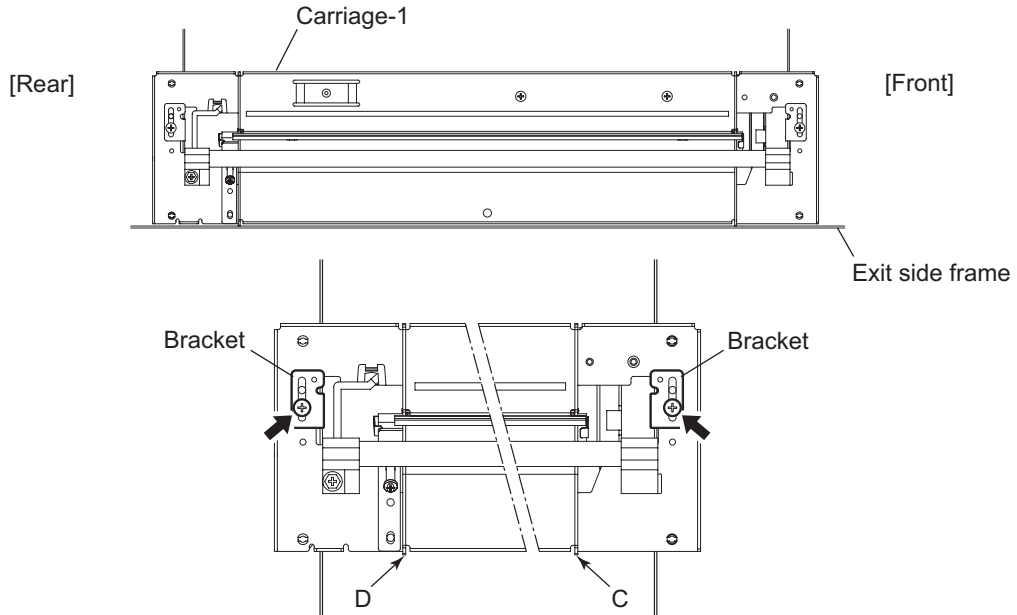


Fig.3-32

[C] Assembling carriage wires (Winding the wire around the wire pulley)

<Procedure>

- (1) Pull the $\varnothing 3$ ball terminal located at the center of the wire into a hole on the wire pulley. One end of the wire with a hook attached comes to the outside.
- (2) Wind the wires around the wire pulleys of the front and rear sides. The number of turns to be wound are as follows:
 - 2 turns toward the opposite side of the boss
 - 4 turns toward the boss side

Note:

Pay attention to the following when the wires are wound around the pulleys:

- Do not twist the wire.
- Wind the wires tightly so that they are in complete contact with the surface of the pulleys.
- Each turn should be pushed against the previously wound turn so that there is no space between them.

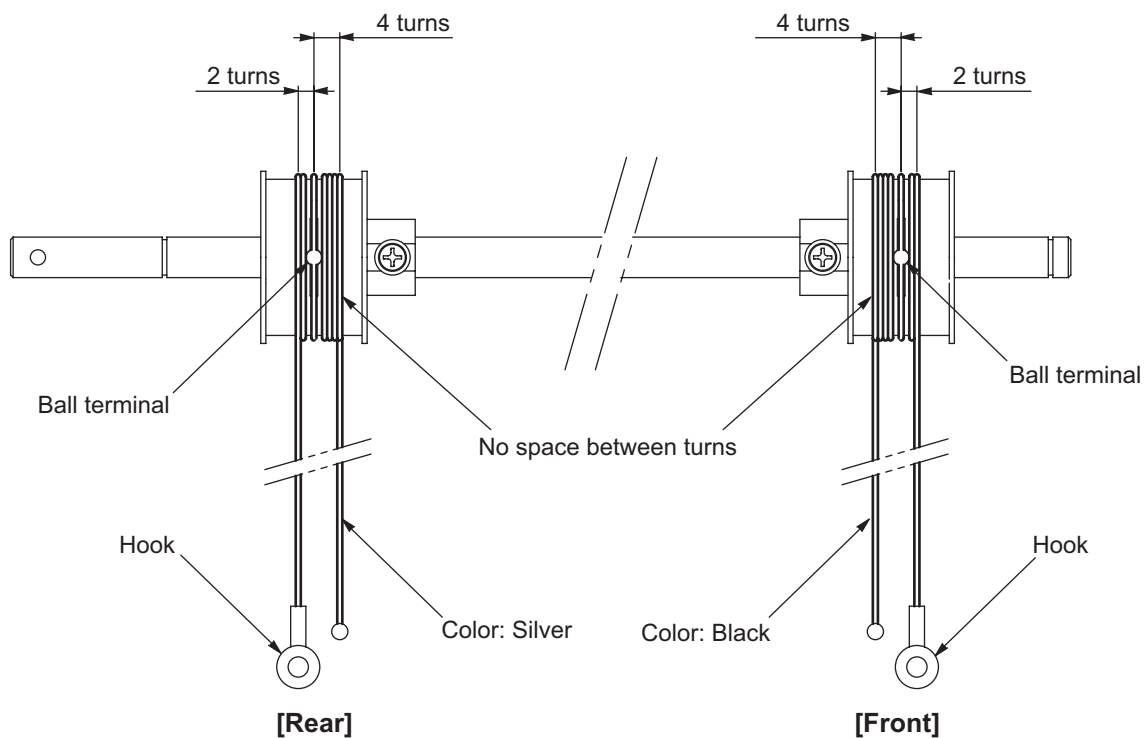


Fig.3-33

(3) After winding the wires around the pulleys, attach the wire holder jigs not to loosen the wires.

Notes:

- When the wire holder jig is attached, make sure that the wire is not shifted or loosened.
- The wire should come out of the slot of the wire holder jig and be passed through between the arm and the jig.

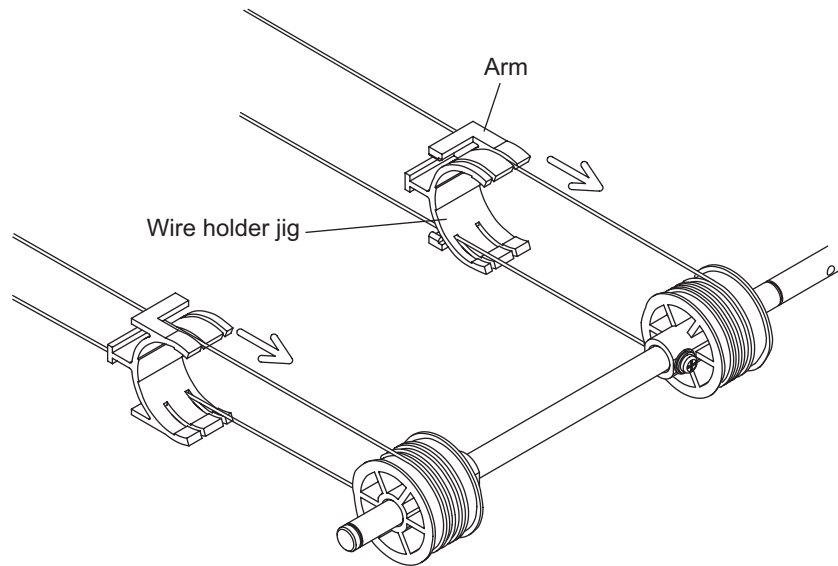


Fig.3-34

3.7.2 Lens unit

[A] Replacing the lens unit

- The lens unit must not be readjusted and some part of its components must not be replaced in the field since the unit is precisely adjusted. If any of the components is defective, replace the whole unit.
- When replacing the unit, do not loosen or remove the 4 screws indicated with the arrows.

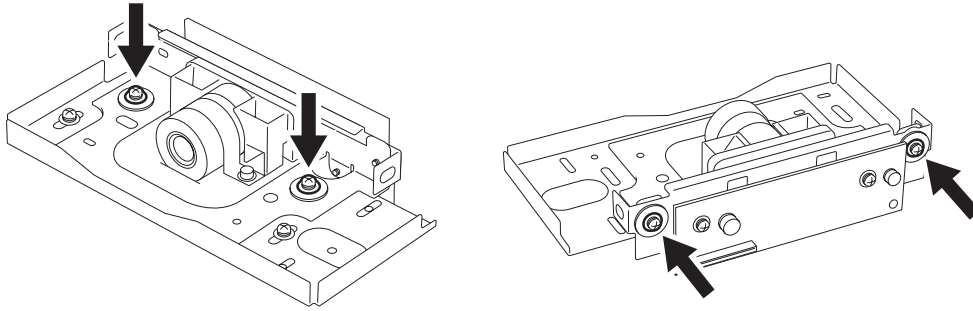


Fig.3-35

- Handle the unit with care. Do not hold the lens and adjusted part (hold the unit as shown below).

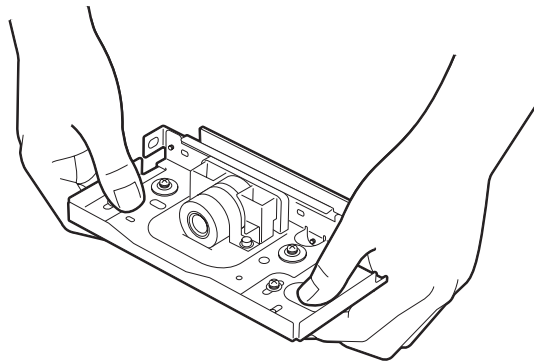


Fig.3-36

[B] Adjustment of the magnification ratio of the lens

Notes:

- Perform this adjustment only when the lens unit is taken off or replaced.
- Make sure that the primary scanning reproduction ratio (printer section) is correct before this adjustment.

- (1) Place a ruler on the original glass (in the primary scanning direction) and make a copy on A4/LT-sized paper at 100% reproduction ratio.
- (2) Compare the copied ruler with the actual ruler.

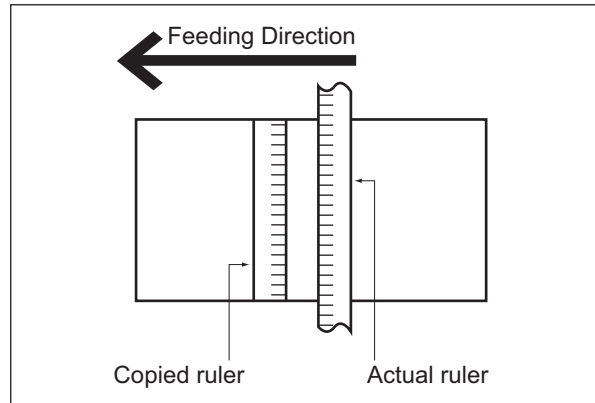


Fig.3-37

- (3) If each mark on the rulers differs, perform the adjustment with the following procedures.

<Procedure>

- (1) Take off the original glass and lens cover.
- (2) Loosen 2 screws fixing the lens unit.

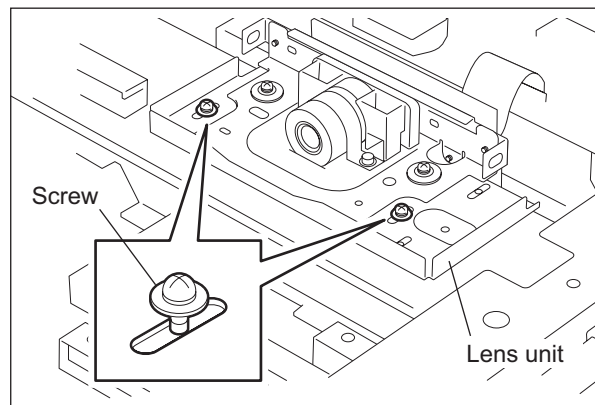


Fig.3-38

- (3) Slide the lens unit to the right or left direction using the marks on the lens base as a guide. (Slide right when the copied ruler is magnified and slide left when the copied ruler is demagnified.) The following table shows how the reproduction ratio difference between the copied ruler and actual ruler corresponds to the movement amount of the lens unit.

| Reproduction-ratio error | Movement amount of unit |
|--------------------------|-------------------------|
| 0.1% | 0.5 mm |
| 0.2% | 0.9 mm |
| 0.3% | 1.4 mm |
| 0.4% | 1.8 mm |
| 0.5% | 2.3 mm |
| 0.6% | 2.7 mm |
| 0.7% | 3.2 mm |
| 0.8% | 3.6 mm |
| 0.9% | 4.1 mm |
| 1.0% | 4.5 mm |

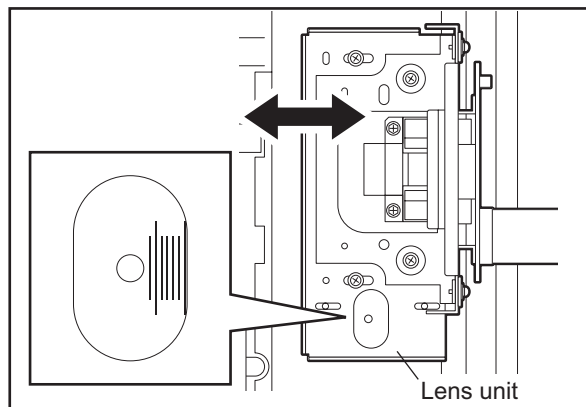


Fig.3-39

Note:

Fine adjustment can be made in the “Reproduction ratio of primary scanning direction (printer)”. on the copied ruler and actual ruler match.

- (4) Tighten 2 screws fixing the lens unit.
- (5) Attach the lens cover and original glass. Make a copy to confirm the reproduction ratio.
- (6) Repeat the procedure 1 to 5 until the marks on the copied ruler and actual ruler match.

3.8 Adjustment of the Paper Feeding System

3.8.1 Sheet sideways deviation caused by paper feeding

<Procedure>

The center of the printed image shifts to the front side. → Move the guide to the front side (Arrow (A) direction in the lower figure).

The center of the printed image shifts to the rear side. → Move the guide to the rear side (Arrow (B) direction in the lower figure).

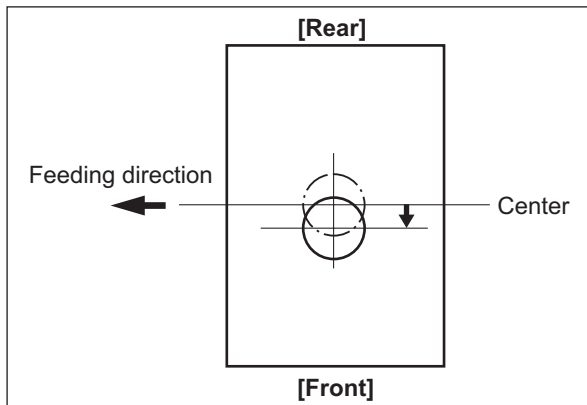


Fig.3-40

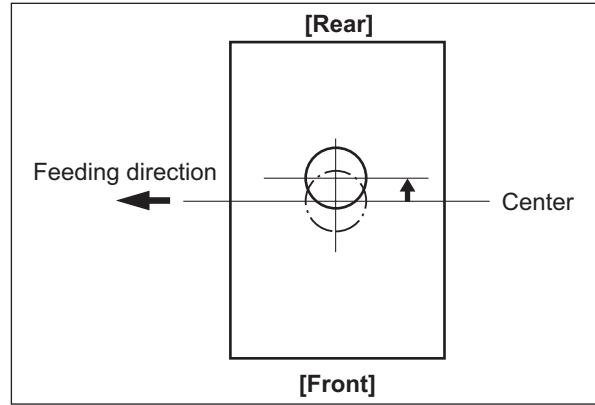


Fig.3-41

Bypass feeding

- 1) Loosen the screen.
- 2) Move the entire guide to the front or rear side.
- 3) Tighten the screw.

Drawer feeding

- 1) Loosen 2 screws.
- 2) Move the entire guide to the front or rear side.
- 3) Tighten the screws.

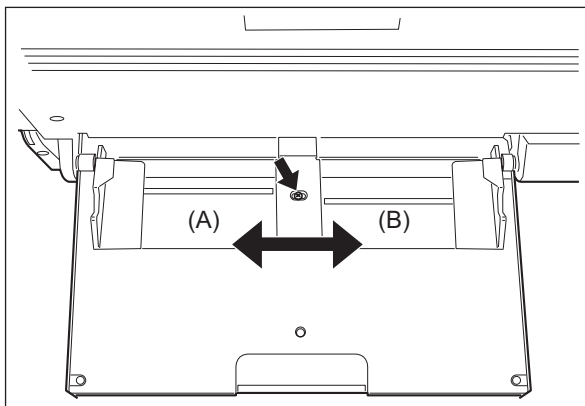


Fig.3-42

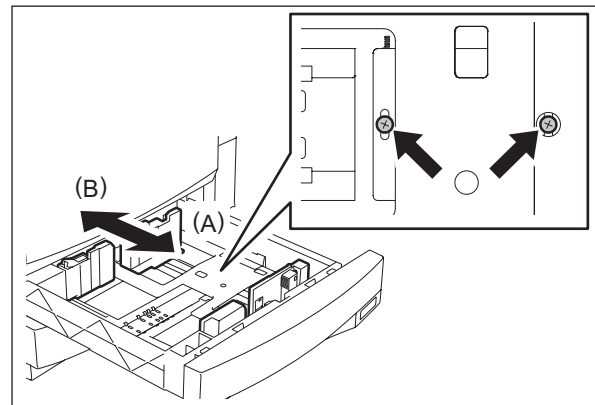


Fig.3-43

3.9 Adjustment of Developer Unit

3.9.1 Doctor-to-sleeve gap

Adjustment tool to use: Doctor-sleeve jig
<Procedure>

- (1) Perform the adjustment code "05-280".
- (2) Take out the process unit from the equipment.
- (3) Take out the developer unit from the process unit.
- (4) Remove 2 screws and take off the developer material cover and discharge the developer material.

Note:

Discharge the developer material from the rear side, being careful not to let it be scattered on the gear.

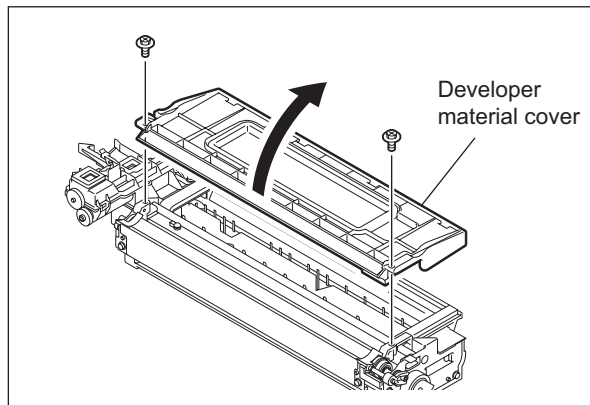


Fig.3-44

- (5) Turn the adjustment screw to widen the gap so that the jig can be inserted in it.
(Turning the screw clockwise widens the gap)

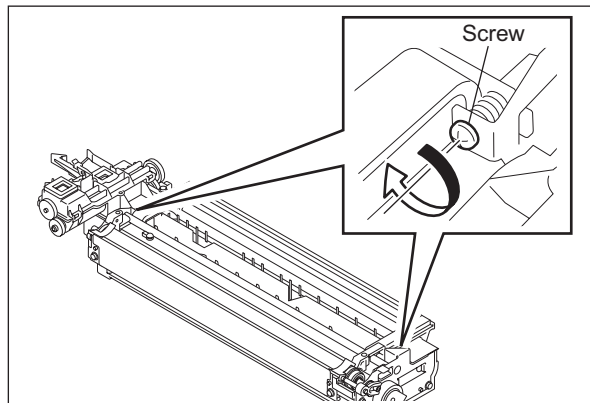


Fig.3-45

- (6) Insert the gauge with the thickness "0.45" of the doctor sleeve jig into the gap between the developer sleeve and doctor blade after lifting up the toner scattering prevention sheet.
Adjust the screws with the doctor blade to push the doctor sleeve jig lightly.

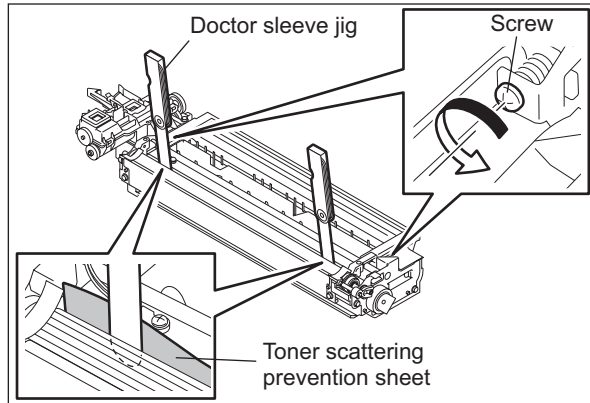


Fig.3-46

- (7) Insert the gauge "0.40" of the doctor sleeve jig into the gap between the developer sleeve and doctor blade. Confirm that the jig moves smoothly to the front and rear side, and the gauge "0.50" cannot be inserted into the gap.

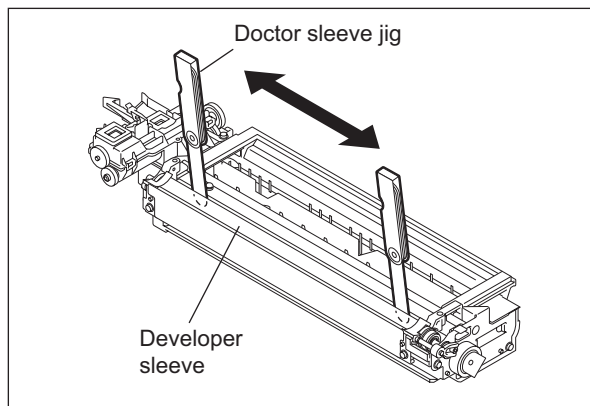


Fig.3-47

- (8) Confirm that the side seals are attached on the toner scattering prevention sheet.

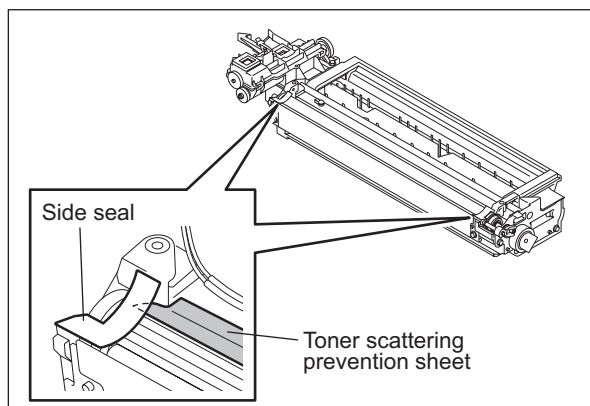



Fig.3-48

- (9) Attach the developer material cover and tighten 2 screws.

Note:

After the developer material has been replaced, adjust the auto-toner sensor.
(See  P.3-1 "3.1 Adjustment of Auto-Toner Sensor".)

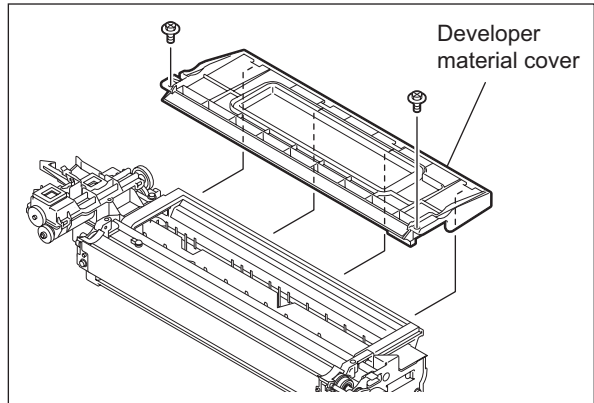


Fig.3-49

3.10 Adjustment of the RADF (MR-3016)

3.10.1 Adjustment of RADF position

It is mainly performed at the installation. It is also required when the RADF is dislocated for some reason such as moving the equipment.

Remove the platen sheet during adjustment.

<Procedure>

- (1) Open the RADF and then attach 2 positioning pins to the equipment.
(The positioning pins have been attached at the rear of the right-hand hinge of the RADF.)

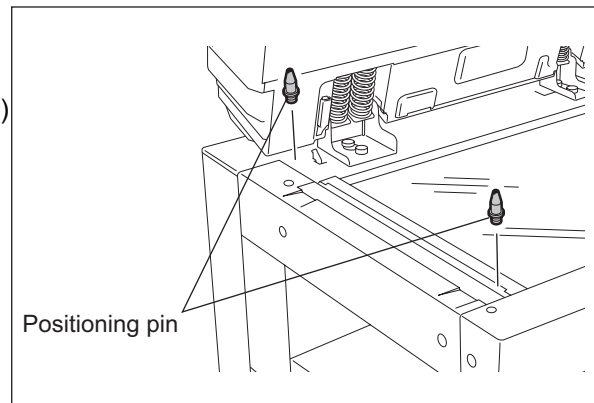


Fig.3-50

- (2) Close the RADF to check that the positioning pins fit smoothly into the holes on the RADF. If they do not, adjust them according to the following procedure.

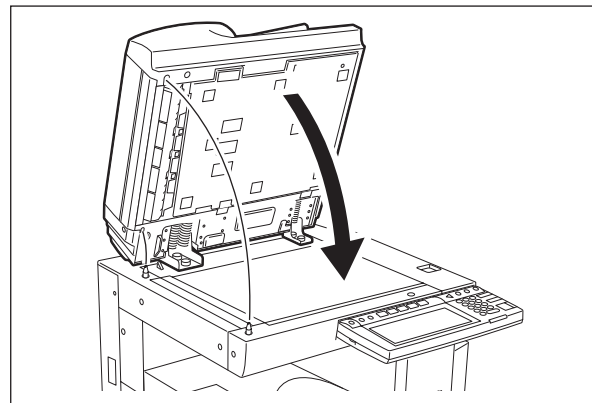


Fig.3-51

- (3) Loosen the stepped screw 1 turn and 2 screws on the adjustment plate a half turn (status of temporary fixing).

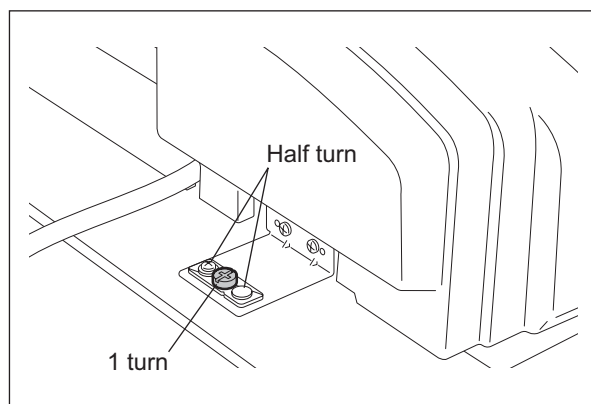


Fig.3-52

- (4) Remove the stepped screw at the rear of right-hand hinge.

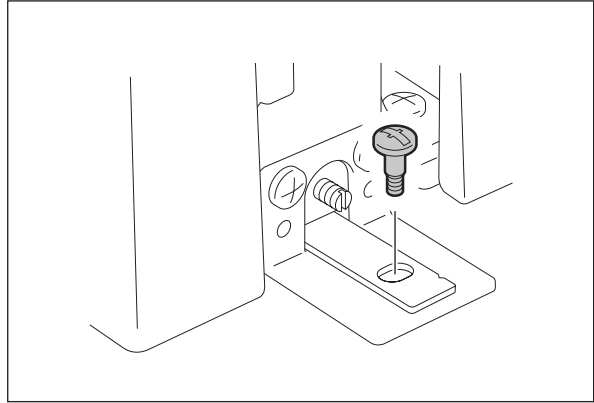


Fig.3-53

- (5) Open the RADF, and then loosen 2 hand screws 1 turn (status of tentative fixing).

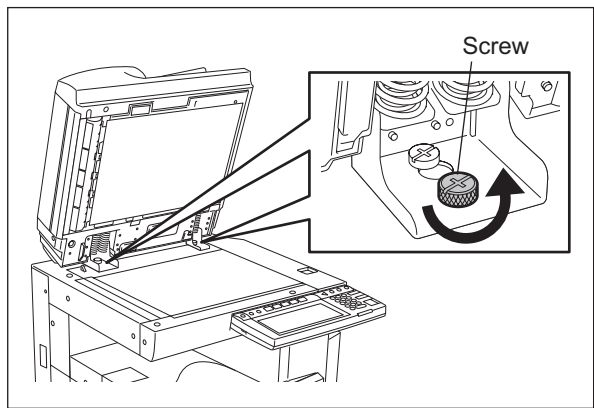


Fig.3-54

- (6) Remove the positioning pin at the front side. Close the RADF to fit the positioning pin into the hole at the rear side of the RADF. While peering inside from the front side, fit the positions of the pin and hole by moving the RADF right and left.

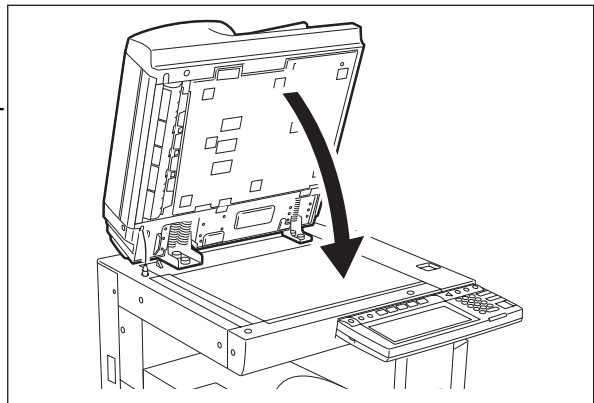


Fig.3-55

- (7) Tighten the positioning pin at the front side. Close the RADF to fit the positioning pin into the hole at the front side of the RADF. (For the front side, adjust the RADF position all around.)

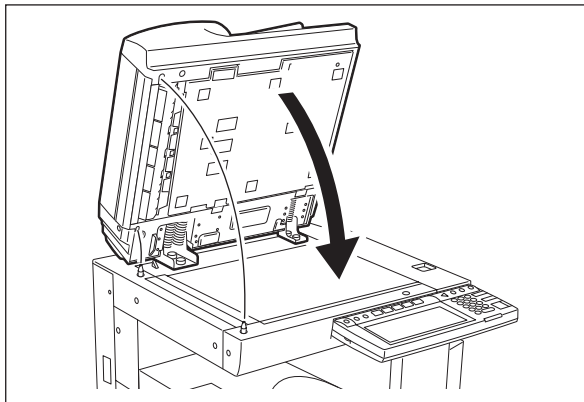


Fig.3-56

- (8) While peering inside from the left side, close the RADF. Check the positions of the holes of the RADF and pins and then fit their positions by moving the RADF back and forth. (For the front side, also adjust the RADF position right and left.) Make sure not to dislocate the positions of the pin and hole at the rear side.

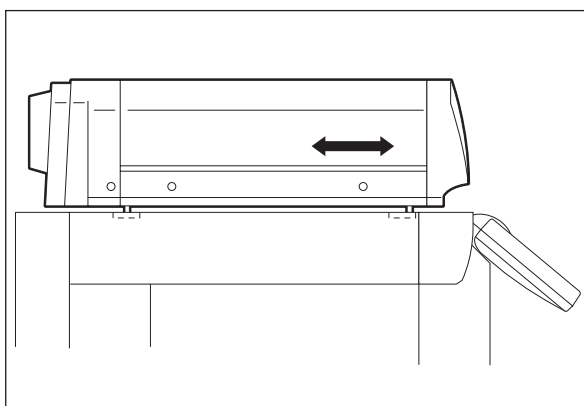


Fig.3-57

- (9) Open the RADF to tighten 2 hand screws. Close the RADF and then check again that the positioning pins fit smoothly into the holes on the RADF.

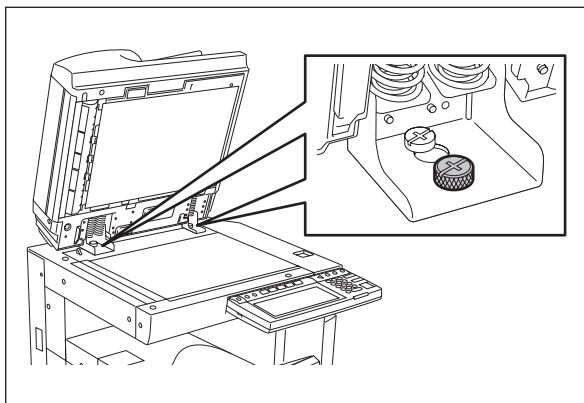


Fig.3-58

- (10) Match the rear hole of the right-hand hinge and the hole of the equipment side to tighten the stepped screw. If they do not fit, adjust the position of the hole by turning the screw of the adjustment plate.

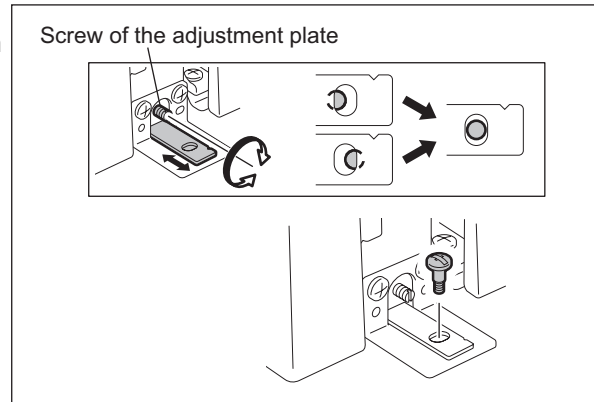


Fig.3-59

- (11) Tighten the stepped screw and 2 screws on the adjustment plate. Open and close the RADF to check again that the positioning pins fit smoothly into the holes on the RADF. Remove the positioning pins after checking it. (Replace the positioning pins at the rear of the right-hand hinge of the RADF.)

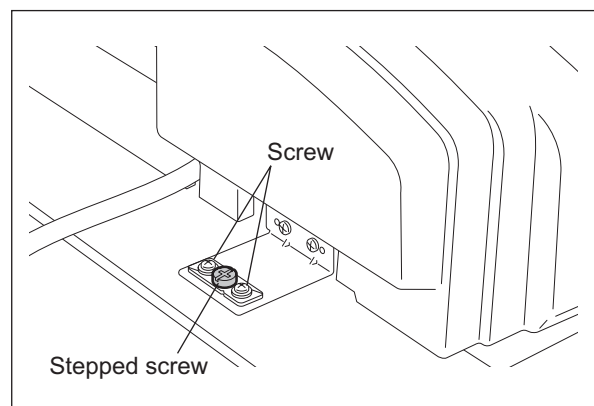


Fig.3-60

- (12) Place the platen sheet on the original glass with the semi round cutout toward you. Align the platen sheet against the left and rear side of the original glass. Close the RADF slowly. Open the RADF to check that the platen sheet is correctly attached.

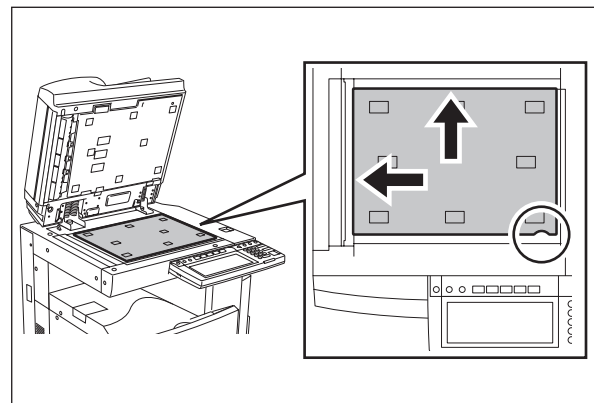


Fig.3-61

3.10.2 Adjustment of RADF height

It is mainly performed at the installation. It is also required when the RADF is dislocated for some reason such as moving the equipment.

Perform the following adjustment by using the screw of the left and right hinge.

Note:

Perform this adjustment after "3.10.1 Adjustment of RADF position".

Turn the exposure lamp ON during the gap check. (Test Mode: 03-267)

<Procedure>

(1) Adjustment standard:

Adjust the height so that the platen guide front holder touches the ADF original glass.

Adjust the height so that the gap between the platen guide rear holder and the ADF original glass becomes $0.5 \text{ mm} \pm 0.3$.

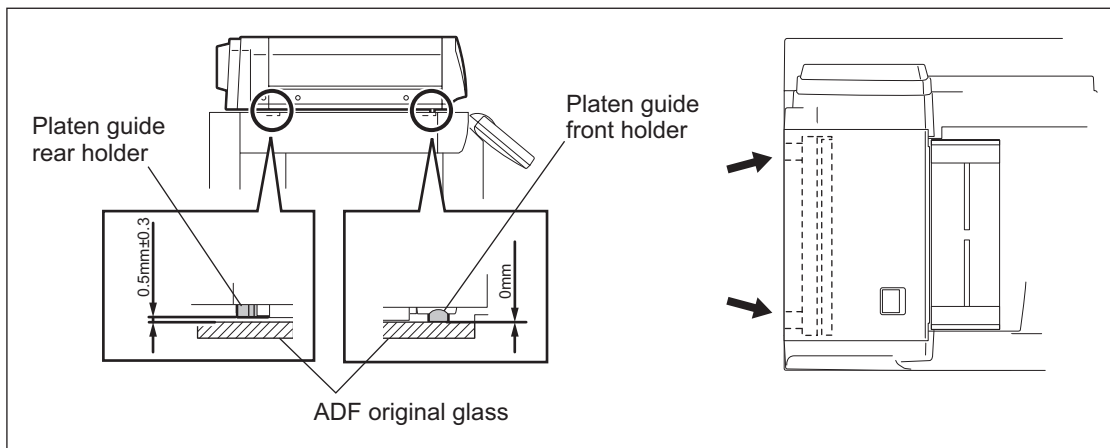


Fig.3-62

(2) Adjust the height by turning the height adjusting screw on the right hinge.

CW: The height of the hinge becomes high.

CCW: The height of the hinge becomes low.

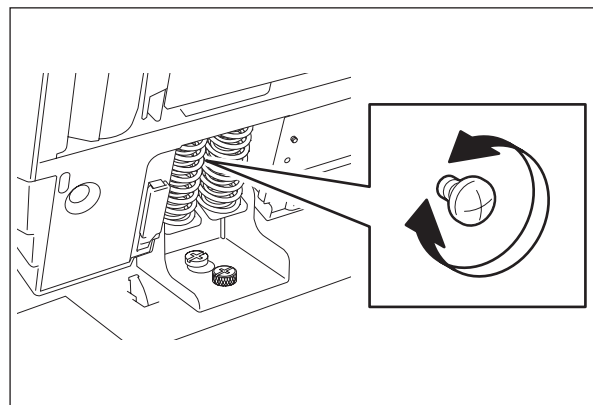


Fig.3-63

- (3) Adjust the height by turning the height adjusting screw on the left hinge.
CW: The height of the hinge becomes high.
CCW: The height of the hinge becomes low.

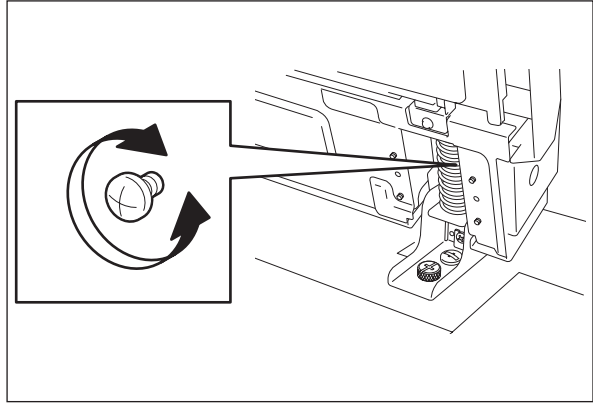


Fig.3-64

3.10.3 Adjustment of skew

When an image skew occurs, adjust it according to the following steps, Step 1 → Step 2 → Step 3.

Note:

Perform this adjustment after confirming that the equipment has been adjusted properly. Prior to this adjustment, of RADF position and height are needed to be adjusted.

(1) **Step 1**

Case A:

Adjust the aligning adjustment position to the rear side “-” of the original (📖 P.3-62 "3.10.5 Adjustment of aligning").

Case B:

Adjust the aligning adjustment position to the rear side “+” of the original (📖 P.3-62 "3.10.5 Adjustment of aligning").

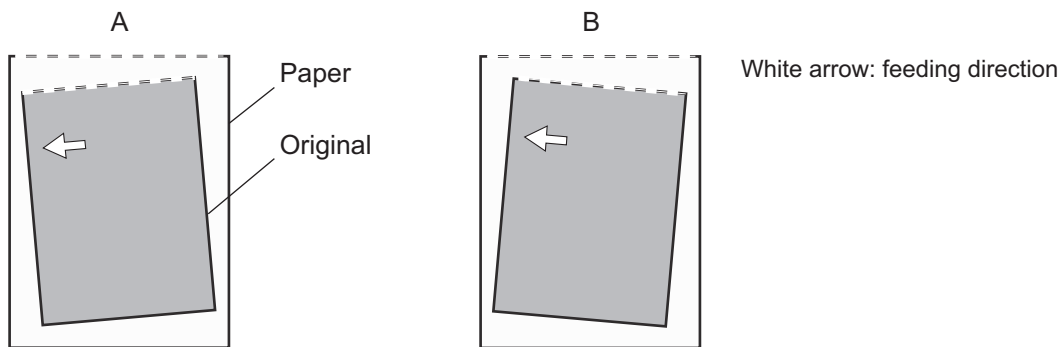


Fig.3-65

(2) **Step 2**

Case C:

Loosen the fixing screw and hand screw of the right side hinge and then turn the adjustment screw counterclockwise.

Case D:

Loosen the fixing screw and hand screw of the right side hinge and then turn the adjustment screw clockwise.

Note:

When adjusting, refer to the hinge position (scribed line) and be sure not to move it from the hinge position ± 0.5 mm or further. Otherwise, image failures such as a jitter may occur.

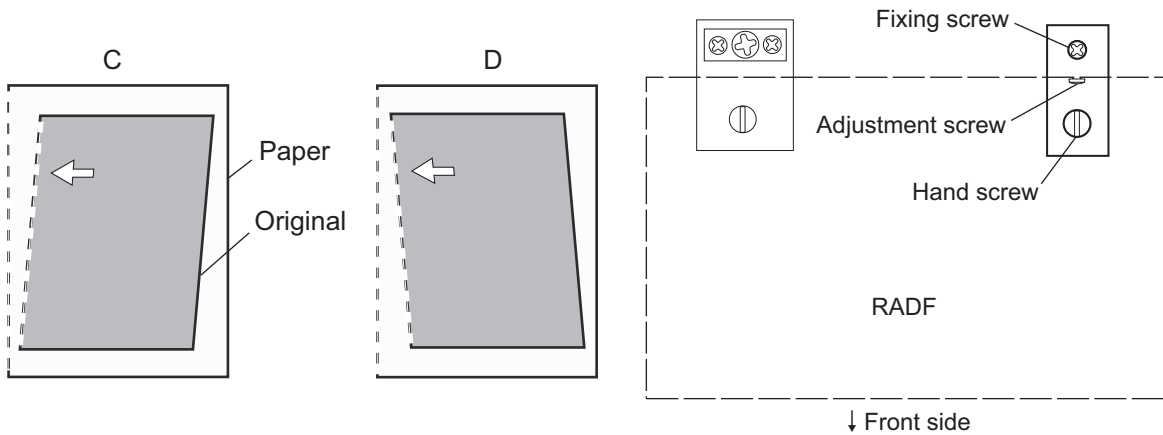


Fig.3-66

Fig.3-67

(3) **Step 3**

Case E:

Adjust the reverse aligning adjustment position to the rear side "-" of the original (see P.3-63 "3.10.6 Adjustment of aligning at reversing").

Case F:

Adjust the reverse aligning adjustment position to the rear side "+" of the original (see P.3-63 "3.10.6 Adjustment of aligning at reversing").

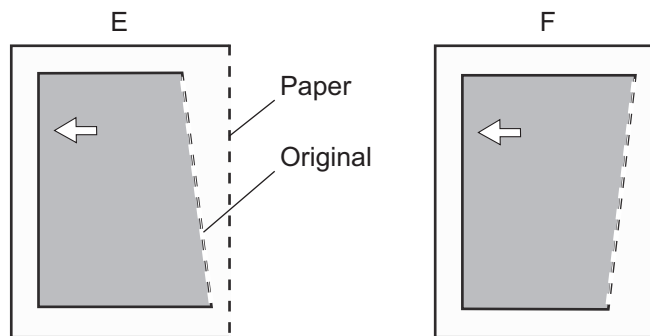



Fig.3-68

3.10.4 Automatic adjustment of sensors and initialization of EEPROM

When any of the PC board, original length sensor, read sensor, reverse sensor is replaced with a new one, make sure to perform the initialization of EEPROM and adjustment of sensors in the Adjustment Mode (05).

Perform them after removing all originals on the sensor and closing the RADF.

Also, make sure to adjust the tray volume when the initialization of EEPROM and automatic sensor adjustment have been performed.

Refer to  P.2-43 "2.2.5 Adjustment mode (05) (e-STUDIO200L/230/280)" for the details.

Errors such as paper jamming may occur if the EEPROM is not initialized and the sensors are not adjusted after the above mentioned parts were replaced.

3.10.5 Adjustment of aligning

Adjust the aligning according to Step 1 of 3.10.3.

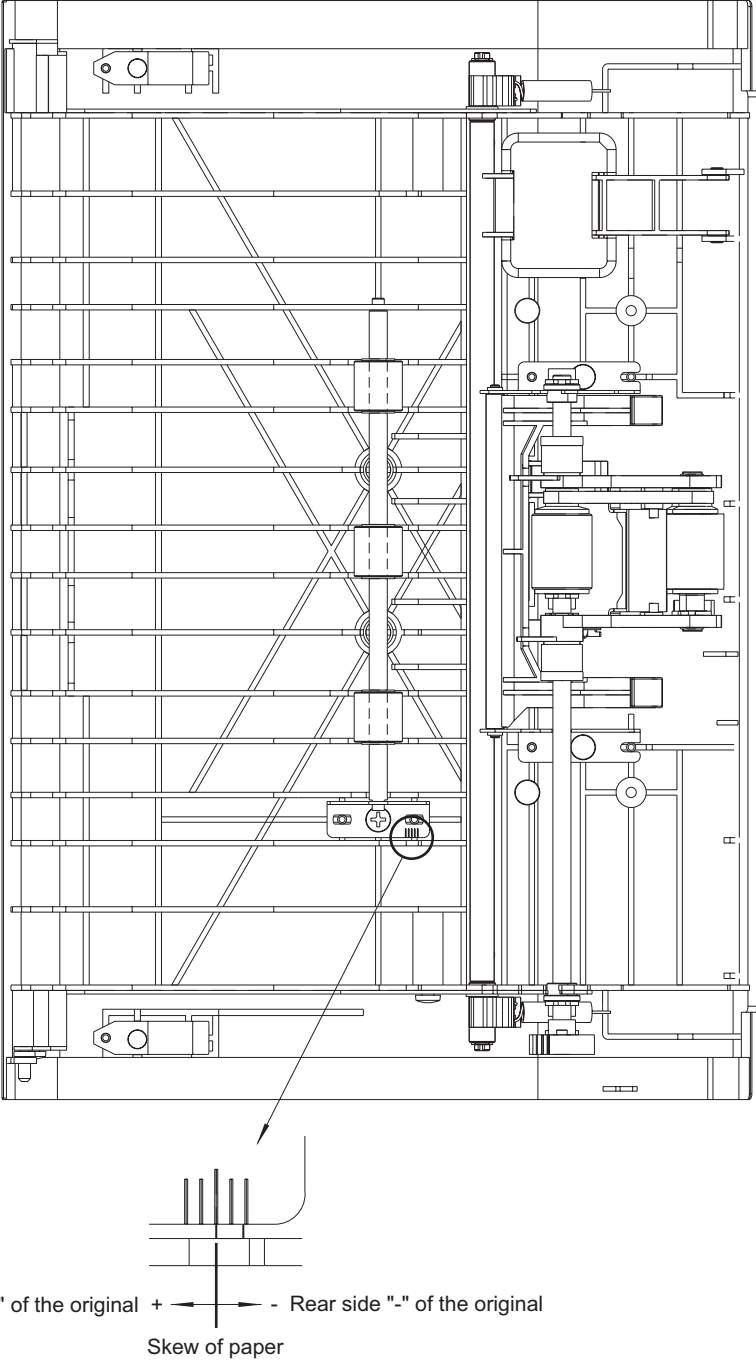


Fig.3-69

3.10.6 Adjustment of aligning at reversing

Adjust the aligning according to Step 3 of 3.10.3.

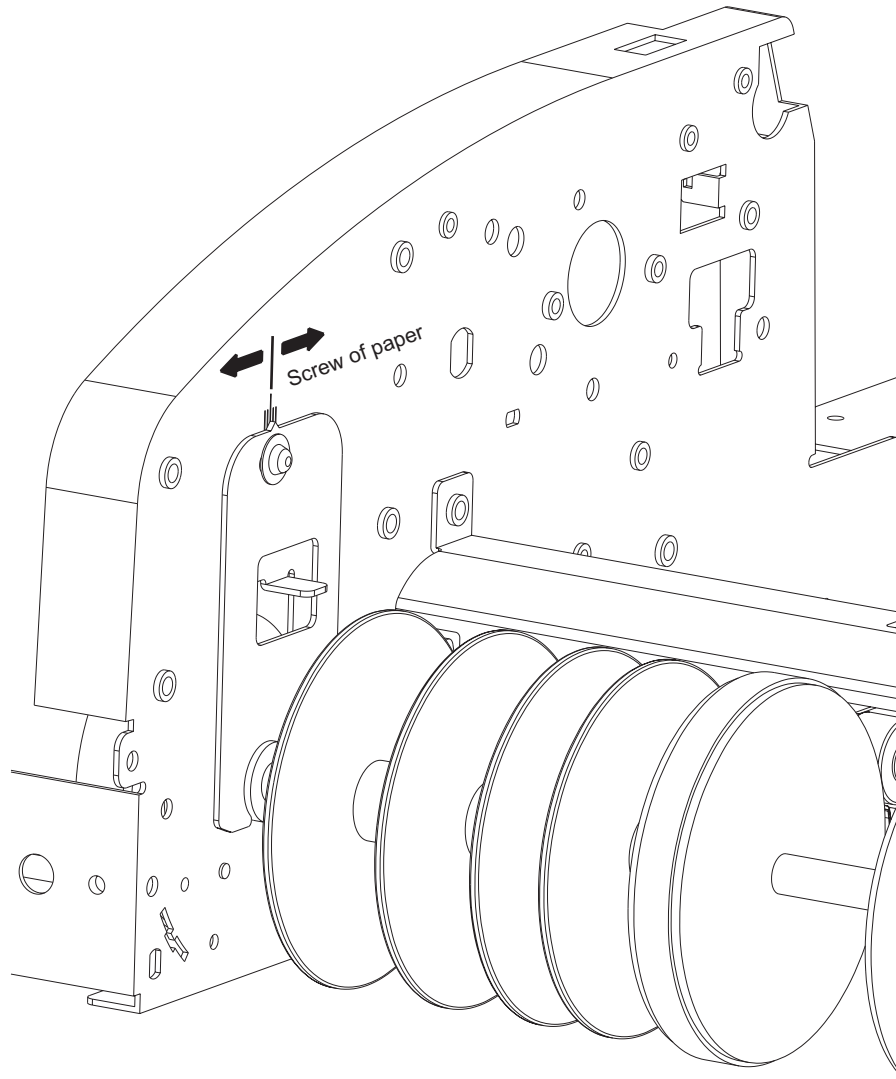


Fig.3-70

3.10.7 Adjustment of reverse solenoid

When operating the reverse solenoid, adjust it if the position of the flapper lever is out of the following dimension.

Gap between A of the front frame and the flapper lever "C": 0.5 mm to 2.0 mm

<Procedure>

- (1) Remove the screw on the left and take off the plate spring.

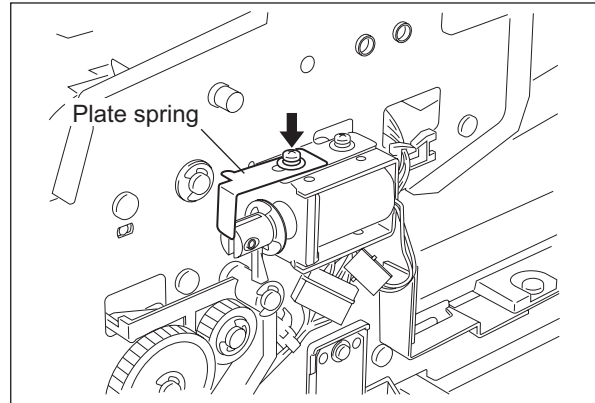


Fig.3-71

- (2) Align B of the front frame with the edge of the reverse solenoid, and temporarily fix the reverse solenoid with the screw on the right.

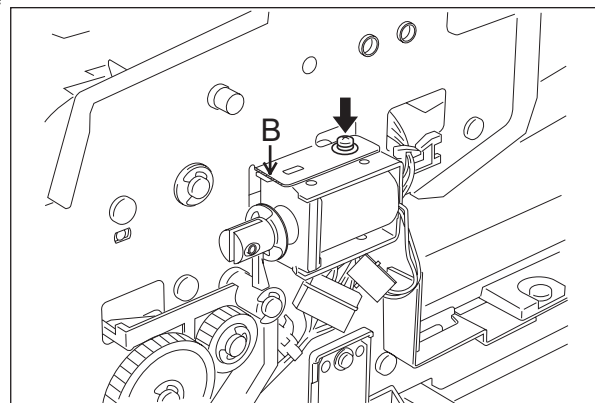


Fig.3-72

- (3) While the plunger of the reverse solenoid is put in the position to be turned ON (by pressing it in the direction of an arrow), loosen the screw on the right to adjust the reverse solenoid so that the gap (C) between A of the front frame and the flapper lever is 0.5 mm to 2.0 mm.

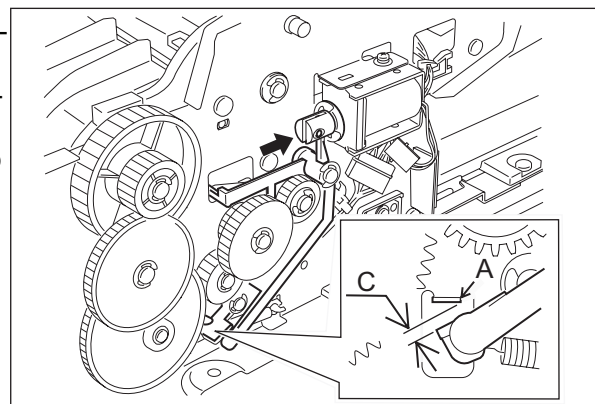


Fig.3-73

- (4) Fix the plate spring temporarily with the screw on the left. Then press the plate spring slightly in the direction of an arrow and tighten the screw in the position where the gap (D) between the plunger and the flapper lever is eliminated.

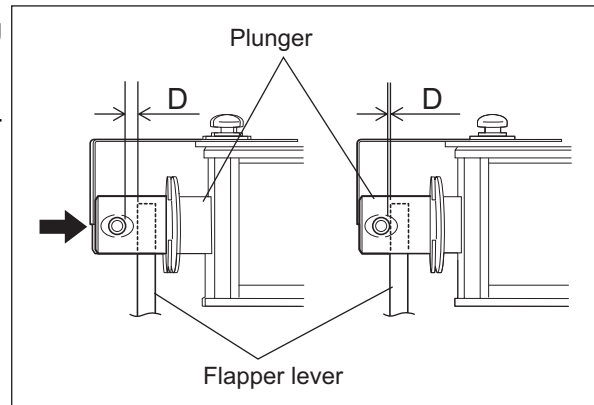


Fig.3-74

3.10.8 Adjustment of RADF opening/closing switch

Adjust the bracket position so that the switch is turned ON when the height A becomes 40-45 mm (within the empty weight falling limit).

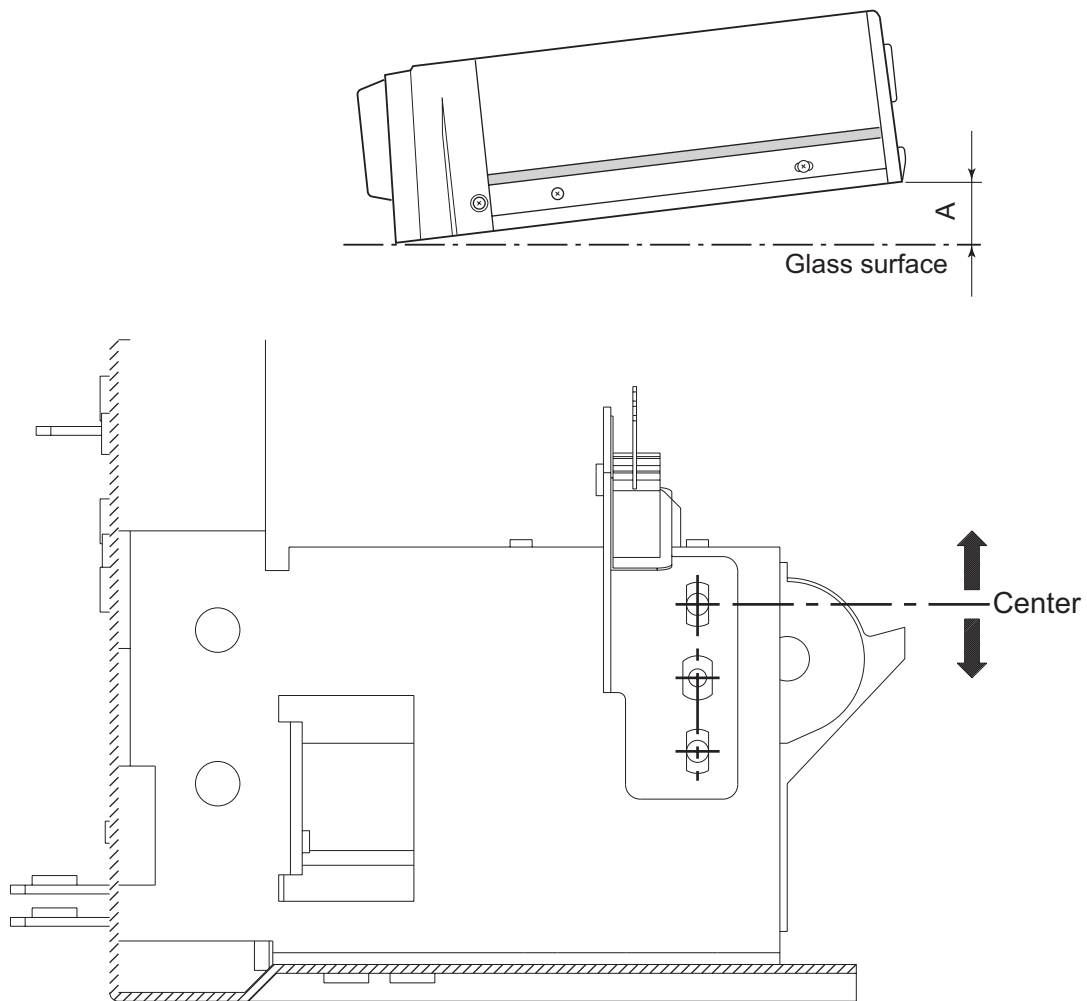


Fig.3-75

3.10.9 Adjustment of RADF opening/closing sensor

Adjust the bracket position so that the sensor is turned ON when the height A becomes 30-35 mm (within the empty weight falling limit).

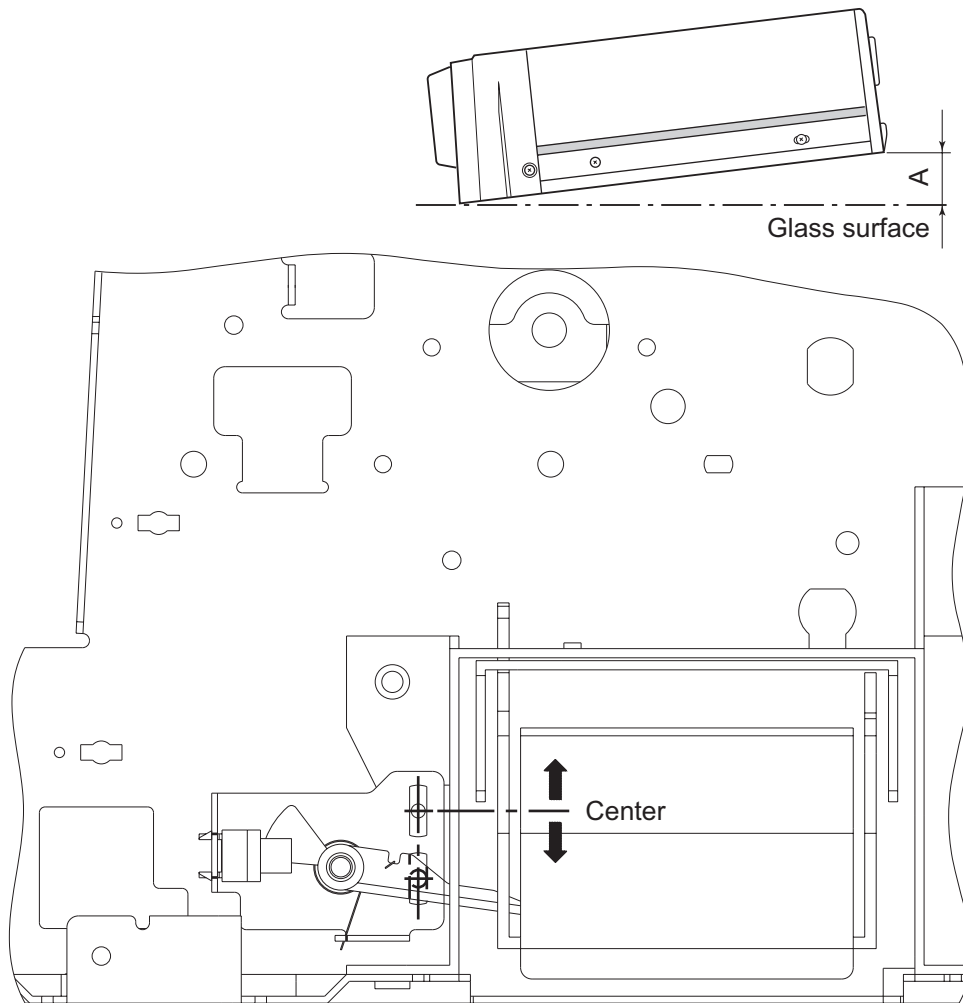


Fig.3-76

3.10.10 Adjustment of tray volume

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Narrow the original guide to the limit.
- (3) Input the code "367".
- (4) Press the [START] button.

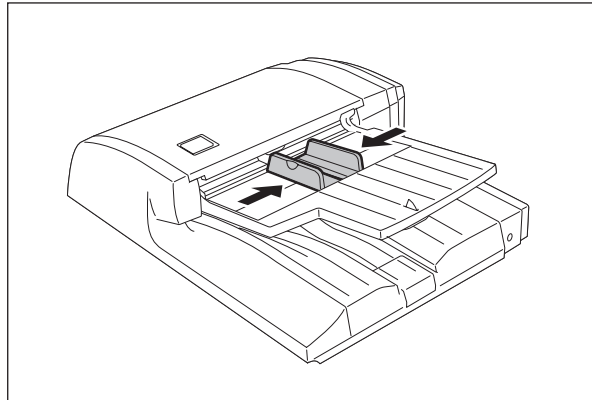


Fig.3-77

- (5) Extend the original guide to the limit.
- (6) Input the code "368".
- (7) Press the [START] button
- (8) Turn the power OFF.

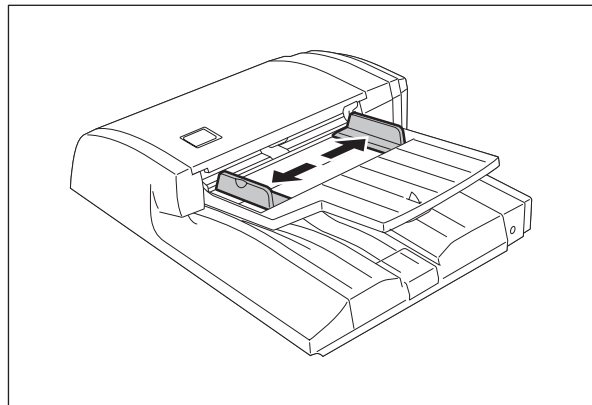


Fig.3-78

3.11 Adjustment of the RADF (MR-3020)

3.11.1 Adjustment of RADF Position

Perform this adjustment when the RADF is not installed in the correct position.

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF.

[A] Checking

- (1) Open the RADF and install 2 positioning pins (the positioning pins are installed to the back side of the hinge which is on the left side of the RADF).

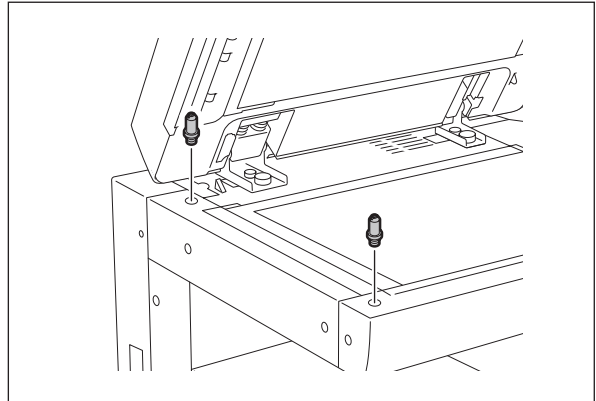


Fig.3-79

- (2) Remove the platen sheet.

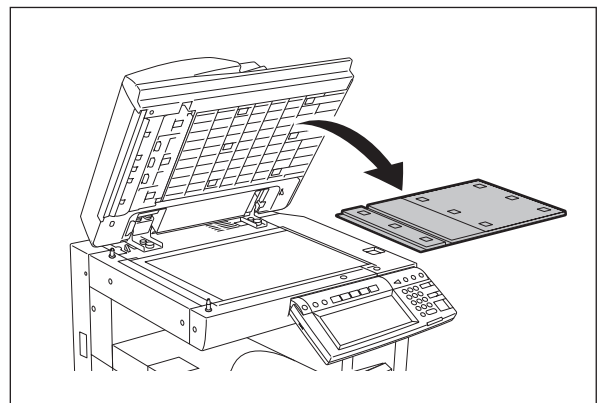


Fig.3-80

- (3) Close the RADF and check if the positioning pins fit the holes on the RADF.

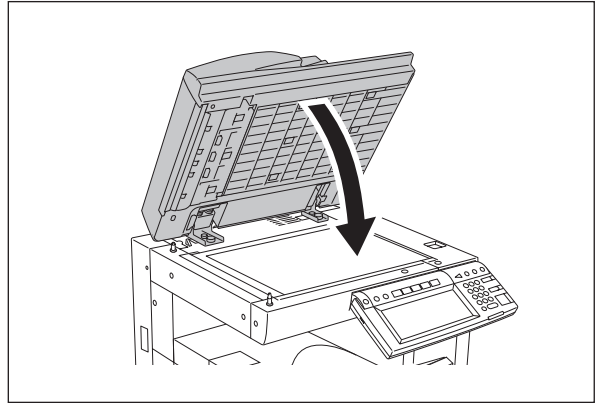


Fig.3-81

[B] Adjustment

If the pins cannot be fitted into the holes, perform the adjustment according to the following procedure.

- (1) Remove the right-hand hinge screw at the rear side.

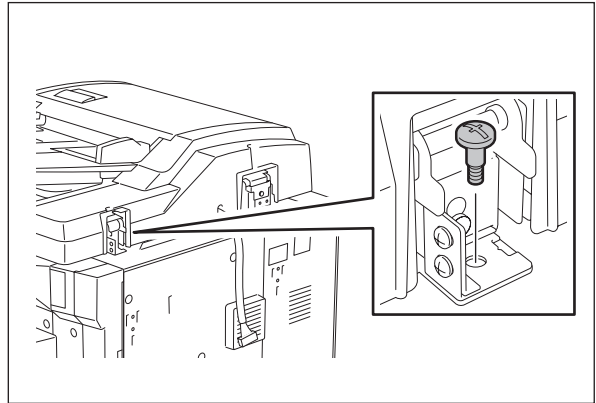


Fig.3-82

- (2) Loosen the left-hand hinge screw at the rear side.

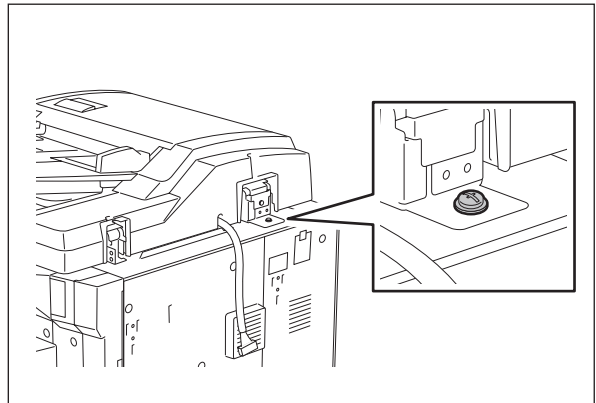


Fig.3-83

- (3) Loosen the hinge screws at the front side.

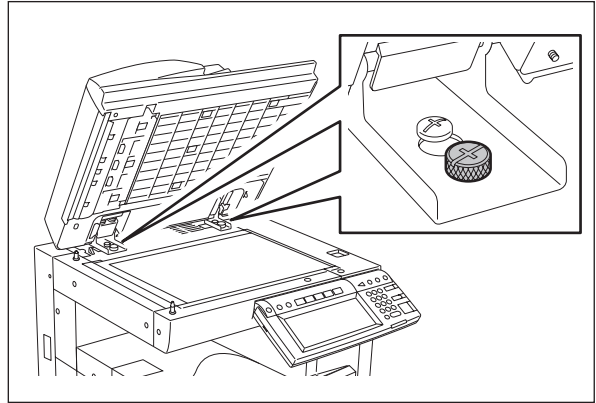


Fig.3-84

- (4) Position the pins with the holes on the RADF by moving it so that the pins fit into the holes when the RADF is closed.

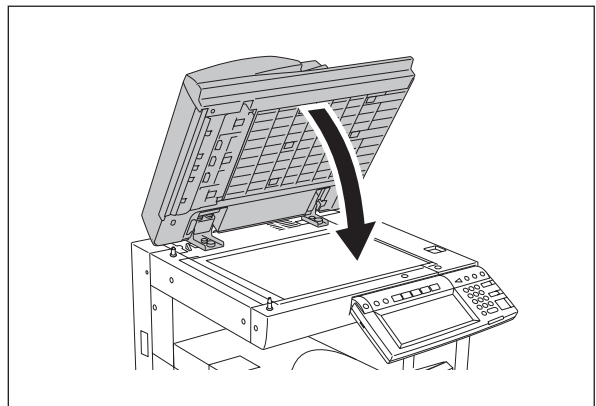


Fig.3-85

- (5) Tighten the left-hand hinge screw at the rear side.

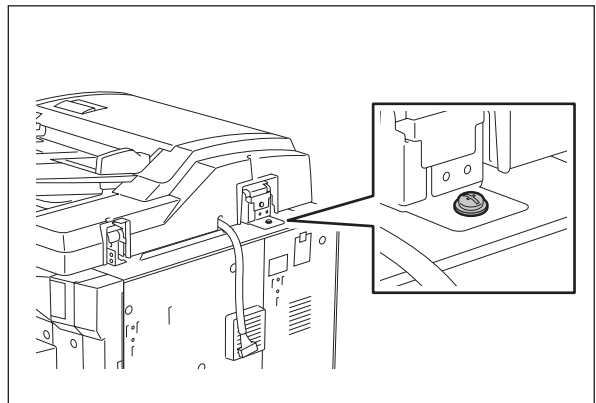


Fig.3-86

- (6) Loosen the hole position adjustment screws on the right hand side.

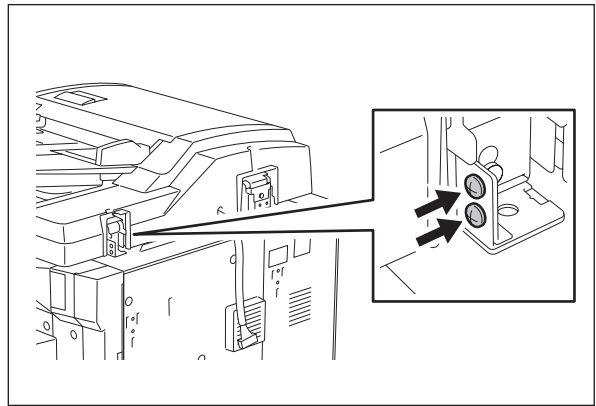


Fig.3-87

- (7) Match the screw hole positions.

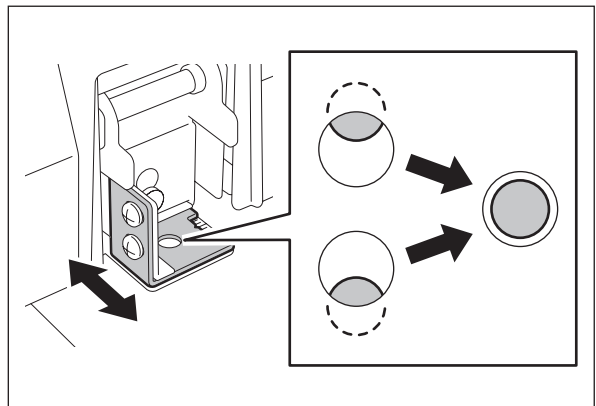


Fig.3-88

- (8) Install the right-hand hinge screw at the rear side.

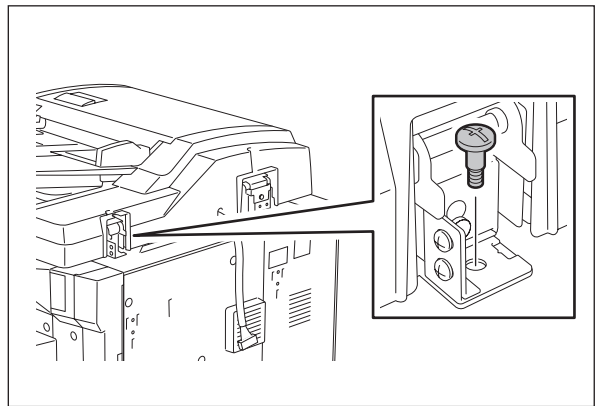


Fig.3-89

(9) Loosen the hinge screws at the front side.

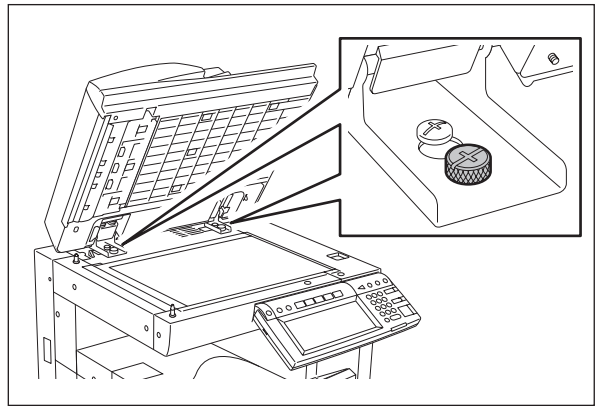


Fig.3-90

(10) Place the platen sheet on the original glass and align it to the top left corner.
Close the RADF gently and open it to check if the platen sheet is attached properly.

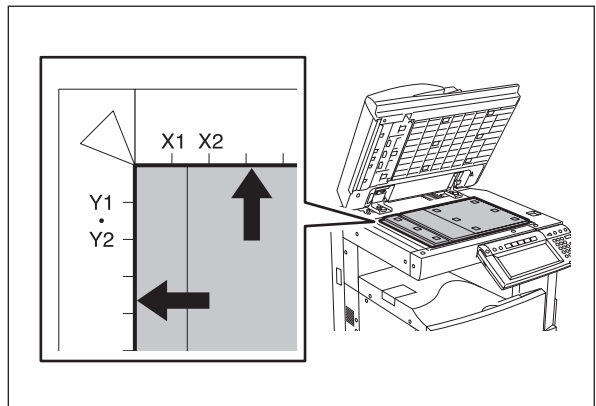


Fig.3-91

3.11.2 Adjustment of RADF Height

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF.

[A] Checking

- (1) Close the RADF.
- (2) Light the exposure lamp.
 - Turn the power ON while pressing [0] and [3] simultaneously.
 - Key in [267] and then press the [START] button. The exposure lamp is turned ON for a given length of time.
- (3) Visually check the gap between platen guide holder "A" and upper surface of the original glass "B" from the left hand side of the equipment. If the value is not within the tolerance, perform the adjustment according to the following procedure.

[Tolerance of the gap]
Rear side: 0 - 0.5 mm
Front side: 0 mm

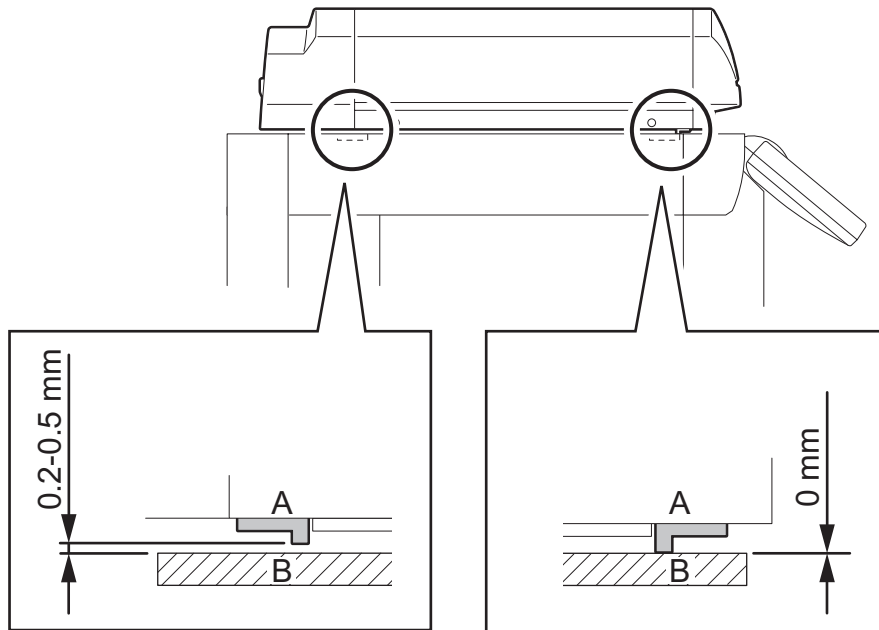


Fig.3-92

[B] Adjustment

- (1) Close the RADF.
- (2) Adjust it by turning the adjustment screws on the hinges.
 - Adjust the height on the rear side by means of the screw on the hinge on the feed side of the RADF.

Turn it clockwise Heightened

Turn it counterclockwise Lowered

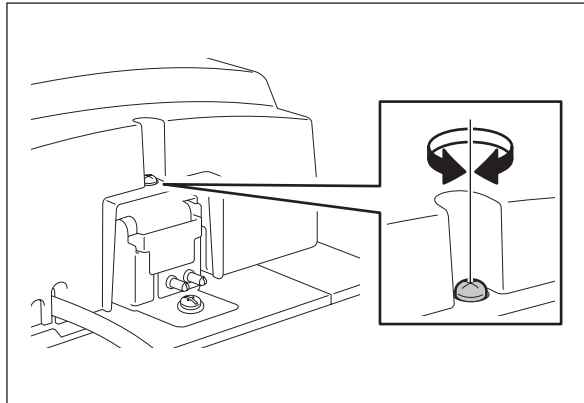


Fig.3-93

- Adjust the gap on the rear side by means of the screw on the hinge on the feed side of the RADF.

Turn it clockwis Lowered

Turn it counterclockwise Heightened

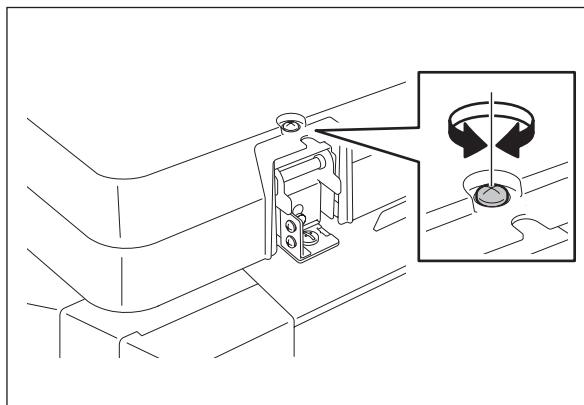


Fig.3-94

3.11.3 Adjustment of Skew

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF. Also, the RADF position and height shall be adjusted properly.

[A] Checking

Check the image using the chart (original) with vertical and horizontal lines in the following procedure.

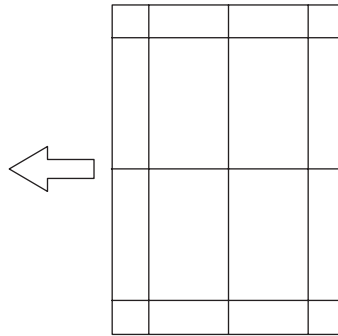


Fig.3-95 Chart (Original)

Simplex copying:

- (1) Place the chart provided as an original with its face up on the original tray of the RADF, select [1 Sided -> 1 Sided] and press the [START] button.
- (2) Superimpose the chart on the copy and check the inclination of the copy image.

Duplex copying:

- (1) Place the chart provided as an original with its face up on the original tray of the RADF, select [2 Sided -> 2 Sided] and press the [START] button.
- (2) Superimpose the chart on the copy and check the inclination of the copy image.

[B] Adjustment
Simplex copying:

- (1) Shift the aligning plate with the scale as the guide shown in the figure below to adjust the skew.

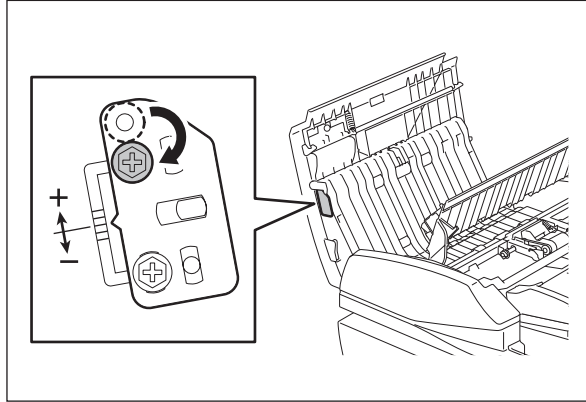


Fig.3-96

- (2) If the image skew is "C" as shown in the figure below, shift the aligning plate in the direction of "+", and if "D", shift it to "-".

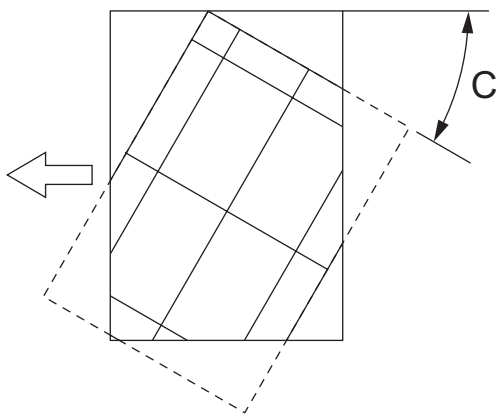


Fig.3-97

Shift the aligning plate in the direction of "+".

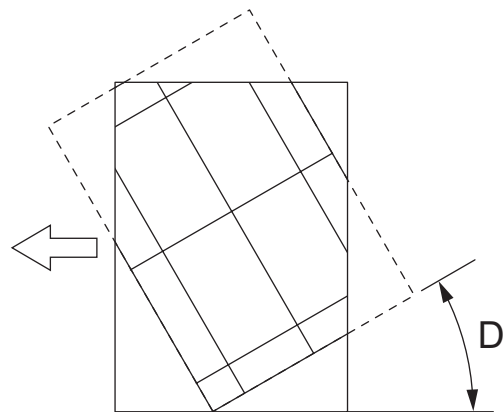


Fig.3-98

Shift the aligning plate in the direction of "-".

Duplex copying:

- (1) Shift the aligning plate with the scale as the guide shown in the figure below to adjust the skew.

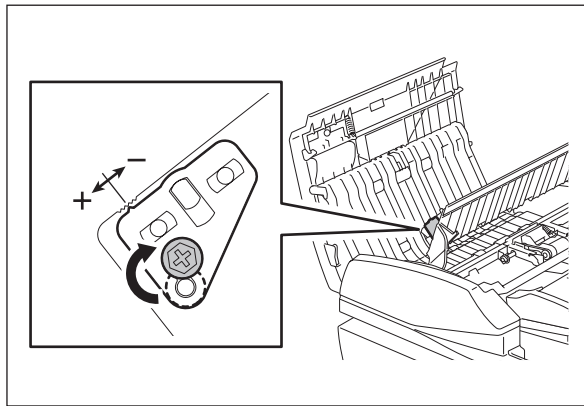


Fig.3-99

- (2) If the image skew is "C" as shown in the figure below, shift the aligning plate in the direction of "-", and if "D", shift it to "+".

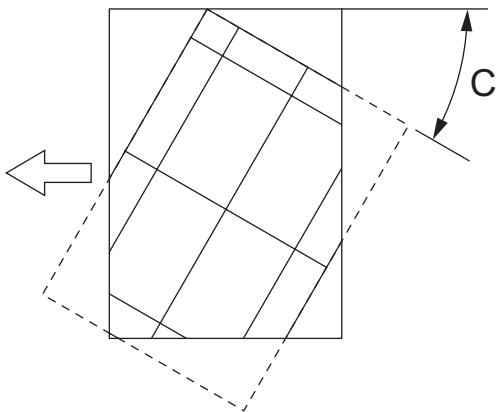


Fig.3-100

Shift the aligning plate in the direction of "-".

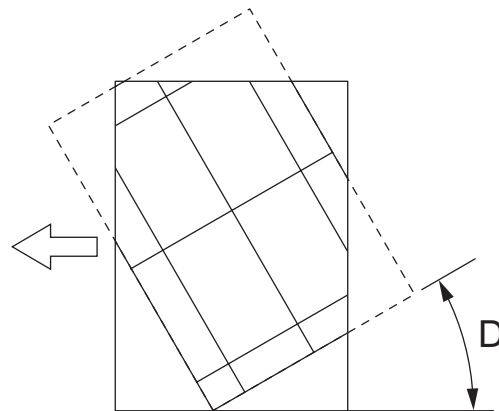


Fig.3-101

Shift the aligning plate in the direction of "+".

3.11.4 Adjustment of the Leading Edge Position

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF. Also, the RADF position and height shall be adjusted properly.

[A] Checking

Check the image using the chart (original) with vertical and horizontal lines in the following procedure.

Simplex copying:

- (1) Place the chart provided as an original with its face up on the original tray of the RADF, select [1 Sided -> 1 Sided] and press the [START] button.
- (2) Superimpose the chart on the copy and check the leading edge E of the chart and F of the copy.

Duplex copying:

- (1) Place the chart provided as an original with its face up on the original tray of the RADF, select [2 Sided -> 2 Sided] and press the [START] button.
- (2) Superimpose the chart on the copy and check the leading edge E of the chart and F of the copy.

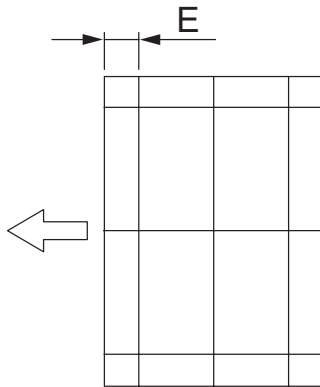


Fig.3-102 Chart (Original)

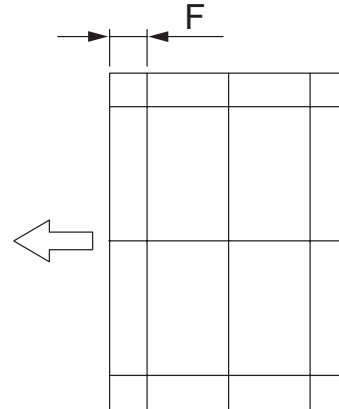


Fig.3-103 Copy

[B] Adjustment

Simplex copying:

- (1) Turn the power ON while pressing [0] and [5] simultaneously, key in [365] and then press the [START] button.
- (2) Enter the value.
 - If the leading edge (F) margin of the copy image is larger than the (E) margin of the chart, enter a value smaller than the current one.

Note:

Changing one value shifts the copy image by 0.1 mm.

- If the leading edge (F) margin of the copy image is smaller than the (E) margin of the chart, enter a value larger than the current one.

Note:

Changing one value shifts the copy image by 0.1 mm.

- (3) Press the [ENTER] button.

Duplex copying:

- (1) Turn the power ON while pressing [0] and [5] simultaneously, key in [366] and then press the [START] button.
- (2) Enter the value.
 - If the leading edge (F) margin of the copy image is larger than the (E) margin of the chart, enter a value smaller than the current one.

Note:

Changing one value shifts the copy image by 0.1 mm.

- If the leading edge (F) margin of the copy image is smaller than the (E) margin of the chart, enter a value larger than the current one.

Note:

Changing one value shifts the copy image by 0.1 mm.

- (3) Press the [ENTER] button.

3.11.5 Adjustment of Horizontal Position

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF. Also, the RADF position and height shall be adjusted properly.

[A] Checking

Check the image using the chart (original) with a center line in the following procedure.

- (1) Place the chart provided as an original with its face up on the original tray of the RADF.
- (2) Press the [START] button.
- (3) Fold the copy in half and check if the center line is misaligned.

[B] Adjustment

- (1) Turn the power ON while pressing [0] and [5] simultaneously.
- (2) Key in [358] and then press the [START] button.
 - If the center line of the copy image is shifted to the front side of the equipment, enter a value larger than the current one.

Note:

Changing one value shifts the copy image by 0.042 mm.

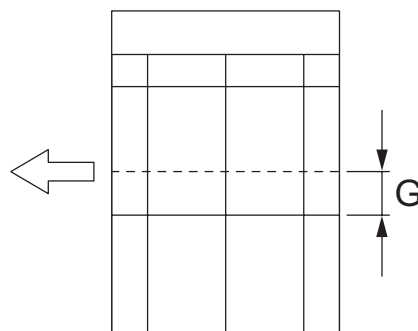


Fig.3-104

- If the center line of the copy image is shifted to the rear side of the equipment, enter a value smaller than the current one.

Note:

Changing one value shifts the copy image by 0.042 mm.

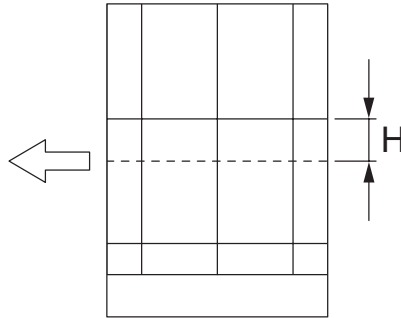


Fig.3-105

(3) Press the [ENTER] button.

3.11.6 Adjustment of Copy Ratio

Note:

Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF. Also, the RADF position and height shall be adjusted properly.

[A] Checking

Check the image using the chart (original) with vertical and horizontal lines in the following procedure.

- (1) Place the chart provided as an original with its face up on the original tray of the RADF.
- (2) Press the [START] button.
- (3) Superimpose the chart on the copy and check the image dimension "I".

[B] Adjustment

- (1) Turn the power ON while pressing [0] and [5] simultaneously.
- (2) Key in [357] and then press the [START] button.
 - If the copy image dimension "I" is larger than the chart dimension, enter a value smaller than the current one.
 - If the copy image dimension "I" is smaller than the chart dimension, enter a value larger than the current one.

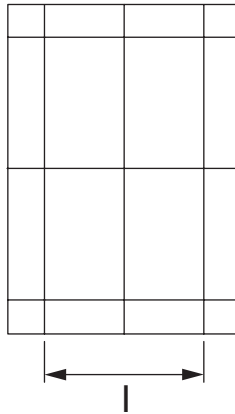


Fig.3-106

- (3) Press the [ENTER] button.

3.11.7 Adjustment of RADF Opening/Closing Sensor

Adjust the bracket position so that the sensor is turned ON when the height "A" becomes 100 mm or less (within the empty weight falling limit).

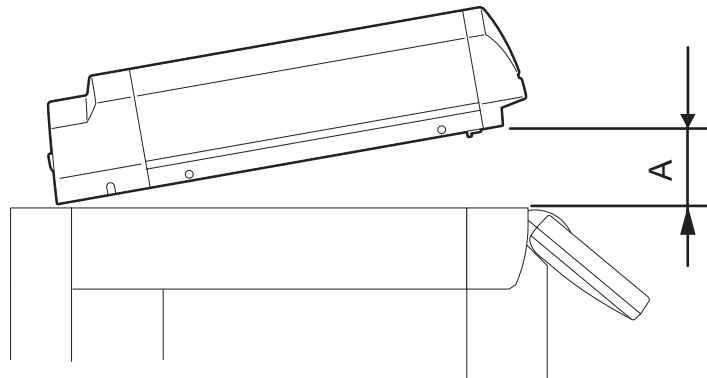


Fig.3-107

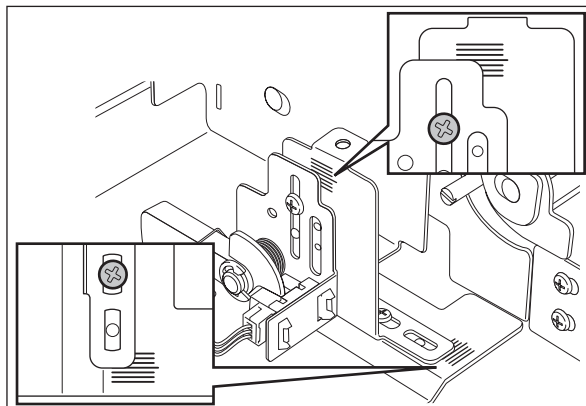


Fig.3-108


3.12 Adjustment of the Finisher (MJ-1022)

3.12.1 Adjusting the jogging plate width

<Procedure>

(1) Remove the right inner cover and the rear cover.

(2) Adjust the front jogging plate to the home position.

- Set SW1 on the finisher controller PC board as shown in  P.3-84 "Fig.3-109".
- Press SW2 twice on the finisher controller PC board.
 - The front jogging plate moves to the home position.

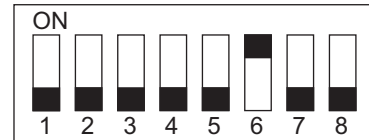



Fig.3-109

(3) Adjust the rear jogging plate to the home position.

- Set SW1 on the finisher controller PC board as shown in  P.3-84 "Fig.3-110".
- Press SW2 twice on the finisher controller PC board.
 - The rear jogging plate moves to the home position.

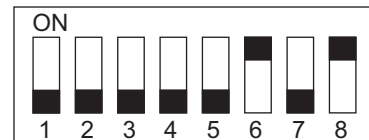


Fig.3-110

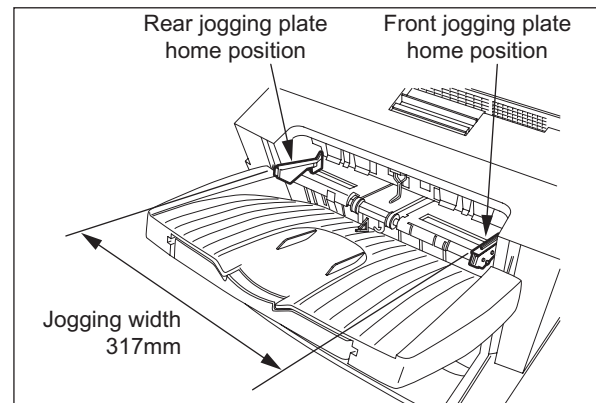


Fig.3-111

(4) Measure the jogging width (standard at 317 mm).

- (5) Remove the processing tray.
- (6) Loosen the screw on the home position sensor plate at the front.

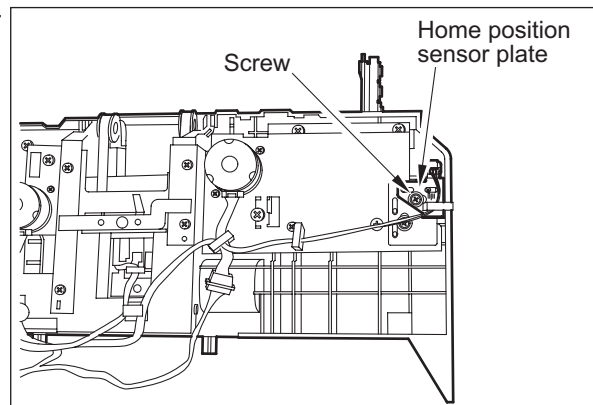


Fig.3-112

- (7) Adjust the position of the front jogging plate home position sensor (S6) with reference to the index.

- EX. 1
If the width is 319 mm in step (4), the difference from the standard is +2 mm, it requires relocation of the sensor in the direction of arrow A by 2 mm.
- EX. 2
If the width is 316 mm in step (4), the difference from the standard is -1 mm; it requires relocation of the sensor in the direction of arrow B by 1 mm.

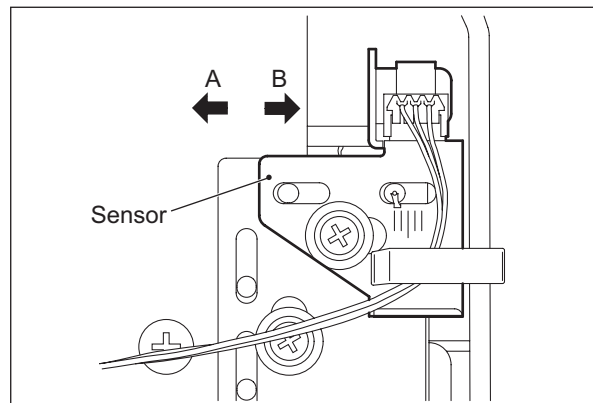


Fig.3-113

3.12.2 Adjusting the angle of the jogging plate

<Procedure>

- (1) Without removing the processing tray unit, loosen the 2 mounting screws of the rear jogging plate.

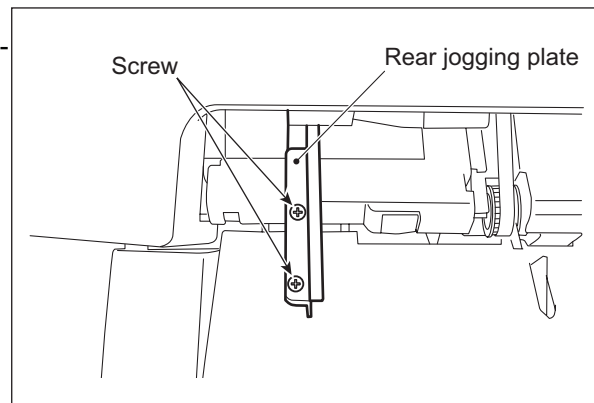


Fig.3-114

- (2) Place several sheets of A4/LT paper on the processing tray, and adjust the rear jogging plate. (At this time, adjust the gap between the paper and the front end of the rear jogging plate so that it is 0 mm to 0.5 mm.)

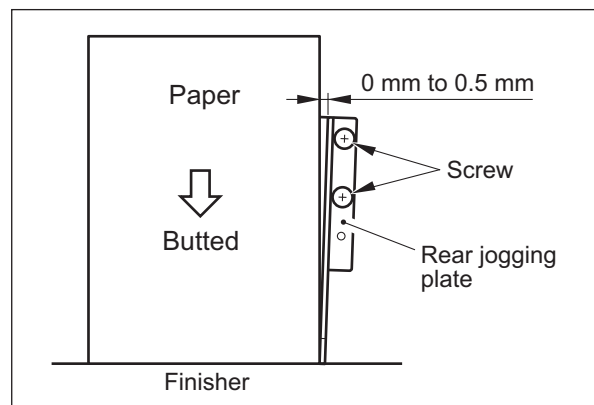


Fig.3-115

- (3) With reference to the rear jogging plate adjusted in step (2), adjust the front jogging plate in the same manner.

3.12.3 Adjusting the overlap of the sensor flag

If the overlap between the sensor and the flag is wrong for some reason, perform the following adjustment.

<Procedure>

- (1) Remove the processing tray unit.
- (2) Loosen the mounting screw of the front/rear jogging plate adjusting plate; then, move the adjusting plate to the left and the right.

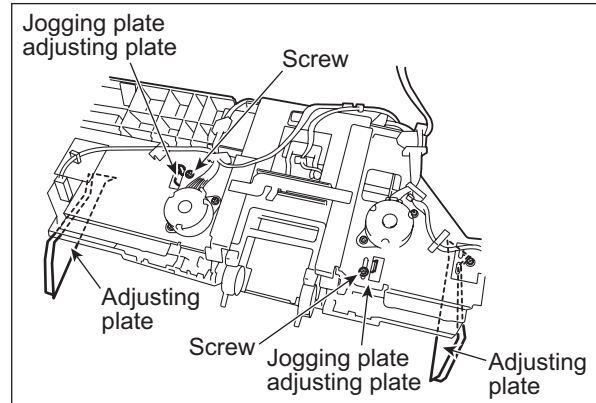


Fig.3-116

- (3) Tighten the screw so that the overlap between the flag of the front/rear jogging rack plate and the sensor is 1.5 mm to 2.0 mm.

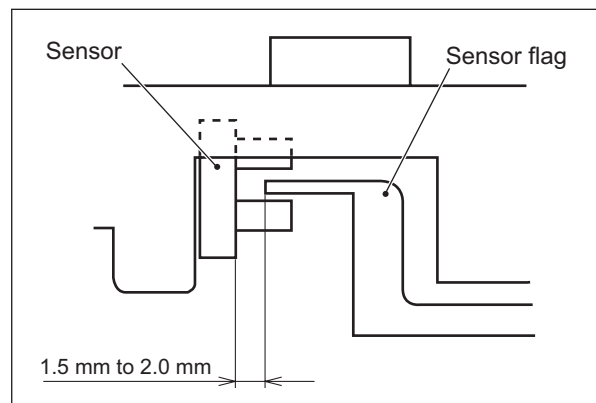


Fig.3-117

3.12.4 Adjusting the tension of the stack processing motor belt

<Procedure>

- (1) Remove the right inner cover and the rear cover.
- (2) Remove the 2 mounting screws, and detach the grip unit.

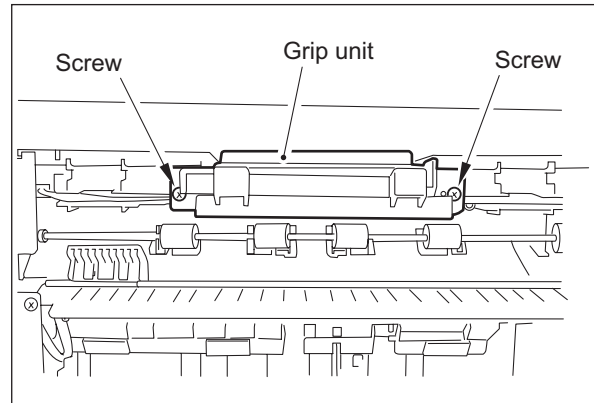


Fig.3-118

- (3) Loosen the screw on the tension arm plate. (The tension arm plate will be pulled under tension by the tension spring.)

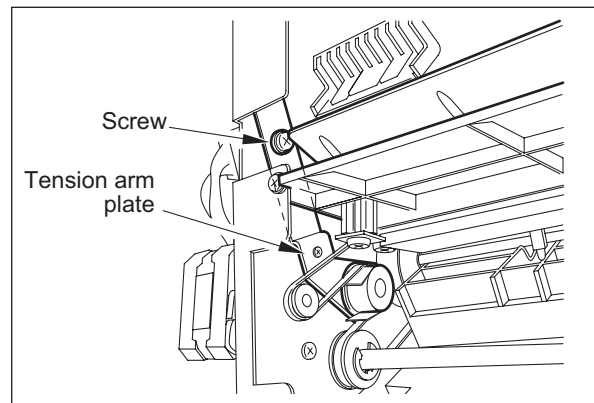


Fig.3-119

- (4) Move the returning roller shaft to its lower limit (the slack of a belt is lightly taken); then, tighten the screw on the tension arm plate.

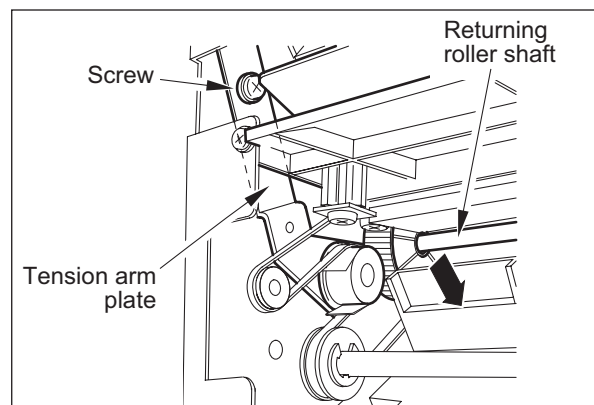


Fig.3-120

- (5) Check to make sure that the returning roller shaft moves smoothly.

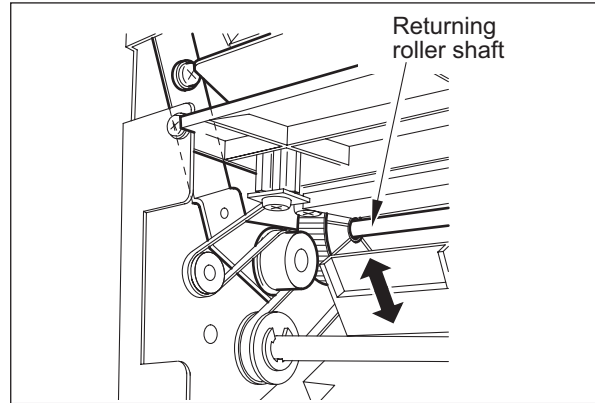


Fig.3-121

3.12.5 Releasing the stack tray guide lever fixing plate

<Procedure>

- (1) Remove the right inner cover and the rear cover.
- (2) Remove the finisher control PC board, PC board bracket and sensor PC board.
- (3) Remove the stack tray.
- (4) Remove the stack tray drive unit.
- (5) Place the stack tray guide lever fixing plate so that it is in view through the hole in the side plate (front, rear). Then remove the fixing screw. (Perform the same for the front and the rear.)

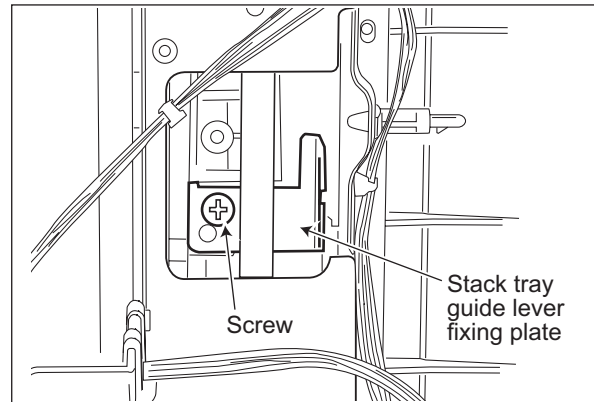


Fig.3-122

Note:

When removing the mounting screw, be sure to hold the stack tray guide lever up from below.

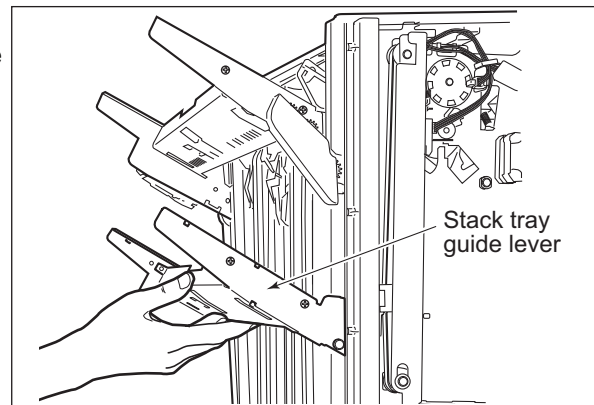


Fig.3-123

3.12.6 Adjustment of the upper tray angle

<Procedure>

- (1) Remove the front cover.

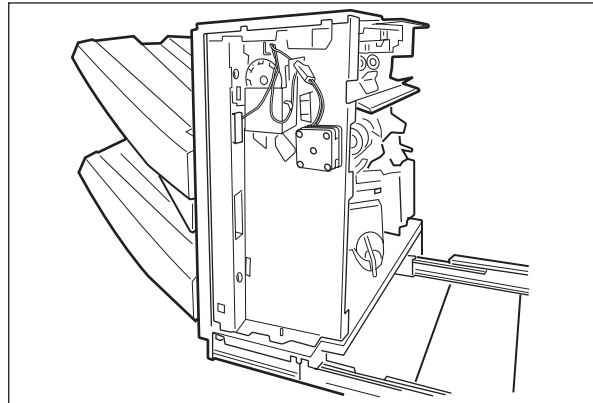


Fig.3-124

- (2) Loosen the screw denoted with the arrow.

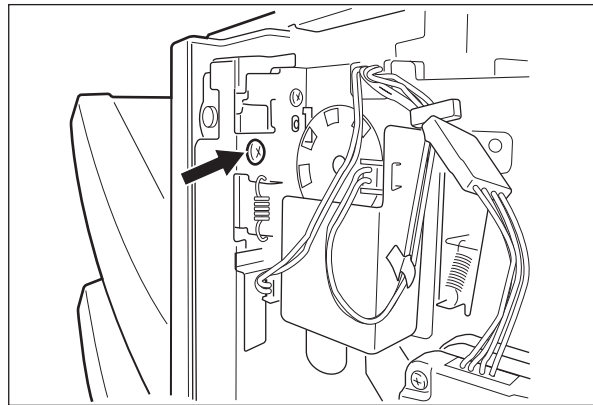


Fig.3-125

- (3) The tension becomes loose.
While pushing the bracket down, hold the tray and move it up or down, to adjust the angle so that the tray becomes parallel by a visual check.

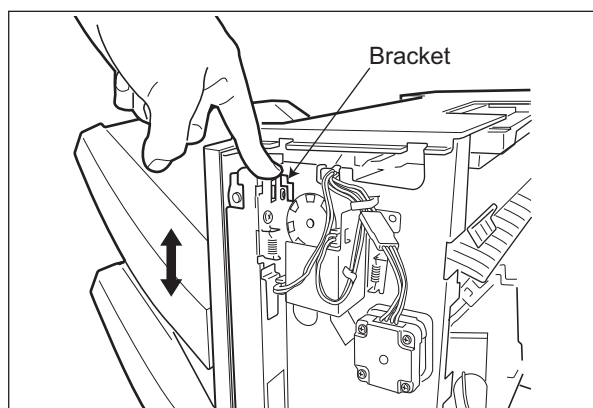


Fig.3-126

- (4) After adjustment, tighten the fixing screw of the bracket.

Note:

If the fixing screw of the bracket is not fixed, the belt is loosened which may cause a skipped tooth.

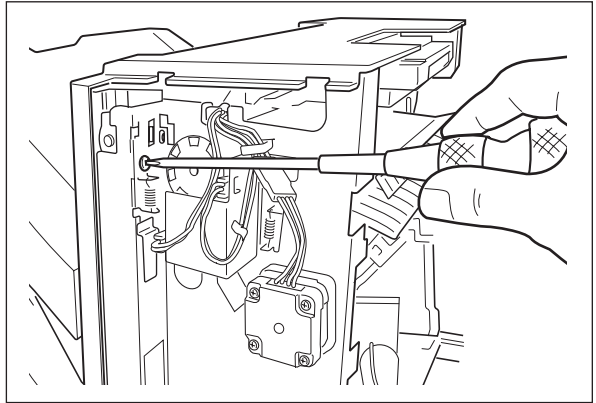



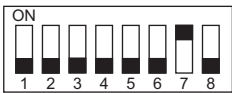
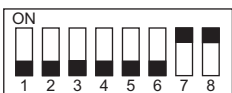
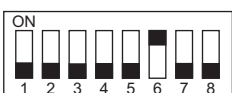




Fig.3-127




3.12.7 DIP switch functions

You can simulate various functions by setting the DIP switch (SW1) on the finisher controller PC board appropriately.

Initiating Operations

- 1) Remove any obstacles from the area of operation.
- 2) Set the DIP switch (SW1) as shown, and turn ON the power (so that LED1 will start to blink).
- 3) Press the pushing switch (SW2) twice to initiate the operation in question. (LED2 will remain on during operation).

| Setting | Item | Operation | | To stop |
|---|---|--|--|---|
|  | Delivery motor | The delivery roller rotates in a specific speed. | | <ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4). |
|  | Stack processing motor (stack delivery lever) | The stack delivery lever moves to its home position and stops. | | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
|  | Stack processing motor (returning roller) | The returning roller moves to the home position and stops. | | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
|  | Front jogging plate motor | When not at the home position | The front jogging plate moves to its home position and stops. | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
| | | When at the home position | The front jogging plate moves over a specific position and stops at the home position. | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
|  | Rear jogging plate motor | When not at the home position | The rear jogging plate moves to the home position and stops. | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
| | | When at the home position | The rear jogging plate moves over a specific distance and stops. | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |
|  | Upper stack tray motor (up) | The upper stack tray moves up and stops when the upper stack tray upper limit sensor turns ON. | | <ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4). |
|  | Upper stack tray motor (down) | The upper stack tray moves down and stops when the lower stack tray lower limit sensor turns ON. | | <ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4). |
|  | Lower stack tray motor (up) | The lower stack tray moves up and stops when the lower stack tray upper limit sensor is turned ON. | | <ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4). |

| Setting | Item | Operation | To stop |
|---|-------------------------------|--|---|
|  | Lower stack tray motor (down) | The lower stack tray moves down and stops when the lower stack tray lower limit sensor is turned ON. | <ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4). |
|  | Stapler motor | The stapler motor stops after the stapling operation. | <ul style="list-style-type: none"> • Press the stapler safety switch (S14). • Turn OFF the joint sensor (S4). |
|  | Shipping position operation | The upper and lower stack trays move to the shipping position and stop. | <ul style="list-style-type: none"> • Turn OFF the joint sensor (S4). |

Note:

Perform the shipping position operation when the finisher is packed again.

3.13 Adjustment of the Finisher (MJ-1025)

3.13.1 Adjusting the folding position (Electrical system (Finisher/Saddle unit))

The folding position is adjusted by matching it with the stapling position.

If you have replaced the finisher controller PCB, you must transfer the existing settings to the new PCB. Perform the following if the folding position must be adjusted for some reason.

Note:

Both the folding and stapling positions may deviate for some type of paper.

In such a case, change the “middle stapling position” in the user mode of the host machine.

<Procedure>

- (1) Set SW1 on the finisher controller PCB as follows:

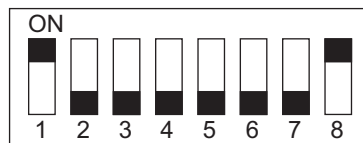


Fig.3-128

- (2) Adjust the folding position by pressing the PSW1 or PSW2 on the finisher controller PCB a required number of times. Pressing the switch once moves the folding position about 0.16 mm.
 - To move the folding position in the “-” direction, press the PSW1.
 - To move the folding position in the “+” direction, press the PSW2.
 - Pressing the PSW1 and PSW2 at the same time clears the adjustment value.

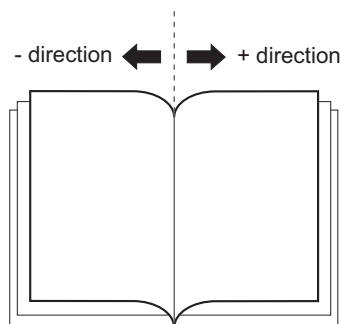


Fig.3-129

- (3) When adjustment of the folding position is complete, set all bits of the SW1 on the finisher controller PCB to OFF.
- (4) Enter the bind mode of the host machine and check whether the folding position is adjusted properly. If adjusted improperly, adjust the folding position again.

3.13.2 Adjusting the sensor output (Electrical system (Puncher unit; option))

Perform the following when the punch controller PCB, horizontal registration sensor (photosensor PCB/LED PCB), or waste full sensor (waste full photosensor PCB/waste full LED PCB) has been replaced.

<Procedure>

- (1) Shift bits 1 through 4 on the punch controller PCB as follows:

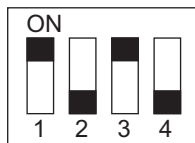


Fig.3-130

- (2) Press SW1002 or SW1003 on the punch controller PCB. A press will automatically adjust the sensor output.
 - The adjustment is over when all LEDs on the punch controller PCB are ON: LED 1001, LED1002, LED1003.
- (3) Shift all bits of DIPSW1001 to OFF.

3.13.3 Registering the number of punch hole (Electrical system (Puncher unit; option))

Perform the following to register the type of puncher unit (number of holes) used to the IC on the punch controller PCB for identification by the finisher. Be sure to register the type whenever you have replaced the punch controller PCB.

<Procedure>.

- (1) Set bits of 1 through 4 on the DIPSW1001 on the punch controller PCB as follows:

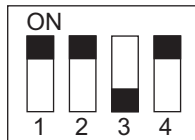


Fig.3-131

- (2) Press SW1002 on the punch controller PCB to select the appropriate number of punch holes.
 - Each press on SW1002 moves the selection through the following (repeatedly from top to bottom).

| Number of punch holes | LED1001 | LED1002 | LED1003 |
|-----------------------|---------|---------|---------|
| 2 holes (E) | ON | OFF | OFF |
| 2/3 holes (N) | ON | ON | OFF |
| 4 holes (F) | OFF | OFF | OFF |
| 4 holes (S) | OFF | OFF | ON |

- (3) Press SW1003 on the punch controller PCB twice. The presses will store the selected number of punch holes on the punch controller PCB.
 - A single press on SW1003 will cause the LED indication to flash; another press on SW1003 will cause the indication to remain ON to indicate the end of registration.
- (4) Shift all bits of DIPSW1001 to OFF.

3.13.4 After replacing the EEP-ROM (IC1002) (Electrical system (Puncher unit; option))

<Procedure>

- (1) Turn off the host machine.
- (2) Set bits 1 through 4 on the punch controller PCB as follows:

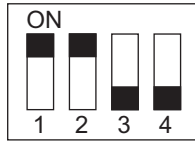


Fig.3-132

- (3) Press SW1002 and SW1003 on the punch controller PCB at the same time.
 - The presses will initialize the EEP-ROM. At the end, all LEDs (LED1001, LED1002, LED1003) will go ON.
- (4) Adjust the sensor output, and store the number of punch holes.

3.14 Key Copy Counter (MU-8, MU-10)

To make a key copy counter available, the following 2 components must be installed to the equipment.

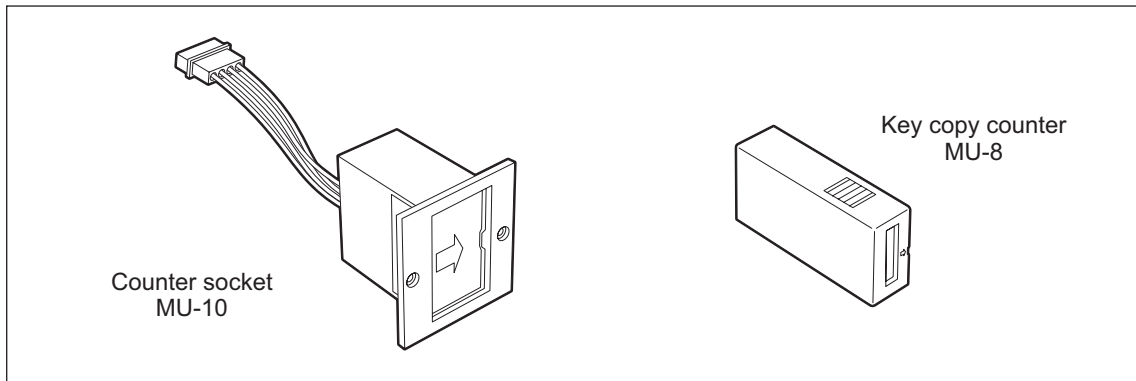


Fig.3-133

<Installation procedure>

- (1) Remove the rear cover.
- (2) Remove the right upper cover-3, and cut open the window for the key copy counter.

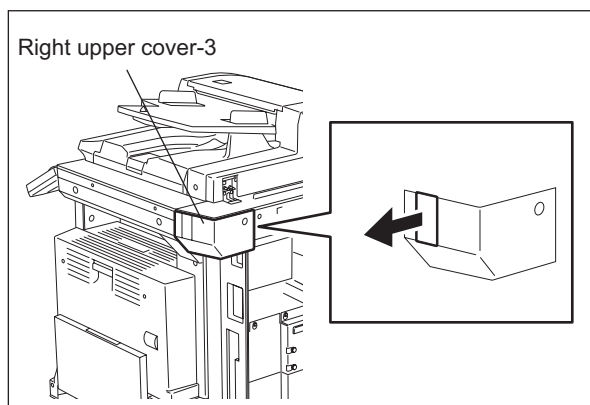


Fig.3-134

- (3) Pull out the harness connector from the hole of the machine frame, and cut the short harness of the connector. (Treat the cut harness properly to avoid it causing a short circuit with the machine frame.) Then, disconnect the dummy connector.

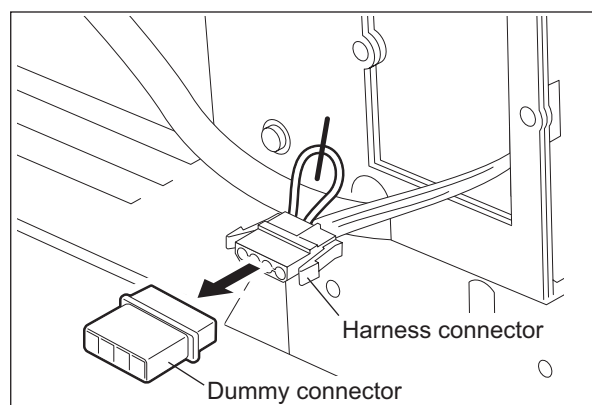


Fig.3-135

- (4) Connect the connector of the counter socket to the harness connector of the equipment side.
- (5) Install the counter socket to the machine frame with two screws.
- (6) Reattach the cover.

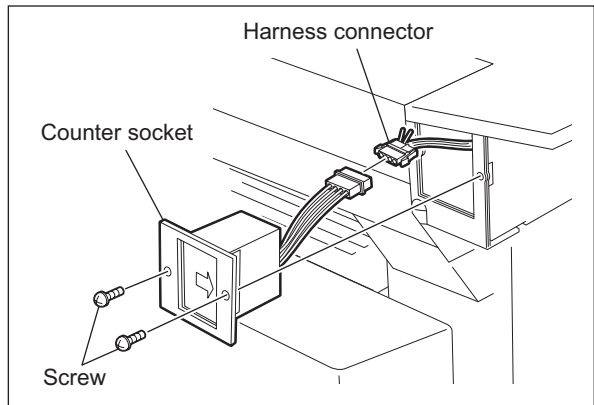


Fig.3-136

- (7) Insert the key copy counter with its arrow mark pointing the rear side of the equipment.

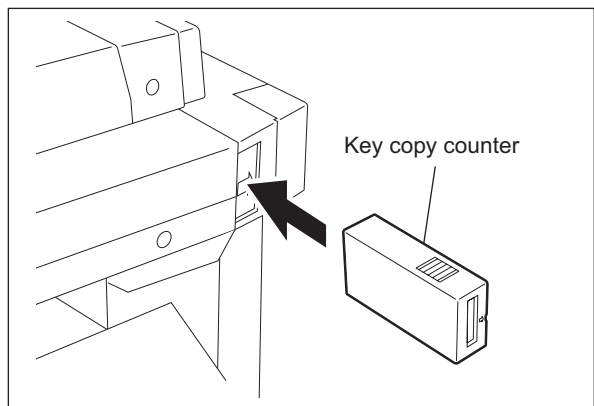


Fig.3-137

- (8) Enter the value "3" in the setting mode (08-202).

3.15 Adjustment of Dogleg

Dogleg is the name given to an image which is deformed approx. 48 mm of the trailing edge of the output paper.

Since adjustment has usually been performed when the equipment was manufactured, dogleg image should not occur. However, if the following dogleg image A or B does happen to occur, the following adjustment must be performed. An original with a line parallel to the feeding direction is used for the adjustment.

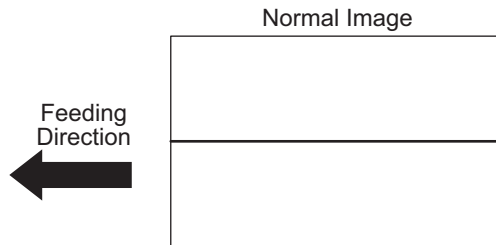


Fig.3-138

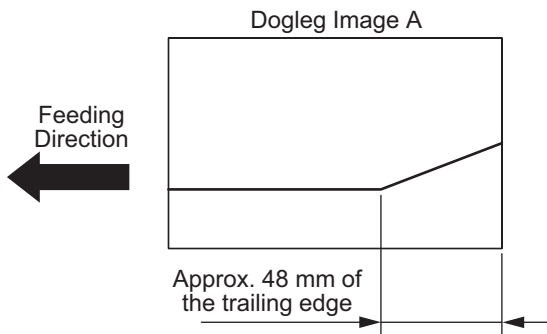


Fig.3-139

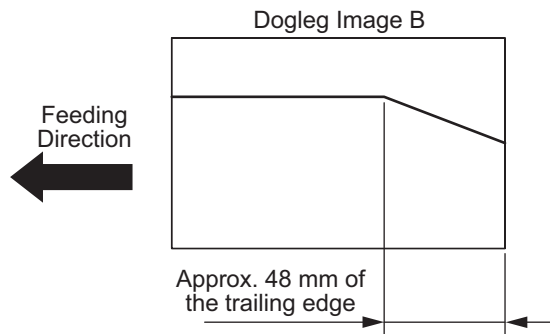


Fig.3-140

<Adjustment procedure>

- (1) Check the position of the adjustment screws.

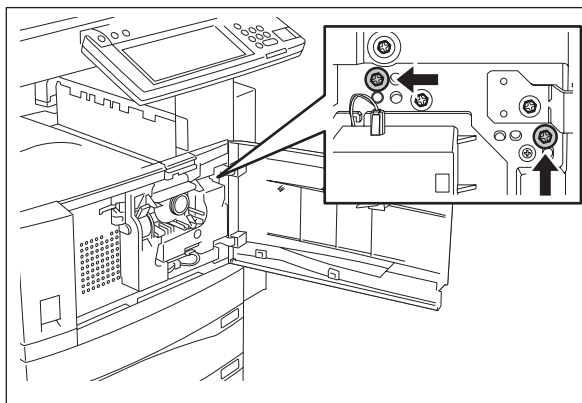


Fig.3-141

- (2) Remove the 2 adjustment screws.

(3) Fix the adjustment screws in the position as shown in the figure.

- Dogleg image A

Install the adjustment screws as shown in the figure below so that the stay of the fuser unit can move upward.

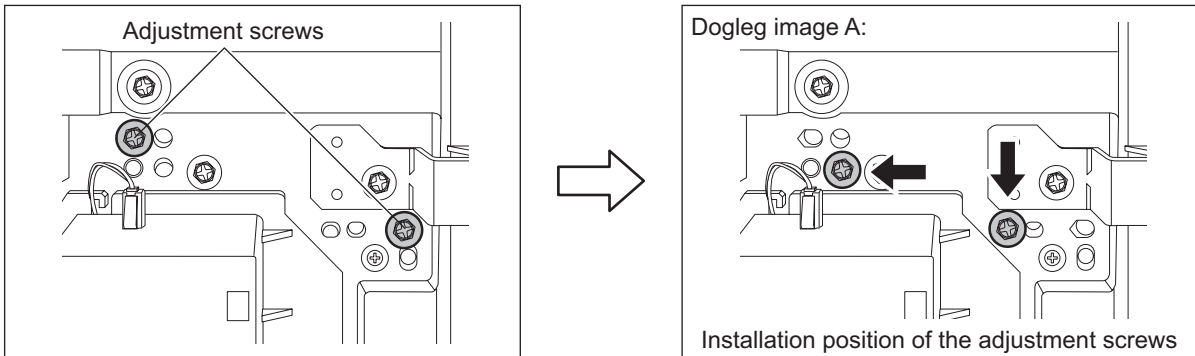


Fig.3-142

- Dogleg image B

Install the adjustment screws as shown in the figure below so that the stay of the fuser unit can move downward.

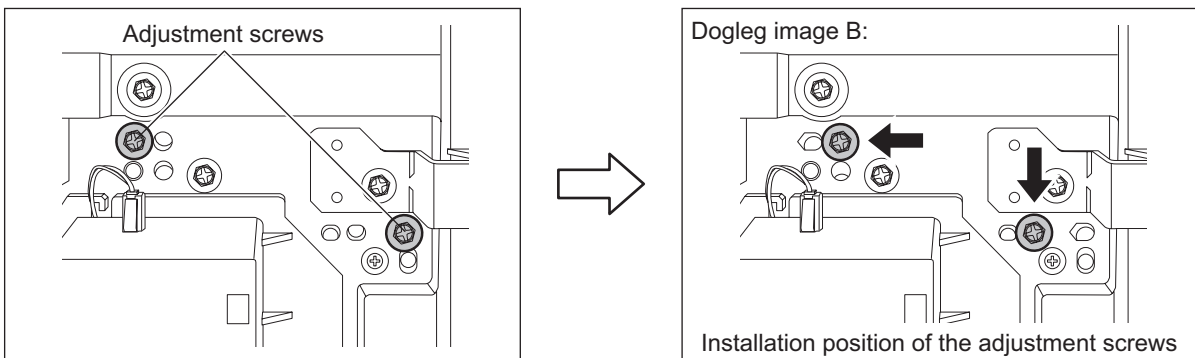


Fig.3-143

(4) Check the copied image. If further adjustment is needed, fix the adjustment screws in the position as shown in the figure so that the stay can be moved both upward and downward by 1 mm.

Be sure to make the scales on the right and left match when installing the adjustment screws.

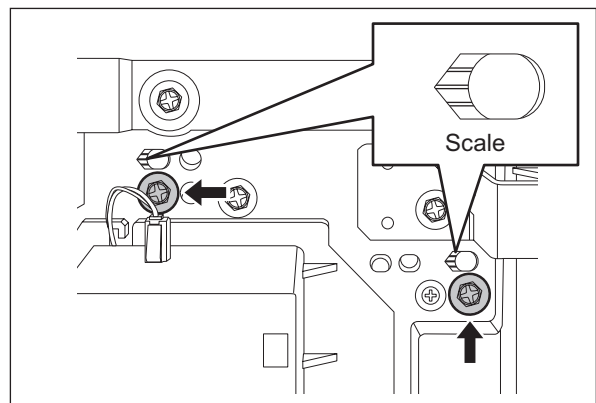


Fig.3-144

4. PREVENTIVE MAINTENANCE (PM)

4.1 PM Support Mode

4.1.1 General description

The timing for the parts replacement usually depends on the number of output pages ever printed after they were replaced before. However, the life span of them changes depending on the general use of users and the environment in which the equipment is placed. Therefore, it is necessary to consider not only the number of output pages but also the drive counts when deciding the timing for the parts replacement in order to utilize the parts and materials effectively.

This equipment has the PM support mode, which makes it possible to see the general use of each part (the number of output pages, drive counts) and replacement record and to do a counter clearing operation more efficiently when replacing.

The replacement record can be printed out in the list printing mode (9S-103).

4.1.2 Operational flow and operational screen

[1] Operational flow

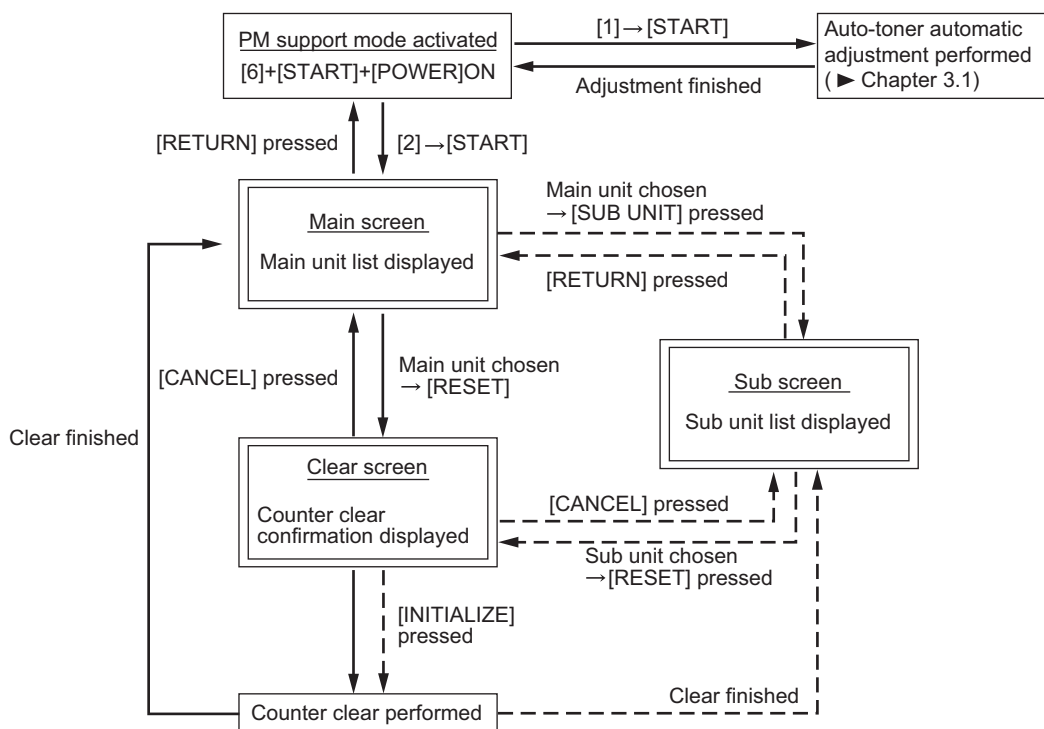


Fig. 4-1

- * The screen goes back to the main screen when the counter clear is executed or the [CANCEL] button is pressed after moving from the main screen, while it goes back to the sub screen after moving from the sub screen.

[2] Operational screen

1) Main screen

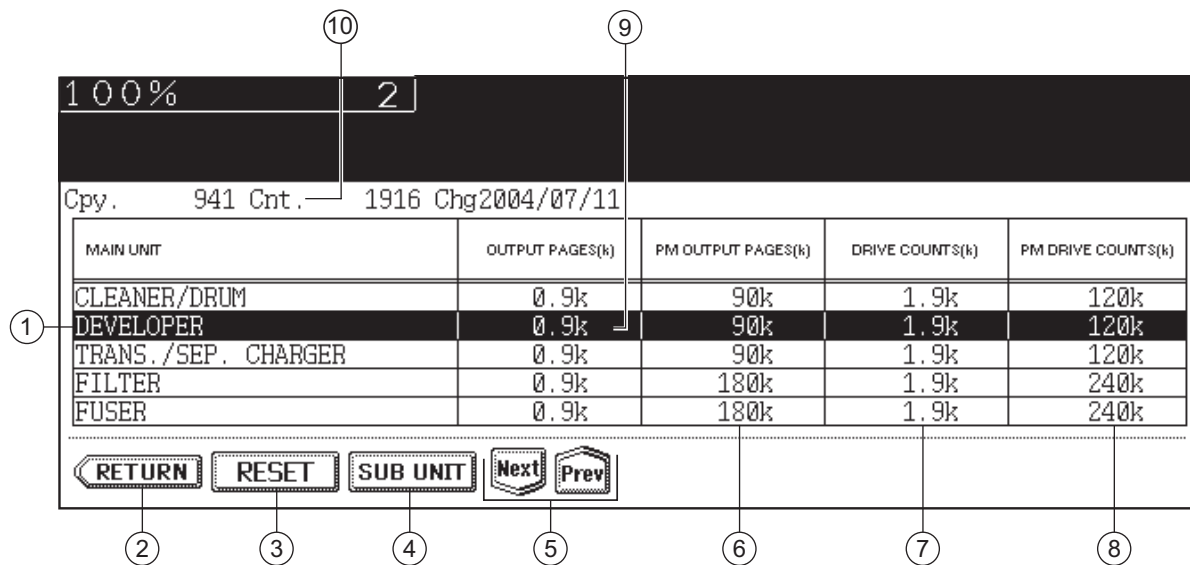


Fig. 4-2

- ① Displaying of the main unit name
- ② Back to the PM support mode activation screen
- ③ Clearing of the chosen unit counters (all the sub unit (parts) counters belonging to that unit)
All counters are cleared when the unit is not selected
- ④ Moving to the sub screen
- ⑤ Moving to the next/previous page
- ⑥ Displaying of the standard number of output pages counts (x 1,000) to replace the unit parts
- ⑦ Displaying of the present drive counts (x 1,000)
“*” is displayed next to the present number when the number of drive counts has exceeded its PM standard number.
- ⑧ Displaying of the standard number of drive counts (x 1,000) to replace the unit parts
- ⑨ Displaying of the present number of output pages counts (x 1,000)
When there are differences among the sub units (parts), “_” is displayed and “CHECK SUB-UNIT” is displayed at the top
“*” is displayed next to the present number when the number of output pages counts has exceeded its PM standard number.
- ⑩ Displaying of the number of output pages counts (Cpy.), drive counts (Cnt.) and previous replacement date (Chg.) for a chosen unit.
When the replacement date for the sub unit is different, press the [SUB UNIT] button to move to the sub screen and see each information, otherwise information is not displayed

Notes:

- “_” is always displayed at the drive counts section for the reversing automatic document feeder (RADF) and feed unit.
- The paper source differs depending on the structure of options, however, “0.0k” is displayed in “OUTPUT PAGES (k)” and its standard number of output pages is displayed in “PM OUTPUT PAGES (k)” even for the installed paper source.

2) Sub screen

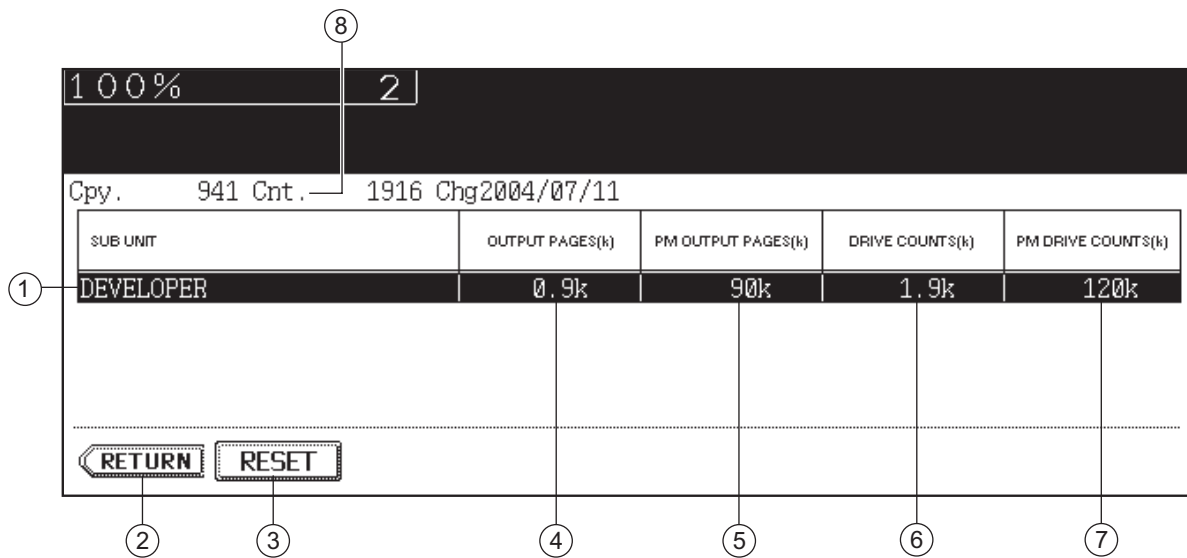


Fig. 4-3

- ① Displaying of the sub unit (parts) name
- ② Back to the main screen
- ③ Clearing of the chosen sub unit (parts) counters
- ④ Displaying of the present number of output pages counts (x 1,000)
 "*" is displayed next to the present number when the number of output pages counts has exceeded its PM standard number.
- ⑤ Displaying of the standard number of output pages counts (x 1,000) to replace the sub unit (parts)
- ⑥ Displaying of the present drive counts (x 1,000)
 "*" is displayed next to the present number when the number of drive counts has exceeded its PM standard number.
- ⑦ Displaying of the standard number of drive counts (x 1,000) to replace the sub unit (parts)
- ⑧ Displaying of the number of output pages counts, drive counts and previous replacement date for a chosen sub unit

3) Clear screen

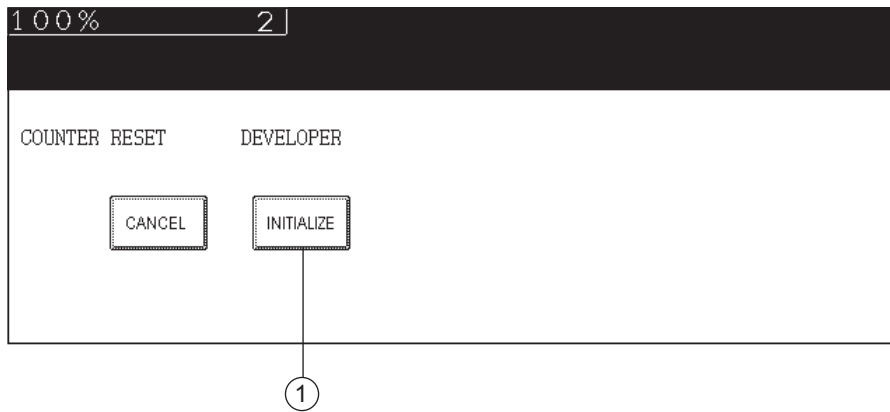


Fig. 4-4

- ① When the [INITIALIZE] button is pressed, “Present number of output pages counts” and “Present driving counts” are cleared and “Previous replacement date” is updated.

[3] LCD screen display list

Note:

The name inside [] is displayed on the LCD screen.

| Main screen | Sub-screen |
|--|--|
| Drum/cleaner unit [CLEANER/DRUM] | Drum [DRUM] Drum cleaning blade [DRUM BLADE] Main charger grid [GRID] Needle electrode [NEEDLE ELECTRODE] Separation finger for drum [SEPARATION FINGER (DRUM)] Recovery blade [RECOVERY BLADE] |
| Developer unit [DEVELOPER] | Developer [DEVELOPER] |
| Transfer/separation charger unit [TRANS./SEP. CHARGER] | Transfer charger wire [TRANSFER CHARGER WIRE] Separation charger wire [SEPARATION CHARGER WIRE] |
| Filter [FILTER] | Ozone filter [OZONE FILTER] |
| Fuser unit [FUSER] | Fuser roller [FUSER ROLLER] Pressure roller [PRESS ROLLER] Cleaning roller [CLEANING ROLLER] Separation finger for fuser roller [SEPARATION FINGER (FUSER)] |
| Upper drawer [1st CST.] | Pickup roller [PICK UP ROLLER (1st CST.)] Feed roller [FEED ROLLER (1st CST.)] Separation roller [SEP ROLLER (1st CST.)] |
| Lower drawer [2nd CST.] | Pickup roller [PICK UP ROLLER (2nd CST.)] Feed roller [FEED ROLLER (2nd CST.)] Separation roller [SEP ROLLER (2nd CST.)] |
| Bypass unit [SFB] | Pickup roller [PICK UP ROLLER (SFB)] Feed roller [FEED ROLLER (SFB)] Separation roller [SEP ROLLER (SFB)] |
| RADF [RADF] | Pickup roller [PICK UP ROLLER (RADF)] Feed roller [FEED ROLLER (RADF)] Separation roller [SEP ROLLER (RADF)] |
| LCF [LCF] | Pickup roller [PICK UP ROLLER (LCF)] Feed roller [FEED ROLLER (LCF)] Separation roller [SEP ROLLER (LCF)] |
| PFP upper drawer [3rd CST.] | Pickup roller [PICK UP ROLLER (3rd CST.)] Feed roller [FEED ROLLER (3rd CST.)] Separation roller [SEP ROLLER (3rd CST.)] |
| PFP lower drawer [4th CST.] | Pickup roller [PICK UP ROLLER (4th CST.)] Feed roller [FEED ROLLER (4th CST.)] Separation roller [SEP ROLLER (4th CST.)] |

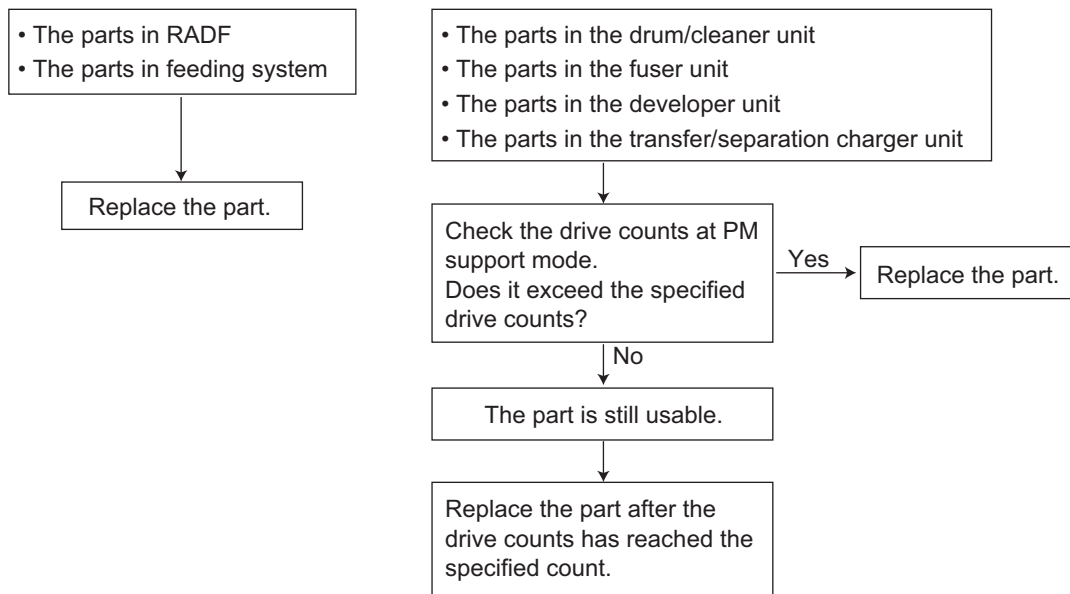
4.1.3 Work flow of parts replacement

The timing for the parts replacement usually depends on the number of output pages ever made after they were replaced before. However, its drive counts time is also to be considered when replacing the parts. Even if the number of output pages has reached the level of replacement, for instance, the part may still be usable with its drive counts not reaching the specified drive counts. On the other hand, the part may need replacement even if the number of output pages has not reached the level of replacement with its driving time exceeding the specified drive counts. The life span of some parts such as feed roller is heavily dependent on the number of output pages rather than the drive counts.

The following work flow diagram shows how to judge the timing of replacement with the number of output pages and the drive counts.

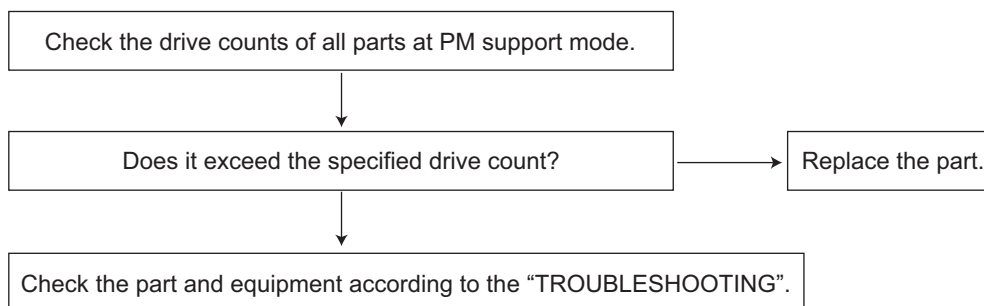
Example 1:

When the number of output pages has reached the specified level



Example 2:

When the image failure occurred before the number of output pages has reached the specified level



4.2 General Descriptions for PM Procedure

Perform the preventive maintenance in the following timing.

- e-STUDIO200L/202L: every 6,400 sheets
- e-STUDIO230/232: every 74,000 sheets
- e-STUDIO280/282: every 90,000 sheets

(1) Preparation

- Ask the user about the current conditions of the equipment and note them down.
- Before starting maintenance, make some sample copies and store them.
- See the replacement record and check the parts to be replaced in the PM support mode (6S-2) or list printing mode (9S-103).

6S-2 : [6] + [START] + [POWER] ON → [2] → [START]

9S-103 : [9] + [START] + [POWER] ON → [103] → [START]

| PM SUPPORT CODE LIST | | | | |
|--------------------------|--------------|----------------|--------------|-----------------|
| MM-DD-YY 09:30 | | | | |
| UNIT | OUTPUT PAGES | PM OUTPUT PAGE | DRIVE COUNTS | PM DRIVE COUNTS |
| DRUM | 81813 | 150000 | 119758 | 220000 |
| DRUM BLADE | 81813 | 150000 | 119758 | 220000 |
| GRID | 81813 | 150000 | 119758 | 220000 |
| MAIN CHARGER WIRE | 81813 | 150000 | 119758 | 220000 |
| SEPARATION FINGER (DRUM) | 81813 | 150000 | 119758 | 220000 |

Fig. 4-5

- Turn OFF the power and make sure to unplug the equipment.
- (2) Perform a preventive maintenance using the following checklist and illustrations. Refer to the Service Manual if necessary.
- (3) Plug in the equipment after the maintenance has been finished. Then turn ON the power and make some copies to confirm that the equipment is working properly.

4.3 Operational Items in Overhauling

Overhaul each equipment with the following timing.

- e-STUDIO200L/202L: When the number of output pages has reached 193,000 or 2.5 years have passed from the start of use (Whichever is earlier)
- e-STUDIO230/232: When the number of output pages has reached 222,000 or 2.5 years have passed from the start of use (Whichever is earlier)
- e-STUDIO280/282: When the number of output pages has reached 270,000 or 2.5 years have passed from the start of use (Whichever is earlier)

- (1) Replace all the supplies.
- (2) Check the components in the drive section (gears, pulleys, timing belts, etc.). Replace them with new ones if they are damaged.
- (3) Check all the adhesives such as tape and Mylar if they are damaged or have become unstuck. Replace them with new ones if necessary.
- (4) Check the performance of all the switches and sensors. Replace them with new ones if necessary.
- (5) Clean inside the equipment thoroughly.

4.4 Preventive Maintenance Checklist

Symbols used in the checklist

| Cleaning | | Lubrication | | Replacement | Operation check | Date |
|----------|--|-------------|------------------------------------|---|--|---------------------|
| A | Clean with alcohol ○ Clean with soft pad, cloth or vacuum cleaner | L | Launa 40 | The number of sheets consumed before replacement (Value x 1,000) △ Replace if deformed or damaged | ○ After cleaning or replacement, confirm there is no problem. | User name |
| | | | Coating | | | Serial No. |
| | | SI | Silicon oil | | | Inspector's name |
| | | W1 | White grease (Molykote X5-6020) | | | Remarks |
| | | W2 | White grease (Molykote HP-300) | | | |
| AV | Alvania No.2 | | | | | |
| FL | Floil (GE-334C) | | | | | |
| CG | Conductive grease (KS-660) | | | | | |

[Preventive Maintenance Checklist]

Notes:

- Perform cleaning and lubricating in the following timing. Lubricate the replacement parts according to the replacement cycle.
 e-STUDIO200L/202L: every 64,000 sheets
 e-STUDIO230/232: every 74,000 sheets
 e-STUDIO280/282: every 90,000 sheets
- Values under "Replacement" indicate the replacement cycle for the e-STUDIO200L/e-STUDIO230/e-STUDIO280 or e-STUDIO202L/e-STUDIO232/e-STUDIO282.
- The replacement cycle of the parts in the feeding section equals to the number of sheets fed from each paper source.
- Be careful not to put oil on the rollers, belts and belt pulleys when lubricating.

A. Scanner

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|-----|--|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| A1 | Original glass | ○ or A | | | | <P22-I1> | *a1 |
| A2 | ADF original glass | ○ | | | | <P22-I2> | *a1 |
| A3 | Mirror-1 | ○ | | | | | |
| A4 | Mirror-2 | ○ | | | | | |
| A5 | Mirror-3 | ○ | | | | | |
| A6 | Reflector | ○ | | | | <P23-I4> | |
| A7 | Lens | ○ | | | | <P11-I16> | |
| A8 | Exposure lamp | | | △ | ○ | <P23-I6> | |
| A9 | Automatic original detection sensor | ○ | | | ○ | <P11-I17> | |
| A10 | Slide sheet (front and rear) | ○ or A | | △ | | | |

B. Laser unit

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|----------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| B1 | Slit glass | ○ | | | | | |

C. Feed unit

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|--------------------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| C1 | Pickup roller | | | 80/80 | | <P15-I19> | |
| C2 | Feed roller | | | 80/80 | | <P15-I39> | |
| C3 | Separation roller | | AV, W2 | 80/80 | | <P15-I29> | *c1 |
| C4 | Transport roller (1st/2nd) | A | | Δ | | | |
| C5 | Paper guide | ○ | | | | | |
| C6 | Drive gear (tooth face and shaft) | | W1 | | | | |
| C7 | GCB bushing bearing | | L | | | | *c2 |
| C8 | One side of the plastic bushing | | W1 | | | | |
| C9 | Registration roller | A | | Δ | | | |

D. Automatic duplexing unit (MD-0102)

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|---|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| D1 | Transport roller (upper, middle and lower) | A | | Δ | | | |
| D2 | One side of the GCB busing to which the shaft is inserted | | L | | | | |
| D3 | One side of the plastic busing to which the shaft is inserted | | W1 | | | | |
| D4 | Paper guide | ○ | | | | <P32-I4> | |

E. Bypass feed unit

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|--------------------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| E1 | Pickup roller | | | 80/80 | | <P20-I4> | |
| E2 | Feed roller | | | 80/80 | | <P20-I4> | |
| E3 | Separation roller | | AV, W2 | 80/80 | | <P19-I4> | *e1 |
| E4 | Bypass tray | ○ | | | | | |
| E5 | Drive gear (tooth face and shaft) | | W1 | | | | |
| E6 | GCB bushing bearing | | L | | | | |

F. Main charger

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|----------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| F1 | Main charger case | ○ | | | | <P25-I1> | *f1 |
| F2 | Needle electrode | | | 64/74/90 | | | *f1 |
| F3 | Contact point of terminals | ○ | | | | | |
| F4 | Main charger wire cleaner | | | △ | ○ | <P25-I7> | |
| F5 | Main charger grid | | | 64/74/90 | | <P25-I3> | |

G. Transfer / Separation charger

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|----------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| G1 | Charger case | ○ | | | | <P26-I2> | *g1 |
| G2 | Transfer charger wire | | | 64/74/90 | ○ | <P26-I18> | *g1 |
| G3 | Separation charger wire | | | 64/74/90 | ○ | <P26-I18> | *g1 |
| G4 | Pre-transfer guide | ○ or A | | | | | |
| G5 | Post-transfer guide | ○ or A | | | | | |
| G6 | Separation supporter | ○ | | △ | | <P26-I17> | |
| G7 | Terminal cover | ○ | | | | | |
| G8 | Contact point of terminals | ○ | | | | | |
| G9 | Transfer guide roller | ○ | | △ | | <P26-I14> | |

H. Drum/Cleaner related section

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|----------------------------|----------|-------------|---------------------------------|--------------------|---------------------|----------------|
| H1 | Photoconductive drum | | | 64/74/90 | | | Chap. 4.8.2 |
| H2 | Discharge LED | ○ | | | | | |
| H3 | Whole cleaner unit | ○ | | | | | |
| H4 | Drum cleaning blade | | | 64/74/90 | | <P27-I5> | *h1 |
| H5 | Separation finger for drum | | | 64/74/90 △ | | | *h2 |
| H6 | Recovery blade | ○ | | 64/74/90 | | <P27-I6> | *h3 |
| H7 | Ozone filter | | | 128/148/180 | | <P12-I8> | |

I. Developer unit / Toner cartridge related section

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|----------------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| I1 | Whole developer unit | ○ | | | | | |
| I2 | Developer material | | | 64/74/90 | | | *i1 |
| I3 | Front shield | ○ | | △ | | | |
| I4 | Oil seal (6 pcs.) | | AV | 320/370/450 | | <P28-I11> | *i2 |
| I5 | Guide roller | ○ or A | | | | | |
| I6 | Side shield | ○ | | | | | |
| I7 | Developer unit lower stay | ○ | | | | | |
| I8 | Toner cartridge drive gear shaft | | W1 | | | | |

J. Fuser unit

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|------------------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| J1 | Fuser roller | | | 128/148/180 | | <P30-I23> | |
| J2 | Pressure roller | | | 128/148/180 | | <P30-I21> | |
| J3 | Separation finger for fuser roller | | | 128/148/180 | | <P30-I28> | *j1 |
| J4 | Cleaning roller | | | 128/148/180 | | <P30-I14> | |
| J5 | Fuser unit entrance guide | A | | | | <P30-I39> | |
| J6 | Thermistor (3 pcs.) | A | | △ | | <P30-I10> | *j2 |
| J7 | Drive gear (tooth face and shaft) | | W2 | △ | | <P30-I19> | |
| J8 | Fuser roller gear | | | △ | | <P30-I24> | |

K. Exit unit

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|--------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| K1 | Exit/reverse guide | A | | | | <P31-I21> | |
| K2 | Exit roller | A | | △ | | <P31-I3> | |
| K3 | Drive gear | | SI | | | | |

L. RADF (MR-3016)

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|-----|------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| L1 | Pickup roller | ○ | | 120 | | <P8-I26> | |
| L2 | Feed roller | ○ | | 120 | | <P8-I25> | |
| L3 | Separation roller | ○ | | 120 | | <P6-I6> | |
| L4 | Original length sensor | ○ | | | | | |
| L5 | Registration roller | A | | | | | |
| L6 | 1st small roller | A | | | | | |
| L7 | 2nd small roller | A | | | | | |
| L8 | Read sensor | ○ | | | | | |
| L9 | Read sensor | ○ | | | | | |
| L10 | Read roller | A | | | | | |
| L11 | 3rd small roller | A | | | | | |
| L12 | 4th small roller | A | | | | | |
| L13 | Reverse sensor | ○ | | | | | |
| L14 | Exit roller | A | | | | | |
| L15 | Reverse roller | A | | | | | |
| L16 | Platen sheet | ○ or A | | | | | |

M. PFP (KD-1011)

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|------------------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| M1 | Pickup roller (upper/lower) | | | 80 | | <P5-I29> | |
| M2 | Feed roller (upper/lower) | | | 80 | | <P5-I26> | |
| M3 | Separation roller (upper/lower) | | AV, W2 | 80 | | <P5-I12> | *m1 |
| M4 | Drive gear (tooth face) | | W1 | | | | |

N. LCF (KD-1012)

| | Items to check | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----|-------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| N1 | Pickup roller | A | | 160 | | <P4-I30> | |
| N2 | Feed roller | A | | 160 | | <P4-I28> | |
| N3 | Separation roller | A | | 160 | | <P5-I12> | |
| N4 | Drive gear | | W1 | | | | |

O. Job Separator (MJ-5004)

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| O1 | Idling roller | ○ or A | W1 | | | | *o1 |
| O2 | Other rollers | ○ or A | | | | | |
| O3 | Paper guide | ○ or A | | | | | |
| O4 | JSP upper stuck sensor | ○ | | | ○ | <P1-I51> | |
| O5 | JSP lower stuck sensor | ○ | | | ○ | <P1-I12> | |
| O6 | JSP paper jam sensor | ○ | | | ○ | | |

P. Offset Tray (MJ-5005)

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|--------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| P1 | OCT separator roller | ○ or A | W1, FL | | | <P2-I22> | *p1 |
| P2 | Other rollers | ○ or A | | | | <P2-I39> | |
| P3 | Paper guide | ○ or A | | | | | |
| P4 | OCT stuck sensor | ○ | | | ○ | <P1-I13> | |
| P5 | OCT home position sensor | ○ | | | ○ | | |
| P6 | OCT feed sensor | ○ | | | ○ | | |

Q. Finisher (MJ-1025)

| Items to check | | Cleaning | Lubrication | Replacement (x 1,000 sheets) | Operation check | Parts list <P-I> | Remarks |
|----------------|-----------------------------|----------|-------------|---------------------------------|--------------------|---------------------|---------|
| Q1 | Feed roller | ○ or A | | | | | |
| Q2 | Delivery roller | ○ or A | | | | | |
| Q3 | Stack delivery roller | ○ or A | | | | | |
| Q4 | Stack feed roller | ○ or A | | | | | |
| Q5 | Paper fold roller | ○ or A | | | | | |
| Q6 | Bind delivery roller | ○ or A | | | | | |
| Q7 | Waste full detection sensor | ○ | | | | | |
| Q8 | Feeding assembly member | ○ or A | | | | | |
| Q9 | Paper guide | ○ or A | | | | | |

R. RADF (MR-3020)

| Items to check | | Cleaning | Lubrication/ Coating | Replacement (KS) | Operation check | Parts list <P-I> | Remarks |
|----------------|---------------------------------|----------|-------------------------|---------------------|--------------------|---------------------|---------|
| R1 | Pickup roller | A | | 120 | | 5-1 | |
| R2 | Separation roller | A | | 120 | | 4-10 | |
| R3 | Feed roller | A | | 120 | | 5-1 | |
| R4 | Registration roller | A | | | | | |
| R5 | Intermediate transfer roller | A | | | | | |
| R6 | Front read roller | A | | | | | |
| R7 | Platen roller | A | | | | | |
| R8 | Rear read roller | A | | | | | |
| R9 | Reverse registration roller | A | | | | | |
| R10 | Exit/reverse roller | A | | | | | |
| R11 | Platen sheet | ○ or A | | | | | |

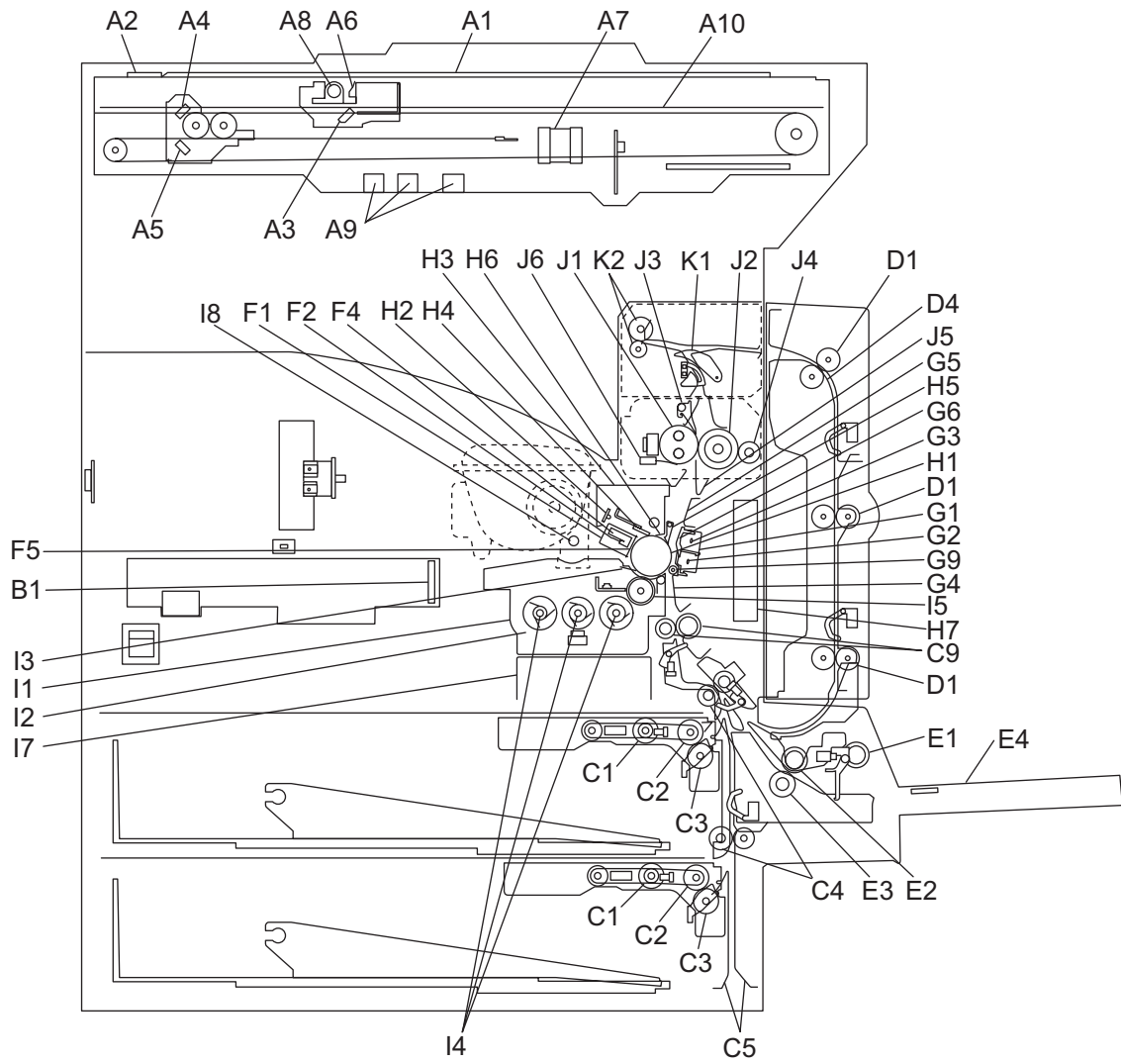


Fig. 4-6 Front side

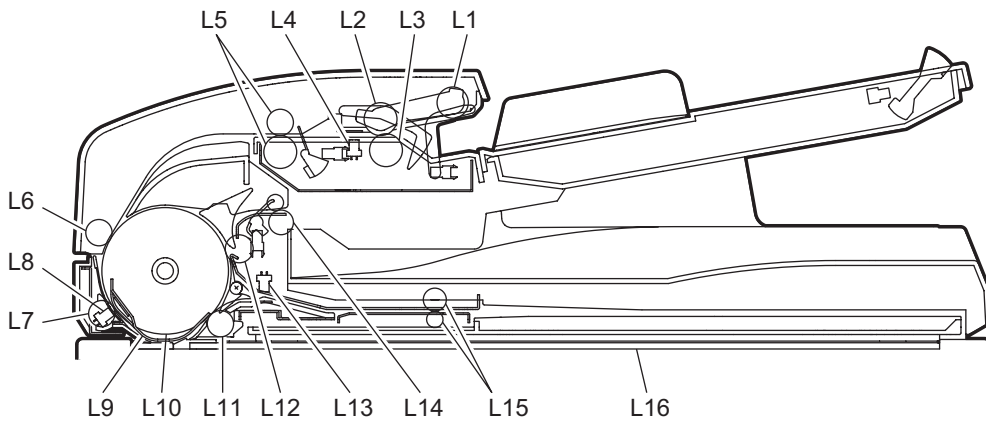


Fig. 4-7 Reversing Automatic Document Feeder (RADF: MR-3016)

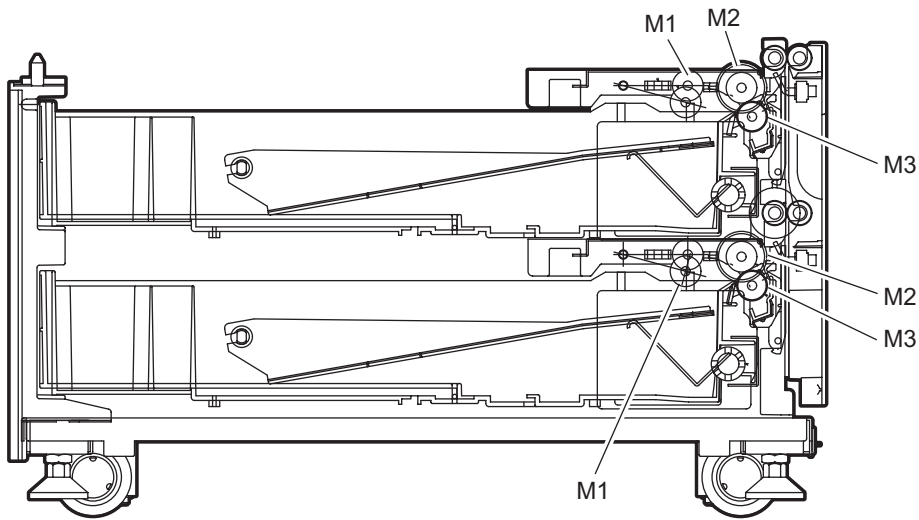


Fig. 4-8 Paper Feed Pedestal (PFP)

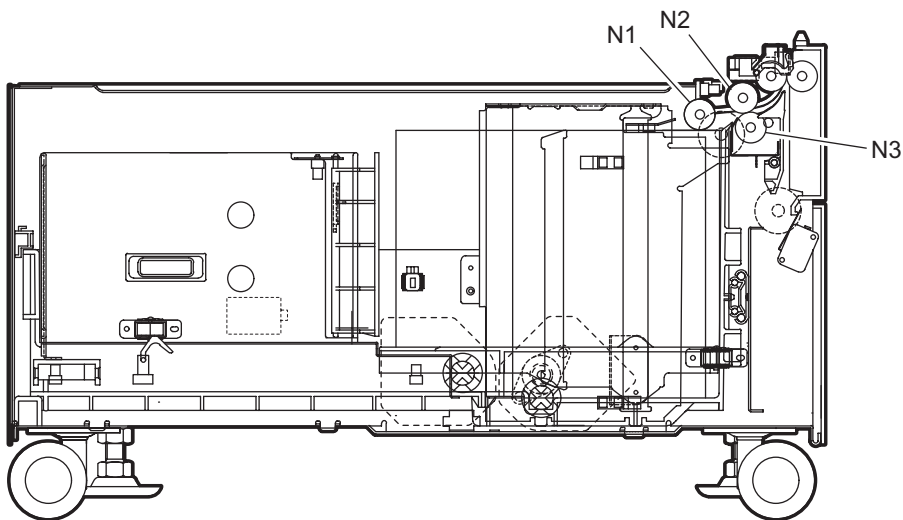


Fig. 4-9 Large Capacity Feeder (LCF)

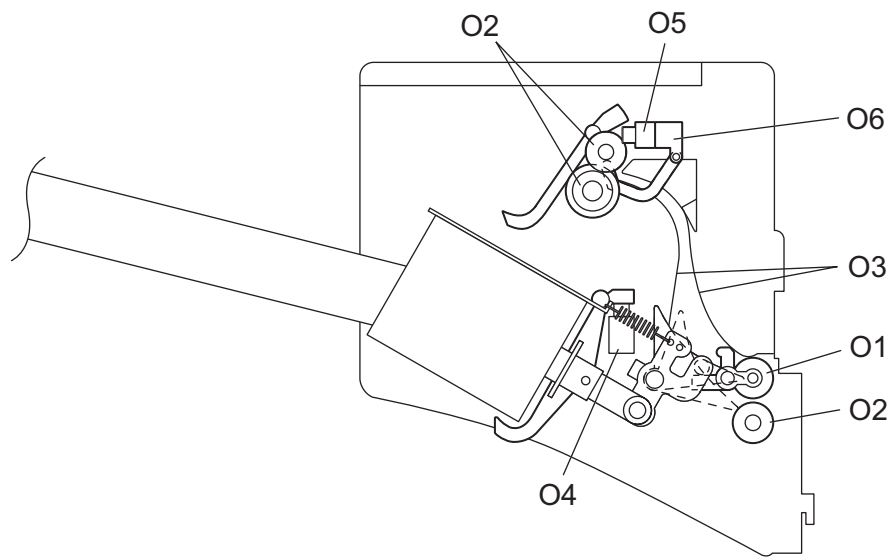


Fig. 4-10 Job Separator (JSP)

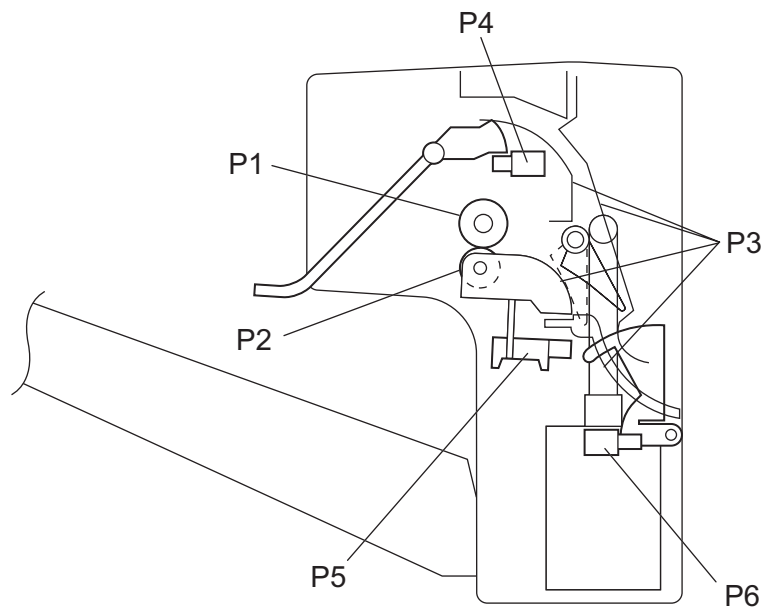


Fig. 4-11 Offset Tray (OCT)

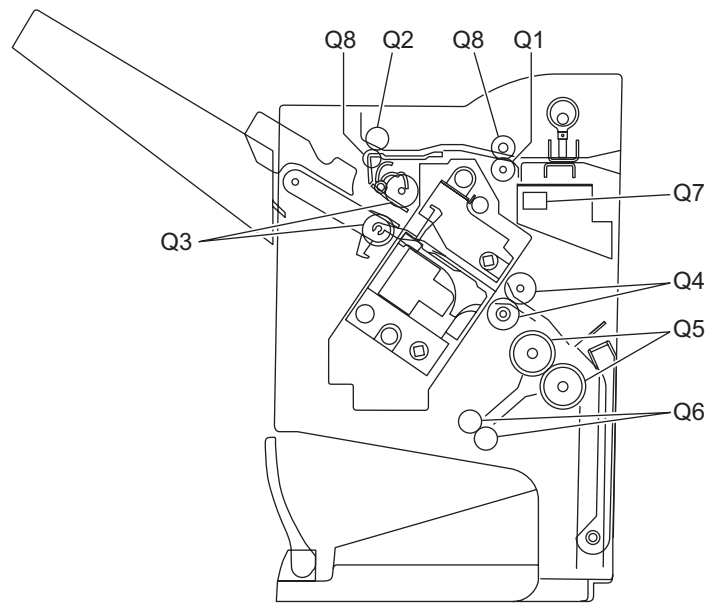


Fig. 4-12 Finisher (MJ-1025)

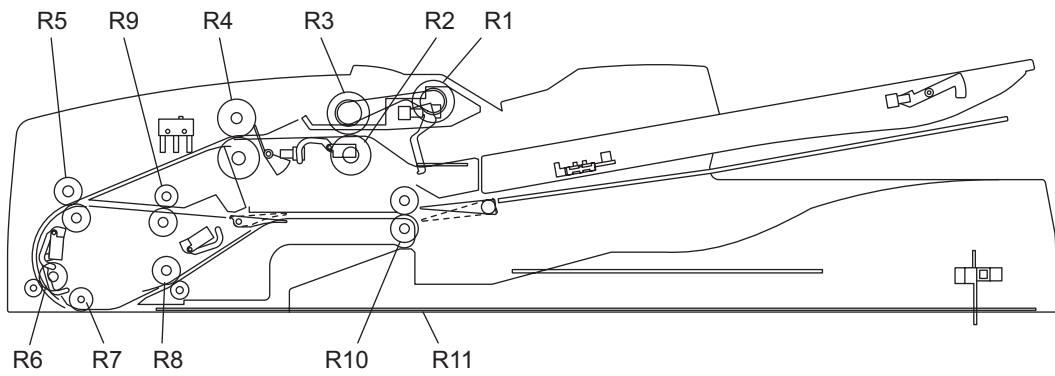


Fig. 4-13 Reversing Automatic Document Feeder (RADF: MR-3020)

Remarks “*” in the Preventive Maintenance Check List

- * a1. Original glass / ADF original glass
Clean both sides of the original glass and ADF original glass.

Note:

Make sure that there is no fingerprints or oil staining on part of the original glass on where the original scale is mounted since the shading correction plate is located below the scale to be scanned.

- * c1, m1. Separation roller (Feed unit, PFP)
Apply an even coat of grease (Alvania No.2) to all round the inside of the spring.
When replacing the separation roller, apply adequate amount of white grease (Molykote HP-300) on the places of the holder shown in the figure (4 places).

Note:

Make sure that the grease does not adhere to the roller surface. Wipe it off with alcohol if adhered.

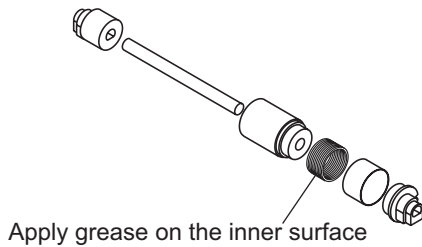


Fig. 4-14

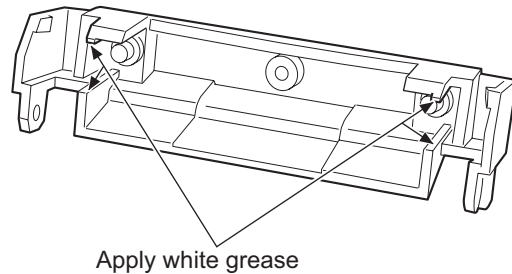


Fig. 4-15

- * c2. Drive gears in the paper feeding section (teeth of gears and shafts)
Apply some white grease (Molykote X5-6020) to the teeth of gears and shafts of the drive gears.

Note:

Make sure that oil is not running over or scattered around as the gear is rotated coming into the clutch after applying Molykote to the gear which is located near the clutch. The quantity of Molykote should be smaller than that to be applied to the other parts.

- * e1. Separation roller (SFB)
Apply an even coat of grease (Alvania No.2) to all round the inside of the spring.
When replacing the separation roller, apply adequate amount of white grease (Molykote HP-300) on the places of the holder shown in the figure (4 places).

Note:

Make sure that the grease does not adhere to the roller surface. Wipe it off with alcohol if adhered.

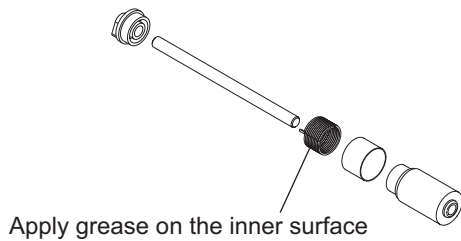


Fig. 4-16

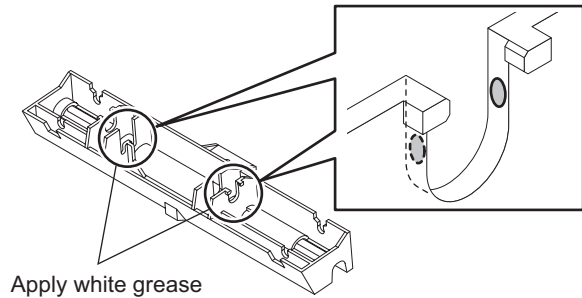


Fig. 4-17

- * f1. Main charger case / Needle electrode
Clean the main charger case with a cloth soaked in water and squeezed tightly, and then wipe them with a dry cloth.
Clean the needle electrode only with the main charger cleaner.
Replace the needle electrode with a new one if it is damaged regardless of the number of output pages which have been made.

Note:

Do not touch the needle electrode with your bare hand when attaching the needle electrode.

- * g1. Transfer / separation charger case and transfer / separation wire
Clean the transfer / separation charger case with a cloth soaked in water and squeezed tightly, and then wipe them with a dry cloth.
Replace the wire with a new one if it is damaged regardless of the number of output pages which have been made.


Notes:

- Do not deform the metal plate of the transfer guide roller.
- Be careful of the following when attaching a new wire (length: 353 mm)
 - Insert the wire securely into the V-grooves of the front and rear sides.
 - Do not twist the wire.
 - Do not touch the wire with your bare hand.

- * h1. Drum cleaning blade
Since the edge of the blade is vulnerable and can be easily damaged by factors such as the adherence of paper dust. Replace the cleaning blade with new ones if poor images are printed due to the damaged blade regardless of the number of output pages if which have been made.
- * h2. Separation fingers for drum
The paper jam may be caused if the tip of the separation finger is damaged or deformed. If there is any problem with it, replace the finger with a new one regardless of the number of output pages which have been made.
If any mark which was made by the finger appears on the printed image, clean the tip of the finger.

Notes:

1. Wipe the tip of the finger lightly with a dry cloth trying not to deform it.
Do not leave the lint on the tip.
2. Apply patting powder to the tip of the fingers and drum surface after replacing or cleaning them to reduce the load on the drum surface by the finger.

- * h3. Recovery blade
Replace the recovery blade regardless the number of output pages if the edge of the blade get damaged.
- * i1. Developer material
After replacing the developer material, be sure to perform the auto-toner adjustment.
( P. 3-1 "3.1 Adjustment of Auto-Toner Sensor")
- * i2. Oil seal (Developer unit)
Mixer unit (Shafts of mixers-1, -2 & -3) 6 pcs.

During replacement, coat the oil seal with grease (Alvanian No.2).

- (1) Push in a new oil seal parallel to the mounting hole section of the developer frame or outside of the holder.
* Pay attention to the direction in which the oil seal is attached. (See figure on right.)
- (2) Apply an even coat of grease to the inside of the oil seal.
• Amount: About two small drops
- (3) Wipe off any grease the exudes from the inside.

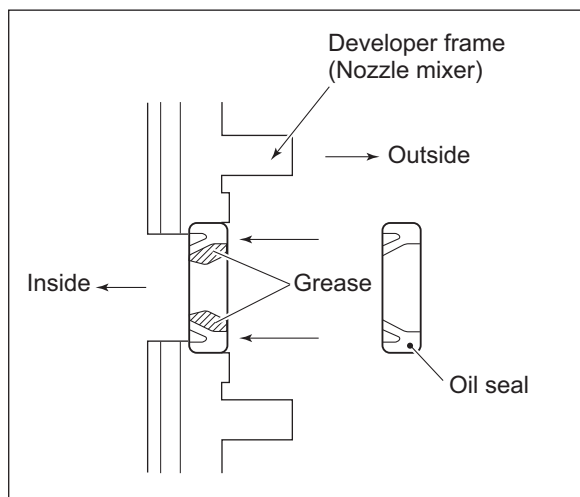


Fig. 4-18

- * j1. Separation fingers for fuser roller
The paper jam may be caused if the tip of the finger is damaged or deformed. If there is any problem with it, replace the finger with a new one regardless of the number of output pages which have been made. Do not damage the tip of the finger during the cleaning. The finger may be damaged if the toner adhering to the tip of it is scraped off forcibly. Replace the finger if the toner is sticking to it heavily.
- * j2. Thermistor
Clean the thermistor with alcohol if the toner or dirt is sticking to it when the fuser roller is replaced.
Do not deform or damage the thermistor during the cleaning. Replace the thermistor with a new one if it is damaged or deformed regardless of degree.
- * o1. Idling roller
Apply one-rice-grain-amount of white grease (Molykote X5-6020) to each part A in the figure below.

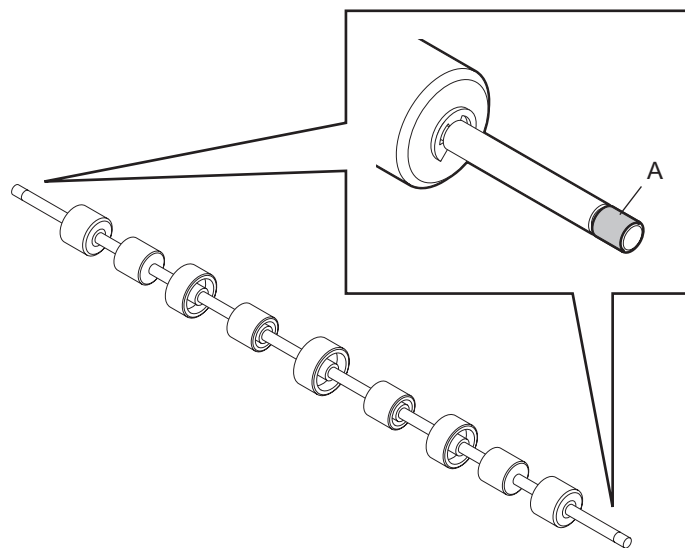


Fig. 4-19

- * p1. OCT separator roller
Apply one-rice-grain-amount of FLOIL (GE-334C) to the part A in the figure below. Also apply three-rice-grain-amount of white grease (Molykote X5-6020) to each part B.

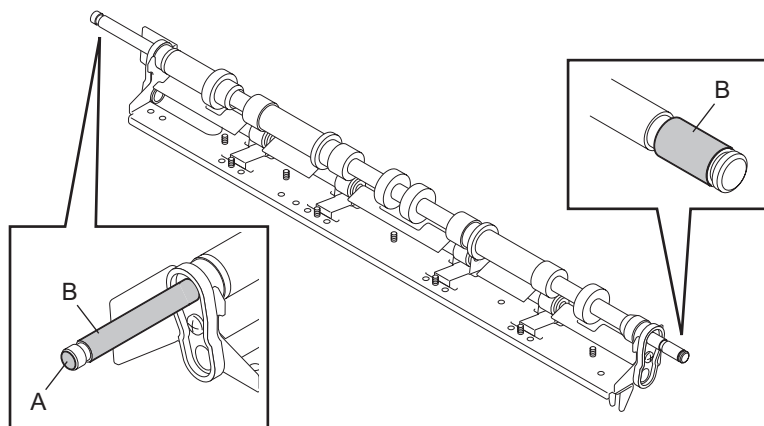


Fig. 4-20

4.5 PM KIT

| Item | Product name | Part name | Qty. |
|------------------|------------------------------------|-------------------|------|
| DEV-KIT-2320 | Drum cleaning blade | BL-2320D | 1 |
| | Recovery blade | ASYS-BLADE-REC | 1 |
| | Separation finger for drum | SCRAPER-371 | 3 |
| | Main charger grid | GRID-CH-M-371 | 1 |
| | Needle electrode | CH-M | 1 |
| | Transfer charger wire | WIRE-CH-060-353-R | 1 |
| | Separation charger wire | WIRE-CH-060-353-R | 1 |
| | Developer material | D-2320 | 1 |
| FR-KIT-2320 | Fuser roller | HR-2320-U | 1 |
| | Pressure roller | HR-2320-L | 1 |
| | Separation finger for fuser roller | SCRAPER-HR-371 | 6 |
| | Cleaning roller | B-2320-L | 1 |
| | Ozone filter | ASYS-FILTER-OZN | 1 |
| ROLL-KIT-2320CST | Pickup roller | ROLLER-PICK-AT | 1 |
| | Feed roller | K-ROLL-FEED | 1 |
| | Separation roller | K-ROLL-SPT | 1 |
| ROL-KIT-1010 | Pickup roller | ROLL-PICK-UP | 1 |
| | Feed roller | ROLL-PAPER-FED-F | 1 |
| | Separation roller | ROLL-PAPER-FED-S | 1 |
| DF-KIT-3015 | Pickup roller | ROLL-PICK-UP | 1 |
| | Feed roller | ROLL-FEED | 1 |
| | Separation roller | ROL-SPT-513 | 1 |

4.6 Jig List

| Item | Parts list | |
|-------------------------------|------------|------|
| | Page | Item |
| Door switch jig | 101 | 1 |
| Brush | 101 | 2 |
| Doctor sleeve jig | 101 | 3 |
| Developer material nozzle | 101 | 4 |
| Wire holder jig | 101 | 5 |
| Belt tension jig | 101 | 6 |
| High-voltage transformer jig | 101 | 7 |
| Downloading jig (DLM board) | 102 | 1 |
| Download JIG-2 (6 Flash ROMs) | 102 | 2 |
| Download JIG-1 (2 Flash ROMs) | 102 | 3 |
| ROM writer adapter (For 1881) | 102 | 4 |
| ROM writer adapter (For 1931) | 102 | 5 |

4.7 Grease List

| | Grease name | Part name | Volume | Container | Parts list | |
|----|---------------------------------|-----------------|--------|-----------|------------|------|
| | | | | | Page | Item |
| SI | Silicon oil | ASM-SILICONE-1M | 100cc | Bottle | 101 | 10 |
| L | Launa 40 | OIL-LAUNA40-100 | 100cc | Oiler | 101 | 11 |
| W2 | White grease (Molykote HP-300) | ASM-PG-HP300-S | 100g | Bottle | 101 | 12A |
| W2 | White grease (Molykote HP-300) | GREASE-HP300-S | 10g | Bottle | 101 | 12B |
| AV | Alvania No.2 | ASM-PG-ALV2 | 100g | Tube | 101 | 13 |
| W1 | White grease (Molykote X5-6020) | MOLYKOTE-100 | 100g | Tube | 101 | 14 |
| FL | Floil (GE-334C) | ASM-PG-GE334C-S | 20g | Bottle | 101 | 15 |

4.8 Precautions for Storing and Handling Supplies

4.8.1 Precautions for storing TOSHIBA supplies

1) Toner/Developer

Toner and developer should be stored in a place where the ambient temperature is between 10°C to 35°C (no condensation), and should also be protected against direct sunlight during transportation.

2) Photoconductive drum

Like the toner and developer, photoconductive drum should be stored in a dark place where the ambient temperature is between 10°C to 35°C (no condensation). Be sure to avoid places where drums may be subjected to high humidity, chemicals and/or their fumes.

3) Drum cleaning blade

This item should be stored in a flat place where the ambient temperature is between 10°C to 35°C, and should also be protected against high humidity, chemicals and/or their fumes.

4) Fuser roller / Pressure roller / Cleaning roller

Avoid places where the rollers may be subjected to high humidity, chemicals and/or their fumes.

5) Paper

Avoid storing paper in places where it may be subjected to high humidity.
After a package is opened, be sure to place and store it in a storage bag.

4.8.2 Checking and cleaning of photoconductive drum

1) Use of gloves

If fingerprints or oil adhere to the drum surface, the property of the photoconductive drum may degrade, affecting the quality of the print image. So, do not touch the drum surface with bare hands.

2) Handling precautions

As the photoconductive drum surface is very sensitive, be sure to handle the drum carefully when installing and removing it so as not damage its surface.

Be sure to apply "patting powder" (lubricant) to the entire surface of the drum (including both ends of the drum where OPC is not coated) when replacing the drum. When the drum has been replaced with a new one, the drum counter (the Setting Mode 08-1150-0, 3, 6 and 7) must be cleared to 0 (zero).

This clearing can be performed in the PM Support Mode.

Notes:

- Application of the patting powder is for reducing the friction between the drum and cleaning blade. If the application of patting powder is neglected, the drum and cleaning blade may be damaged.
- When paper fibers or dirt adhere to the cleaning blade edge, they may reduce the cleaning efficiency and, in addition, may damage the blade and the drum. Be sure to remove any fibers found adhering to the blade.

3) Installation of the equipment and storage of drum

Avoid installing the equipment where it may be subjected to high temperature, high humidity, chemicals and/or their fumes.

Do not place the light drum in a location where it is exposed to direct sunlight or high intensity light such as near a window. Otherwise the drum will fatigue, and will not produce sufficient image density immediately after being installed in the equipment.

4) Cleaning the drum

At preventive maintenance calls, wipe the entire surface of the drum clean using the designated cleaning cotton. Use sufficiently thick cleaning cotton (dry soft pad) so as not to scratch the drum surface inadvertently with your fingertips or nails. Also, remove your rings and wristwatch before starting cleaning work to prevent accidental damage to the drum.

Do not use alcohol, selenium refresher and other organic solvents or silicon oil as they will have an adverse effect on the drum.

5) Scratches on photoconductive drum surface

If the surface is scratched in such a way that the aluminum substrate is exposed, no print image will be produced on this area. In addition, the cleaning blade will be damaged so replacement with a new drum will be necessary.

6) Collecting used photoconductive drums

Regarding the recovery and disposal of used photoconductive drums, we recommend following the relevant local regulations or rules.

4.8.3 Checking and cleaning of drum cleaning blade

1) Handling precautions

Pay attention to the following points as the cleaning blade life is determined by the condition of its edge:

- Do not allow hard objects to hit or rub against blade edge.
- Do not rub the edge with a cloth or soft pad.
- Do not leave oil (or fingerprints, etc.) on the edge.
- Do not apply solvents such as paint thinner to the blade.
- Do not allow paper fibers or dirt to contact the blade edge.
- Do not place the blade near a heat source.

2) Cleaning procedure

Clean the blade edge with a cloth moistened with water and squeezed lightly.

4.8.4 Checking and cleaning of fuser roller and pressure roller

1) Handling precautions

- Fuser roller

Do not leave any oil (fingerprints, etc.) on the fuser roller.

Be careful not to allow any hard object to hit or rub against the fuser roller, or it may be damaged, possibly resulting in poor cleaning.

- Pressure roller

Do not leave any oil (fingerprints, etc.) on the pressure roller.

2) Checking

- Check for stain and damage on the fuser and pressure rollers, and clean if necessary.
- Check the separation guide and fingers and check for chipped tips.
- Check the cleaning effect of the cleaning roller.
- Check the thermistors for proper contact with the pressure roller.
- Check the fused and fixed condition of the toner.
- Check the gap between the entrance guide and pressure roller.
- Check the fuser roller for proper rotation.

3) Cleaning procedure

When fuser roller and pressure roller become dirty, they will cause jamming. If this happens, wipe the surface clean with a piece of soft cloth. For easier cleaning, clean the roller while they are still warm.

Note:

Be careful not to rub the fuser roller and pressure roller surface with your nails or hard objects because it can be easily damaged. Do not use silicone oil on the fuser roller and pressure roller.

4.8.5 Checking and replacing the cleaning roller

1) Handling precautions


Never allow solvents such as paint thinner to touch to the cleaning rollers.

2) Poor cleaning and corrective treatment

Judgment should be made depending on how much toner has been deposited on the pressure roller surface. When its surface is stained with toner, check the cleaning roller. If toner is heavily adhered on the cleaning roller, the cleaning roller should be replaced with new ones.

Replace it when a specified number of output pages have been made.

5. TROUBLESHOOTING

When any of the PC boards or the HDD requires replacement, refer to  P. 5-116 "5.3 Replacement of PC Boards and HDD".

5.1 Diagnosis and Prescription for Each Error Code

5.1.1 Paper transport jam

[E010] Leading edge of paper not reaching the exit sensor

[E020] Trailing edge of paper not passing the exit sensor

Open the transfer cover. Is there any paper on the transport path?

↓ YES → Remove the paper.

NO

Is the exit sensor working? (Perform the input check in the test mode: 03-[FAX]ON/[2]/[B])

↓ NO →

- 1) Check if the connector of the exit sensor is disconnected.
- 2) Check if the connector CN308 on the LGC board is disconnected.
- 3) Check if the connector pins are disconnected and the harnesses are open circuited.
- 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 5) Replace the exit sensor.
- 6) Replace the LGC board.

↓

YES

Is the registration roller clutch working?

(Perform the output check in the test mode: 03-108/158)

↓ NO →

- 1) Check if the connector of the registration roller clutch is disconnected.
- 2) Check if the connector CN305 on the LGC board is disconnected.
- 3) Check if the connector pins are disconnected and the harnesses are open circuited.
- 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 5) Replace the registration roller clutch.
- 6) Replace the LGC board.

↓

YES

Check the registration roller. Replace it if it is worn out.

[E030] Paper remaining inside the equipment at power-ON

Open the cover of the unit/area whose picture is blinking on the control panel. Is there any paper on the transport path? (Refer to the following table.)

↓ YES → Remove the paper.

NO

Is the sensor in the jamming area working? (Perform the input check in the test mode: refer to the following table.)

↓ NO →

- 1) Check if the connector of the sensor is disconnected.
- 2) Check if any of the connectors on the LGC board is disconnected.
- 3) Check if the connector pins are disconnected and the harnesses are open circuited.
- 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 5) Replace the sensor.
- 6) Replace the LGC board.

YES

Replace the LGC board.

Relation between the jamming area and the corresponding sensors and covers
(If a jam is occurring in the ADU, LCF, PFP, JSP or OCT check the board in each unit.)

| Jamming area | Cover | Sensor | Test mode / Input check |
|--------------------------|----------------|--------------------------------|-------------------------|
| Registration area | Transfer cover | Registration sensor | 03-[FAX]ON/[2]/[A] |
| | | 1st transport sensor | 03-[FAX]OFF/[6]/[E] |
| Exit area | Transfer cover | Exit sensor | 03-[FAX]ON/[2]/[B] |
| ADU | ADU | ADU entrance sensor | 03-[FAX]OFF/[1]/[H] |
| | | ADU exit sensor | 03-[FAX]OFF/[1]/[G] |
| Feeding area (Main unit) | Side cover | 2nd transport sensor | 03-[FAX]OFF/[7]/[E] |
| LCF | LCF side cover | LCF feed sensor | 03-[FAX]OFF/[5]/[G] |
| PFP | PFP side cover | PFP upper drawer feed sensor | 03-[FAX]OFF/[2]/[D] |
| | | PFP lower drawer feed sensor | 03-[FAX]OFF/[4]/[D] |
| Bridge unit | Bridge unit | Bridge unit transport sensor-1 | 03-[FAX]ON/[3]/[H] |
| | | Bridge unit transport sensor-2 | 03-[FAX]ON/[3]/[E] |
| JSP | JSP cover | JSP feed sensor | 03-[FAX]ON/[3]/[H] |
| OCT | OCT cover | OCT feed sensor | 03-[FAX]ON/[3]/[H] |

[E090] Paper jam by HDD abnormality

- (1) Check if the error is cleared by turning the power OFF and then back ON.
- (2) Check if the connectors of the HDD are disconnected.
- (3) Check if the connector pins are disconnected and the harnesses are open circuited.
- (4) Replace the HDD.
- (5) Replace the SYS board.

[E200] Paper fed from the upper drawer not reaching the registration sensor

[E210] Paper fed from the lower drawer not reaching the registration sensor

[E300] Paper fed from the PFP upper drawer not reaching the registration sensor

[E330] Paper fed from the PFP lower drawer not reaching the registration sensor

[E3C0] Paper fed from the LCF not reaching the registration sensor

Open the transfer cover. Is there paper in front of the registration sensor?

↓ YES → Remove the paper.

NO

Is the registration sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[2]/[A])

| NO → 1) Check if the connector of the registration sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the registration sensor.
| 6) Replace the LGC board.
↓

YES

Are the (lower/middle) transport clutches working?

(Perform the output check in the test mode: 03-203, 205)

| NO → 1) Check if the connectors of the (lower/middle) transport clutches are
| disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the (lower/middle) transport clutches.
| 6) Replace the LGC board.
↓

YES

- 1) Check the condition of the feed roller, separation roller and pickup roller of each paper source, and replace them if they are worn out.
- 2) Check the transport roller. Replace it if it is worn out.

[E220] Paper fed from the lower drawer not reaching the 1st transport sensor

[E310] Paper fed from the PFP upper drawer not reaching the 1st transport sensor

[E340] Paper fed from the PFP lower drawer not reaching the 1st transport sensor

[E3D0] Paper fed from the LCF not reaching the 1st transport sensor

Open the transfer cover. Is there paper in front of the 1st transport sensor?

↓ YES → Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

| NO → 1) Check if the connector of the 1st transport sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 1st transport sensor.
| 6) Replace the LGC board.
↓

YES

Are the (lower/middle) transport clutches working?

(Perform the output check in the test mode: 03-203, 205)

| NO → 1) Check if the connectors of the (lower/middle) transport clutches are
| disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the (lower/middle) transport clutches.
| 6) Replace the LGC board.
↓

YES

- 1) Check the condition of the feed roller, separation roller and pickup roller of each paper source, and replace them if they are worn out.
- 2) Check the transport roller. Replace it if it is worn out.

[E270] Bypass transport jam (Paper not reaching the registration sensor)

[E280] ADU transport jam (Paper not reaching the registration sensor)

Open the transfer cover. Is there paper in front of the registration sensor?

↓ YES → Remove the paper.

NO

Is the registration sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[2]/[A])

| NO → 1) Check if the connector of the registration sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the registration sensor.
| 6) Replace the LGC board.
↓

YES

Is the registration clutch working?

(Perform the output check in the test mode: 03-108/158)

| NO → 1) Check if the connector of the registration clutch is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the registration roller clutch.
| 6) Replace the LGC board.
↓

YES

Check the registration roller. Replace it if it is worn out.

[E320] Paper fed from the PFP upper drawer not reaching the 2nd transport sensor

[E350] Paper fed from the PFP lower drawer not reaching the 2nd transport sensor

[E3E0] Paper fed from the LCF not reaching the 2nd transport sensor

Open the side cover. Is there paper in front of the 2nd transport sensor?

↓ YES → Remove the paper.

NO

Is the 2nd transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[7]/[E]

| NO → 1) Check if the connector of the 2nd transport sensor is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 2nd transport sensor.
| 6) Replace the LGC board.
↓

YES

Are the (lower/middle) transport clutches working?

(Perform the output check in the test mode: 03-203, 205)

| NO → 1) Check if the connectors of the (lower/middle) transport clutches are
| disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the (lower/middle) transport clutches.
| 6) Replace the LGC board.
↓

YES

Is the PFP transport clutch working? (Perform the output check in the test mode: 03-225)

| NO → 1) Check if the connector of the PFP transport clutch is disconnected.
| 2) Check if any of the connectors CN241, CN242 and CN244 on the
| PFP board is disconnected.
| 3) Check if the connector CN310 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the PFP board and LGC board
| are short circuited or open circuited.
| 6) Replace the PFP transport clutch.
| 7) Replace the PFP board.
| 8) Replace the LGC board.
↓

YES

- 1) Check the condition of the feed roller, separation roller and pickup roller of each paper source, and replace them if they are worn out.
- 2) Check the transport roller. Replace it if it is worn out.

[E360] Paper fed from the PFP lower drawer not reaching the PFP upper drawer feed sensor

Open the PFP side cover. Is there any paper in front of the PFP upper drawer feed sensor?

↓ YES → Remove the paper.

NO

Is the PFP upper drawer feed sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[2]/[D])

- | NO →
- 1) Check if the connector of the PFP upper drawer feed sensor is disconnected.
 - 2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP upper drawer feed sensor.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

Is the PFP transport clutch working? (Perform the output check in the test mode: 03-225)

- | NO →
- 1) Check if the connector of the PFP transport clutch is disconnected.
 - 2) Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP transport clutch.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Check the condition of the feed roller, separation roller and pickup roller of each paper source, and replace them if they are worn out.
- 2) Check the PFP transport roller. Replace it if it is worn out.

[E510] ADU transport jam (paper not reaching the ADU exit sensor)

Open the ADU. Is there any paper in front of the ADU exit sensor?

↓ YES → Remove the paper.

NO

Is the ADU exit sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[1]/[G])

| NO → 1) Check if the connector of the ADU exit sensor is disconnected.
| 2) Check if either of the connectors CN562 or CN213 on the ADU board
| is disconnected.
| 3) Check if the connector CN304 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the ADU board and LGC board
| are short circuited or open circuited.
| 6) Replace the ADU exit sensor.
| 7) Replace the ADU board.
↓ 8) Replace the LGC board.

YES

Is the ADU clutch working? (Perform the output check in the test mode: 03-222)

| NO → 1) Check if the connector of the ADU clutch is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the ADU clutch.
↓ 6) Replace the LGC board.

YES

Check the rollers in the ADU. Replace them if they are worn out.

[E520] ADU stack jam (paper not reaching the ADU entrance sensor)

Open the ADU. Is there any paper in front of the ADU entrance sensor?

↓ YES → Remove the paper.

NO

Is the ADU entrance sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[1]/[H])

| NO → 1) Check if the connector of the ADU entrance sensor is disconnected.
| 2) Check if either of the connectors CN562 or CN214 on the ADU board
| is disconnected.
| 3) Check if the connector CN304 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the ADU board and LGC board
| are short circuited or open circuited.
| 6) Replace the ADU entrance sensor.
| 7) Replace the ADU board.
↓ 8) Replace the LGC board.

YES

Is the exit motor (rotating in reverse) working?

(Perform the output check in the test mode: 03-121/171)

| NO → 1) Check if the connector of the exit motor is disconnected.
| 2) Check if the connector CN306 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the exit motor.
↓ 6) Replace the LGC board.

YES

Is the ADU motor working? (Perform the output check in the test mode: 03-110/160)

| NO → 1) Check if the connector of the ADU motor is disconnected.
| 2) Check if any of the connectors CN562, CN563 and CN215 on the
| ADU board is disconnected.
| 3) Check if the connector CN304 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the ADU board and LGC board
| are short circuited or open circuited.
| 6) Replace the ADU motor.
| 7) Replace the ADU board.
↓ 8) Replace the LGC board.

YES

Check the rollers in the ADU and the exit roller of the equipment. Replace them if they are worn out.

[E550] Paper remaining on the transport path

Open the cover of the unit/area whose picture is blinking on the control panel. Is there any paper on the transport path?

↓ YES → Remove the paper.

NO

Is the sensor in the jamming area working? (Perform the input check in the test mode: refer to the following table)

- ↓ NO →
- 1) Check if the connector of the sensor is disconnected.
 - 2) Check if any of the connectors on the LGC board is disconnected.
 - 3) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
 - 5) Replace the sensor.
 - 6) Replace the LGC board.
- ↓

YES

Replace the LGC board.

Relation between the jamming area and the corresponding sensors/covers
(If a jam is occurring in the ADU, LCF, PFP, JSP or OCT check the board in each unit.)

| Jamming area | Cover | Sensor | Test mode/Input check |
|--------------------------|----------------|--------------------------------|-----------------------|
| Registration area | Transfer cover | Registration sensor | 03-[FAX]ON/[2]/[A] |
| | | 1st transport sensor | 03-[FAX]OFF/[6]/[E] |
| Exit area | Transfer cover | Exit sensor | 03-[FAX]ON/[2]/[B] |
| ADU | ADU | ADU entrance sensor | 03-[FAX]OFF/[1]/[H] |
| | | ADU exit sensor | 03-[FAX]OFF/[1]/[G] |
| Feeding area (Main unit) | Side cover | 2nd transport sensor | 03-[FAX]OFF/[7]/[E] |
| LCF | LCF side cover | LCF feed sensor | 03-[FAX]OFF/[5]/[G] |
| PFP | PFP side cover | PFP upper drawer feed sensor | 03-[FAX]OFF/[2]/[D] |
| | | PFP lower drawer feed sensor | 03-[FAX]OFF/[4]/[D] |
| Bridge unit | Bridge unit | Bridge unit transport sensor-1 | 03-[FAX]ON/[3]/[H] |
| | | Bridge unit transport sensor-2 | 03-[FAX]ON/[3]/[E] |
| JSP | JSP cover | JSP feed sensor | 03-[FAX]ON/[3]/[H] |
| OCT | OCT cover | OCT feed sensor | 03-[FAX]ON/[3]/[H] |
| Finisher | Finisher door | Sensors in the finisher | - |

[E950] Jam not reaching the JSP feed sensor

[E951] Stop jam at the JSP feed sensor

Open the JSP cover. Is there any paper on the transport path?

↓ YES → Remove the paper.

NO

Is the JSP feed sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[H])

- | NO →
- 1) Check if the connector of the JSP feed sensor is disconnected.
 - 2) Check if either of the connectors CN260 or CN262 on the JSP board is disconnected.
 - 3) Check if the connector CN306 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the JSP board and LGC board are short circuited or open circuited.
 - 6) Replace the JSP feed sensor.
 - 7) Replace the JSP board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Replace the JSP board.
- 2) Replace the LGC board.

[E960] Jam not reaching the OCT feed sensor

[E961] Stop jam at the OCT feed sensor

Open the OCT cover. Is there any paper on the transport path?

↓ YES → Remove the paper.

NO

Is the OCT feed sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[H])

- | NO →
- 1) Check if the connector of the OCT feed sensor is disconnected.
 - 2) Check if either of the connectors CN260 or CN262 on the OCT board is disconnected.
 - 3) Check if the connector CN306 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the OCT board and LGC board are short circuited or open circuited.
 - 6) Replace the OCT feed sensor.
 - 7) Replace the OCT board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Replace the OCT board.
- 2) Replace the LGC board.

[EB50] Paper left on the transport path due to multiple feeding

In case the paper is fed from the upper drawer, bypass unit or ADU:

Open the transfer cover. Is there any paper in front of the registration sensor?

↓ YES → Remove the paper.

NO

When the paper is fed from the upper drawer:

Is the 1st transport sensor working? (Perform the input check: 03-[FAX]OFF/[6]/[E])

| NO → 1) Check if the connector of the 1st transport sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 1st transport sensor.
| 6) Replace the LGC board.
↓

YES

When the paper is fed from the bypass feed unit:

Is the bypass paper sensor working? (Perform the input check: 03-[FAX]ON/[1]/[D])

| NO → 1) Check if the connector of the bypass paper sensor is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the bypass paper sensor.
| 6) Replace the LGC board.
↓

YES

When the paper is fed from the ADU:

Is the ADU exit sensor working? (Perform the input check: 03-[FAX]OFF/[1]/[G])

| NO → 1) Check if the connector of the ADU exit sensor is disconnected.
| 2) Check if either of the connectors CN562 or CN213 on the ADU board
| is disconnected.
| 3) Check if the connector CN304 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the ADU board and LGC board
| are short circuited or open circuited.
| 6) Replace the ADU exit sensor.
| 7) Replace the ADU board.
| 8) Replace the LGC board.
↓

[EB60] Paper left on the transport path due to multiple feeding

Open the transfer cover. Is there any paper in front of the registration sensor?

↓ YES → Remove the paper.

NO

Is the registration sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

| NO → 1) Check if the connector of the registration sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the registration sensor.
| 6) Replace the LGC board.
↓

YES

Check the rollers. Replace them if they are worn out.

5.1.2 Paper misfeeding

[E110] ADU misfeeding

Open the transfer cover. Is there any paper in front of the 1st transport sensor?

↓ YES → Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

| NO → 1) Check if the connector of the 1st transport sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 1st transport sensor.
| 6) Replace the LGC board.
↓

YES

Is the ADU clutch working? (Perform the output check in the test mode: 03-222)

| NO → 1) Check if the connector of the ADU clutch is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the ADU clutch.
| 6) Replace the LGC board.
↓

YES

Check the rollers in the ADU. Replace them if they are worn out.

[E120] Bypass misfeeding

Open the transfer cover. Is there any paper in front of the 1st transport sensor?

↓ YES → Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[6]/[E])

| NO → 1) Check if the connector of the 1st transport sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 1st transport sensor.
| 6) Replace the LGC board.
↓

YES

Is the bypass feed clutch working? (Perform the output check in the test mode: 03-204)

Is the bypass paper sensor working? (Perform the input check in the test mode: 03-[FAX]OFF/[1]/[D])

| NO → 1) Check if the connector of the bypass feed clutch and bypass paper
| sensor are disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the bypass feed clutch and bypass paper sensor.
| 6) Replace the LGC board.
↓

YES

Check the bypass transport, feed separation and pickup rollers. Replace them if they are worn out.

[E130] Upper drawer misfeeding (paper not reaching the 1st transport sensor)

Open the transfer cover. Is there any paper in front of the 1st transport sensor?

↓ YES → Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

| NO → 1) Check if the connector of the 1st transport sensor is disconnected.
| 2) Check if the connector CN305 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 1st transport sensor.
| 6) Replace the LGC board.
↓

YES

Is the upper drawer feed clutch working?

(Perform the output check in the test mode: 03-201)

| NO → 1) Check if the connector of the upper drawer feed clutch is discon-
| nected.
| 2) Check if the connector CN307 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the upper drawer feed clutch.
| 6) Replace the LGC board.
↓

YES

Check the upper drawer feed roller, separation roller and pickup roller.
Replace them if they are worn out.

[E140] Lower drawer misfeeding (paper not reaching the 2nd transport sensor)

Open the side cover. Is there any paper in front of the 2nd transport sensor?

↓ YES → Remove the paper.

NO

Is the 2nd transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[7]/[E])

| NO → 1) Check if the connector of the 2nd transport sensor is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the 2nd transport sensor.
| 6) Replace the LGC board.
↓

YES

Is the lower drawer feed clutch working?

(Perform the output check in the test mode: 03-202)

| NO → 1) Check if the connector of the lower drawer feed clutch is discon-
| nected.
| 2) Check if the connector CN307 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the lower drawer feed clutch.
| 6) Replace the LGC board.
↓

YES

Check the lower drawer feed roller, separation roller and pickup roller. Replace them if they are worn out.

[E150] PFP upper drawer misfeeding (paper not reaching the PFP upper drawer feed sensor)

Open the PFP side cover. Is there any paper in front of the PFP upper drawer feed sensor?

↓ YES → Remove the paper.

NO

Is the PFP upper drawer feed sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[2]/[D])

- ↓ NO →
- 1) Check if the connector of the PFP upper drawer feed sensor is disconnected.
 - 2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP upper drawer feed sensor.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

Is the PFP upper drawer feed clutch working?

(Perform the output check in the test mode: 03-226)

- ↓ NO →
- 1) Check if the connector of the PFP upper drawer feed clutch is disconnected.
 - 2) Check if any of the connectors CN241, CN242 and CN247 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP upper drawer feed clutch.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

Check the PFP upper drawer feed roller, separation roller and pickup roller.
Replace them if they are worn out.

[E160] PFP lower drawer misfeeding (paper not reaching the PFP lower drawer feed sensor)

Open the PFP side cover. Is there any paper in front of the PFP lower drawer feed sensor?

↓ YES → Remove the paper.

NO

Is the PFP lower drawer feed sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[4]/[D])

- ↓ NO →
- 1) Check if the connector of the PFP lower drawer feed sensor is disconnected.
 - 2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP lower drawer feed sensor.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

Is the PFP lower drawer feed clutch working?

(Perform the output check in the test mode: 03-228)

- ↓ NO →
- 1) Check if the connector of the PFP lower drawer feed clutch is disconnected.
 - 2) Check if any of the connectors CN241, CN242 and CN248 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP lower drawer feed clutch.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

Check the PFP lower drawer feed roller, separation roller and pickup roller.
Replace them if they are worn out.

[E190] LCF misfeeding (paper not reaching the LCF feed sensor)

Open the LCF side cover. Is there any paper in front of the LCF feed sensor?

↓ YES → Remove the paper.

NO

Is the LCF feed sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[5]/[G])

- | NO →
- 1) Check if the connector of the LCF feed sensor is disconnected.
 - 2) Check if either of the connectors CN100 or CN104 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 6) Replace the LCF feed sensor.
 - 7) Replace the LCF board.
 - 8) Replace the LGC board.
- ↓

YES

Is the LCF feed clutch working? (Perform the output check in the test mode: 03-209)

- | NO →
- 1) Check if the connector of the LCF feed clutch is disconnected.
 - 2) Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 6) Replace the LCF feed clutch.
 - 7) Replace the LCF board.
 - 8) Replace the LGC board.
- ↓

YES

Check the LCF feed roller, separation roller and pickup roller.
Replace them if they are worn out.

5.1.3 Cover open jam

[E400] Transfer cover opened during printing

Is the transfer cover open?

↓ YES → Remove paper if there is any, then close the cover.

NO

Is the transfer cover opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[2]/[G])

↓ NO →

- 1) Check if the connector of the transfer cover opening/closing switch is disconnected.
- 2) Check if the connector CN305 on the LGC board is disconnected.
- 3) Check if the connector pins are disconnected and the harnesses are open circuited.
- 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 5) Replace the front cover opening/closing switch.
- 6) Replace the LGC board.

↓

YES

Replace the LGC board.

Is the voltage of 24V being supplied from the power supply unit?

(Perform the input check in the test mode: 03-[FAX] ON/[1]/[C])

↓ NO →

- 1) Check if the connector for 24 V power supply is disconnected.
- 2) Check if the connector CN305 on the LGC board is disconnected.
- 3) Check if the connector pins are disconnected and the harnesses are open circuited.
- 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 5) Replace the LGC board.

↓

YES

Replace the LGC board.

[E410] Front cover opened during printing

Is the front cover open?

↓ YES → Close the cover.

NO

Is the front cover opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[2]/[D])

| NO → 1) Check if the connector of the front cover opening/closing switch is
| disconnected.
| 2) Check if the connector CN303 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the front cover opening/closing switch.
↓ 6) Replace the LGC board.

YES

Is the voltage of 24V being supplied from the power supply unit?

(Perform the input check in the test mode: 03-[FAX] ON/[1]/[C])

| NO → 1) Check if the connector for 24 V power supply is disconnected.
| 2) Check if the connector CN303 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
↓ 5) Replace the LGC board.

YES

Replace the LGC board.

[E420] PFP side cover opened during printing

Is the PFP side cover open?

↓ YES → Remove the paper if there is any, then close the cover.

NO

Is the PFP side cover opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]OFF/[2]/[F])

- | NO →
- 1) Check if the connector of the PFP side cover opening/closing switch is disconnected.
 - 2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP side cover opening/closing switch.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Replace the PFP board.
- 2) Replace the LGC board.

[E430] ADU opened during printing

Is the ADU open?

↓ YES → Remove the paper if there is any, then close the ADU.

NO

Is the ADU opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]OFF/[1]/[F])

| NO → 1) Check if the connector of the ADU opening/closing switch is disconnected.
| 2) Check if either of the connectors CN562 or CN217 on the ADU board is disconnected.
| 3) Check if the connector CN304 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are open circuited.
| 5) Check if the conductor patterns on the ADU board and LGC board are short circuited or open circuited.
| 6) Replace the ADU opening/closing switch.
| 7) Replace the ADU board.
↓ 8) Replace the LGC board.

YES

- 1) Replace the ADU board.
- 2) Replace the LGC board.

[E440] Side cover opened during printing

Is the side cover open?

↓ YES → Remove the paper if there is any, then close the cover.

NO

Is the side door switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[2]/[F])

| NO → 1) Check if the connector of the side door switch is disconnected.
| 2) Check if the connector CN304 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or open circuited.
| 5) Replace the side door switch.
↓ 6) Replace the LGC board.

YES

Replace the LGC board.

[E450] LCF side cover opened during printing

Is the LCF side cover open?

↓ YES → Remove the paper if there is any, then close the cover.

NO

Is the LCF side cover opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]OFF/[5]/[D])

| NO → 1) Check if the connector of the LCF side cover opening/closing switch
| is disconnected.
| 2) Check if either of the connectors CN100 or CN106 on the LCF board
| is disconnected.
| 3) Check if the connector CN310 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the LCF board and LGC board are
| short circuited or open circuited.
| 6) Replace the LCF side cover opening/closing switch.
| 7) Replace the LCF board.
↓ 8) Replace the LGC board.

YES

- 1) Replace the LCF board.
- 2) Replace the LGC board.

[E480] Bridge unit opened during printing

Is the bridge unit open?

↓ YES → Remove the paper if there is any, then close the unit.

NO

Is the bridge unit opening/closing switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[F])

| NO → 1) Check if the connector of the bridge unit opening/closing switch is
| disconnected.
| 2) Check if the connector CN306 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 5) Replace the bridge unit opening/closing switch.
↓ 6) Replace the LGC board.

YES

Replace the LGC board.

[E490] JSP cover opened during printing

Is the JSP cover open?

↓ YES → Remove the paper if there is any, then close the cover.

NO

Is the JSP cover switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[F])

| NO → 1) Check if the connector of the JSP cover switch is disconnected.
| 2) Check if either of the connectors CN260 or CN261 on the JSP board
| is disconnected.
| 3) Check if the connector CN306 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the JSP board and LGC board are
| short circuited or open circuited.
| 6) Replace the JSP cover switch.
| 7) Replace the JSP board.
↓ 8) Replace the LGC board.

YES

- 1) Replace the JSP board.
- 2) Replace the LGC board.

[E491] OCT cover opened during printing

Is the OCT cover open?

↓ YES → Remove the paper if there is any, then close the cover.

NO

Is the OCT cover switch working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[F])

| NO → 1) Check if the connector of the OCT cover switch is disconnected?
| 2) Check if either of the connectors CN260 or CN261 on the OCT board
| is disconnected.
| 3) Check if the connector CN306 on the OCT board is disconnected.
| 4) Check if the connector pins are disconnected and the harnesses are
| open circuited.
| 5) Check if the conductor patterns on the OCT board and LGC board
| are short circuited or open circuited.
| 6) Replace the OCT cover switch.
| 7) Replace the OCT board.
↓ 8) Replace the LGC board.

YES

- 1) Replace the OCT board.
- 2) Replace the LGC board.

5.1.4 Transport jam (RADF)

Note:

When performing the RADF related troubleshooting, be sure to perform “Automatic adjustment of RADF sensor and EEPROM initialization (05-356)” and “RADF original guide width adjustment (05-367/368)” consecutively at the Adjustment Mode whenever the RADF board, original length sensor, read sensor or reverse sensor has been replaced.

[E711] Jam not reaching the original length sensor

[E712] Jam not reaching the registration sensor

[E713] Stop jam at the original length sensor

Are the pickup roller, feed roller and separation roller stained or worn out?

↓ YES → Clean the rollers or replace them.

NO

Is the original excessively curled or folded?

↓ YES → Flatten and set it again.

NO

Are the original length sensor and registration sensor working?

(Perform the input check: 03-[FAX]ON/[8]/[E],/[7]/[H])

↓ NO →

- 1) Check if the connectors of the original length sensor and registration sensor are disconnected.
- 2) Check if the connector CN3 on the RADF board is disconnected.
- 3) Check if the connector pins are disconnected or the harnesses are open circuited.
- 4) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- 5) Replace the original length sensor and registration sensor.
- 6) Replace the RADF board.

YES

Replace the RADF board.

[E722] Jam not reaching the exit sensor (during scanning)

[E723] Jam not reaching the reverse sensor (during scanning)

Is the read roller stained?

↓ YES → Clean the roller.

NO

Are the exit sensor and reverse sensor working?

(Perform the input check: 03-[FAX]ON/[7]/[E],/[7]/[F])

| NO → 1) Check if the connectors of the exit sensor and reverse sensor are
| disconnected.
| 2) Check if the connector CN4 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the exit sensor and reverse sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E724] Stop jam at the registration sensor

Is the registration roller stained?

↓ YES → Clean the roller.

NO

Is the registration sensor working? (Perform the input check: 03-[FAX]ON/[7]/[H])

| NO → 1) Check if the connector of the registration sensor is disconnected.
| 2) Check if the connector CN3 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the registration sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E725] Stop jam at the read sensor

Is the read roller stained?

↓ YES → Clean the roller.

NO

Is the read sensor working? (Perform the input check: 03-[FAX]ON/[7]/[G])

↓ NO →

- 1) Check if the connector of the read sensor is disconnected.
- 2) Check if the connector CN6 on the RADF board is disconnected.
- 3) Check if the connector pins are disconnected or the harnesses are open circuited.
- 4) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- 5) Replace the read sensor.
- 6) Replace the RADF board.

↓

YES

Replace the RADF board.

[E726] Transport/exit signal reception jam

- (1) If the original remains in the RADF, remove it.
- (2) If any paper remains in the equipment, remove it.
- (3) Turn the power OFF and then back ON. If the jam still occurs, lead the following procedure.
- (4) Check the connection between the RADF board and SLG board, and the connection between the RADF board and switching power supply.
 - Are the connection of the connectors and joint connectors normal?
 - Are the connector pins disconnected or are the harnesses open circuited?
- (5) Check if the 24V and 5V outputs of the switching power supply are normal.
- (6) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- (7) Replace the RADF board.
- (8) Check if the conductor pattern on the SLG board is short circuited or open circuited.
- (9) Replace the SLG board.

[E731] Stop jam at the exit sensor

Is the exit roller stained?

↓ YES → Clean the roller.

NO

Is the exit sensor working? (Perform the input check: 03-[FAX]ON/[7]/[E])

| NO → 1) Check if the connector of the exit sensor is disconnected.
| 2) Check if the connector CN4 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the exit sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E741] Stop jam at the reverse sensor

Are the read roller and reverse roller stained?

↓ YES → Clean the rollers.

NO

Is the reverse sensor working? (Perform the input check: 03-[FAX]ON/[7]/[F])

| NO → 1) Check if the connector of the reverse sensor is disconnected.
| 2) Check if the connector CN4 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the reverse sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E742] Jam not reaching the reverse sensor (feeding in reverse)

Is the reverse roller stained?

↓ YES → Clean the roller.

NO

Is the reverse sensor working? (Perform the input check: 03-[FAX]ON/[7]/[F])

| NO → 1) Check if the connector of the reverse sensor is disconnected.
| 2) Check if the connector CN4 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the reverse sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E743] Jam not reaching the exit sensor (feeding in reverse)

Are the reverse roller and read roller stained?

↓ YES → Clean the rollers.

NO

Is the exit sensor working? (Perform the input check: 03-[FAX]ON/[7]/[E])

| NO → 1) Check if the connector of the exit sensor is disconnected.
| 2) Check if the connector CN4 on the RADF board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Check if the conductor pattern on the RADF board is short circuited
| or open circuited.
| 5) Replace the exit sensor.
| 6) Replace the RADF board.
↓

YES

Replace the RADF board.

[E860] RADF jam access cover open

Is the RADF jam access cover opened?

↓ YES → Remove the original, if any, and close the RADF jam access cover.

NO

Is the RADF jam access cover switch working? (Perform the input check: 03-[FAX]ON/[7]/[C])

↓ NO →

- 1) Check if the connector of the RADF jam access cover switch is disconnected.
- 2) Check if the connector CN8 on the RADF board is disconnected.
- 3) Check if the connector pins are disconnected or the harnesses are open circuited.
- 4) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- 5) Replace the RADF jam access cover switch.
- 6) Replace the RADF board.

↓

YES

Replace the RADF board.

[E870] RADF open jam

Is the RADF opened?

↓ YES → Remove the original, if any, and close the RADF.

NO

Is the RADF opening/closing sensor adjusted within the specified range?

↓ NO → Adjust the RADF opening/closing sensor.

YES

Is the RADF opening/closing sensor working? (Perform the input check: 03-[FAX]ON/[7]/[D])

↓ NO →

- 1) Check if the connector of the RADF opening/closing sensor is disconnected.
- 2) Check if the connector CN6 on the RADF board is disconnected.
- 3) Check if the connector pins are disconnected or the harnesses are open circuited.
- 4) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- 5) Replace the RADF opening/closing sensor.
- 6) Replace the RADF board.

↓

YES

Replace the RADF board.

5.1.5 Finisher jam

[1] Jam in bridge unit

[E910] Paper not reaching the bridge unit transport sensor-1

[E920] Paper stopping at the bridge unit transport sensor-1

[E930] Paper not reaching the bridge unit transport sensor-2

[E940] Paper stopping at the bridge unit transport sensor-2

Is there any paper remaining inside the bridge unit?

↓ YES → Remove the paper.

NO

Are the bridge unit transport sensors-1 and -2 working?

(Perform the input check: 03-[FAX]ON/[3]/[H], /[3]/[E])

| NO → 1) Check if the connectors of the bridge unit transport sensors-1 and -2
| are disconnected.
| 2) Check if the connector J512 of the bridge unit is disconnected.
| 3) Check if the connector CN306 on the LGC board is disconnected.
| 4) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 5) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 6) Replace the bridge unit transport sensors-1 and -2.
| 7) Replace the LGC board.
↓

YES

Is the bridge unit gate solenoid working? (Perform the output check: 03-232)

| NO → 1) Check if the connector J512 of the bridge unit is disconnected.
| 2) Check if the connector CN306 on the LGC board is disconnected.
| 3) Check if the connector pins are disconnected or the harnesses are
| open circuited.
| 4) Replace the bridge unit gate solenoid.
| 5) Replace the LGC board.
↓

YES

Does the transport roller of the bridge unit work when the main motor is rotated?

(Perform the output check: 03-101/151)

↓ NO → Check the drive system of the equipment and bridge unit.

YES

Check the roller in the bridge unit. Replace it if it is worn out.

[2] Paper jam in puncher unit

[E9F0] Punching jam

MJ-1025

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J1006 on the punch controller PC board disconnected?

Is the harness connecting the punch controller PC board and punch home position sensor (PI1P) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the punch home position sensor working properly?

↓ NO → 1) Connect the connector of the punch home position sensor securely.
2) Replace the punch home position sensor.

YES

Replace the punch controller PC board.

[3] Paper jam in finisher section

[EA10] Paper transport delay jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

↓ NO → 1) Connect the connector of the inlet sensor securely.
↓ 2) Attach the actuator securely if its shaft is out of place.
↓ 3) Replace the inlet sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector CN16 (inlet sensor) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

↓ NO → 1) Attach the actuator securely if its shaft is out of place.
↓ 2) Replace the sensor.

YES

Replace the finisher controller PC board.

[EA20] Paper transport stop jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

↓ NO → 1) Connect the connector of the inlet sensor securely.
↓ 2) Attach the actuator securely if its shaft is out of place.
↓ 3) Replace the inlet sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is there any paper remaining on the transport path in the finisher?

↓ YES → Remove the paper.

NO

Is the connector CN16 (inlet sensor) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

↓ NO → 1) Attach the actuator securely if its shaft is out of place.
↓ 2) Replace the sensor.

YES

Replace the finisher controller PC board.

[EA30] Power-ON jam

MJ-1022

Is there any paper remaining on the transport path in the finisher?

↓ YES → Remove the paper.

NO

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

↓ NO → 1) Connect the connector of the inlet sensor securely.
↓ 2) Attach the actuator securely if its shaft is out of place.
↓ 3) Replace the inlet sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector CN16 (inlet sensor, folding position sensor) on the finisher controller PC board disconnected?

Is the connector J1007 (photosensor PC board) on the punch controller PC board disconnected?

Is the harness between the finisher controller PC board and each sensor (inlet sensor, folding position sensor, and punch controller PC board) open-circuited?

Is the harness connecting the punch controller PC board and photosensor PC board open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Are the inlet sensor and holding position sensor working properly?

Is the photosensor PC board working properly?

↓ NO → 1) Attach the actuator securely if its shaft is out of place.
↓ 2) Replace the sensor.

YES

Replace the finisher controller PC board.

Replace the punch controller PC board.

[EA40] Finisher front door open jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the finisher connected with the equipment?

↓ NO → Connect the finisher with the equipment.

YES

Is the connector J11 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and joint sensor (S4) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the joint sensor working properly?

I NO → 1) Connect the connector of the joint sensor securely.
↓ 2) Replace the joint sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is the finisher connected with the equipment?

Are the upper cover and front door of the finisher closed?

I YES → 1) Connect the finisher with the equipment.
↓ 2) Close the cover and door of the finisher.

NO

Is any of the connectors CN4 (upper cover sensor and front door sensor) and CN8 (joint switch) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and each sensor (upper cover sensor or front door sensor) open-circuited?

Is the harness connecting the finisher controller PC board and joint switch (MS2) open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Are the joint switch, upper cover sensor and front door sensor working properly?

↓ NO → 1) Attach the actuator securely if its shaft is out of place.
2) Replace the switch or sensor.

YES

Replace the finisher controller PC board.

[EA50] Stapling jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment or on the stapling tray?

↓ YES → Remove the paper.

NO

Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case?

↓ YES → End.

NO

Is the connector J8 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and stapling home position sensor (S17) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the stapling home position sensor working properly?

↓ NO → 1) Connect the connector of the stapling home position sensor securely.
2) Replace the stapling home position sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is there any paper remaining on the stapling tray?

↓ YES → Remove the paper.

NO

Open the front door. Is the stapler home position mark blue?

↓ YES → Rotate the stapler opening dial until the home position mark turns blue.

NO

Is any of the connectors CN11 (slide home position sensor), CN8 (stapler safety switch) and CN6 (staple/fold motor) on the finisher controller PC board disconnected?

Is the stapler unit installed securely?

Is the harness connecting the finisher controller PC board and slide home position sensor open-circuited?

Is the harness connecting the finisher controller PC board and stapler safety switch open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Are the slide home position sensor and stapler safety switch working properly?

↓ NO → 1) Replace the stapler unit.
2) Replace the stapler safety switch.

YES

Replace the finisher controller PC board.

[EA60] Early arrival jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

↓ NO →
↓ 1) Connect the connector of the inlet sensor securely.
↓ 2) Attach the actuator securely if its shaft is out of place.
↓ 3) Replace the inlet sensor.

YES

Replace the finisher controller PC board.

[EA70] Stack delivery jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J9 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and stack delivery lever home position sensor (S8) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the stack delivery lever home position sensor working properly?

- ↓ NO →
- 1) Connect the connector of the stack delivery lever home position sensor securely.
 - 2) Replace the stack delivery lever home position sensor.

YES

Replace the finisher controller PC board.

MJ-1025

Is there any paper remaining on the stapling tray?

↓ YES → Remove the paper.

NO

Are the paper on the stack tray and the latches of the stack delivery belt contacting each other?

↓ YES → Remove the paper on the stack tray.

NO

Is any of the connectors CN5 (delivery belt home position sensor), CN13 (delivery motor) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and delivery belt home position sensor open-circuited?

Is the harness connecting the finisher controller PC board and delivery motor open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the delivery belt home position sensor working properly?

↓ NO → Replace the sensor.

YES

Is the delivery motor working properly?

↓ NO → Replace the motor.

YES

Rotate the delivery motor by hand. Is there any mechanical problem with the rotation of the stack delivery belt?

Are the latches of the stack delivery belt damaged?

↓ YES → Fix the mechanism.

NO

Replace the finisher controller PC board.

[EAF0] Stack return jam

MJ-1022

Is there any paper remaining on the transport path in the finisher or equipment?

↓ YES → Remove the paper.

NO

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and returning roller home position sensor (S3) open circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the returning roller home position sensor working properly?

↓ NO → 1) Connect the connector of the returning roller home position sensor securely.
↓ 2) Replace the returning roller home position sensor.

YES

Replace the finisher controller PC board.

[4] Paper jam in saddle stitcher section

[EAB0] Saddle paper transport stop jam

MJ-1025

Is there any paper remaining on the paper transport path in the saddle stitcher section in the finisher?

↓ YES → Remove the paper.

NO

Is the connector CN16 (folding position sensor) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and folding position sensor open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the folding position sensor working properly?

↓ NO → Replace the sensor.

YES

Replace the finisher controller PC board.

[EAC0] Saddle transport delay jam

MJ-1025

Is there any paper remaining on the paper transport path in the saddle stitcher section in the finisher?

↓ YES → Remove the paper.

NO

Is the connector CN16 (folding position sensor) on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and folding position sensor open-circuited?

↓ YES → Connect the connector securely. Replace the harness.

NO

Is the folding position sensor working properly?

↓ NO → Replace the sensor.

YES

Replace the finisher controller PC board.

[5] Other paper jam

[EAD0] Print end command time-out jam

Is the main motor rotating normally?

↓

NO

- 1) Replace the SYS board.
- 2) Replace the LGC board.

[EAE0] Receiving time time-out jam

Is the finisher working?

↓ YES → Replace the finisher controller PC board.

NO

- 1) Check if the voltage (24V) is being supplied to the finisher.
- 2) Check the connection of the LGC board and IPC board.
- 3) Check if the harness connecting the IPC board and finisher I/F connector of the equipment side is open circuited.
- 4) Check if the harness connecting the I/F connector of the finisher side and finisher controller PC board is open circuited.
- 5) Replace the finisher controller PC board.

[EB30] Ready time time-out jam

Is there paper in the equipment?

↓ NO → Replace the LGC board.

YES

Are the IPC board and LGC board properly connected to each other?

↓ NO → Connect them properly.

YES

Is the harness securely connected to the IPC board?

↓ NO → Connect the harness properly.

YES

Is any of the connector pins of the harness connecting the equipment and finisher disconnected or any of those harnesses open circuited?

↓ NO → Connect the pin or replace the harness.

YES

- 1) Replace the IPC board.
- 2) Replace the LGC board.
- 3) Replace the finisher controller PC board.

[C150] PFP upper drawer tray is abnormal

[C160] PFP lower drawer tray is abnormal

Does the tray go up? (Perform the output check in the test mode: 03-278/280)

- | NO →
- 1) Check if the connector of the tray-up motor is disconnected.
 - 2) Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 6) Replace the PFP board.
 - 7) Replace the LGC board.
- | ↓

YES

Is the tray-up sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[2]/[H], /[4]/[H])

- | NO →
- 1) Check if the connector of the sensor is disconnected.
 - 2) Check if any of the connectors CN241, CN247 and CN248 on the PFP board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the slit reaches the sensor.
 - 5) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 6) Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
 - 7) Replace the PFP board.
 - 8) Replace the LGC board.
- | ↓

YES

- 1) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 2) Replace the LGC board.

[C180] LCF tray-up motor is abnormal

Does the tray move? (Perform the output check in the test mode: 03-271)

- | NO →
- 1) Check if the connector of the LCF tray-up motor is disconnected.
 - 2) Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 6) Replace the LCF board.
 - 7) Replace the LGC board.
- ↓

YES

Are the LCF tray bottom sensor and LCF tray-up sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[5]/[F]./[3]/[A])

- | NO →
- 1) Check if the connectors of the sensors are disconnected.
 - 2) Check if any of the connectors CN100, CN104 and CN105 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the slit reaches the sensors.
 - 5) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 6) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 7) Replace the LCF board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 2) Replace the LGC board.

[C1A0] LCF end fence motor is abnormal

Is the LCF end fence motor working? (Perform the output check in the test mode: 03-207)

- NO →
- 1) Check if the connector of the LCF end fence motor is disconnected.
 - 2) Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 5) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 6) Replace the LCF board.
 - 7) Replace the LGC board.
- ↓

YES

Are the LCF end fence home/stop position sensors working?

(Perform the input check in the test mode: 03-[FAX]OFF/[5]/[A], ./[5]/[B])

- NO →
- 1) Check if the connectors of the sensors are disconnected.
 - 2) Check if either of the connectors CN100 or CN107 on the LCF board is disconnected.
 - 3) Check if the connector CN310 on the LGC board is disconnected.
 - 4) Check if the slit reaches the sensors.
 - 5) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 6) Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
 - 7) Replace the LCF board.
 - 8) Replace the LGC board.
- ↓

YES

- 1) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 2) Replace the LGC board.

[C1B0] LCF transport motor is abnormal

Is the LCF transport motor working? (Perform the output check in the test mode: 03-122/172)

- | NO →
- 1) Check if the connector CN1 of the LCF transport motor is disconnected.
 - 2) Check if the connector CN102 on the LCF board is disconnected.
 - 3) Check if the signal line connector CN100 on the LCF board is disconnected.
 - 4) Check if the power line connector CN101 on the LCF board is disconnected.
 - 5) Check if the connector CN310 on the LGC board is disconnected.
 - 6) Check if the connector pins are disconnected and the harnesses are open circuited.
 - 7) Check if the conductor patterns on the LCF transport motor board, LCF board and LGC board are short circuited or open circuited.
 - 8) Replace the LCF transport motor.
 - 9) Replace the LCF board.
 - 10) Replace the LGC board.
- | ↓

YES

- 1) Check if the connector pins are disconnected and the harnesses are open circuited.
- 2) Check if the conductor patterns on the LCF transport motor board, LCF board and LGC board are short circuited or open circuited.
- 3) Check if the PLL lock signal CN102-3 output from the LCF board is always "L" level.
- 4) Check if the voltage supplied to the microcomputer input terminal IC103-17 is always "L" level.
- 5) Replace the LCF transport motor.
- 6) Replace the LCF board.
- 7) Replace the LGC board.

5.1.8 Scanning system related service call

[C260] Peak detection error

Does the exposure lamp light? (Perform the output check in the test mode: 03-267)

- | YES → 1) Check if the connectors on the CCD and SLG boards are disconnected.
| 2) Check if the shading correction plate is dirty.
| 3) Check if the conductor pattern on the CCD board is short circuited or open circuited.
| 4) Check if the conductor pattern on the SLG board is short circuited or open circuited.
| 5) Replace the lens unit.
| 6) Replace the SLG board.
↓

NO

- 1) Check if the connectors of the exposure lamp and inverter are disconnected.
- 2) Check the SLG board if the connector pin CN9 is disconnected and the harness is short circuited or open circuited.
- 3) Check if the conductor pattern on the SLG board is short circuited or open circuited.
- 4) Replace the SLG board.
- 5) Replace the inverter.
- 6) Replace the exposure lamp.

[C270] Carriage home position sensor not going OFF within a fixed time

[C280] Carriage home position sensor not going ON within a fixed time

Remove the original glass and move the carriages to the paper feeding side. Turn ON the power and check the following items.

[C270] Are the carriages slightly moved to the feeding direction? Are the carriages staying at a position other than home position?

- | YES → 1) Check if the connector of the scan motor is disconnected.
- | 2) Check if the connector pin is disconnected and the harness is short
- | circuited or open circuited.
- ↓ 3) Replace the SLG board.

NO

- 1) Check if the connector pin is disconnected and the harness is short circuited or open circuited.
- 2) Check if the conductor pattern on the SLG board is short circuited or open circuited.
- 3) Replace the SLG board.

[C280] Do the carriages make a big noise after they arrive at the home position?

- | YES → The carriage home position sensor is not turned ON.
- | 1) Check if the connector of the sensor is disconnected.
- | 2) Replace the carriage home position sensor.
- ↓ 3) Replace the SLG board.

NO

The carriages are stopped at the home position and do not move.

- 1) Check if the connector pins are disconnected and the harnesses are short circuited or open circuited.
- 2) Check if the conductor pattern on the SLG board is short circuited or open circuited.
- 3) Replace the SLG board.

5.1.9 Fuser unit related service call

CAUTION

Be sure to turn OFF the power and unplug the power cable beforehand when checking the heater.

The fuser unit itself or the part of the unit remains heated and the capacitors are still charged after a while the power cable is unplugged. So make sure the unit is cooled down enough before checking.

[C410] Thermistor or heater is abnormal at power ON

1. Check the thermistors

- (1) Check if the connectors are disconnected.
- (2) Check if the center, side and edge thermistors are in contact with the surface of the fuser roller properly?
- (3) Check if the harnesses of the center, side and edge thermistors are open circuited.

2. Check the heater

- (1) Check if the heater is broken.
- (2) Check if the connector of the heater is disconnected.
- (3) Check if the thermostat is blown.

3. Check the LGC board

- (1) Check if the connectors CN308 are disconnected.
- (2) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- (3) Replace the LGC board.

4. Clear the status counter

After repairing the matter which caused the error [C410], perform the following:

- (1) Turn ON the power while [0] and [8] are pressed simultaneously.
- (2) Key in "400", then press [START].
- (3) Change the current status counter value "1" or "2" to "0", then press [ENTER] or [INTERRUPT] (to cancel [C410]).
- (4) Turn the power OFF and then back ON. Make sure that the equipment enters the normal ready state.

[C440] Fuser is abnormal after abnormality judgment

1.2.3. Check the thermistors, Heater and LGC board

Check the above components following the procedures 1, 2 and 3 for [C410].

4. Clear the status counter

Change the current status counter value (08-400) "5", "7" or "9" to "0" for [C440], taking the same procedure as that for [C410].

- * The status counter value is as follows in the following cases. Change them to "0" respectively.
 - The error occurred during warming-up: "5"
 - The error occurred after the equipment has become ready: "7"
 - The temperature detected by the center thermistor is 230°C or higher: "9"
 - The temperature detected by the side thermistor is 230°C or higher: "9"
 - The temperature detected by the edge thermistor is 230°C or higher: "9" only during printing.

[C450] Thermistor abnormality during printing

1. Check the edge thermistor

- (1) Check if the connector is disconnected.
- (2) Check if the edge thermistor is in contact with the surface of the fuser roller properly.
- (3) Check if the harness of the edge thermistor is open circuited.

2. Check the LGC board

- (1) Check if the connector CN308 is disconnected.
- (2) Check if the conductor pattern on the board is short circuited or open circuited.
- (3) Replace the LGC board.

3. Clear the status counter

Change the current status counter value (08-400) "6" to "0".

5.1.10 Communication related service call

[C550 (C780)] RADF I/F error

- (1) Check if the harness connecting the RADF board and SLG board is disconnected or open circuited.
- (2) Check if the conductor pattern on the RADF board is short circuited or open circuited.
- (3) Check if the conductor pattern on the SLG board is short circuited or open circuited.
- (4) Replace the RADF board.
- (5) Replace the SLG board.

[C570] Communication error between main CPU and IPC board

- (1) Check if the LGC board and IPC board are connected properly.
- (2) Check if the conductor pattern on the IPC board is short circuited or open circuited.
- (3) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- (4) Replace the IPC board.
- (5) Replace the LGC board.

[C580] Communication error between IPC board and finisher

- (1) Check if the specified finisher is attached.
- (2) Check if the harness connecting the IPC board and the finisher controller PC board is disconnected or open circuited.
- (3) Check if the conductor pattern on the IPC board is short circuited or open circuited.
- (4) Check if the conductor pattern on the finisher controller PC board is short circuited or open circuited.
- (5) Replace the IPC board.
- (6) Replace the finisher controller PC board.

[F070] Communication error between system CPU and main CPU

- (1) Check if the harness connecting the SYS board (CN117) and LGC board (CN309) is disconnected or open circuited.
- (2) Check the version of the system ROM on the SYS board.
- (3) Check the version of the engine ROM version on the LGC board.
- (4) Replace the SYS board.
- (5) Replace the LGC board.

[F110] Communication error between system CPU and scanner CPU

[F111] Scanner response abnormality

- (1) Check if the harness connecting the SYS board and SLG board is disconnected or open circuited.
- (2) Check the version of the system ROM on the SYS board.
- (3) Check the version of the scanner ROM version on the SLG board.
- (4) Replace the SYS board.
- (5) Replace the SLG board.

5.1.11 RADF related service call (MR-3016)

Note:

When performing the RADF related troubleshooting, be sure to perform “Automatic adjustment of RADF sensor and EEPROM initialization (05-356)” and “RADF original guide width adjustment (05-367/368)” consecutively at the Adjustment Mode whenever the RADF board, original length sensor, read sensor or reverse sensor has been replaced.

[C730] EEPROM initialization error

- (1) Check the RADF board, mainly IC12, for short circuits and open circuits.
- (2) Replace the RADF board.

[C810] Fan motor is abnormal

- (1) Check if the load on the motor shaft is normal.
- (2) Remove foreign matters.
- (3) Check if the harness connecting the fan motor and RADF board is open circuited.
- (4) Check if the power is supplied to the pin 1 of the CN9 on the RADF board during the operation.
- (5) Check the circuits and connectors on the RADF board, mainly Q12 and Q16, for short circuits and open circuits.
- (6) Replace the fan motor.
- (7) Replace the RADF board.

[C820] Read sensor adjustment error

- (1) Check if there is any foreign matter between the read sensor and the reflecting mirror. Check if the reflecting mirror is dirty.
- (2) Check if the harness connecting the read sensor and the RADF board is open circuited.
- (3) Check the circuits and connectors on the RADF board, mainly IC3, IC4 and CN6, for short circuits and open circuits.
- (4) Replace the read sensor.
- (5) Replace the RADF board.

[C830] Original length sensor adjustment error

- (1) Check if there is any foreign matter between the original length sensor and reflecting mirror. Check if the reflecting mirror is dirty.
- (2) Check if the harness connecting the original length sensor and the RADF board is open circuited.
- (3) Check the circuits and connectors on the RADF board, mainly IC3, IC4 and CN3, for short circuits and open circuits.
- (4) Replace the original length sensor.
- (5) Replace the RADF board.

5.1.12 RADF related service call (MR-3020)

No service call for the RADF (MR-3020).

5.1.13 Laser optical unit related service call

[CA10] Polygonal motor is abnormal

Is the polygonal motor rotating?

- | NO → 1) Check if the connector of the harness is disconnected between LGC
| board (CN312) and the laser optical unit.
| 2) Check if the harness is open circuited and the connector pin is dis-
| connected.
| 3) Check if the conductor pattern on the LGC board is short circuited or
| open circuited.
| 4) Replace the laser optical unit.
| 5) Replace the LGC board.
↓

YES

- 1) Check if the conductor pattern on the LGC board is short circuited or open circuited.
- 2) Replace the LGC board.

[CA20] H-Sync detection error

Are the harness open circuited and the connectors disconnected between the LGC board (CN313) and LRL board (CN204), and between the LRL board (CN204) and laser optical unit?

- ↓ YES → Replace the harness. Connect the disconnected connectors.

NO

- 1) Replace the LGC board.
- 2) Replace the laser optical unit.

5.1.14 Finisher related service call

[CB10] Transport motor abnormality

MJ-1025

Is the stack feed roller (upper) home position sensor (PI12) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and feed motor (M1) correct?

↓ NO → Correct the wiring.

YES

Try turning the stack feed roller (upper) shaft by hand. Does the stack feed roller (upper) move up/down normally?

↓ NO → Fix the mechanism.

YES

Try replacing the feed motor (M1). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CB20] Delivery motor abnormality

MJ-1022

Rotate the delivery roller by hand. Does it rotate smoothly?

↓ NO → Fix the mechanism.

YES

Is the wiring between the finisher controller PC board and delivery motor (M1) correct?

↓ NO → Correct the wiring.

YES

Is the delivery motor clock sensor (S1) working properly?

↓ NO → Replace the sensor.

YES

- 1) Replace the delivery motor (M1).
- 2) Replace the finisher controller PC board.

MJ-1025

Is the delivery belt home position sensor (PI7) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and delivery motor (M3) correct?

↓ NO → Correct the wiring.

YES

Rotate the stack delivery roller by hand. Does it rotate smoothly?

↓ NO → Fix the mechanism.

YES

Try replacing the delivery motor (M3). Is the problem corrected?

↓ YES → END.

NO

Replace the finisher controller PC board.

[CB30] Tray lift motor abnormality

MJ-1025

[Procedure 1]

Is the paper surface sensor (PI9) working properly?

↓ NO → Replace the sensor.

YES

Is the tray up/down mechanism working properly?

↓ NO → Fix the mechanism.

YES

Is 24 VDC supplied from the finisher controller PC board to the shift motor as soon as the tray is driven?

↓ NO → Replace the finisher controller PC board.

YES

Is the wiring between the finisher controller PC board and shift motor (M6) correct?

↓ YES → Replace the shift motor.

NO

Correct the wiring.

[Procedure 2]

Is the tray as far as the shift upper limit sensor?

↓ YES → Lower the position of the tray.

NO

Is the shift upper limit sensor (PI15) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and shift upper limit sensor (PI15) correct?

↓ YES → Replace the finisher controller PC board.

NO

Correct the wiring.

[Procedure 3]

Does the tray go up?

| NO → Is 24 VDC supplied from the finisher controller PCB to the shift motor as
| soon as the tray is driven?
| ↓ NO → Replace the finisher controller PC board.
| YES
| Is there any problem with the tray up/down mechanism?
| ↓ YES → Fix the lift mechanism.
| NO
| Replace the shift motor.
↓
YES

Is the shift motor clock sensor (PI7) working properly?

↓ YES → Replace the finisher controller PC board
NO
Replace the sensor.

[CB50] Staple motor abnormality

MJ-1025

[Procedure 1]

Is the wiring between the finisher controller PC board and the staple/fold motor normal?

↓ NO → Correct the wiring.
YES

Try to rotate the staple jam releasing dial. Is there mechanical trapping?

↓ YES → Fix the mechanism.
NO

Try replacing the staple/fold motor (M7). Is the problem corrected?

↓ YES → End.
NO
Replace the finisher controller PC board.

[Procedure 2]

Is the staple/fold motor clock sensor (PI14) working properly?

↓ NO → Replace the sensor.

YES

Does the staple/fold motor operate at the appropriate timing?

↓ YES → Replace the finisher controller PC board.

NO

Is the stapler unit drive mechanism working properly?

↓ NO → Fix the mechanism.

YES

Try replacing the staple/fold motor (M7). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[Procedure 3]

Is the folding home position sensor (PI11) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and the staple/fold motor normal?

↓ NO → Correct the wiring.

YES

Try to rotate the fold jam releasing dial. Is there mechanical trapping?

↓ YES → Fix the mechanism.

NO

Try replacing the staple/fold motor (M7). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[Procedure 4]

Is the staple/fold motor clock sensor (PI14) working properly?

↓ NO → Replace the sensor.

YES

Does the staple/fold motor operate at the appropriate timing?

↓ YES → Replace the finisher controller PC board.

NO

Is the saddle stitch unit drive mechanism working properly?

↓ NO → Fix the mechanism.

YES

Try replacing the staple/fold motor (M7). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CB60] Stapler unit shift motor abnormality

MJ-1025

Is the slide home position sensor (PI18) working properly?

↓ NO → Replace the sensor controller PC board.

YES

Is the wiring between the finisher controller PC board and slide motor correct?

↓ NO → Correct the wiring.

YES

Is there any mechanical problem with the stapler stand motion path?

↓ YES → Fix the mechanism.

NO

Try replacing the slide motor (M8). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CB80] Backup RAM data abnormality

MJ-1025

Is the problem solved by turning the power of the equipment OFF and ON?

↓ YES → End.

NO

- 1) Replace the finisher controller PC board.
- 2) Replace the punch controller PC board.

[CC30] Stack processing motor abnormality/Paddle motor abnormality

MJ-1022 (Stack processing motor abnormality)

[Procedure 1]

Is the tension of the drive belt normal?

↓ NO → Loosen the adjustment screw to adjust its tension.

YES

Does the bushing attached to the returning roller shaft smoothly move up and down?

↓ NO → Apply grease on the cut-out part of the front side frame where the bushing contacts.

YES

Is the spring of the returning roller detached?

↓ YES → Attach the spring.

NO

Is the wiring between the finisher controller PC board and stack delivery motor (M2) correct?

↓ NO → Correct the wiring.

YES

Is the stack delivery lever home position sensor (S8) working properly?

↓ NO → Replace the sensor.

YES

- 1) Replacing the stack processing motor.
- 2) Replace the finisher controller PC board.

[Procedure 2]

Does the bushing attached to the returning roller shaft smoothly move up and down?

↓ NO → Apply grease on the cut-out part of the front side frame where the bushing contacts.

YES

Is the spring of the returning roller detached?

↓ YES → Attach the spring.

NO

Is the tension of the stack processing motor drive belt normal?

↓ NO → Loosen the adjustment screw to adjust its tension.

YES

Is the returning roller home position sensor (S3) working properly?

↓ NO → Replace the sensor.

YES

- 1) Replace the stack delivery motor.
- 2) Replace the finisher controller PC board.

MJ-1025 (Paddle motor abnormality)

Is the paddle home position sensor (PI2) working properly?

↓ NO → Replace the sensor.

YES

Is the swing guide home position sensor (PI3) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and paddle motor (M2) correct?

↓ NO → Correct the wiring.

YES

Try turning the paddle motor counterclockwise by hand. Is there mechanical trapping in the up/down movement of the swing guide?

↓ YES → Fix the mechanism.

NO

Try replacing the paddle motor. Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CC50] Horizontal registration motor abnormalityMJ-1025Is the horizontal registration home position sensor (PI2P) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and the horizontal registration home position sensor (PI2P) correct?

↓ NO → Correct the wiring.

YES

Is there any problem with the horizontal registration mechanism?

↓ YES → Fix the mechanism.

NO

Replace the horizontal registration motor (M2P).

Try replacing the punch controller PC board. Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CC60] Punch motor abnormalityMJ-1025Is the punch home position sensor (PI1P) working properly?

↓ NO → Replace the sensor.

YES

Is the punch motor clock sensor (PI3P) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and sensor correct?

↓ NO → Correct the wiring.

YES

Is there any problem with the punching mechanism?

↓ YES → Fix the mechanism.

NO

Replace Punch motor (M1P)

Try replacing the punch controller PC board. Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CC80] Front jogging plate motor abnormality/Alignment motor (front) abnormality

MJ-1022 (Front jogging plate motor abnormality)

Is the front jogging plate home position sensor (S6) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and front jogging motor (M3) correct?

↓ NO → Correct the wiring.

YES

Has the rack run over the stopper of the roll?

↓ YES → Fix it.

NO

- 1) Replace the front jogging motor.
- 2) Replace the finisher controller PC board.

MJ-1025 (Alignment motor (front) abnormality)

Is the aligning plate home position sensor (front) (PI4) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and alignment motor (front) (M4) correct?

↓ NO → Correct the wiring.

YES

Is there any mechanical problem with the path of aligning plate?

↓ YES → Fix the mechanism.

NO

Try replacing the alignment motor (front) (M4). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CC90] Upper stack tray lift motor abnormality

MJ-1022

Is the wiring between the finisher controller PC board and upper stack tray lift motor (M5) correct?

↓ NO → Correct the wiring.

YES

Are the front and rear sides of the upper stack tray leveled?

↓ NO → Level them.

YES

Is the upper stack tray lift motor clock sensor (S19) working properly?

↓ NO → Replace the sensor.

YES

Is the stack tray paper height sensor (S10) working properly?

↓ NO → Replace the sensor.

YES

Are the upper stack tray upper limit sensor (S25), upper stack tray full sensor (S22) and stack processing safety switch (S26) working properly?

↓ NO → Replace the sensor or sensor controller PC board.

YES

Does the voltage between the pins J14-1 pin and -2 pin on the finisher controller PC board become 24 V when the upper stack tray lift motor starts rotating?

↓ NO → Replace the finisher controller PC board.

YES

Check the wiring between the upper stack tray lift motor and finisher controller PC board. If there is no problem, replace the upper stack tray lift motor.

[CCA0] Lower stack tray lift motor abnormality

MJ-1022

Is the wiring between the finisher controller PC board and lower stack tray lift motor (M7) correct?

↓ NO → Correct the wiring.

YES

Are the front and rear sides of the lower stack tray leveled?

↓ NO → Level them.

YES

Is the lower stack tray lift motor clock sensor (S9) working properly?

↓ NO → Replace the sensor.

YES

Is the stack tray paper height sensor (S10) working properly?

↓ NO → Replace the sensor.

YES

Are the lower stack tray upper limit sensor (S13) and lower stack tray full sensor (S23) working properly?

↓ NO → Replace the sensor or sensor controller PC board

YES

Does the voltage between the pins J3-1 pin and -2 pin on the finisher controller PC board become 24 V when the lower stack tray lift motor starts rotating?

↓ NO → Replace the finisher controller PC board.

YES

Check the wiring between the upper stack tray lift motor and finisher controller PC board. If there is no problem, replace the motor.

[CCB0] Rear jogging plate motor abnormality/Alignment motor (rear) abnormality

MJ-1022 (Rear jogging plate motor abnormality)

Is the rear jogging plate home position sensor (S7) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and rear jogging motor (M4) correct?

↓ NO → Correct the wiring.

YES

Has the rack run over the stopper of the roll?

↓ YES → Fix it.

NO

- 1) Replace the rear jogging motor.
- 2) Replace the finisher controller PC board.

MJ-1025 (Alignment motor (rear) abnormality)

Is the aligning plate home position sensor (rear) (PI5) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and aligning plate home position sensor (rear) correct?

↓ NO → Correct the wiring.

YES

Is there any mechanical problem with the path of aligning plate?

↓ YES → Fix the mechanism.

NO

Try replacing the alignment motor (rear) (M5). Is the problem corrected?

↓ YES → End.

NO

Replace the finisher controller PC board.

[CDC0] Punch power failure occurred abnormality

MJ-1025

Is the problem solved by turning the power of the equipment OFF and ON?

↓ YES → End

NO

Is the wiring between the finisher controller PC board and punch controller PC board correct?

↓ NO → Correct the wiring.

YES

Does the voltage between the CN14-5 (+) and CN14-3 (-) on the finisher controller PC board become 24 V?

↓ YES → Replace the punch controller PC board.

NO

Replace the finisher controller PC board.

[CDD0] Folding sensor abnormality

MJ-1025

Is the folding position sensor (PI10) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and folding position sensor (PI10) correct?

↓ NO → Correct the wiring.

YES

Is there any mechanical problem with the fold jam releasing dial?

↓ YES → Fix the mechanism.

NO

- 1) Replace the staple/fold motor (M7).
- 2) Replace the finisher controller PC board.

[CDE0] Paddle motor abnormalityMJ-1025Is the paddle home position sensor (PI2) working properly?

↓ NO → Replace the sensor.

YES

Is the Swing guide home position sensor (PI3) working properly?

↓ NO → Replace the sensor.

YES

Is the wiring between the finisher controller PC board and Paddle motor (M2) correct?

↓ NO → Correct the wiring.

YES

Try to rotate the paddle motor (M2) clockwise and counterclockwise by hand. Is there mechanical trapping in the rotation of the paddle or the up/down movement of the swing guide?

↓ YES → Fix the mechanism.

NO

- 1) Replace the paddle motor (M2)
- 2) Replace the finisher controller PC board.

[CE00] Communication error between finisher and puncher unitMJ-1025Is the problem solved by turning the power of the equipment OFF and ON?

↓ YES → End.

NO

Is the wiring between the finisher controller PC board and the punch controller PC board correct?

↓ NO → Correct the wiring.

YES

Measure the voltage between CN14-5 (+) and CN14-3 (-) on the finisher controller PC board 24 V?

↓ NO → Replace the finisher controller PC board.

YES

Replace the punch controller PC board.

5.1.15 Service call for others

[C940] Engine-CPU is abnormal

Is the "Call for Service" displayed even after the power is turned OFF and back ON?

↓ NO → Leave it and see what happens.

YES

- 1) Check if the circuit pattern between the Engine-CPU and FROM is short circuited or open circuited.
- 2) Replace the LGC board if this error occurs frequently.

[C970] High-voltage transformer abnormality

- (1) Is the main charger installed securely?
- (2) Check if the spring of high-voltage supply contact point is deformed.
- (3) Check if the needle electrode is broken or the main charger grid is deformed.
- (4) Check if any foreign matters is on the needle electrode or the main charger grid.
- (5) Is the transfer/separation charger installed securely?
- (6) Check if the transfer/separation charger wire is broken or unhooked.
- (7) Check if any foreign matter is on the transfer/separation charger wire.

[CDF0] Initialize error of the offset tray

- (1) Check if each connector between the OCT motor and OCT board (CN261) is disconnected.
- (2) Check if each connector between the OCT board (CN261) and LGC board (CN306) is disconnected.
- (3) Check if each connector pin is removed or the harness is broken.
- (4) Check if any conductor pattern on the OCT board and LGC board is short circuited or open circuited.
- (5) Replace the OCT motor.
- (6) Replace the OCT board.
- (7) Replace the LGC board.

[CF60] Recycle toner transport area lock

- (1) Check if any foreign matter or toner flakes are on the recycle toner transport area.
- (2) Check if the auger or the gear is damaged on the recycle toner transport area.
- (3) Check if the connector (CN305) is disconnected or the connector pin is removed on the LGC board.
- (4) Check if the harness is short circuited or open circuited.
- (5) Replace the auger lock switch.
- (6) Replace the LGC board.

[F090] SRAM abnormality on the SYS board

- (1) Turn the power OFF and start up the Setting Mode (08).
- (2) When the message "SRAM ERROR DOES IT INITIALIZE?" is displayed on the LCD, press [INITIALIZE]. (SRAM is cleared.)
- (3) Turn the power OFF and then back ON. If the error is not recovered, replace the SYS board.

[F091] NVRAM abnormality on the SYS board

- (1) Turn the power OFF and start up the Setting Mode (08).
- (2) When the message "NVRAM ERROR DOES IT INITIALIZE?" is displayed on the LCD, press the [INTERRUPT] or [INITIALIZE] button. (NVRAM is initialized.)
- (3) Perform the panel calibration (08-692).

Note:

When the NVRAM is initialized, the scanner and image processing related adjustments are also initialized. Readjust them after the NVRAM initialization.

- (4) Turn the power OFF and then back ON. If the error is not recovered, replace the NVRAM on the SYS board.

[F092] SRAM/NVRAM abnormality on the SYS board

- (1) Turn the power OFF and start up the Setting Mode (08).
- (2) When the message "NVRAM/SRAM ERROR DOES IT INITIALIZE?" is displayed on the LCD, press the [INTERRUPT] or [INITIALIZE] button. (SRAM is cleared and NVRAM is initialized.)
- (3) Perform the panel calibration (08-692).

Note:

When the NVRAM is initialized, the scanner and image processing related adjustments are also initialized. Readjust them after the NVRAM initialization.

- (4) Turn the power OFF and then back ON. If the error is not recovered, replace the NVRAM on the SYS board.

[F100] HDD Initialization error

- (1) Check if the HDD is mounted.
- (2) Check if the specified HDD is mounted.
- (3) Check if the connector pins of the HDD are bent.
- (4) Check if the power supply connector is disconnected.
- (5) Check if the connector J111 on the SYS board is disconnected.
- (6) Replace the harness.
- (7) Initialize the HDD. (Key in "2" at 08-690.)
- (8) Replace the HDD.
- (9) Replace the SYS board.

[F101] HDD unmounted

[F102] HDD start error

[F103] HDD transfer time-out

[F104] HDD CRC error

[F105] HDD other error

- (1) Check if the connectors of the HDD are disconnected.
- (2) Check if the connector pins are disconnected or the wires of harnesses are broken.
- (3) Perform the bad sector check (08-694). If the check result is OK, recover the data in the HDD. If the check result is failed, replace the HDD.
- (4) Replace the SYS board.

[F106] Point and Print partition damage

- (1) Turn the power OFF and start up the Setting Mode (08).
- (2) Key in "662" and press the [START] button. (Partition clearing is performed.)
- (3) Restart the equipment.
- (4) Access TopAccess. Click the [Administration] tab, and then click the Maintenance Menu to open. Then install the "Point and Print" driver.

[F107] /SHR partition damage

Initialize the Electronic Filing using the Setting Mode (08-666).

[F108] /SHA partition damage

Initialize the shared folder using the Setting Mode (08-667).

[F120] Database abnormality

- (1) Rebuild the databases. (Perform 08-684.)
- (2) If the error is not recovered, initialize the HDD. (Key in "2" at 08-690.)

[F130] Invalid MAC address (e-STUDIO202L/232/282)

Compare the serial number of the equipment with a number displayed in 08-995. If they are different, enter the correct serial number at 08-995.

[F200] Data overwrite kit (GP-1050/1060) is taken off

Clear the service call "F200". (Key in "0" at 08-633.)

- * When the Data overwrite kit (GP-1050/1060) is taken off from the equipment, the service call "F200" occurs.

5.1.16 Error in Internet FAX / Scanning Function

Notes:

1. When initializing the Electronic Filing (Setting Mode (08-666)), all data in the Electronic Filing are erased. Back up the data in the Electronic Filing by using the Electronic Filing Function of TopAccess before the initialization.
2. When initializing the shared folder (Setting Mode (08-667)), all data in the shared folder are erased. Back up the data in the shared folder by using Explorer before the initialization.
3. When formatting the HDD (Setting Mode (08-690)), all data in the shared folder, Electronic Filing, Address Book, template, etc. are erased. Back up these data before the initialization. Note that some of data cannot be backed up (Page 5-1).

[1] Internet FAX related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

[1C10] System access abnormality

[1C32] File deletion failure

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting (08-690).

[1C11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[1C12] Message reception error

[1C13] Message transmission error

Turn the power OFF and then back ON. Perform the job in error again.

[1C14] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[1C15] Exceeding file capacity

Reset and extend the "Maximum send to E-mail/iFAX size" or reduce the number of pages and perform the job again.

[1C20] System management module access abnormality

[1C21] Job control module access abnormality

[1C22] Job control module access abnormality

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting (08-690).

If the recovery is still not completed, replace the SYS board.

[1C30] Directory creation failure**[1C31] File creation failure****[1C33] File access failure**

Check if the access privilege to the storage directory is writable.
Check if the server or local disk has a sufficient space in disk capacity.

[1C40] Image conversion abnormality

Turn the power OFF and then back ON. Perform the job in error again.
Replace the main memory and perform the job again.

[1C60] HDD full failure during processing

Reduce the number of pages of the job in error and perform the job again.
Check if the server or local disk has a sufficient space in disk capacity.

[1C61] Address Book reading failure

Turn the power OFF and then back ON. Perform the job in error again.
Reset the data in the Address Book and perform the job again.

[1C62] Memory acquiring failure

Check if there is any job being performed and perform the job in error again.

Turn the power OFF and then back ON. Perform the job in error again.
Replace the main memory and perform the job again.

[1C63] Terminal IP address unset

Reset the Terminal IP address.
Turn the power OFF and then back ON. Perform the job in error again.

[1C64] Terminal mail address unset

Reset the Terminal mail address.
Turn the power OFF and then back ON. Perform the job in error again.

[1C65] SMTP address unset

Reset the SMTP address and perform the job.
Turn the power OFF and then back ON. Perform the job in error again.

[1C66] Server time time-out error

Check if the SMTP server is operating properly.

[1C67] NIC time time-out error**[1C68] NIC access error****[1C6D] System error**

Turn the power OFF and then back ON. Perform the job in error again.
If the error still occurs, replace the NIC board.

[1C69] SMTP server connection error

Reset the login name or password of SMTP server and perform the job again.
Check if the SMTP server is operating properly.

[1C6A] HOST NAME error

Check if there is an illegal character in the device name.
Delete the illegal character and reset the appropriate device name.

[1C6B] Terminal mail address error

Check if there is an illegal character in the Terminal mail address.
Delete the illegal character and reset the appropriate Terminal mail address, then perform the job again.

[1C6C] Destination mail address error

Check if there is an illegal character in the Destination mail address.
Delete the illegal character and reset the appropriate Destination mail address, then perform the job again.

[1C70] SMTP client OFF

Set the SMTP valid and perform the job again.

[1C71] SMTP authentication ERROR

Check that SMTP authentication method, login name and password are correct, then perform authentication again.

[1C72] POP Before SMTP ERROR

Check that both the POP Before SMTP setting and POP3 setting are correct, then perform authentication again.

[1C80] Internet FAX transmission failure when processing E-mail job received

Reset the "Received InternetFax Forward".

[1C81] Onramp Gateway transmission failure

Reset the mail box.

[1C82] Internet FAX transmission failure when processing FAX job received

Reset the "Received Fax Forward".

[1CC1] Power failure

Check if the power cable is connected properly and it is inserted securely.
Check if the power voltage is unstable.

[2] RFC related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

[2500] HOST NAME error (RFC: 500) / Destination mail address error (RFC: 500) / Terminal mail address error (RFC: 500)

[2501] HOST NAME error (RFC: 501) / Destination mail address error (RFC: 501) / Terminal mail address error (RFC: 501)

Check if the Terminal mail address and Destination mail address are correct.

Check if the mail server is operating properly.

Turn the power OFF and then back ON. Perform the job in error again.

[2503] Destination mail address error (RFC: 503)

[2504] HOST NAME error (RFC: 504)

[2551] Destination mail address error (RFC: 551)

Check if the mail server is operating properly.

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, replace the NIC board.

[2550] Destination mail address error (RFC: 550)

Check the state of the mail box in the mail server.

[2552] Terminal/Destination mail address error (RFC: 552)

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, replace the NIC board.

[2553] Destination mail address error (RFC: 553)

Check if there is an illegal character in the mail box in the mail server.

[3] Electronic Filing related error

[2B10] No applicable job error in Job control module

[2B11] JOB status abnormality

[2B20] File library function error

[2B30] Insufficient disk space in /SHR partition

[2BC0] Fatal failure occurred

[2BC1] System management module resource acquiring failure

Erase some data in the Electronic Filing and perform the job in error again (in case of [2B30]).

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting (08-690).

If the recovery is still not completed, replace the SYS board.

[2B50] Image library error

[2B90] Insufficient memory capacity

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, replace the main memory.

Perform the job in error again.

Check if there are no other running jobs and initialize the Electronic Filing using the Setting Mode (08-666).

[2B31] Status of specified Electronic Filing or folder is undefined or being created/deleted

Check if the specified Electronic Filing or folder exists. (If no, this error would not occur.)

Delete the specified Electronic Filing or folder.

Perform the job in error again.

If the specified Electronic Filing or folder can not be deleted, initialize the Electronic Filing using the Setting Mode (08-666).

[2B32] Electronic Filing printing failure: Specified document can not be printed because of client's access (being edited, etc.)

Check if the specified document exists. (If no, this error would not occur.)

Delete the specified document.

Perform the job in error again.

If the specified document can not be deleted, initialize the Electronic Filing using the Setting Mode (08-666).

[2B51] List library error

Check if the Function List can be printed out.

If it can be printed out, perform the job in error again.

If it can not be printed out, replace the main memory.

If the recovery is still not completed, perform the HDD formatting (08-690).

[2BA0] Invalid Box password

Check if the password is correct.

Reset the password.

When this error occurs when printing the data in the Electronic Filing, perform the printing with the administrator's password.

If the recovery is still not completed or in case of invalid password for the operation other than printing (opening the file, etc.), initialize the Electronic Filing using the Setting Mode (08-666).

[2BB1] Power failure**[2BD0] Power failure occurred during restoring of Electronic Filing**

Check if the power cable is connected properly and it is inserted securely.

Check if the power voltage is unstable.

[2BE0] Machine parameter reading error

Turn the power OFF and then back ON. Perform the job in error again.

[2BF0] Exceeding maximum number of pages

Reduce the number of inserting pages and perform the job again.

[2BF1] Exceeding maximum number of documents

Backup the documents in the box or folder to PC or delete them.

[2BF2] Exceeding maximum number of folders

Backup the folders in the box or folder to PC or delete them.

[4] E-mail related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

[2C10] System access abnormality

[2C32] File deletion failure

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting (08-690).

[2C11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2C12] Message reception error

[2C13] Message transmission error

Turn the power OFF and then back ON. Perform the job in error again.

[2C14] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2C15] Exceeding file capacity

Reset and extend the "Message size limitation" or reduce the number of pages and perform the job again.

[2C20] System management module access abnormality

[2C21] Job control module access abnormality

[2C22] Job control module access abnormality

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting (08-690).

If the recovery is still not completed, replace the SYS board.

[2C30] Directory creation failure

[2C31] File creation failure

[2C33] File access failure

Check if the access privilege to the storage directory is writable.

Check if the server or local disk has a sufficient space in disk capacity.

[2C40] Image conversion abnormality

[2C62] Memory acquiring failure

Turn the power OFF and then back ON. Perform the job in error again.

Replace the main memory and perform the job again.

[2C60] HDD full failure during processing

Reduce the number of pages of the job in error and perform the job again.
Check if the server or local disk has a sufficient space in disk capacity.

[2C61] Address Book reading failure

Turn the power OFF and then back ON. Perform the job in error again.
Reset the data in the Address Book and perform the job again.

[2C63] Terminal IP address unset

Reset the Terminal IP address.
Turn the power OFF and then back ON. Perform the job in error again.

[2C64] Terminal mail address unset

Reset the Terminal mail address.
Turn the power OFF and then back ON. Perform the job in error again.

[2C65] SMTP address unset

Reset the SMTP address and perform the job.
Turn the power OFF and then back ON. Perform the job in error again.

[2C66] Server time time-out error

Check if the SMTP server is operating properly.

[2C67] NIC time time-out error

[2C68] NIC access error

[2C6D] System error

Turn the power OFF and then back ON. Perform the job in error again.
If the error still occurs, replace the NIC board.

[2C69] SMTP server connection error

Reset the login name and password of SMTP server and perform the job again.
Check if the SMTP server is operating properly.

[2C6A] HOST NAME error (No RFC error)

Check if there is an illegal character in the device name.
Delete the illegal character and reset the appropriate device name.

[2C6B] Terminal mail address error

Check if there is an illegal character in the Terminal mail address.
Delete the illegal character and reset the appropriate Terminal mail address, then perform the job again.

[2C6C] Destination mail address error (No RFC error)

Check if there is an illegal character in the Destination mail address.
Delete the illegal character and reset the appropriate Destination mail address, then perform the job again.

[2C70] SMTP client OFF

Set the SMTP valid and perform the job again.

[2C71] SMTP authentication ERROR

Check that SMTP authentication method, login name and password are correct, then perform authentication again.

[2C72] POP Before SMTP ERROR

Check that both the POP Before SMTP setting and POP3 setting are correct, then perform authentication again.

[2C80] E-mail transmission failure when processing E-mail job received

Reset the "Received InternetFax Forward".

[2C81] Process failure of FAX job received

Reset the setting of the mail box or "Received InternetFax Forward".

[2CC1] Power failure

Check if the power cable is connected properly and it is inserted securely.
Check if the power voltage is unstable.

[5] File sharing related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

[2D10] System access abnormality

[2D32] File deletion failure

[2DA6] File deletion failure

[2DA7] Resource acquiring failure

Delete some files in the shared folder by using Explorer because of automatic/manual file deletion failure (in case of [2DA6])

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting (08-690).

[2D11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2D12] Message reception error

[2D13] Message transmission error

Turn the power OFF and then back ON. Perform the job in error again.

[2D14] [2D61] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2D15] Exceeding document number

Delete some documents in the folder, and then perform the job in error again.

[2D20] System management module access abnormality

[2D21] Job control module access abnormality

[2D22] Job control module access abnormality

[2D60] File library access abnormality

Delete some files in the shared folder by using Explorer because of automatic/manual file deletion failure (in case of [2DA6])

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting (08-690).

If the recovery is still not completed, replace the SYS board.

[2D30] Directory creation failure

[2D31] File creation failure

[2D33] File access failure

Check if the access privilege to the storage directory is writable.

Check if the server or local disk has a sufficient space in disk capacity.

[2D40] Image conversion abnormality

Turn the power OFF and then back ON. Perform the job in error again.

Replace the main memory and perform the job again.

If the error still occurs, first, check if there are no jobs existing and then initialize the shared folder using the Setting Mode (08-667).

[2D62] File server connection error

Check the IP address or path of the server.

Check if the server is operating properly.

[2D63] Invalid network path

Check the network path.

If the path is correct, turn the power OFF and then back ON, and perform the job again.

[2D64] Login failure

Reset the login name and password. Perform the job.

Check if the account of the server is properly set up.

[2D65] Exceeding documents in folder: Creating new document is failed

Delete some documents in the folder.

[2D66] HDD full failure during processing

Reduce the number of pages of the job in error and perform the job again.

Check if the server or local disk has a sufficient space in disk capacity.

[2D67] FTP service not available

Check if the setting of FTP service is valid.

[2D68] File sharing service not available

Check if the setting of SMB is valid.

[2DC1] Power failure

Check if the power cable is connected properly and it is inserted securely.

Check if the power voltage is unstable.

[6] E-mail reception related error

(when GM-1020/3020, 1030/3030, 2020 or 2030 is installed (e-STUDIO200L/230/280))

(when GM-1070/4070, 1080U/4080U, 2070 or 2080U is installed (e-STUDIO202L/232/282))

[3A10] [3A11] [3A12] E-mail MIME error

The format of the mail is not corresponding to MIME 1.0.

Request the sender to retransmit the mail in the format corresponding to MIME 1.0.

[3A20] [3A21] [3A22] E-mail analysis error

[3B10] [3B11] [3B12] E-mail format error

[3B40] [3B41] [3B42] E-mail decode error

These errors occur when the mail data is damaged from the transmission to the reception of the mail.

Request the sender to retransmit the mail.

[3A30] Partial mail time-out error

The partial mail is not received in a specified period of time.

Request the sender to retransmit the partial mail, or set the time-out period of the partial mail longer.

[3A40] Partial mail related error

The format of the partial mail is not corresponding to this equipment.

Request the sender to remake and retransmit the partial mail in RFC2046 format.

[3A50] [3A51] [3A52] Insufficient HDD capacity error

[3A60] [3A61] [3A62] Warning of insufficient HDD capacity

These errors occur when the HDD capacity is not sufficient for a temporary concentration of the jobs, etc.

Request the sender to retransmit after a certain period of time, or divide the mail into more than one.

Insufficient HDD capacity error also occurs when printing is disabled for no printing paper.

In this case, supply the printing paper.

[3A70] Warning of partial mail interruption

This error occurs when the partial mail reception setting becomes OFF during the partial mail reception.

Reset the partial mail reception setting ON and then request the sender to retransmit the mail.

[3A80] [3A81] [3A82] Partial mail reception setting OFF

Reset the partial mail reception setting ON and then request the sender to retransmit the mail.

[3B20] [3B21] [3B22] Content-Type error

The format of the attached file is not supported by this equipment (TIFF-FX).

Request the sender to retransmit the file in TIFF-FX.

[3B30] [3B31] [3B32] Charset error

These errors occur when the standard of the Charset is other than ISO-8559-1 or ISO-8559-2.

Request the sender to reformat the Charset into either of the standards described above and then retransmit the mail.

[3C10] [3C11] [3C12] [3C13] TIFF analysis error

These errors occur when the mail data is damaged from the transmission to the reception of the mail, or when the format of the attached file is not supported by this equipment (TIFF-FX).
Request the sender to retransmit the mail.

[3C20] [3C21] [3C22] TIFF compression error

The compression method of the TIFF file is not acceptable for this equipment. (Acceptable: MH/MR/MMR/JBIG)
Request the sender to retransmit the file in the acceptable compression method.

[3C30] [3C31] [3C32] TIFF resolution error

The resolution of the TIFF file is not acceptable for this equipment. (Acceptable: 200 x 100, 200 x 200, 200 x 400, 400 x 400, 300 x 300 or equivalent)
Request the sender to retransmit the file in the acceptable resolution.

[3C40] [3C41] [3C42] TIFF paper size error

The paper size of the TIFF file is not acceptable for this equipment. (Acceptable: A4, B4, A3, B5, LT, LG, LD or ST)
Request the sender to retransmit the file in the acceptable paper size.

[3C50] [3C51] [3C52] Offramp destination error

These errors occur when the FAX number of the offramp destination is incorrect.
Request the sender to correct the FAX number of offramp destination and then retransmit the mail.

[3C60] [3C61] [3C62] Offramp security error

These errors occur when the FAX number of the offramp destination is not on the Address Book.
Check if the FAX number of the offramp destination is correctly entered or the number has not been changed.

[3C70] Power failure error

Check if the mail is recovered after turning ON the power again.
Request the sender to retransmit the mail if it is not recovered.

[3D10] Destination address error

Check if the setting of the server or DNS is correct. Correct if any of the setting is incorrect.
When the content of the setting is correct, confirm the sender if the destination is correct.

[3D20] Offramp destination limitation error

Inform the sender that the transfer of the FAX data over 40 is not supported.

[3D30] FAX board error

This error occurs when the FAX board is not installed or the FAX board has an abnormality.
Check if the FAX board is correctly connected.

[3E10] POP3 server connection error

Check if the IP address or domain name of the POP3 server set for this equipment is correct, or check if POP3 server to be connected is operating properly.

[3E20] POP3 server connection time-out error

Check if POP3 server to be connected is operating properly.
Check if the LAN cable is correctly connected.

[3E30] POP3 login error

Check if the POP3 server login name and password set for this equipment are correct.

[3E40] POP3 Login Type ERROR

Check that the login type (Auto, POP3 or APOP) to the POP3 server is correct.

[3F00] [3F10] [3F20] [3F30] [3F40] File I/O error

These errors occur when the mail data is not transferred properly to the HDD.
Request the sender to retransmit the mail.
Replace the HDD if the error still occurs after retransmission.

[4030] No printer kit/Invalid

Install the print kit and perform the job again.
Register it officially and perform the job again.

[4031] HDD full failure during printing

Reduce the number of pages of the job in error and perform the job again.
Check if the server or local disk has a sufficient space in disk capacity.

[4032] Private-print-only error

Select "Private", and then perform the printing again.

[4033] Printing data storing limitation error

Select "Print", and then perform the printing again.

[4034] e-Filing storing limitation error

Select "Print", and then perform the printing again.

[4035] Local file storing limitation error

Select "Remote" (SMB/FTP) for the destination of the file to save.

[4036] User authentication error

Perform the authentication or register as a user, and then perform the printing again.

[A221] Print job cancellation

This message appears when deleting the job on the screen.

[A222] Print job power failure

When there are running jobs, perform the job in error again after the completion of the running jobs.
If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[A290] Limit over error
[A291] Limit over error
[A292] Limit over error
Clear the limit counter.

5.2 Troubleshooting for the Image

1) Abnormality of image density / Gray balance

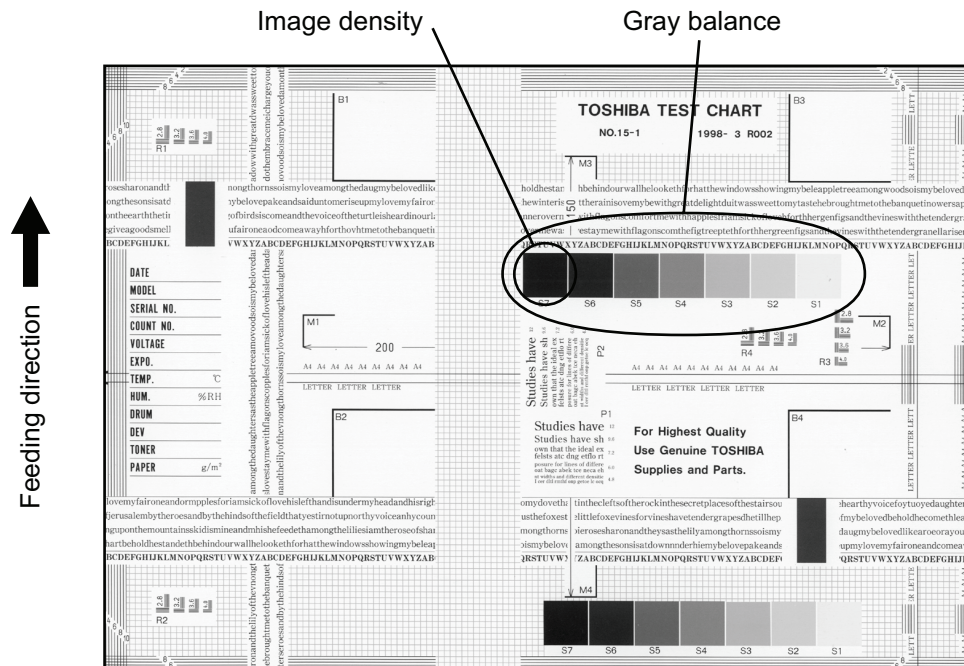


Fig. 5-1

| Defective area | Step | Check items | Prescription |
|----------------------|------|---|---|
| Density/Gray balance | 1 | Check the density/gray balance. | Adjust the density. |
| Printer section | 2 | Check test print image (04-113). | Go to step 4 if there is any problem on image. |
| Scanner | 3 | Are the original glass, mirrors and lens dirty? | Clean them. |
| Printed image | 4 | Is the image faded? | Perform troubleshooting for faded image. |
| | 5 | Is background fogging occurring? | Perform troubleshooting for background fogging. |
| | 6 | Is there a blotch on the image? | Perform troubleshooting for blotched image. |
| | 7 | Is the image transferred normally? | Perform troubleshooting for abnormal transfer. |

2) Background fogging

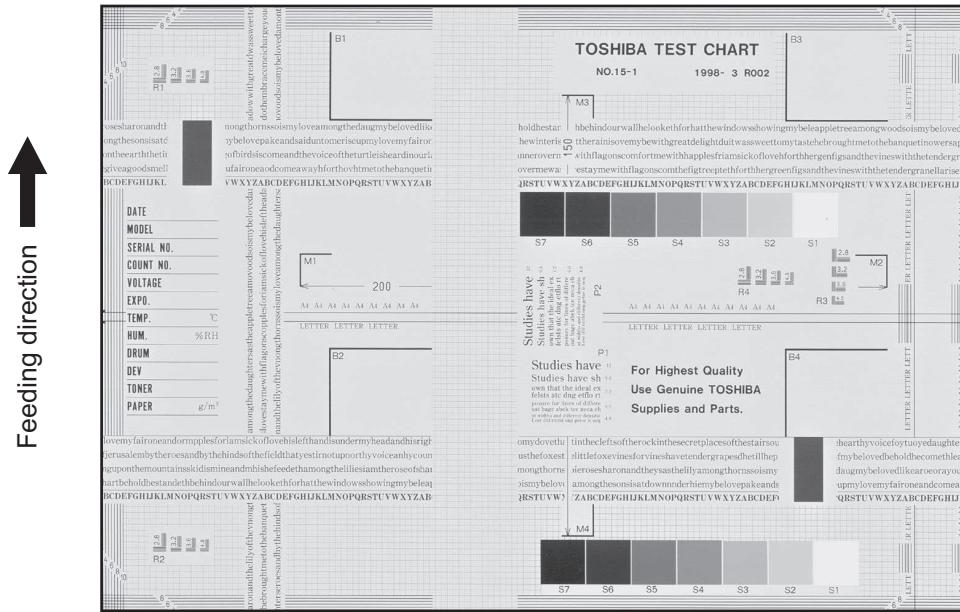


Fig. 5-2

| Defective area | Step | Check items | Prescription |
|--|------|--|---|
| Density reproduction | 1 | Check the reproduction of the image density. | Adjust the density. |
| Background reproduction | 2 | Check the background reproduction. | Adjust the background. |
| Printer section | 3 | Check test print image (04-113). | Go to step 4 if there is any problem on image. |
| Scanner | 4 | Are the original glass, mirrors and lens dirty? | Clean them. |
| Auto-toner | 5 | Is the auto-toner sensor normal? | Check the performance of the auto-toner sensor and readjust. |
| | 6 | Is the toner supplied normally? | Check the motor and circuits. |
| High-voltage transformer (Main charger / Developer bias) | 7 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| Developer unit | 8 | Is the contact between the drum and developer material normal? | Adjust the doctor-sleeve gap and polarity. |
| Developer material/Toner/Drum | 9 | Using the specified developer material, toner and drum? | Use the specified developer material, toner and drum. |
| | 10 | Have the developer material and drum reached their PM life? | Replace the developer material and drum. |
| | 11 | Is the storage environment of the toner cartridge 35°C less without dew? | Use the toner cartridge stored in the environment within specification. |
| Drum cleaning blade | 12 | Is the drum cleaned properly? | Check the pressure of the drum cleaning blade. |
| Toner dusting | 13 | Is toner heaped on the seal of the developer unit? | Remove the toner and clean the developer unit. |

3) Moire/lack of sharpness

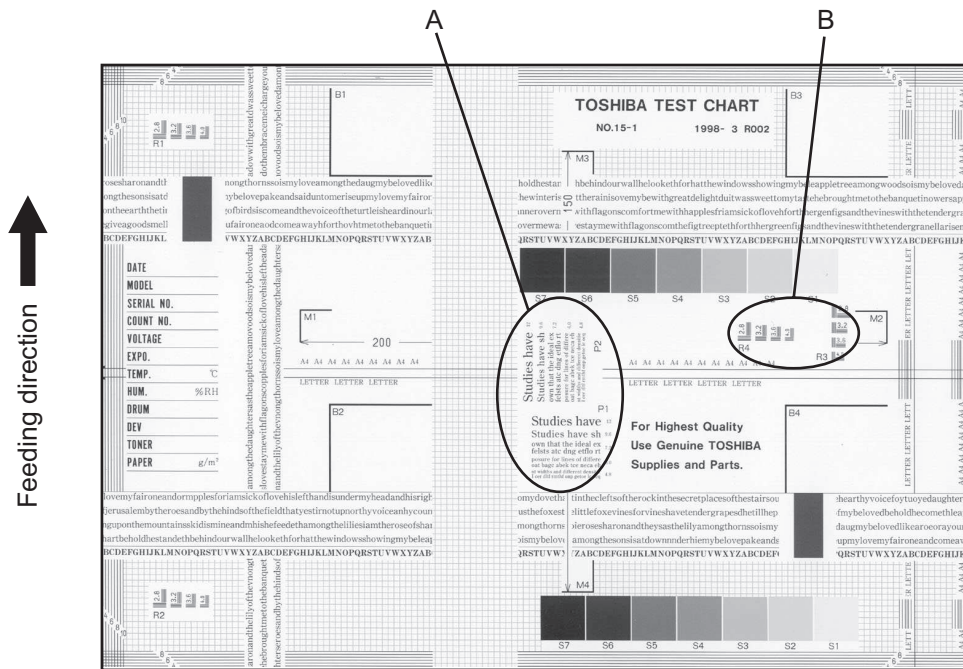


Fig. 5-3

Moire

| Defective area | Step | Check items | Prescription |
|----------------------------|------|--|--|
| Density reproduction | 1 | Check the reproduction of the image density. | Adjust the density. |
| Parameter adjustment value | 2 | Check the image processing parameters. | Check the adjustment value for sharpness. |
| Printer section | 3 | Check test print image (04-113). | When defects occur, perform the corresponding troubleshooting procedure. |

Lack of sharpness

| Defective area | Step | Check items | Prescription |
|----------------------------|------|--|--|
| Density reproduction | 1 | Check the reproduction of the image density. | Adjust the density. |
| Parameter adjustment value | 2 | Check the image processing parameters. | Check the adjustment value for sharpness. |
| Printer section | 3 | Check test print image (04-113). | When defects occur, perform the corresponding troubleshooting procedure. |
| | 4 | Check the image processing parameters. | Check the encircled areas A and B in the image, and change the sharpness intensity in the sharpness adjustment mode. |

4) Toner offset

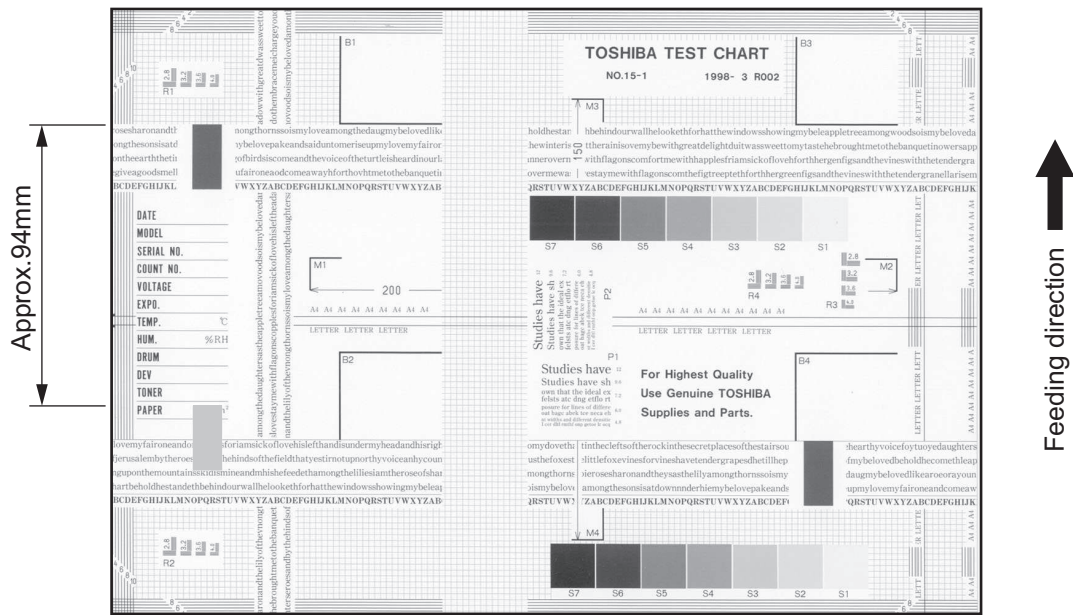


Fig. 5-4

Toner offset (Shadow image appears approx. 94 mm toward the dark image.)

| Defective area | Step | Check items | Prescription |
|--------------------|-------|--|---|
| Density | 1 | Is the density too high? | Adjust the density. |
| Fuser unit | 2 | Is the pressure of the fuser roller normal? | Check the pressure releasing parts and pressurization mechanism. |
| | 3 | Is the thermistor in contact with the fuser roller? | Contact the thermistor with the fuser roller. |
| | 4 | Is there a scratch on the fuser roller surface? | Replace the fuser roller. |
| | 5 | Has the fuser roller reached its PM life? | Replace the fuser roller. |
| | 6 | Is the setting temperature of the fuser roller normal? | Check the adjustment values of fuser roller temperature? 08-407, 410, 411, 450, 515, 516 |
| | Paper | 7 | Has the appropriate paper type been selected? |
| 8 | | Is the setting temperature of the fuser roller in each paper type normal? | Check the setting and correct it. 08-412, 413, 437, 438, 451, 452, 453, 518, 520, 521 |
| 9 | | Using the recommended paper? | Use the recommended paper. |
| Developer material | 10 | Using the specified developer material? | Use the specified developer material and toner. |
| Scanner | 11 | Are the original glass (especially the position of shading correction plate), mirror and lens dirty? | Clean them. |

5) Blurred image

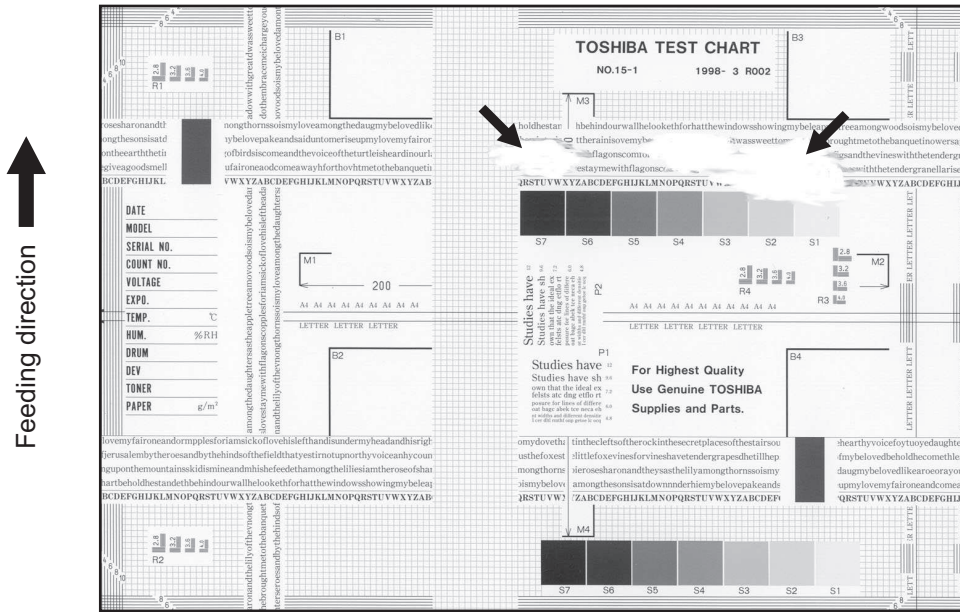


Fig. 5-5

| Defective area | Step | Check items | Prescription |
|-----------------|------|---|---|
| Paper | 1 | Is the paper in the drawer or LCF damp? | Change paper. Avoid storing paper in damp place. |
| Bedewed scanner | 2 | Is the scanner bedewed? | Clean the scanner. |
| Drum | 3 | Is the drum surface wet or dirty? | Wipe the drum with a piece of dry cloth. * Do not use alcohol or other organic solvents. |
| Ozone exhaust | 4 | Is the exhaust fan operating properly? | Check the connection of connector. Replace the ozone exhaust fan. |
| | 5 | Is the ozone filter stained or damaged? | Replace the ozone filter. |

6) Poor fusing

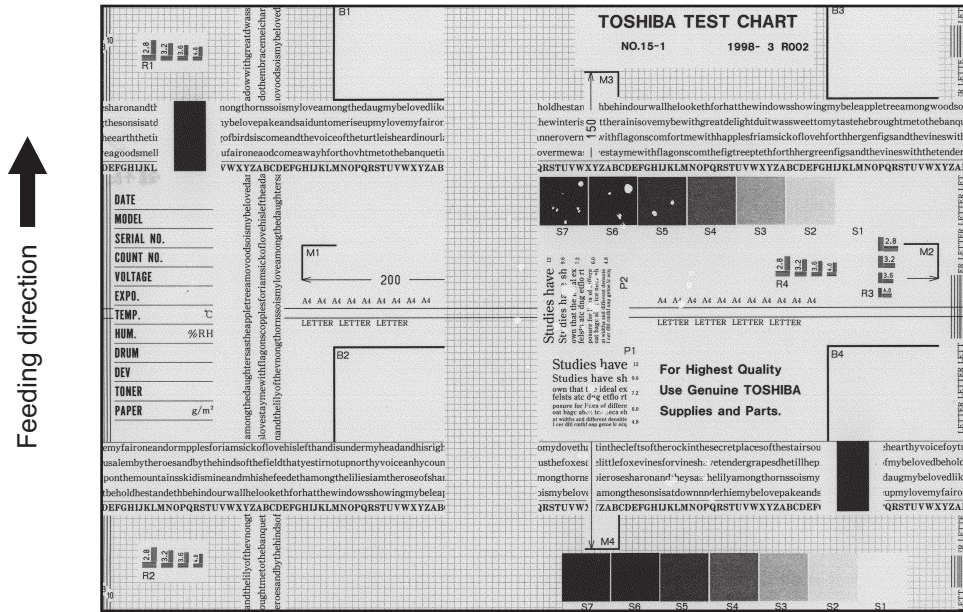


Fig. 5-6

| Defective area | Step | Check items | Prescription |
|---|------|---|---|
| Heater electric power | 1 | Check if the connector contacts properly. | Correct it. |
| | 2 | Is the heater shorted or broken? | Replace the heater. |
| Pressure between fuser roller and pressure roller | 3 | Are the pressure springs working properly? | Check and adjust the pressure springs. |
| Fuser roller temperature | 4 | Is the temperature of the fuser roller normal? | Check the setting and correct it. 08-407, 410, 411, 450, 515, 516 |
| Developer material/Toner | 5 | Using the specified developer material and toner? | Use the specified developer material and toner. |
| Paper | 6 | Is the paper in the drawer or LCF damp? | Avoid storing paper in damp place. |
| | 7 | Is the paper type corresponding to its mode? | Use the proper type of paper or select the proper mode. |
| | 8 | Is the setting temperature of the fuser roller in each paper type normal? | Check the setting and correct it. 08-412, 413, 437, 438, 451, 452, 453, 518, 520, 521 |
| | 9 | Using the recommended paper? | Use the recommended paper. |

7) Blank copy



Fig. 5-7

| Defective area | Step | Check items | Prescription |
|--|------|--|---|
| Transfer charger wire | 1 | Is the transfer charger wire cut off? | Replace the transfer charger wire. |
| High-voltage transformer (Transfer charger, Developer bias) | 2 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| | 3 | Are the connectors of the high-voltage harness securely connected? Is the harness open circuited? | Reconnect the harness securely. Replace the high-voltage harness. |
| Developer unit | 4 | Is the developer unit installed properly? | Check and correct the engaging condition of the developer unit gears. |
| | 5 | Do the developer sleeve and mixers rotate? | Check and fix the drive system of the developer unit. |
| | 6 | Is the developer material smoothly transported? | Remove the foreign matter from the developer material. |
| | 7 | Has the magnetic brush phase been shifted? | Adjust the developer polarity. |
| | 8 | Is the doctor blade positioned properly? | Adjust it using the doctor-sleeve jig. |
| Drum | 9 | Is the drum rotating? | Check the drive system of the drum. |
| CCD, SLG, SYS, LGC boards and harnesses | 10 | Are the connectors securely connected? Check if the harnesses connecting the boards are open circuited. | Connect the connectors securely. Replace the harness. |

8) Solid copy



Fig. 5-8

| Defective area | Step | Check items | Prescription |
|---|------|--|---|
| Exposure lamp and inverter | 1 | Does the exposure lamp light? | Check if the connector contacts with the exposure lamp terminal. Replace the defective inverter. |
| Scanner | 2 | Is there any foreign matter on the light path? | Remove it. |
| Bedewed scanner and drum | 3 | Is the scanner or drum bedewed? | Clean the mirrors, lens and drum. Keep the power cord plugged in all trough the day and night. (For the model with damp heater) |
| Main charger | 4 | Is the main charger securely installed? | Install it securely. |
| | 5 | Is the needle electrode broken? | Replace the needle electrode. |
| High-voltage transformer (Main charger) | 6 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| | 7 | Are the connectors of the high-voltage harness securely connected? Is the harness open circuited? | Reconnect the harness securely. Replace the high-voltage harness. |
| CCD, SLG, SYS, LGC boards and harnesses | 8 | Are the connectors securely connected? Check if the harnesses connecting the boards are open circuited. | Connect the connectors securely. Replace the harness. |

9) White banding (in the feeding direction)

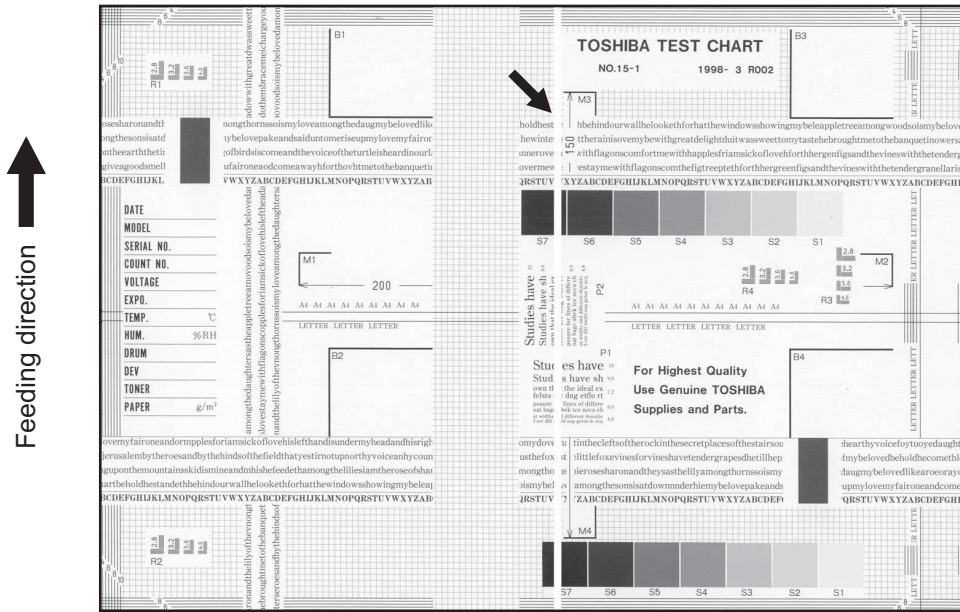


Fig. 5-9

| Defective area | Step | Check items | Prescription |
|-----------------------|------|---|--|
| Laser optical unit | 1 | Is there a foreign matter or stain on the slit glass? | Remove the foreign matter or stain. |
| Main charger grid | 2 | Is there a foreign matter or dew on the charger grid? | Remove the foreign matter. |
| Transfer charger wire | 3 | Is there any foreign matter or stain on the transfer charger wire? | Clean the transfer charger wire. |
| Developer unit | 4 | Is the developer material transported properly? | Remove the foreign matter if there is any. |
| | 5 | Is there a foreign matter or dew on the drum seal? | Remove the foreign matter or dew. |
| | 6 | Is the upper drum seal of the developer unit in contact with the drum? | Correct the position of the drum seal or replace it. |
| Drum | 7 | Is there a foreign matter on the drum surface? | Replace the drum. |
| Transport path | 8 | Does the toner image contact with any foreign matter before the paper enters the fusing section after the separation? | Remove the foreign matter. |
| Discharge LED | 9 | Is any of the discharge LEDs off? | Replace the discharge LED. |
| Scanner | 10 | Is there a foreign matter on the light path? | Remove the foreign matter. |
| | 11 | Are the original glass (especially the position of shading correction plate) mirror and lens dirty? | Clean them. |
| Cleaner | 12 | Is there any foreign matter, which contacts the drum on the cleaner stay? | Remove the foreign matter. |

10) White banding (at right angle with the feeding direction)

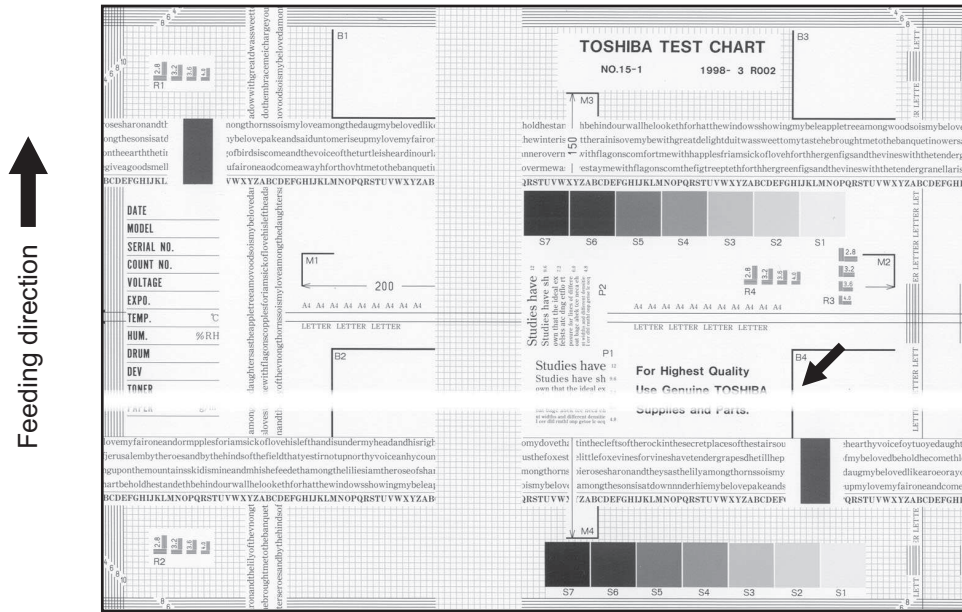


Fig. 5-10

| Defective area | Step | Check items | Prescription |
|---|------|---|--|
| Main charger | 1 | Is there a foreign matter on the charger? | Remove the foreign matter. |
| | 2 | Is the connector in proper contact with the terminal? | Clean or adjust the terminal. |
| Drum | 3 | Is there any abnormality on the drum surface? | Replace the drum. |
| Discharge LED | 4 | Does the discharge LED light normally? | Replace the discharge LED or check the harness and the circuit. |
| Developer unit | 5 | Is the developer sleeve rotating normally? Is there any abnormality on the sleeve surface? | Check the drive system of the developer unit, or clean the sleeve surface. |
| Drive system | 6 | Are the drum and scanner jittering? | Check each drive system. |
| High-voltage transformer (Main charger / Developer bias / Transfer charger) | 7 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| Transfer charger | 8 | Is any foreign matter such as paper shred sticking to the transfer charger wire? | Remove the foreign matter from the wire. |
| Feed system | 9 | Is the aligning amount proper? | Adjust the aligning amount. |

11)Skew (inclined image)

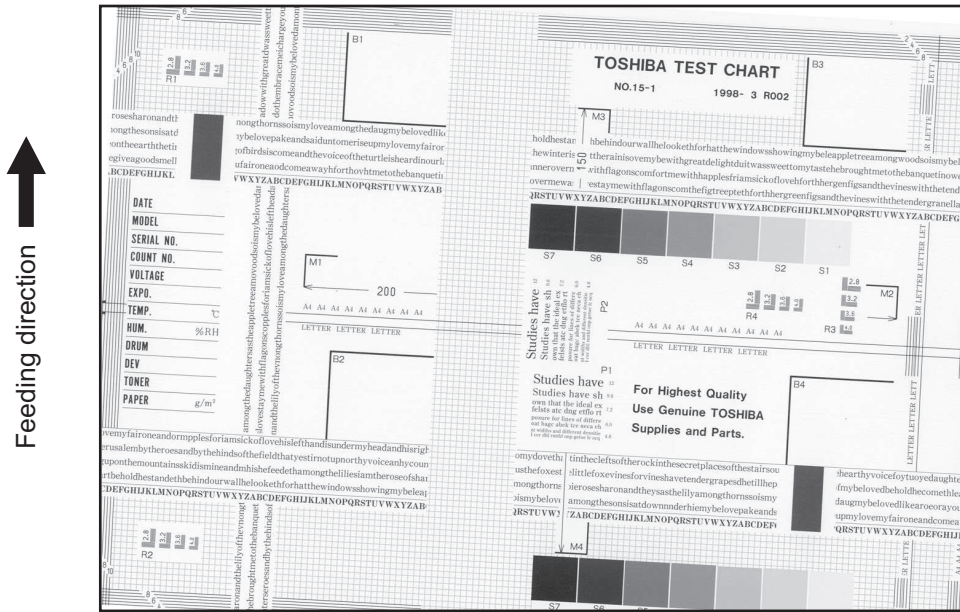


Fig. 5-11

| Defective area | Step | Check items | Prescription |
|------------------------|------|--|---|
| Drawers LCF | 1 | Is the drawer or LCF properly installed? | Install the drawer or LCF properly. |
| | 2 | Is there too much paper in the drawer or LCF? | Reduce paper to 550 sheets or less. (2500 sheets or less/stack for LCF) |
| | 3 | Is the corner of the paper folded? | Change the direction of the paper and set it again. |
| | 4 | Are the side guides of the drawer or LCF properly installed? | Adjust the position of the side guides. |
| Feed roller | 5 | Is the surface of the feed roller dirty? | Clean the feed roller surface with alcohol, or replace the roller. |
| Rollers | 6 | Are the roller and shaft secured? | Check and tighten the E-rings, pins, clips and setscrews. |
| Registration roller | 7 | Is the spring detached from the registration roller? | Attach the spring correctly. Clean the roller if it is dirty. |
| Pre-registration guide | 8 | Is the pre-registration guide properly installed? | Correct it. |
| Carriage-1 | 9 | Is the carriage-1 slanted? | Adjust the carriage-1. |

12) Black banding (in the feeding direction)

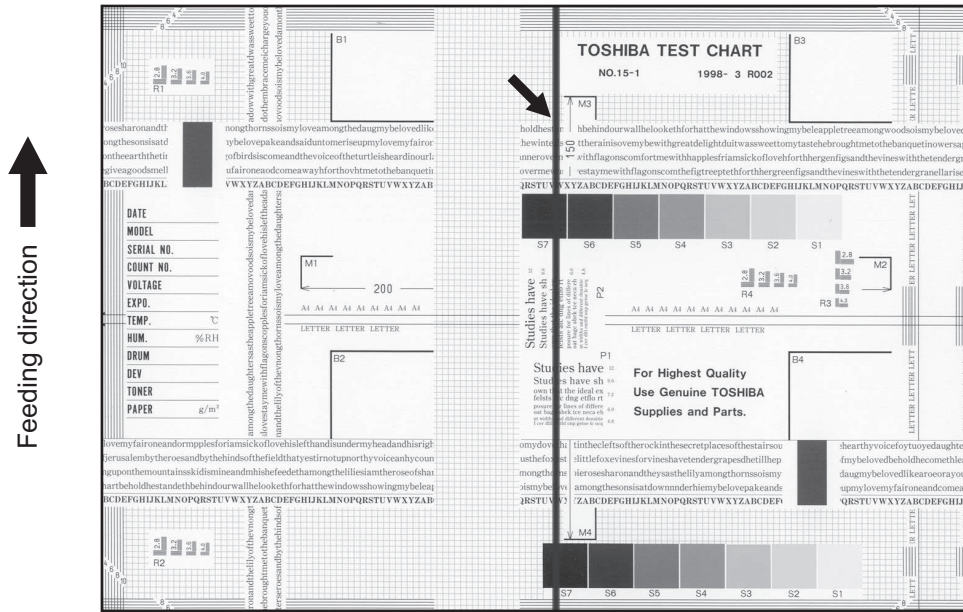


Fig. 5-12

| Defective area | Step | Check items | Prescription | |
|--------------------------|---------|---|---|--|
| Scanner | 1 | Is there a foreign matter on the light path? | Clean the slit, lens and mirrors. | |
| Shading correction plate | 2 | Is there dust or stains on part of the original glass where the shading correction plate is placed. | Clean the plate. | |
| Main charger | 3 | Is there a foreign matter on the main charger grid? | Remove the foreign matter. | |
| | 4 | Is the main charger grid dirty or deformed? | Clean or replace the main charger grid. | |
| | 5 | Is there a foreign matter on the main charger? | Remove the foreign matter. | |
| | 6 | Is the needle electrode dirty or deformed? | Clean or replace the needle electrode. | |
| | 7 | Is there a foreign matter inside the main charger case? | Remove the foreign matter. | |
| | 8 | Is the inside of the main charger case dirty? | Clean the inside of the main charger case. | |
| | Cleaner | 9 | Is there paper dust sticking to the drum cleaning blade edge? | Clean or replace the cleaning blade. |
| | | 10 | Is the drum cleaning blade working properly? | Check the pressurization of the drum cleaning blade. |
| 11 | | Has the used toner been recovered properly? | Clean the toner recovery auger. | |
| Fuser unit | 12 | Is the fuser roller surface dirty or damaged? | Clean or replace the fuser roller. | |
| | 13 | Is the thermistor dirty? | Clean the thermistor. | |
| Drum | 14 | Are there scratches on the drum surface? | Replace the drum. | |
| Laser optical unit | 15 | Is there a foreign matter or stain on the slit glass? | Remove the foreign matter or the stain. | |

13) Black banding (at right angle with the feeding direction)

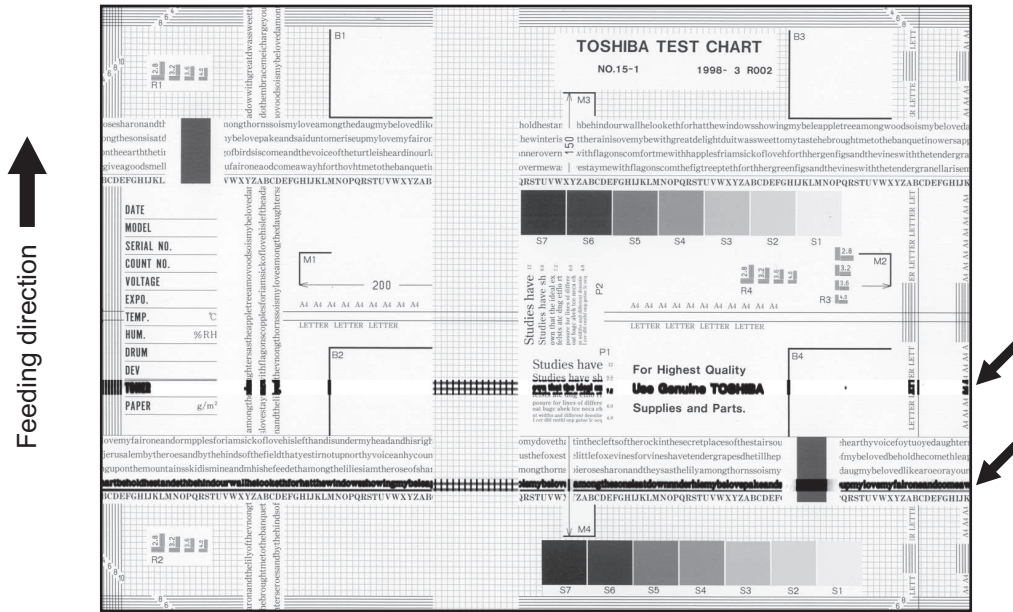


Fig. 5-13

| Defective area | Step | Check items | Prescription |
|---|------|--|--|
| Main charger | 1 | Is the needle electrode dirty or deformed? | Clean or replace the needle electrode. |
| Fuser unit | 2 | Are the fuser roller, separation finger for fuser roller and thermistor dirty? | Clean them. |
| | 3 | Has the cleaning roller, pressure roller, fuser roller and separation finger for fuser roller reached their PM life? | Replace them. |
| High-voltage transformer (Main charger / Developer bias / Transfer charger) | 4 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| Drum | 5 | Is there a deep scratch on the drum surface? | Replace the drum if the scratch has reached the aluminum base. |
| | 6 | Is there thin scratch (drum pitting) on the drum surface? | Check and adjust the contact condition of the cleaning blade and recovery blade. |
| Scanner | 7 | Is there a foreign matter on the carriage rail? | Remove the foreign matter. |

14)White spots



Fig. 5-14

| Defective area | Step | Check items | Prescription |
|--|------|---|--|
| Developer unit, Toner cartridge | 1 | Is the toner density in the developer material appropriate? | Check and correct the auto-toner sensor and toner supply operation. Check if the amount of the toner is sufficient in the toner cartridge. |
| | 2 | Is the doctor-sleeve gap proper? | Adjust the doctor-sleeve gap. |
| Developer material, Toner, Drum | 3 | Using the specified developer material, toner and drum? | Use the specified developer material, toner and drum. |
| | 4 | Have the developer material and drum reached their PM life? | Replace the developer material and drum. |
| | 5 | Is the storage environment of the toner cartridge 35°C or less without dew? | Use the toner cartridge stored in the environment with specification. |
| | 6 | Is there any dent on the drum surface? | Replace the drum. |
| | 7 | Is there any film forming on the drum? | Clean or replace the drum. |
| Main charger | 8 | Is there any foreign matter on the charger? | Remove it. |
| | 9 | Is the needle electrode dirty or deformed? | Clean or replace the needle electrode. |
| High-voltage transformer (Main charger / Developer bias / Transfer charger) | 10 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |
| Transfer/Separation charger | 11 | Is there any foreign matter such as fiber in the paper transport area of the transfer/separation charger? | Clean the transfer/separation charger. |

15) Poor image transfer

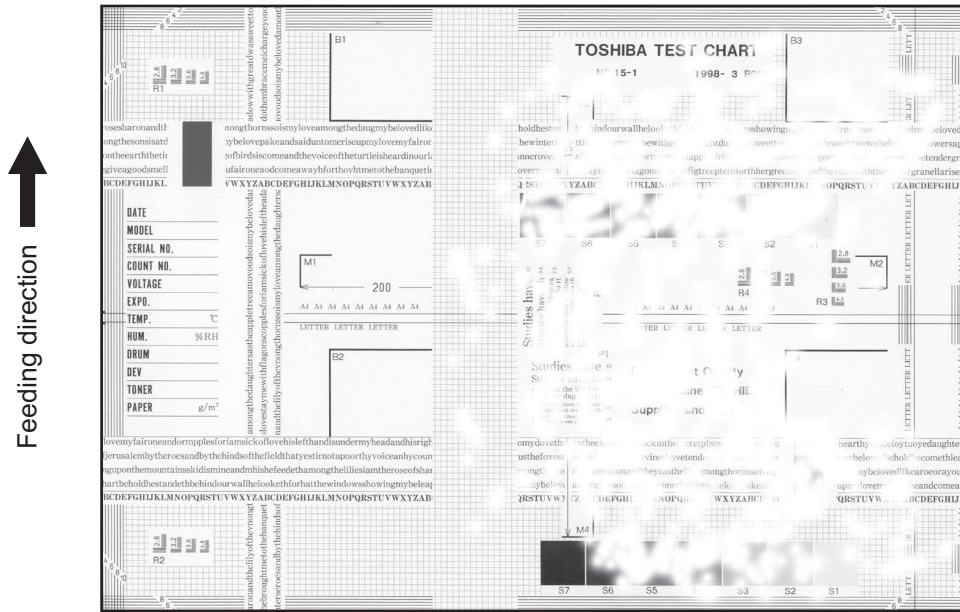


Fig. 5-15

| Defective area | Step | Check items | Prescription |
|---|------|--|--|
| Paper | 1 | Is the paper in the drawer or LCF/ PFP curled? | Reinsert the paper with the reverse side up or change the paper. |
| | 2 | Is the paper in the drawer or LCF damp? | Avoid storing paper in damp place. |
| | 3 | Is the paper type corresponding to its mode? | Select the proper mode. |
| | 4 | Using the recommended paper? | Use the recommended paper. |
| Transfer charger | 5 | Is the transfer charger case dirty? | Clean the transfer charger case. |
| | 6 | Is the transfer charger wire dirty? | Clean the transfer charger wire. |
| Registration roller | 7 | Is there any abnormality related to the registration roller or with the roller itself? | Clean the roller if it is dirty. Securely attach the springs if they are detached. Replace the clutch if it is defective. Adjust the rotation speed of the roller. |
| High-voltage transformer (Transfer charger) | 8 | Is the high-voltage transformer output defective? | Adjust the output, or replace the transformer. |

16) Uneven image density

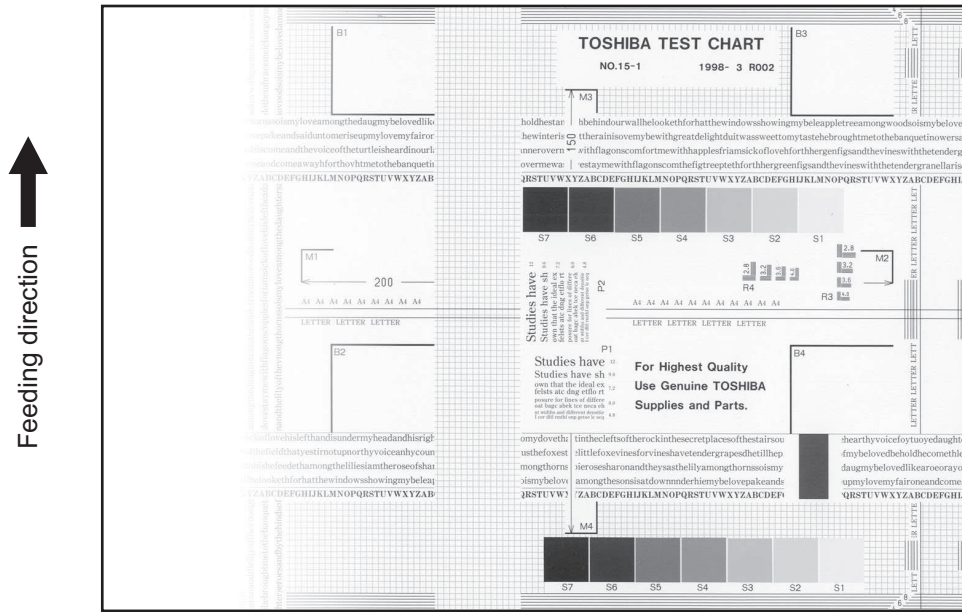


Fig. 5-16

| Defective area | Step | Check items | Prescription |
|--------------------|------|--|--|
| Main charger | 1 | Is the main charger dirty? | Clean or replace the needle electrode and main charger grid. |
| Transfer charger | 2 | Is the transfer charger dirty? | Clean the transfer charger. |
| | 3 | Is the transfer charger wire dirty? | Clean the transfer charger wire. |
| Laser optical unit | 4 | Is there any foreign matter or stain on the slit glass? | Remove the foreign matter or stain. |
| Discharge LED | 5 | Are the connectors of discharge LED harness securely connected? | Reconnect the harness securely. |
| | 6 | Is the discharge LED dirty? | Clean the discharge LED. |
| | 7 | Is any of the discharge LEDs off? | Replace the discharge LED. |
| Developer unit | 8 | Is the magnetic brush in proper contact with the drum? | Adjust the doctor-sleeve gap. |
| | 9 | Is the developer sleeve pressurization mechanism working? | Check the mechanism. |
| | 10 | Is the developer material transported normally? | Remove foreign matters if there is any. |
| Scanner section | 11 | Is the platen cover or RADF opened? | Close the platen cover or RADF. |
| | 12 | Are the original glass (especially the position of shading correction plate), mirror and lens dirty? | Clean them. |

17) Faded image (low density, abnormal gray balance)

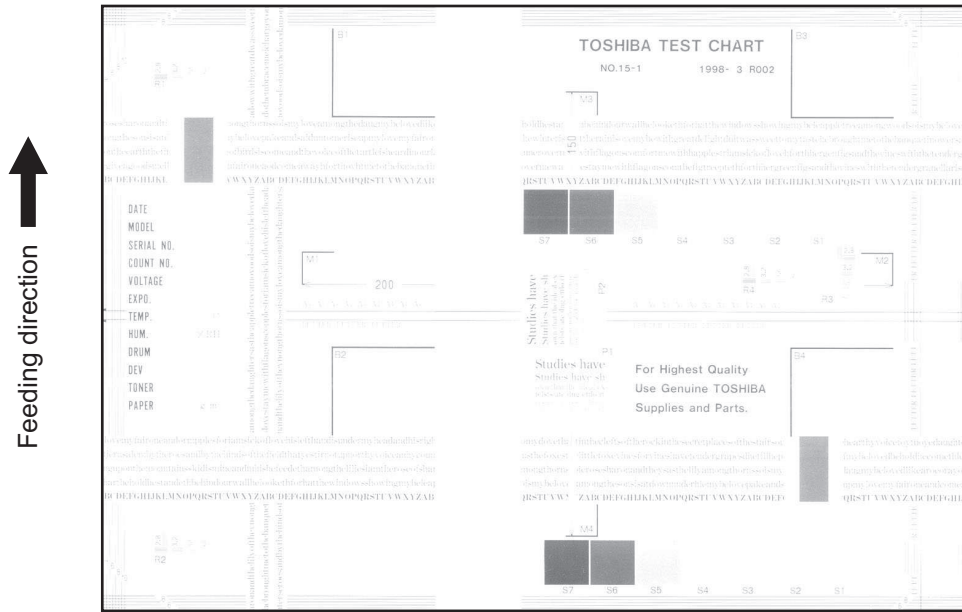


Fig. 5-17

| Defective area | Step | Check items | Prescription |
|--------------------------|------|---|---|
| Toner empty | 1 | Is "ADD TONER" symbol lit? | Replace the toner cartridge. |
| Auto-toner circuit | 2 | Is there enough toner in the cartridge? | Check the performance of the auto-toner circuit. |
| | 3 | Is the toner density in the developer material too low? | |
| Toner motor | 4 | Is the toner motor working normally? | Check the toner motor and the motor drive. |
| Toner cartridge | 5 | Is there any problem with the toner cartridge? | Replace the toner cartridge. |
| Developer material | 6 | Has the developer material reached its PM life? | Replace the developer material. |
| Developer unit | 7 | Is the magnetic brush in proper contact with the drum? | Check the installation of the developer unit. Adjust the doctor-sleeve gap and polarity. |
| | 8 | Is the developer sleeve pressurization mechanism working? | Check the mechanism. |
| Main charger | 9 | Is the main charger dirty? | Clean it or replace the needle electrode and main charger grid. |
| Drum | 10 | Is "film-forming" occurring on the drum surface? | Clean or replace the drum. |
| | 11 | Has the drum reached its PM life? | Replace the drum. |
| Transfer charger | 12 | Is the transfer charger wire cut off? | Replace the transfer charger wire. |
| High-voltage transformer | 13 | Is the setting for the high-voltage transformer proper? | Adjust the output from the high-voltage transformer. |
| | 14 | Are the connectors of the high-voltage harness securely connected? Is the harness open circuited? | Reconnect the harness securely. Replace the high-voltage harness. |
| Discharge LED | 15 | Are the connectors of discharge LED harness securely connected? | Reconnect the harness securely. |

18) Image dislocation in feeding direction

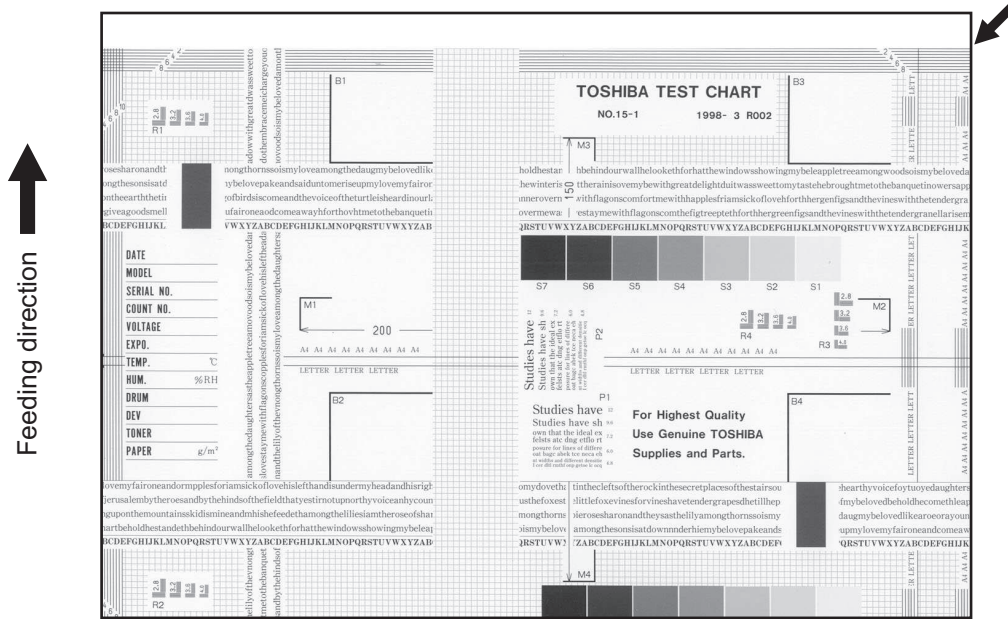


Fig. 5-18

| Defective area | Step | Check items | Prescription |
|----------------------------|------|---|---|
| Scanner/Printer adjustment | 1 | Have the printed images been dislocated in the same manner? | Adjust the position of the leading edge of paper in the Adjustment Mode. |
| Registration roller | 2 | Is the registration roller dirty, or the spring detached? | Clean the registration roller with alcohol. Securely attach the springs. |
| | 3 | Is the registration roller working properly? | Adjust or replace the gears if they are not engaged properly. |
| Feed clutch | 4 | Is the feed clutch working properly? | Check the circuit or feed clutch, and replace them if necessary. |
| Pre-registration guide | 5 | Is the pre-registration guide installed properly? | Install the guide properly. |

19) Jittering image

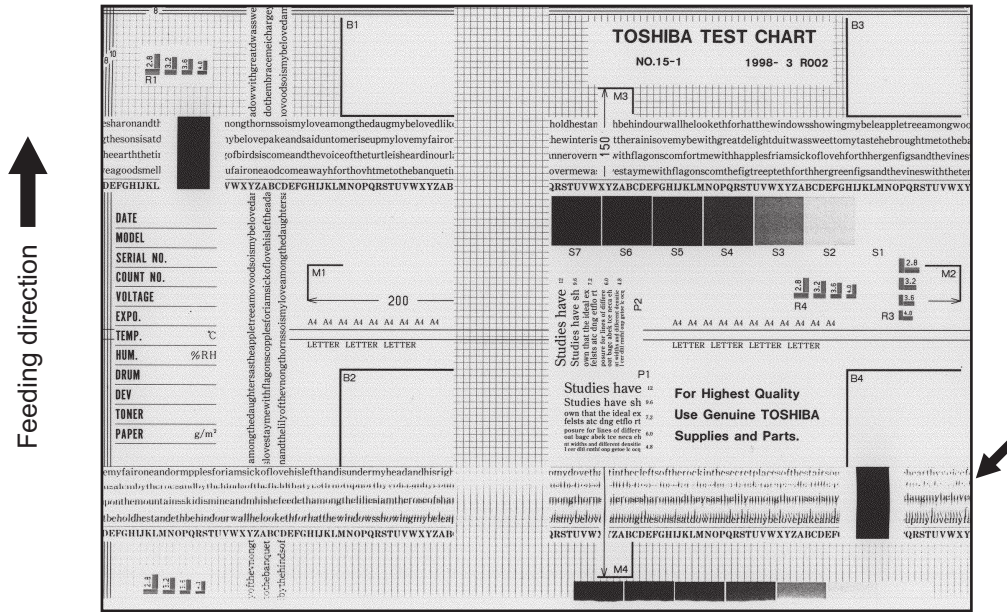


Fig. 5-19

| Defective area | Step | Check items | Prescription |
|----------------------------------|------|---|--|
| — | 1 | Is the toner image on the drum normal? | If normal, perform steps 2 to 4. Perform step 5 and followings in case the image is abnormal. |
| Registration roller | 2 | Is the registration roller rotating normally? | Check the registration roller area and springs for installation condition. |
| Fuser roller and pressure roller | 3 | Are the fuser roller and pressure roller rotating normally? | Check the fuser roller area. Replace the rollers if necessary. |
| Drum | 4 | Is there a big scratch on the drum? | Replace the drum. |
| Operation of carriage | 5 | Is there any problem with the slide sheet? | Replace the slide sheet. |
| | 6 | Is there any problem with the carriage foot? | Replace the carriage foot. |
| | 7 | Is the tension of the timing belt normal? | Adjust the tension. |
| | 8 | Is there any problem with the drive system of the carriage? | Check the drive system of the carriage. |
| Scanner | 9 | Is the mirror secured? | Secure it. |
| Drum drive system | 10 | Is there any problem with the drive system of the drum? | Check the drive system of the drum. Clean or replace the gears if they have stains or scratches. |

20) Poor cleaning

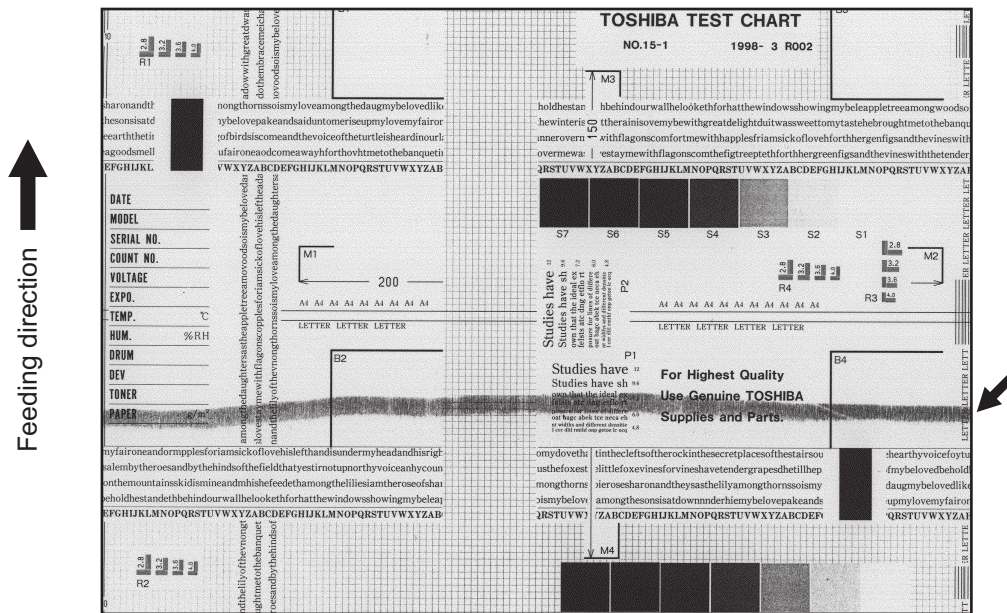


Fig. 5-20

| Defective area | Step | Check items | Prescription |
|----------------------|------|---|---|
| Developer material | 1 | Using the specified developer material? | Use the specified developer material and toner. |
| Cleaner | 2 | Is the cleaning blade in proper contact with the drum? | Check the cleaning blade. |
| | 3 | Has the cleaning blade been turned up? | Replace the cleaning blade. Check and replace drum if necessary. |
| Toner recovery auger | 4 | Is the toner recovered normally? | Clean the toner recovery auger. Check the pressure of the cleaning blade. |
| Fuser unit | 5 | Is the cleaning roller damaged or has it reached its PM life? | Replace the cleaning roller. |
| | 6 | Are there bubble-like scratches on the fuser roller (94 mm pitch on the image)? | Replace the fuser roller. Check and adjust the temperature control circuit. |
| | 7 | Has the fuser roller reached its PM life? | Replace the fuser roller. |
| | 8 | Is the pressure of the fuser roller normal? | Check and adjust the mechanism. |
| | 9 | Is the setting temperature of the fuser roller normal? | Check the setting and correct it. 08-407, 410, 411, 450, 515, 516 |

21) Uneven light distribution



Fig. 5-21

| Defective area | Step | Check items | Prescription |
|----------------|------|--|---|
| Original glass | 1 | Is the original glass dirty? | Clean the original glass. |
| Main charger | 2 | Are the needle electrode, main charger grid and main charger case dirty? | Clean or replace them. |
| Discharge LED | 3 | Is the discharge LED dirty? | Clean the discharge LED. |
| | 4 | Is any of the discharge LEDs off? | Replace the discharge LED. |
| Scanner | 5 | Are the reflector, exposure lamp, mirrors, lens, and original glass (especially the position of shading correction plate) dirty? | Clean them. |
| Exposure lamp | 6 | Is the exposure lamp tilted? | Adjust the position of the exposure lamp. |
| | 7 | Is the exposure lamp discolored or degraded? | Replace the exposure lamp. |

22) Blotched image

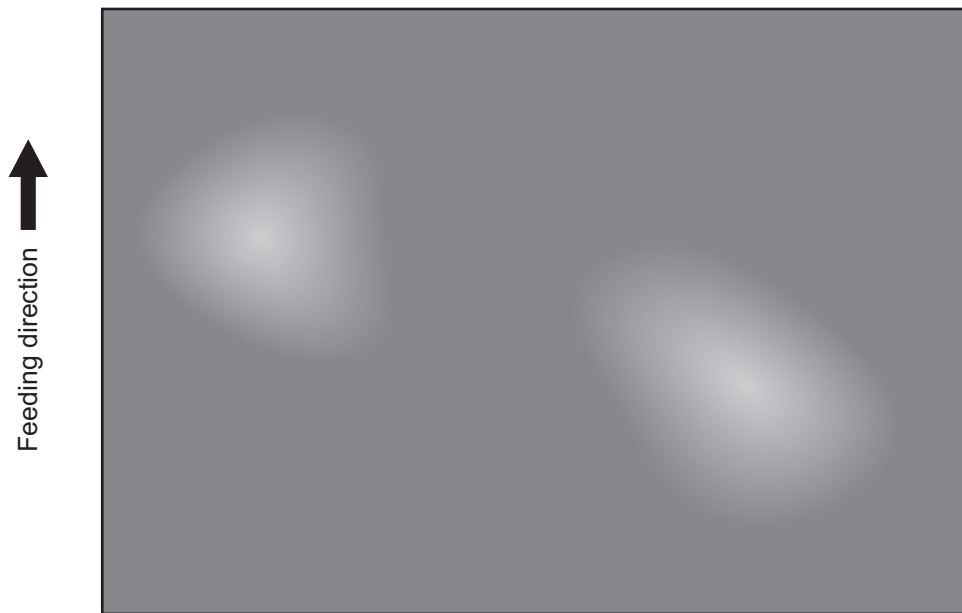



Fig. 5-22

| Defective area | Step | Check items | Prescription |
|---|------|---|--|
| Paper | 1 | Is the paper type corresponding to its mode? | Check the paper type and mode. |
| | 2 | Is the paper too dry? | Change the paper. |
| Separation | 3 | Is the output from the separation charger too high? | Adjust the output, from the separation charger. |
| Transfer | 4 | Is the transfer charger case dirty? | Clean the transfer charger case. |
| | 5 | Is the transfer charger wire dirty? | Clean the transfer charger wire. |
| High-voltage transformer (Transfer charger) | 6 | Is the output from the high-voltage transformer normal? | Adjust the output. Replace the transformer if necessary. |

5.3 Replacement of PC Boards and HDD

When the HDD requires replacement, refer to  P. 5-116 "5.3.1 Replacing HDD".

When the SYS board requires replacement, refer to  P. 5-119 "5.3.2 Replacing SYS board".

5.3.1 Replacing HDD

<<CAUTION IN REPLACING HDD>>

When the HDD is replaced, it is necessary to back up the data in the HDD before replacing and to recover them after replacing.

Notes:

1. To maintain the security, ask users to perform the backup/restore for users' data/information in the HDD. The service technician can perform them only when users permit it.
2. Some data in the HDD cannot be backed up and can be kept only on the paper.

The procedure for replacing the HDD is as follows.

[A] Ask users to back up the data in the HDD. See the following for the item of data, and the possibility and the measure of the backup.

- (1) Image data in the Electronic Filing
Archive them in the "e-Filing" of TopAccess.
- (2) F-code information, Template registration information, Address book
Back them up in the "Administrator" menu of TopAccess.
- (3) Department management data
Export them in "Administrator" menu of TopAccess.
- (4) Log data (Print, Scan, FAX (Transmission / Reception))
Export them in the "Administrator" menu of TopAccess. (Import cannot be performed.)
- (5) Data in the shared folder (Scanned data, Saved data of copy / FAX transmission)
Copy them to the client computer via the network. (The data which have been copied to the client computer cannot be copied to the shared folder.)
- (6) Print waiting data (Copying data and FAX reception data that are waiting to be printed due to the paper run-out and jam, etc.)
Finish printing them after the paper supply and the jam release, etc. (The data cannot be kept.)
- (7) Print job (Private print data, Schedule print data)
If any job is left, print them. (The data cannot be backed up.)
- (8) FAX saved data (Confidential / Bulletin board data)
Print them. (The data cannot be backed up.)
- (9) Registration data for FAX transmission (Delayed transmission / Recovery transmission)
The data cannot be backed up.

[B] Print out the "FUNCTION LIST FOR MAINTENANCE" (content of Function Mode (13) setting) list.


- (1) Press the [USER FUNCTIONS] button and then the [USER] button.
- (2) Press the [LIST] button.
- (3) Key in [*] [#] [*] [*] [3] [3] and then press the [START] button. → The list is outputted.

[C] Print out the "FUNCTION" list.

- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.
- (3) Press the [LIST/REPORT] button and then the [LIST] button.
- (4) Press the [FUNCTION] button. → The list is outputted.

[D] Replace the HDD.

[E] Update of HDD program data and UI data.

- (1) Create partitions. (In case of using the download jig, this is not necessary.)
While pressing [3] and [CLEAR] button, turn the power ON.
When "Firmware Version Up Mode" appears on the LCD, key in [3] and press the [START] button.
- (2) Format the HDD. (Setting Mode (08-690: 2))
- (3) Update with the download jig or USB storage.
See  P. 6-1 "6. FIRMWARE UPDATING" for details.
- (4) Format the HDD. (Setting Mode (08-690: 2))
* When the FAX unit (GD-1150) is installed.
Start up with the FAX Clearing Mode (1*)
Perform the 1*-100 (FAX Set Up), 1*-102 (Clearing the image data) of the FAX Clearing Mode.

[F] Ask users to reset the user's setting items and to restore the data/information. See the following for the reset and the restore.

- (1) Printer driver
Upload them in the "Administrator" menu of TopAccess.
- (2) F-code information, Template registering information, Address book
Restore them in the "Administrator" menu of TopAccess
- (3) Department management data
Import them in the "Administrator" menu of TopAccess.
- (4) Image data in the Electronic Filing
Upload them in the "e-Filing" of TopAccess.

[G] Referring to the "FUNCTION LIST FOR MAINTENANCE" list which was printed beforehand, perform the re-setting.

- (1) Print out the "FUNCTION LIST FOR MAINTENANCE" list after the formatting. (Refer to the procedure of (2).)
- (2) While pressing [1] and [3] simultaneously, turn the power ON. (Function Mode)
- (3) Compare the lists which were printed before and after the formatting to check the setting items having the different setting values. Set the value which was set before the formatting.
- (4) Turn the power OFF.

[H] Referring to the "FUNCTION" list which was printed beforehand, perform the re-setting of the default setting of the FAX function.


- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.
- (3) Press the [FAX] button and then the [TERMINAL ID] button to set each item.
- (4) Press the [INITIAL SETUP] button to set each item.

5.3.2 Replacing SYS board

<<CAUTION IN REPLACING the SYS board>>

The procedure for replacing the SYS board is as follows.

<After replacing the SYS board>

- (1) Install DIMM (main memory) to the new SYS board (from the old SYS board).
- (2) Install NVRAM to the new SYS board (from the old SYS board).
- (3) Install NIC board to the new SYS board (from the old SYS board). (e-STUDIO200L/230/280)
- (4) Update the version of system ROMs (System Firmware, OS data, UI data) (The ROMs had been used for the old SYS board).
 - * See  P. 6-1 "6. FIRMWARE UPDATING" for the details of System ROM update.
- (5) Turn the power OFF and start up with the Setting Mode (08).
- (6) When the message "SRAM ERROR DOES IT INITIALIZE?" is displayed on the LCD, press the [INITIALIZE] button.
 - * SRAM is cleared
 - * If SRAM is not performed, F090 error occurs when starting up.

Notes:

- When SRAM is cleared, following items need to be re-set, so make sure the contents of settings are kept as a record.

<FAX settings>

Terminal ID

Default setting of fax

<E-mail settings>

Setting of properties for E-mail message

<Internet Fax>

Setting of properties for Internet Fax

- When SRAM is cleared, the toner cartridge consumed count of Automatic ordering function of supplies becomes 0, however, it cannot be re-set.
- (7) [If a scrambler board has already been installed]
Perform 08-698 (Entering the key code for scrambler board). Have the user enter the key code.
 - (8) Perform 08-200 (date and time setting) to set Date/Time.
 - (9) Check the serial number after performing 08 Code 995. If the number is different from the number on the label attached on the rear cover of the machine, re-input the correct number with 08 Code 995. (e-STUDIO202L/232/282)
 - (10) Perform 08-693 (initialization of the NIC information). (e-STUDIO202L/232/282)
 - (11) Turn the power OFF.
 - * If the FAX board has not been installed, skip to step (13).

(12) Start up with the FAX Clearing Mode (1*)

(13) Perform 1*-102 (Clearing the image data).

Note:

Following image data are deleted when 1*-102 is performed.

- Images of fax polling transmission
- Images of fax Mailbox and box information
- Images of fax transmission
- Images of fax reception

(14) Turn the power OFF.

(15) Turn the power ON.

(16) Set the dial type. [USER FUNCTIONS] → [ADMIN] → [FAX] → [INITIAL SETUP]

5.3.3 Caution when Data overwrite kit (GP-1050/1060) is installed

When the Data overwrite kit (GP-1050/1060) is installed, follow the cautions below.

<<Caution when disposing of the HDD>>

Be sure to perform 08-1426 (forcible HDD data clearing) before disposing of the HDD of the equipment.

- * When the scrambler board is installed, data in the HDD are overwritten with encrypted data and erased.

<<Caution when disposing of the SYS board>>

Before the SYS board is disposed, the following codes can be performed.

- 08-1427 (Forcible NVRAM data all clearing)
- 08-1428 (Forcible SRAM backup data all clearing)

Caution:

If these codes are performed, the equipment cannot be started up.

5.3.4 HDD information display

This code displays the HDD operation history, which is recorded in the HDD, on the control panel. HDD failure can be diagnosed or predicted with the information displayed.

1) Display

The following screen is displayed with setting code 08-670.

| ID | NAME | VALUE | NAV | Worst |
|----|---------------------------|-------|-----|-------|
| 01 | Read Error Rate | 0 | 200 | 200 |
| 02 | Throughput Performance | ----- | --- | --- |
| 03 | Spin Up Time | 2691 | 166 | 165 |
| 04 | Spin Start/Stop Count | 216 | 100 | 100 |
| 05 | Re-allocated Sector Count | 0 | 200 | 200 |

- Items supported differ depending on the HDD manufacturer.
- "---" is displayed on the VALUE, NAV and Worst columns if items are not supported.

2) Usage

The combination of the values of ID=05 and c5 is used to diagnose whether or not the HDD has a physical failure when HDD failure is suspected (service call F100-180 or 120 occurred).

| Result | | Description | Diagnosis |
|--------|--------------------------------------|--|----------------------------------|
| ID | VALUE | | |
| 05 | 0 | Low possibility of physical failure | HDD replacement is not required. |
| c5 | 0 | | |
| 05 | From 1 to 999 | Defective sector has been reassigned and HDD is recovered. | HDD replacement is not required. |
| c5 | 0 | | |
| 05 | Any value | High possibility of defective sector existence. (There will be a possibility of physical failure depending on the use of HDD.) | HDD replacement is recommended. |
| c5 | 1 or more | | |
| 05 | Either one is at least 1000. | High possibility of physical failure | HDD replacement is recommended. |
| c5 | | | |
| 05 | All values are displayed as "-----". | High possibility of physical failure (A HDD connector, harness or SYS board may be one of the causes.) | HDD replacement is recommended. |
| c5 | | | |

3) ID=05 and c5

| ID | Name | Description | Remarks |
|----|------------------------------|--|--|
| 05 | Re-allocated Sector Count | The number of sectors reassigned | This value tends to increase at HDD failure. |
| c5 | Current Pending Sector Count | The number of candidate sectors to be reassigned | This value tends to increase at HDD failure. |

4) Description of each ID

| ID | Name | Meaning |
|----|--|--|
| 01 | Read Error Rate | This attribute is a measure of the read error rate. |
| 02 | Throughput Performance | This attribute is a measure of the throughput performance. |
| 03 | Spin Up Time | This attribute is a measure of how quickly the drive is able to spin up from a spun down condition. |
| 04 | Spin Start/Stop Count | This attribute is a measure of the total number of spin ups from a spun down condition. |
| 05 | Re-allocated Sector Count | This attribute is a measure of the total number of reallocated sectors. |
| 07 | Seek Error Rate | This is a measure of the seek error rate. |
| 08 | Seek Time Performance | This attribute is a measure of a drive's seek performance during normal online operations. |
| 09 | Power-On Hours | This attribute is a measure of the total time (hours or minutes depending on disk manufacturer) the drive has been on. |
| 0a | Spin Retry Count | This attribute is a measure of the total number of spin retries. |
| 0c | Power Cycle Count | This attribute is a measure of the number of times the drive has been turned on. |
| c0 | Power off Retract Count | This attribute is a measure of the total number of emergency unloads. |
| c1 | Load Cycle Count | This attribute is a measure of the total number of load/unloads. |
| c2 | Temperature | This attribute is a measure of the temperature in the HDD. |
| c3 | ECC On the Fly Count | This attribute is a measure of the total number of the ECC On the Fly. |
| c4 | Reallocation Event Count | This attribute is a measure of the total number of the reallocation events. |
| c5 | Current Pending Sector Count | This attribute is a measure of the total number of candidate sectors to be reallocated. |
| c6 | Off-Line Scan Uncorrectable Sector Count | This attribute is a measure of the total number of uncorrectable sectors found during the off-line scan. |
| c7 | Ultra DMA CRC Error Count (Rate) | This attribute is a measure of the total number of errors found in data transfer in the Ultra-DMA mode. |
| c8 | Write Error Rate | This attribute is a measure of the write error rate. |

6. FIRMWARE UPDATING

In this equipment, following firmware is written on the ROM on each board.



| Firmware | Stored |
|---|---|
| Master data (HDD program data, UI data) | Hard disk |
| System ROM (System firmware, OS data, UI data) | System control PC board (SYS board) |
| Engine ROM (Machine firmware) | Logic PC board (LGC board) |
| Scanner ROM (Scanner firmware) | Scanning section control PC board (SLG board) |
| NIC ROM (NIC firmware) (e-STUDIO200L/230/280 only) | NIC board |
| RADF ROM (RADF firmware) | RADF control PC board (MR-3016/MR-3020) |
| Finisher ROM (Finisher firmware) | Finisher control PC board (MJ-1025) |
| FAX ROM (FAX firmware) | FAX board (GD-1150) |

When you want to update the firmware above or the equipment becomes inoperative status due to some defectives of the firmware, updating the firmware is available by the following actions.

<e-STUDIO200L/230/280>

- Updating with the download jig
 P.6-2 "6.1 Firmware Updating with Download Jig (e-STUDIO200L/230/280)"
- Updating with PC connected
 P.6-54 "6.3 Firmware Updating with FSMS (Field Service Manager) (e-STUDIO200L/230/280)"
- Updating with the USB Storage Device
 P.6-66 "6.4 Firmware Updating with USB Storage Device (e-STUDIO200L/230/280)"

<e-STUDIO202L/232/282>

- Updating with the download jig
 P.6-31 "6.2 Firmware Updating with Download Jig (e-STUDIO202L/232/282)"
- Updating with the USB Storage Device
 P.6-80 "6.5 Firmware Updating with USB Storage Device (e-STUDIO202L/232/282)"

Notes:

- Written firmware varies depending on the kinds of the boards provided as service parts. For updating, only the minimum firmware is installed on the system control PC board, logic PC board, and scanning section control PC board. No firmware is installed on the NIC board and FAX board. The latest version of the firmware at the delivery is written on the RADF control PC board and finisher control PC board.
 When any of above boards is replaced with a new one in the field, confirm the other firmware version used with and then write the suitable version of the firmware.
- The firmware (master data) is not installed on the hard disk provided as a service part. When the hard disk is replaced with a new one, confirm the other firmware version used with and then write the suitable version of the firmware.

6.1 Firmware Updating with Download Jig (e-STUDIO200L/230/280)




In this equipment, it is feasible to update the firmware automatically by connecting the download jig using the dedicated connector and turning ON the equipment.

The download jig consists of the ROM, in which the program is written, and the jig board. And three types of the download jigs are available for each type of the firmware.

For updating the firmware, in addition to the current ways such as updating each firmware individually, the batch update of the firmware of the equipment is available (except the hard disk and the option).

| Firmware | Stored | Download jig | |
|--------------|---|--|-------------------------------|
| | | Individual update | Batch update |
| Master data | Hard disk | PWA-DWNLD-350-JIG2 (48 MB) | — |
| System ROM | System control PC board (SYS board) | PWA-DWNLD-350-JIG1 (16 MB) | PWA-DWNLD-350-JIG1 (16 MB) |
| Engine ROM | Logic PC board (LGC board) | K-PWA-DLM-320 or PWA-DWNLD-350-JIG1 (16 MB) | |
| Scanner ROM | Scanning section control PC board (SLG board) | K-PWA-DLM-320 or PWA-DWNLD-350-JIG1 (16 MB) | |
| NIC ROM | NIC board | PWA-DWNLD-350-JIG1 (16 MB) | |
| RADF ROM | RADF control PC board (MR-3016) | K-PWA-DLM-320 | — |
| Finisher ROM | Finisher control PC board (MJ-1025) | K-PWA-DLM-320 | — |
| FAX ROM | FAX board (GD-1150) | K-PWA-DLM-320 | — |

Refer to the following for the details to update with each download jig.

-  P.6-4 "6.1.1 PWA-DWNLD-350-JIG2 (48 MB)"
-  P.6-11 "6.1.2 PWA-DWNLD-350-JIG1 (16 MB)"
-  P.6-21 "6.1.4 K-PWA-DLM-320"

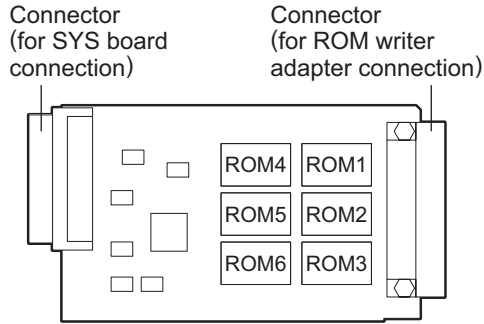


Fig.6-1 Jig board: PWA-DWNLD-350-JIG2 (48 MB)

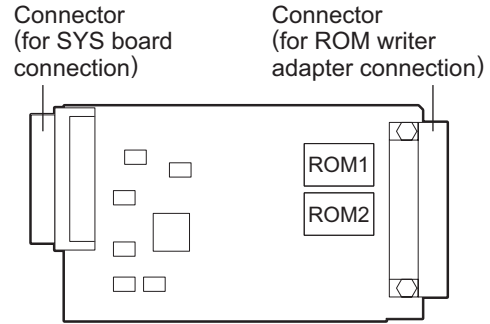


Fig.6-2 Jig board: PWA-DWNLD-350-JIG1 (16 MB)

Important:

- The download jig (PWA-DWNLD-350-JIG) has two types having different ROM capacity. ROM capacity for each jig is as follows.

| Download jig | ROM capacity | Application |
|----------------------------|--------------|---|
| PWA-DWNLD-350-JIG2 (48 MB) | 8 MB x 6 | Updating the master data |
| PWA-DWNLD-350-JIG1 (16 MB) | 8 MB x 2 | Updating the system ROM, engine ROM, scanner ROM, NIC ROM |

* "PWA-DWNLD-350-JIG2 (48 MB)" is substitutable for "PWA-DWNLD-350-JIG1 (16 MB)"

- The download jig (PWA-DWNLD-350-JIG) is different type jig. The Flash ROM is installed on the board directly. Therefore, ROM writer adapter (PWA-DL-ADP-350) is required to write the data to these Flash ROMs. Refer to the following to write the data.
 P.6-20 "6.1.3 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

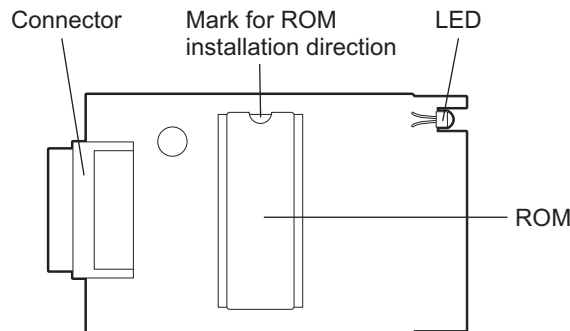


Fig.6-3 Jig board: K-PWA-DLM-320

Important:

Pay attention to the direction of the ROM.

6.1.1 PWA-DWNLD-350-JIG2 (48 MB)

The master data written on the hard disk can be updated by using PWA-DWNLD-350-JIG2 (48 MB). Update the master data according to the need such as the case of replacing the hard disk.

The data to be overwritten are as follows.


- HDD program data (RIP data, list data, Web data, filing box control data)
- UI data (fixed section data, common section data, the language 1 to 7 data, the language 1 to 6 data for Web)

[A] Update procedure

Important:

- Use the download jig "PWA-DWNLD-350-JIG2 (48 MB)".
- Turn OFF the power before installing and removing the download jig.
- Do not turn OFF the power during the update. The data could be damaged and not be operated properly.

(1) Write the data to the download jig.

 P.6-20 "6.1.3 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

(2) Turn OFF the power of the equipment.

(3) Remove the cover plate.

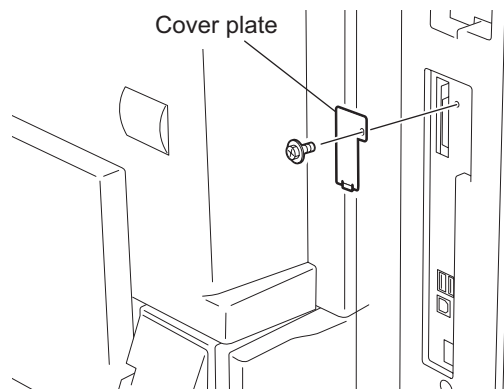


Fig.6-4

- (4) Connect the download jig with the jig connector (CN100) on the SYS board.

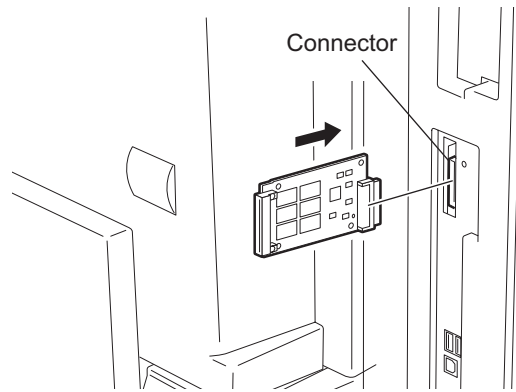


Fig.6-5

- (5) Turn ON the power.
Downloading starts automatically and the processing status is displayed on LCD screen.

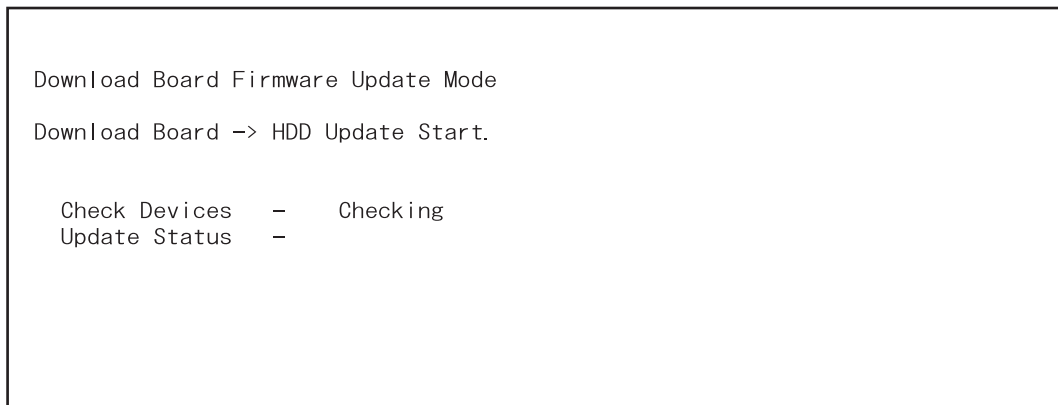


Fig.6-6

- (6) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

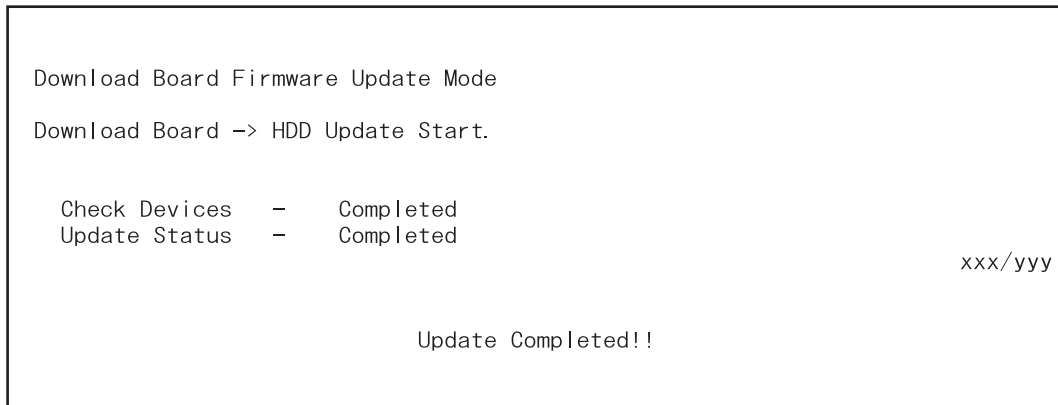


Fig.6-7

"Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. Turn OFF the power, and then check the following items. After confirming and clearing the problems, restart updating from the beginning.

- Is the download jig connected properly?
- Is the updating data written to the download jig properly?
- Do the download jig and the equipment operate properly?

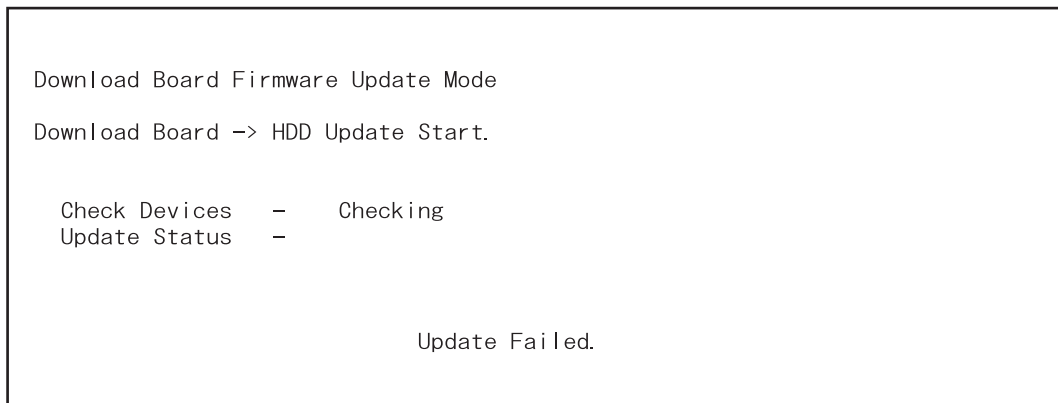



Fig.6-8

- (7) Turn OFF the power, and then remove the download jig.
- (8) Perform the "Updating System ROM" continuously.
 P.6-11 "6.1.2 PWA-DWNLD-350-JIG1 (16 MB)" <Updating System ROM>

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

- 08-900: System ROM version
- 08-920: FROM basic section software version
- 08-921: FROM internal program version
- 08-922: UI data fixed section version
- 08-923: UI data common section version
- 08-924: Version of UI data language 1 in HDD
- 08-925: Version of UI data language 2 in HDD
- 08-926: Version of UI data language 3 in HDD
- 08-927: Version of UI data language 4 in HDD
- 08-928: Version of UI data language 5 in HDD
- 08-929: Version of UI data language 6 in HDD
- 08-931: Version of UI data language 7 in HDD
- 08-930: Version of UI data in FROM displayed at power ON
- 08-933: HDD unit data version
- 08-934: Version of Web UI data language 1 in HDD
- 08-935: Version of Web UI data language 2 in HDD
- 08-936: Version of Web UI data language 3 in HDD
- 08-937: Version of Web UI data language 4 in HDD
- 08-938: Version of Web UI data language 5 in HDD
- 08-939: Version of Web UI data language 6 in HDD

[C] Display during the update

The processing status is displayed as follows on the LCD screen during the update.

Turn ON the power.



```
Download Board Firmware Update Mode
Download Board -> HDD Update Start.

Check Devices -
Update Status -
```



The device check starts.

```
Download Board Firmware Update Mode
Download Board -> HDD Update Start.

Check Devices -   Checking
Update Status -
```



When the device check completes, copying the data to HDD starts.

```

Download Board Firmware Update Mode
Download Board -> HDD Update Start.

Check Devices - Completed
Update Status - F-ROM -> HDD copying

```

xxx/yyy
 Copied Total files

↓ When copying all the files completes, the backup of the RIP font starts.

```

Download Board Firmware Update Mode
Download Board -> HDD Update Start.

Check Devices - Completed
Update Status - Backup file /PRF -> /PR2

```

xxx/yyy

↓ When the backup of the RIP font completes, the update completes with the following screen.

```

Download Board Firmware Update Mode
Download Board -> HDD Update Start.

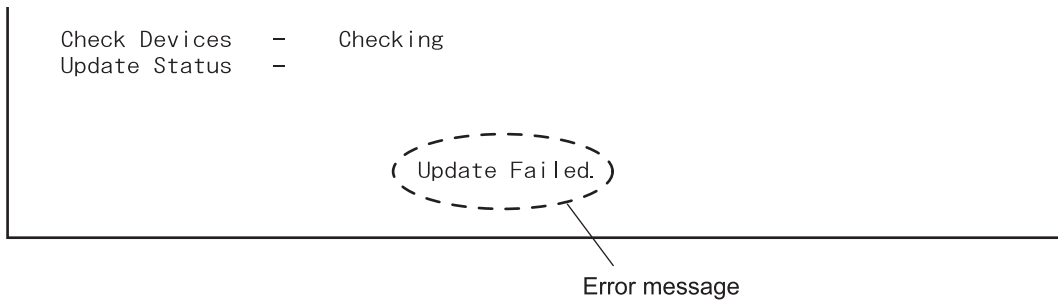
Check Devices - Completed
Update Status - Completed

```

xxx/yyy

Update Completed!!

- * If an error occurs, the following error message is displayed and the update is interrupted.



6.1.2 PWA-DWNLD-350-JIG1 (16 MB)

The firmware of the equipment except the hard disk and the option can be updated individually or in a batch by using PWA-DWNLD-350-JIG1 (16 MB). Update the ROM data written on each board according to the need such as the case of replacing the system control PC board, logic PC board, scanning section control PC board, or NIC board.

The data to be overwritten by this update are as follows.

<Updating System ROM>

- System firmware (System firmware data, FROM internal program data)
- OS data (FROM basic section software)
- UI data (fixed section data, common section data, UI data in FROM displayed at power ON)

<Updating Engine ROM>

Engine ROM data

<Updating Scanner ROM>

Scanner ROM data

<Updating NIC ROM>

NIC ROM data

[A] Update procedure

Important:

- Use the download jig "PWA-DWNLD-350-JIG1 (16 MB)". ("PWA-DWNLD-350-JIG2 (48 MB)" is substitutable.)
- Turn OFF the power before installing and removing the download jig.
- Do not turn OFF the power during the update. The data could be damaged and not be operated properly.

(1) Write the ROM data to be updated to the download jig.

📖 P.6-20 "6.1.3 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

(2) Turn OFF the power of the equipment.

(3) Remove the cover plate.

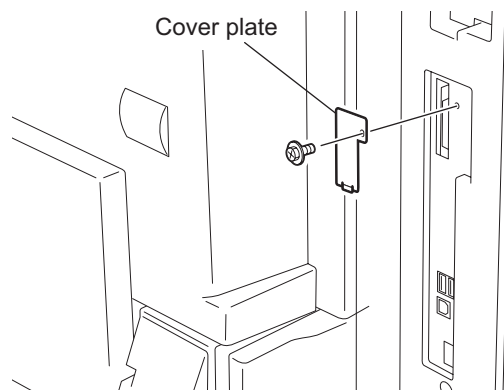


Fig.6-9

- (4) Connect the download jig with the jig connector (CN100) on the SYS board.

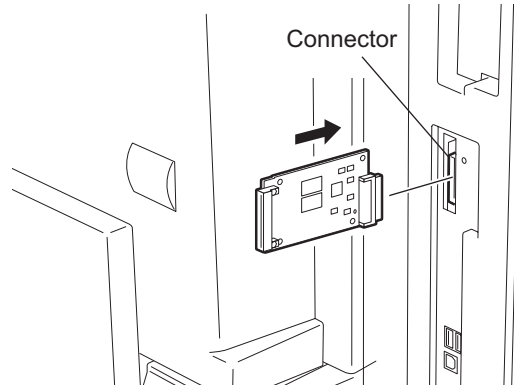


Fig.6-10

- (5) Turn ON the power while [8] button and [9] button are pressed simultaneously. The screen for selecting the items to be updated is displayed. "*" is displayed next to the items to be updated. (All items are selected in the default settings.)

| Download Board Firmware Update Mode Select Update Item | Version in update media |
|---|-----------------------------|
| *1. OS Update | OS Version.. Vx. xx/x. xx |
| *2. UI Update | UIF Version.. Vxxx. xxx. x |
| *3. System Firmware Update | UI0 Version.. Vxxx. xxx. x |
| *4. NIC Firmware Update | U11 Version.. Vxxx. xxx. x |
| *5. Scanner Firmware Update | SYS Version.. Vxxx. xxx. x |
| *6. Machine Firmware Update | NIC Version.. xxxxxxxx. xxx |
| | SCN Version.. xxxxx-xxx |
| | MCN Version.. xxxxx-xxx |

Fig.6-11

- (6) Select the item with the digital keys.
 “*” is displayed next to the selected item. Display or delete the “*” by pressing the number of the item. All items are selected in the default settings.
- Select all items to update the firmware of the equipment in a batch.
 - Select items as follows to update it individually.

<Updating System ROM>

Select “1. OS Update”, “2. UI Update”, and “3. System Firmware”.

<Updating Engine ROM>

Select “6. Machine Firmware Update” only.

<Updating Scanner ROM>

Select “5. Scanner Firmware Update” only.

<Updating NIC ROM>

Select “4. NIC Firmware Update” only.

Example: Updating the system ROM

(Updating the system ROM is taken as an example and explained.)

| | Version in update media |
|-------------------------------------|----------------------------|
| Download Board Firmware Update Mode | |
| Select Update Item | OS Version.. Vx. xx/x. xx |
| *1. OS Update | UIF Version.. Vxxx. xxx. x |
| *2. UI Update | U10 Version.. Vxxx. xxx. x |
| *3. System Firmware Update | U11 Version.. Vxxx. xxx. x |
| 4. NIC Firmware Update | SYS Version.. Vxxx. xxx. x |
| 5. Scanner Firmware Update | NIC Version.. xxxxxxx. xxx |
| 6. Machine Firmware Update | SCN Version.. xxxxx-xxx |
| | MCN Version.. xxxxx-xxx |

Fig.6-12

- (7) Press the [START] button.
 Updating starts and the processing status is displayed on the LCD screen.

| | |
|--------------------------------------|------------|
| Download Board Firmware Update Mode | |
| Download Board -> FROM Update Start. | |
| Check Devices | - Checking |
| Update Status | - |
| Data Check | - |

Fig.6-13

- (8) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

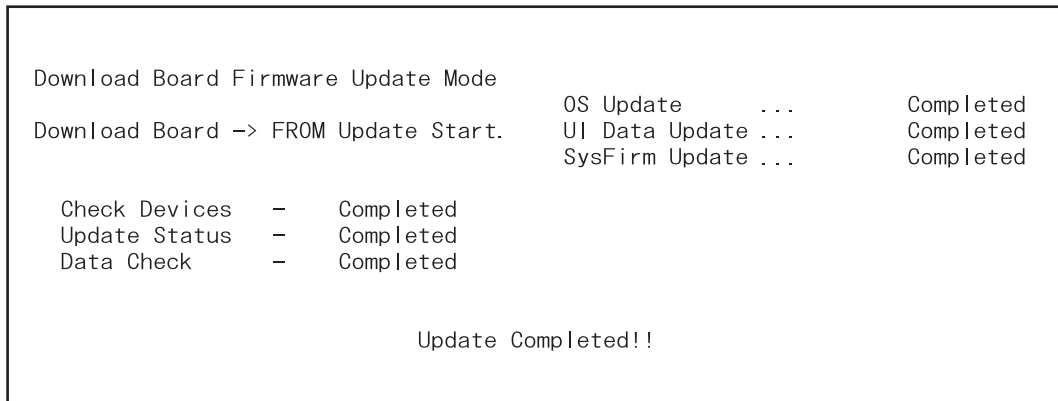


Fig.6-14

"Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. Turn OFF the power, and then check the following items. After confirming and clearing the problems, restart updating from the beginning.

- Is the download jig connected properly?
- Is the updating data written to the download jig properly?
- Do the download jig and the equipment operate properly?

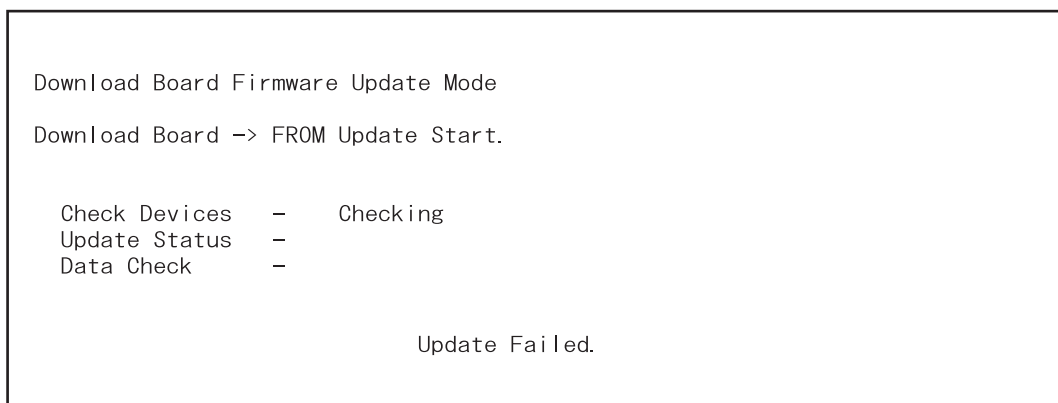


Fig.6-15

*When the updating of the NIC firmware is failed, an error message is displayed as the figure below. Turn OFF the power and then check the above-mentioned items. After confirming them, select only "4. NIC Firmware Update" and restart updating from the beginning. This may complete the updating properly.

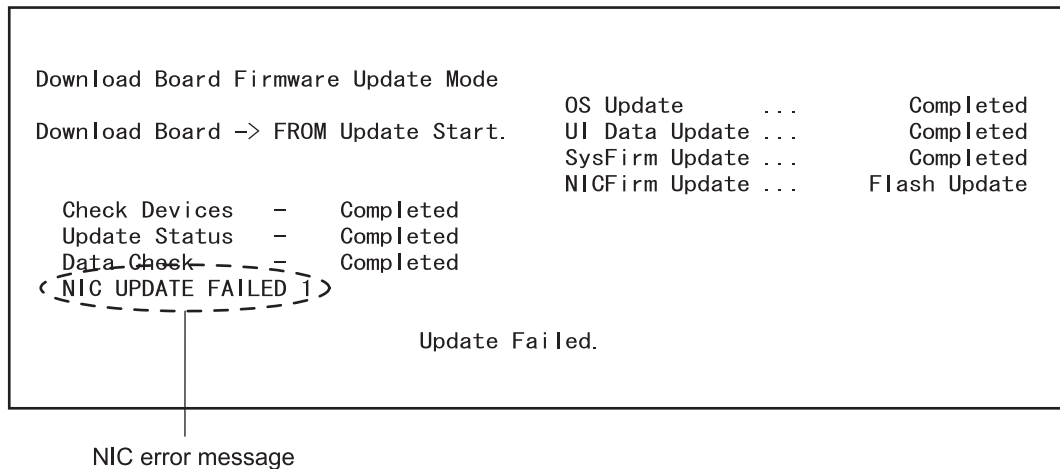


Fig.6-16

If the updating of the NIC firmware is still failed, check the prescription corresponding to the error message. After confirming and clearing the problem, restart updating from the beginning.

| NIC Error Message | Error Contents | Prescription |
|---------------------|--------------------------------------|---|
| NIC UPDATE FAILED 1 | NIC initialization time-out | The IP address may not be assigned correctly. <ul style="list-style-type: none"> Is the IP address assigned correctly? Does the IP address conflict with the other system? If the error still occurs, replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 2 | ATA driver initialization error | The HDD cable may be disconnected. <ul style="list-style-type: none"> Is the HDD cable connected correctly? If the HDD cable is connected correctly, replace the SYS board because it may be destroyed. |
| NIC UPDATE FAILED 3 | HDD partition mount error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 4 | NIC setting information backup error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 5 | NIC firmware transfer error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 6 | NIC firmware writing error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 7 | NIC status time-out | Replace the NIC board because it may be destroyed. |

Note:

If the updating of the NIC firmware is not completed properly, wait 5 minutes or more from the beginning of the updating before turning OFF the power, and then restart updating from the beginning. If you turn OFF the power within 5 minutes, HDD may be destroyed.

- (9) Turn OFF the power, remove the download jig and install the cover plate.
- (10) Perform the initialization of the updating data (NVRAM updating).
- Turn ON the power while [0] button and [8] button are pressed simultaneously.
 - Key in "947", and then press the [START] button.
 - Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

<Updating System ROM>

- 08-900: System ROM version
- 08-920: FROM basic section software version
- 08-921: FROM internal program version
- 08-922: UI data fixed section version
- 08-923: UI data common section version
- 08-930: Version of UI data in FROM displayed at power ON

<Updating Engine ROM>

- 08-903: Engine ROM version

<Updating Scanner ROM>

- 08-905: Scanner ROM version

<Updating NIC ROM>

- 08-916: NIC ROM version

[C] Display during the update

The processing status is displayed as follows on the LCD screen during the update.
(As an example, the display for updating the system ROM is explained below.)

Turn ON the power while [8] button and [9] button are pressed simultaneously.



| | Version in update media |
|-------------------------------------|-----------------------------|
| Download Board Firmware Update Mode | |
| Select Update Item | OS Version.. Vx. xx/x. xx |
| *1. OS Update | UIF Version.. Vxxx. xxx. x |
| *2. UI Update | U10 Version.. Vxxx. xxx. x |
| *3. System Firmware Update | U11 Version.. Vxxx. xxx. x |
| *4. NIC Firmware Update | SYS Version.. Vxxx. xxx. x |
| *5. Scanner Firmware Update | NIC Version.. xxxxxxxx. xxx |
| *6. Machine Firmware Update | SCN Version.. xxxxx-xxx |
| | MCN Version.. xxxxx-xxx |



Press [START] button after selecting the item to be updated. The device check starts.

| | |
|--------------------------------------|------------|
| Download Board Firmware Update Mode | |
| Download Board -> FROM Update Start. | |
| Check Devices | - Checking |
| Update Status | - |
| Data Check | - |



When the device check completes, erasing the data in the ROM of the equipment starts.

```

Download Board Firmware Update Mode
Download Board -> FROM Update Start.

OS Update ...

Check Devices - Completed
Update Status - Erasing
Data Check -

```

↓ When erasing the data completes, copying the data to the ROM of the equipment starts.

```

Download Board Firmware Update Mode
Download Board -> FROM Update Start.

OS Update ...

Check Devices - Completed
Update Status - Installing
Data Check -

```

↓ When copying the data completes, verifying the data starts.

```

Download Board Firmware Update Mode
Download Board -> FROM Update Start.

OS Update ...

Check Devices - Completed
Update Status - Completed
Data Check - Verifying

```

↓ When verifying the data completes, copying and verifying the other data are implemented repeatedly.

| | | | | |
|--------------------------------------|---|------------|--------------------|-----------|
| Download Board Firmware Update Mode | | | OS Update ... | Completed |
| Download Board -> FROM Update Start. | | | UI Data Update ... | |
| Check Devices | - | Completed | | |
| Update Status | - | Installing | | |
| Data Check | - | | | |

↓ When copying and verifying all the data complete, the update completes with the following screen.

| | | | | |
|--------------------------------------|---|-----------|--------------------|-----------|
| Download Board Firmware Update Mode | | | OS Update ... | Completed |
| Download Board -> FROM Update Start. | | | UI Data Update ... | Completed |
| | | | SysFirm Update ... | Completed |
| Check Devices | - | Completed | | |
| Update Status | - | Completed | | |
| Data Check | - | Completed | | |

Update Completed!!

* If an error occurs, the following error message is displayed and the update is interrupted.

| | | | | |
|---------------|---|----------|--|--|
| Check Devices | - | Checking | | |
| Update Status | - | | | |
| Data Check | - | | | |

(Update Failed.)

Error message

6.1.3 Writing the data to the download jig (PWA-DWNLD-350-JIG)

The download jig (PWA-DWNLD-350-JIG) differs from the existing jigs in that the Flash ROM is mounted on the board of the jig directly. The ROM writer adapter (PWA-DL-ADP-350) is required to write data to these Flash ROMs. Connect the download jig with the ROM writer via ROM writer adapter to write data.

For the procedure to write data, refer to the download procedure, instruction manual of each ROM writer, or others.

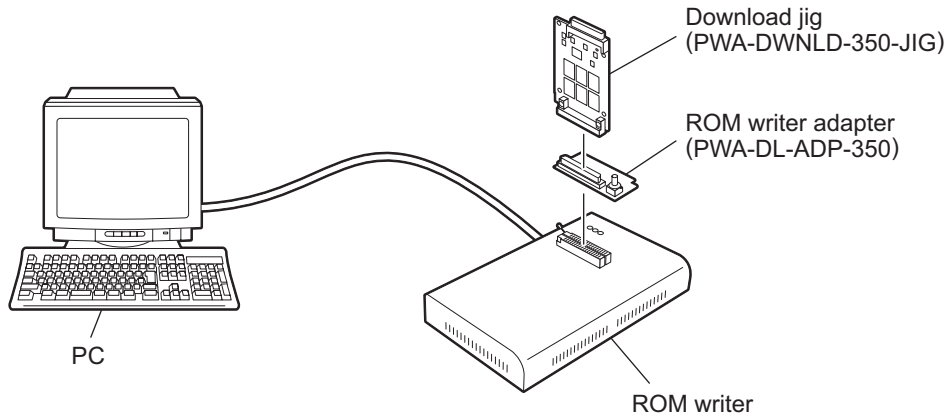


Fig.6-17

Note:

There are two types of the ROM writer adapter. Use the proper one according to the ROM writer to be used. Applicable type of the adapter for the ROM writer can be confirmed by the model name indicated on the board. Confirm that the adapter is available for the ROM writer to be used before connecting them. If an unapplied adapter is connected, the application of the ROM writer judges it as an error and writing the data cannot be implemented. Applicable combinations of the ROM writer and adapter are as follows.

| ROM writer | ROM writer adapter |
|---|-------------------------------------|
| Minato Electronics MODEL 1881XP (or equivalent) | PWA-DL-ADP-350-1881 (model 1881) |
| Minato Electronics MODEL 1893/1895/1931/1940 (or equivalent) | PWA-DL-ADP-350-1931 (model 1931) |

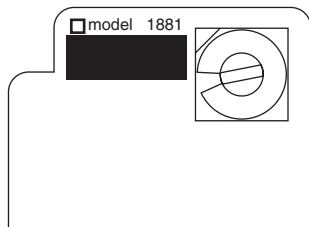


Fig.6-18 PWA-DL-ADP-350-1881

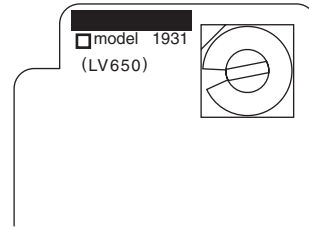


Fig.6-19 PWA-DL-ADP-350-1931

[A] Precaution when writing the data

- Set the writing voltage (VID) to 3.3V.
- When writing the data, set the address from 0 to 3FFFFFF. The data may not be written correctly if it is not set.
- The Flash ROM in which the data will be written, on the download jig is selected by switching the rotary switch on the adapter. Be sure to switch the rotary switch on the adapter depending on the data (file) to be written.

| Rotary Switch | File Name | | Flash ROM |
|---------------|-------------------------------------|---|-----------|
| | Master Data (PWA-DWNLD-350-JIG2) | System, Engine, Scanner and NIC data (PWA-DWNLD-350-JIG1) | |
| 1 | ROM. bin | ROM. bin | ROM1 |
| 2 | 1 | Sysfirm. bin | ROM2 |
| 3 | 2 | N/A | ROM3 |
| 4 | 3 | N/A | ROM4 |
| 5 | 4 | N/A | ROM5 |
| 6 | N/A | N/A | ROM6 |

Note:

Be sure not to confuse different ROM Versions since the file name is identical although the ROM version is different.

6.1.4 K-PWA-DLM-320

The firmware of the equipment (engine ROM, scanner ROM) and the option (RADF ROM, Finisher ROM, FAX ROM) can be updated individually by using K-PWA-DLM-320. Update the ROM data written on each board according to the need such as the case of replacing the board.

The data to be overwritten by this update are as follows.

<Updating Engine ROM>

Engine ROM data

<Updating Scanner ROM>

Scanner ROM data

<Updating RADF ROM>

RADF ROM data

<Updating Finisher ROM>

Finisher ROM data

<Updating FAX ROM>

FAX ROM data

[A] Update Procedure

Since the procedure differs depending on the data, see the each procedure below.

Important:

- Turn OFF the power before installing or removing the download jig.
- Do not turn OFF the power during the update. The data could be damaged and not be operated properly.

<Updating Engine ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-3 "Fig.6-3").
- (2) Turn OFF the power of the equipment.
- (3) Take off the connector cover.

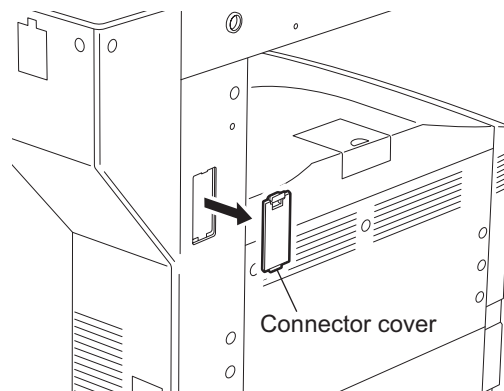


Fig.6-20

- (4) Remove the cover plate.

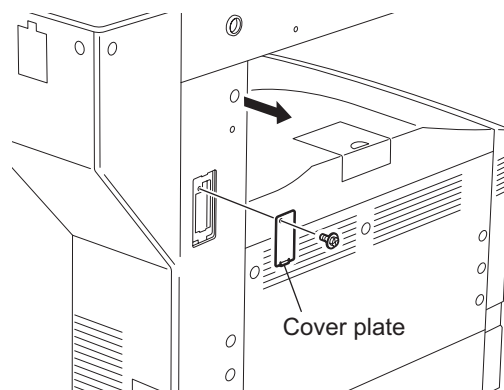


Fig.6-21

- (5) Connect the download jig with the jig connector (CN316) on the logic PC board (LGC board).

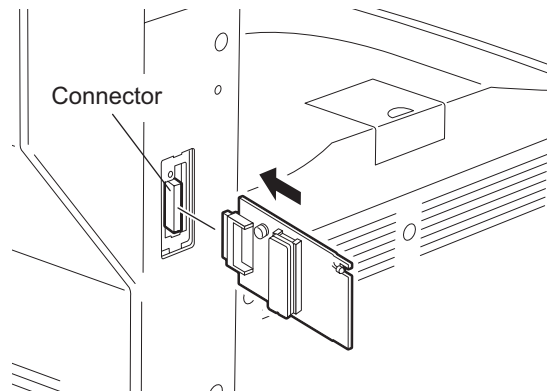


Fig.6-22

- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (7) When the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (8) Turn OFF the power, remove the download jig and install the cover plate and the connector cover.

<Updating Scanner ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-3 "Fig.6-3").
- (2) Turn OFF the power of the equipment.
- (3) Take off the right upper cover-1.

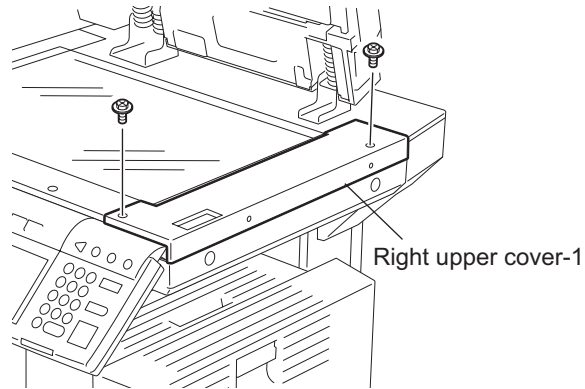


Fig.6-23

- (4) Take off the right upper cover-2.

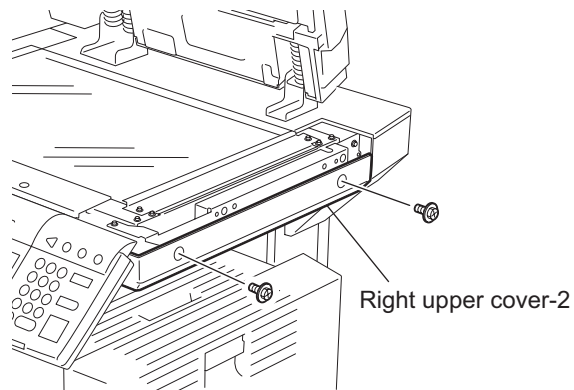


Fig.6-24

- (5) Remove the cover plate.

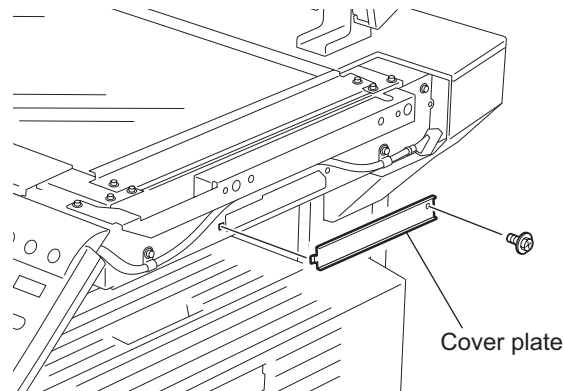


Fig.6-25

- (6) Connect the download jig with the jig connector (CN22) on the scanning section control PC board (SLG board).

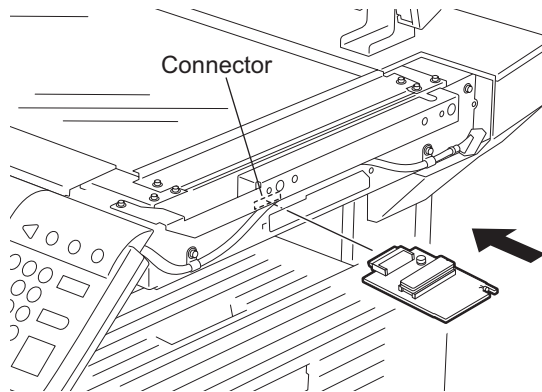


Fig.6-26

- (7) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (8) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (9) Turn OFF the power, remove the download jig and install the cover plate, the right upper cover-1 and the right upper cover-2.

<Updating RADF ROM (MR-3016)>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-3 "Fig.6-3").
- (2) Turn OFF the power of the equipment.
- (3) Take off the RADF rear cover.

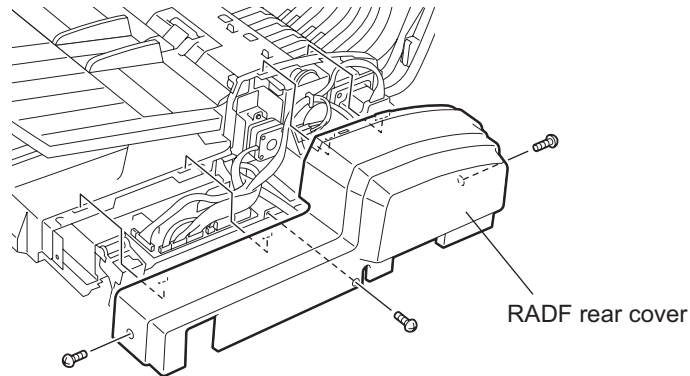


Fig.6-27

- (4) Connect the download jig with the jig connector (CN14) on the RADF control PC board.

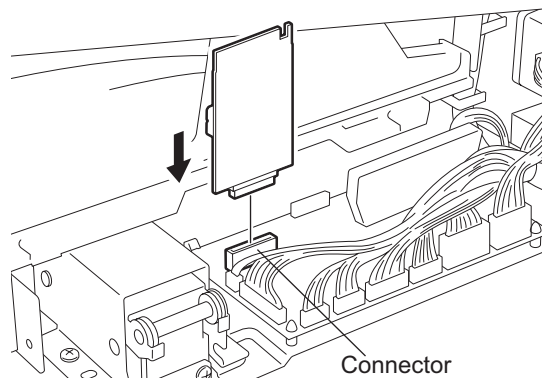


Fig.6-28

- (5) Turn ON the power while [0] button and [8] button are pressed simultaneously.
Updating starts automatically and the LED on the download jig lights.
- (6) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 15 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (7) Turn OFF the power, remove the download jig and install the RADF rear cover.

<Updating Finisher ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-3 "Fig.6-3").
- (2) Turn OFF the power of the equipment.
- (3) Take off the finisher rear cover.

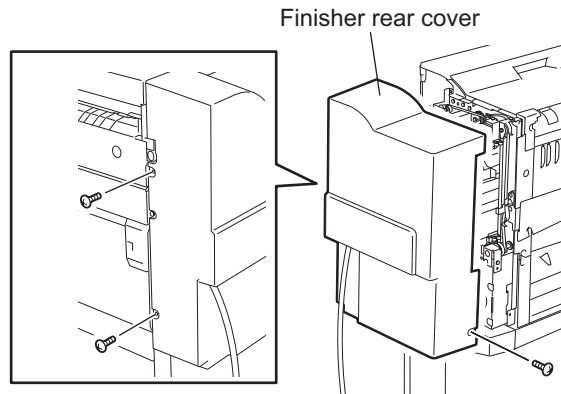


Fig.6-29

*Connect the finisher interface cable with the equipment after removing the finisher rear cover.

- (4) Connect the download jig with the jig connector on the finisher control PC board.

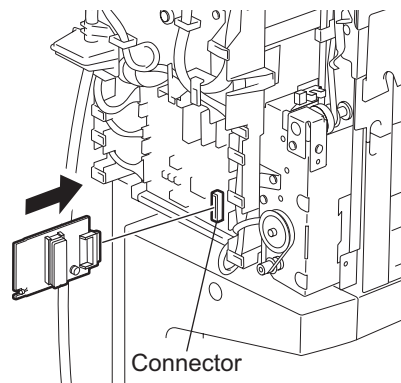


Fig.6-30

- (5) Change the setting of the DIP switch on the finisher control PC board.
Change all the setting of the DIP switch (1-8) to OFF.

Note:

Record the current settings of the DIP switch before changing them. After the updating is completed, return the DIP switch to the status as record.

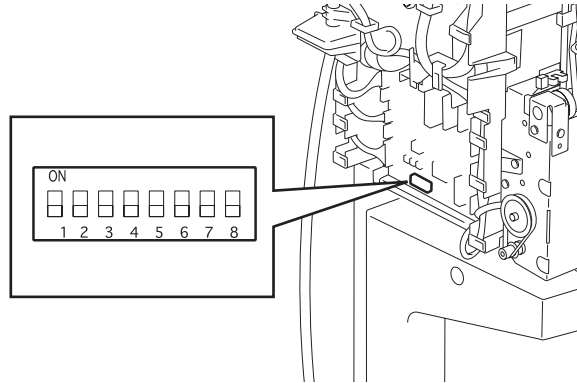


Fig.6-31

- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously.
Updating starts automatically and the LED on the download jig lights.
- (7) After the update is completed properly, the LED on the download jig blinks slowly. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed, or LED flashes fast. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
 - Is the DIP switch on the finisher control PC board set properly?
- (8) Turn OFF the power, remove the download jig and return the DIP switch to the status before updating.
- (9) Install the finisher rear cover.

<Updating FAX ROM>

Important:

- Before updating the FAX ROM, make sure to print out the current Function list for maintenance, Function list (ADMIN), Phone book number information and Group number information. In case the updating is failed and the registered information of the users is lost for some reason, re-register the user information referring to the lists and recover it.
 - Confirm the following items before turning OFF the power of the equipment. Turning OFF the power may clear the data below.
 - Confirm that the "MEMORY RX" LED is OFF and there are no memory reception data.
 - Print the "Mailbox/Relay box report" and then confirm that there are no F code data.
 - Press the [JOB STATUS] button to display the screen and then confirm that there are no memory transmission data.
- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-3 "Fig.6-3").
 - (2) Turn OFF the power of the equipment.
 - (3) Remove the cover plate.

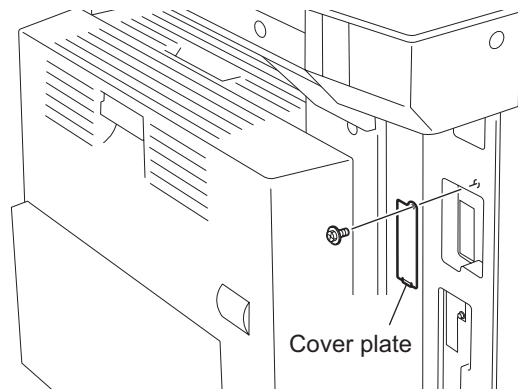


Fig.6-32

- (4) Connect the download jig with the jig connector (CN602) on the FAX board.

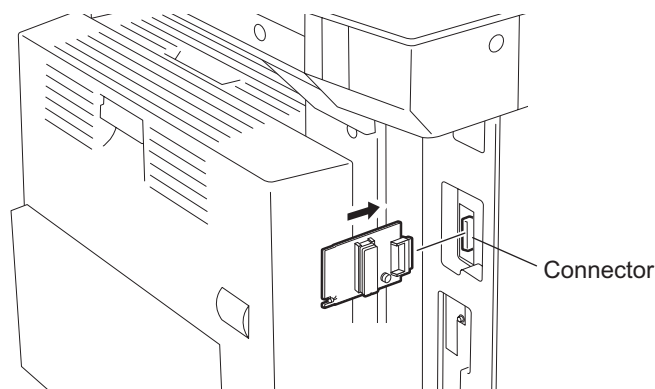


Fig.6-33

- (5) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (6) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 30 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (7) Turn OFF the power, remove the download jig and install the cover plate.
- (8) In the FAX Clearing Mode, perform the "FAX Set up".
 - Confirm the destination setting is correct in the Setting Mode (08).
08-201: Destination setting of the equipment
08-701: Destination setting of the FAX machine
 - Turn ON the power while [1] button and [*] button are pressed simultaneously.
 - Key in "100".
 - Press the [START] button.

Notes:

If the equipment does not work properly after the operation (8), follow the procedure below and then perform the "Clearing the image data" in the FAX Clearing Mode to erase the image data in the memory.

- Confirm the destination setting is correct in the Setting Mode (08).
08-201: Destination setting of the equipment
08-701: Destination setting of the FAX machine
- Turn ON the power while [1] button and [*] button are pressed simultaneously.
- Key in "102".
- Press the [START] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data was overwritten properly.

<Updating Engine ROM>
08-903: Engine ROM version

<Updating Scanner ROM>
08-905: Scanner ROM version

<Updating RADF ROM>
08-907: RADF ROM version

<Updating Finisher ROM>
08-908: Finisher ROM version

<Updating FAX ROM>
08-915: FAX ROM version

6.2 Firmware Updating with Download Jig (e-STUDIO202L/232/282)

In this equipment, it is feasible to update the firmware automatically by connecting the download jig using the dedicated connector and turning ON the equipment.


The download jig consists of the ROM, in which the program is written, and the jig board.


And two types of the download jigs are available for each type of the firmware.

For updating the firmware, in addition to the current ways such as updating each firmware individually, the batch update of the firmware of the equipment is available (except the hard disk and the option).

| Firmware | Stored | Download jig | |
|--|---|----------------------------|-------------------|
| | | Batch update | Individual update |
| System ROM | System control PC board (SYS board) | PWA-DWNLD-350-JIG2 (48 MB) | - |
| Engine ROM | Logic PC board (LGC board) | | K-PWA-DLM-320 |
| Scanner ROM | Scanning section control PC board (SLG board) | | K-PWA-DLM-320 |
| RADF ROM | RADF control PC board (MR-3020) | - | K-PWA-DLM-320 |
| Finisher ROM (Finisher firmware) | Finisher control PC board (MJ-1025) | - | K-PWA-DLM-320 |
| Finisher ROM (Saddle sticher firmware) | Finisher control PC board (MJ-1024) | - | K-PWA-DLM-320 |
| FAX ROM | FAX board (GD-1150) | - | K-PWA-DLM-320 |

Refer to the following for the details to update with each download jig.

 P.6-33 "6.2.1 PWA-DWNLD-350-JIG2 (48 MB)"

 P.6-42 "6.2.2 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

PWA-DWNLD-350-JIG2 (48MB)

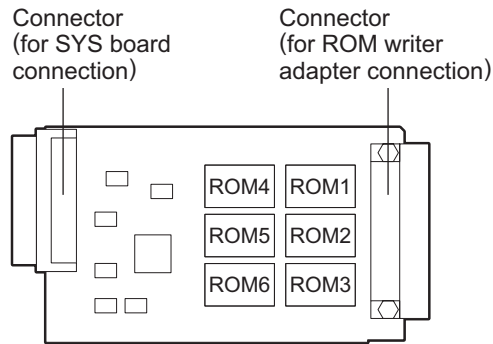



Fig.6-34 Jig board: PWA-DWNLD-350-JIG2 (48 MB)

Important:

The download jig (PWA-DWNLD-350-JIG) is the jig in which the Flash ROM is mounted on the board directly. Therefore, ROM writer adapter (PWA-DL-ADP-350) is required to write the data to these Flash ROMs. Refer to the following to write the data.

 P.6-42 "6.2.2 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

K-PWA-DLM-320

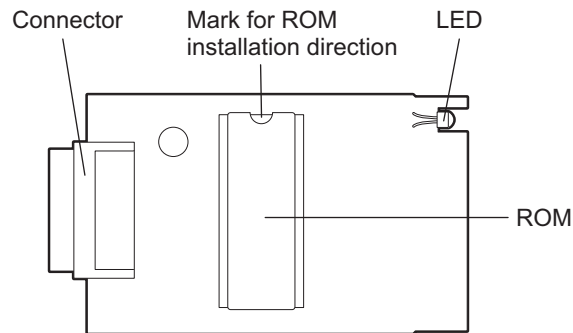


Fig.6-35 Jig board: K-PWA-DLM-320

Important:

Pay attention to the direction of the ROM.

6.2.1 PWA-DWNLD-350-JIG2 (48 MB)

The firmware of the equipment except for the hard disk and the option can be updated individually or in a batch by using PWA-DWNLD-350-JIG2 (48 MB). Update the ROM data written on each board according to the need such as the case of replacing the system control PC board, logic PC board or scanning section control PC board.

The data to be overwritten by this update are as follows.

<Updating System ROM>

- System firmware (System firmware data, FROM internal program data)
- OS data (FROM basic section software)
- UI data (fixed section data, common section data, UI data in FROM displayed at power ON)

<Updating Engine ROM>

Engine ROM data

<Updating Scanner ROM>

Scanner ROM data

[A] Update procedure

Important:

- Turn OFF the power before installing and removing the download jig.
- Do not turn OFF the power during the update. The data could be damaged and not be operated properly.

(1) Write the ROM data to be updated to the download jig.

📖 P.6-42 "6.2.2 Writing the data to the download jig (PWA-DWNLD-350-JIG)"

(2) Shut down the equipment.

(3) Remove the cover plate.

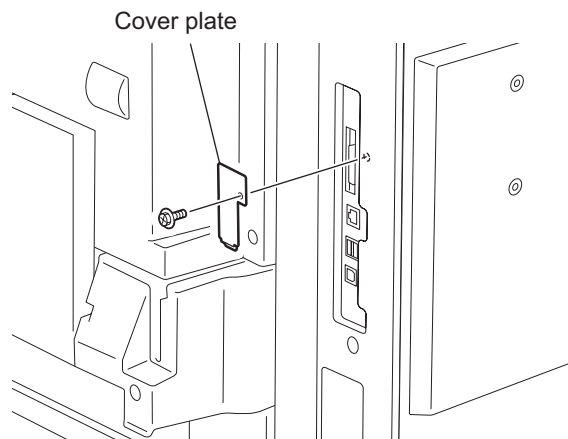


Fig.6-36

- (4) Connect the download jig with the jig connector (CN100) on the SYS board.

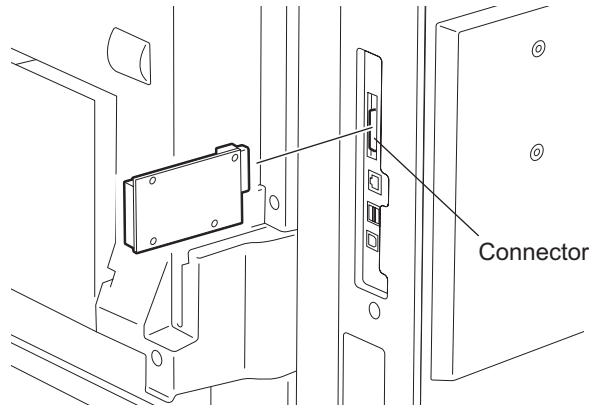


Fig.6-37

- (5) Turn ON the power while [8] button and [9] button are pressed simultaneously. The screen for selecting the items to be updated is displayed. "*" is displayed next to the items to be updated. (All items are selected in the default settings.)

| | |
|-------------------------------------|----------------------------|
| Download Board Firmware Update Mode | Version in update media |
| Select Update Item | OS Version... Vx.xx/x.xx x |
| *0. OS Update | UIF Version... Vxxx.xxx x |
| *1. UI Data Update | UI0 Version... Vxxx.xxx x |
| *2. System Firmware Update | UI1 Version... Vxxx.xxx x |
| *3. Engine Firmware Update | SYS Version... Vxxx.xxx x |
| *4. Scanner Firmware Update | ENG Version... xxxxx-xx |
| | SCN Version... xxxxx-xx |

- (6) Select the item with the digital keys.
 “*” is displayed next to the selected item. Display or delete the “*” by pressing the number of the item. All items are selected in the default settings.
- Select all items to update the firmware of the equipment in a batch.
 - Select items as follows to update it individually.

<Updating System ROM>

Select “0. OS Update”, “1. UI Update”, and “2. System Firmware”.

<Updating Engine ROM>

Select “3. Engine Firmware Update” only.

<Updating Scanner ROM>

Select “4. Scanner Firmware Update” only.

Example: Updating the system ROM

| Download Board Firmware Update Mode Select Update Item | Version in update media |
|---|----------------------------|
| *0. OS Update | OS Version... Vx.xx/x.xx x |
| *1. UI Data Update | UIF Version... Vxxx.xxx x |
| *2. System Firmware Update | UI0 Version... Vxxx.xxx x |
| 3. Engine Firmware Update | UI1 Version... Vxxx.xxx x |
| 4. Scanner Firmware Update | SYS Version... Vxxx.xxx x |
| | ENG Version... xxxxx-xx |
| | SCN Version... xxxxx-xx |

(Updating all the items is taken as an example and explained in the following procedures.)

- (7) Press the [START] button.
Updating starts and the processing status is displayed on the LCD screen.

```

Download Board Firmware Update Mode

Download Board  -> FROM Update Start.  OS Update      .....
Check Devices   -   Completed
Update Status   -   Installing
Data Check      -

Engine MAIN Update .. Flash Update
Scanner Firm Update .. Flash Update
  
```

| Status display during update | Status display when update is completed |
|------------------------------------|---|
| OS Update | OS Update Completed |
| UI Data Update | UI Data Update |
| SysFirm Update | SysFirm Update |
| Engine MAIN Update .. Flash Update | Engine MAIN Update .. Completed |
| Scanner Firm Update..Flash Update | Scanner Firm Update.. Completed |

- (8) "Update Completed." is displayed at the bottom of the LCD screen after the updating is completed properly.

```

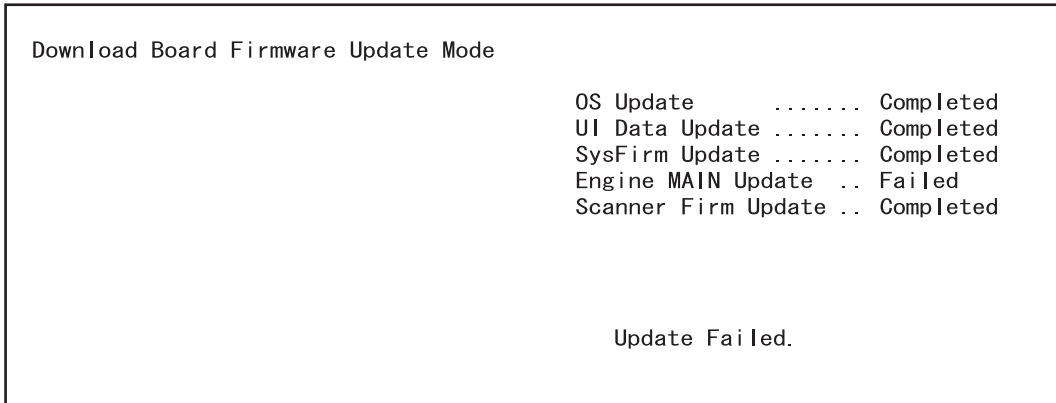
Download Board Firmware Update Mode

OS Update      ..... Completed
UI Data Update .....

```

“Update Failed.” is displayed at the bottom of the LCD screen when the updating is not completed properly. “Failed” appears next to the failed item on the status display. Turn OFF the power, and then check the following items. After confirming and cleaning the problems, restart updating from the beginning.

- Is the download jig connected properly?
- Is the updating data written to the download jig properly?
- Do the download jig and the equipment operate properly?



(9) Turn OFF the power, remove the download jig and install the cover plate and the connector cover.

(10) Perform the initialization of the updating data.

- Turn ON the power while [0] button and [8] button are pressed simultaneously.
- Key in “947”, and then press the [START] button.
- Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

<Updating System ROM>

08-900: System ROM version

08-920: FROM basic section software version

08-921: FROM internal program version

08-922: UI data fixed section version

08-923: UI data common section version

08-930: Version of UI data in FROM displayed at power ON

<Updating Engine ROM>

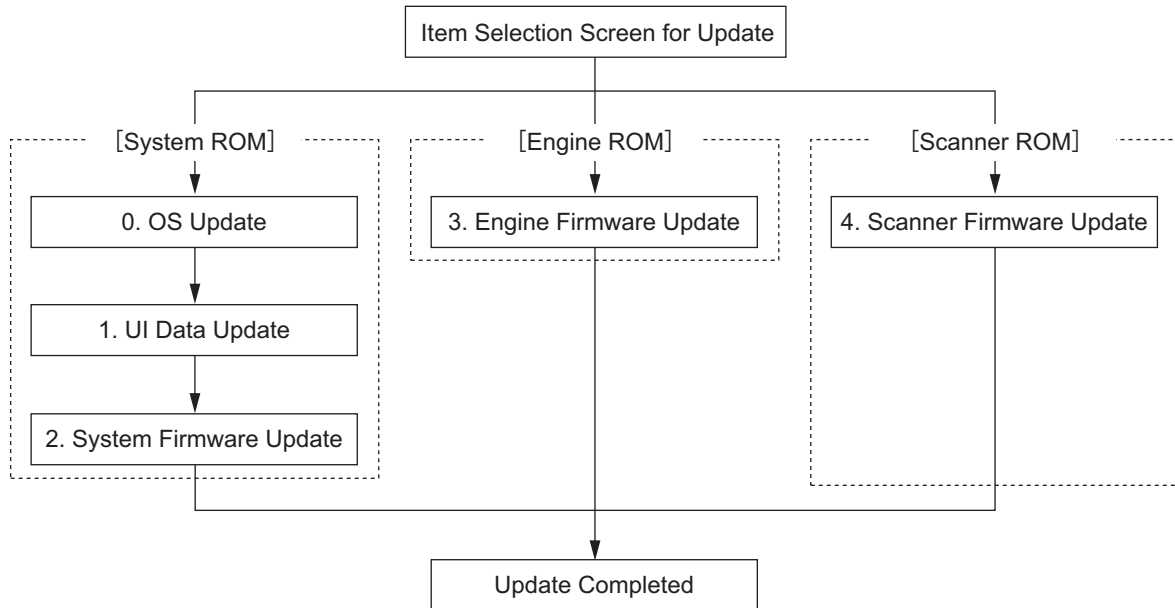
08-903: Engine ROM version

<Updating Scanner ROM>

08-905: Scanner ROM version

[C] Display during the update

Update is performed in parallel as shown in the transition diagram below.



Below is an example of the changes of the LCD screen during update.

Note that the screen order may be different from the actual one, because a parallel update is performed in the process.

Turn ON the power while [8] button and [9] button are pressed simultaneously



| | |
|-------------------------------------|----------------------------|
| Download Board Firmware Update Mode | Version in update media |
| Select Update Item | OS Version... Vx.xx/x.xx x |
| *0. OS Update | UIF Version... Vxxx.xxx x |
| *1. UI Data Update | U10 Version... Vxxx.xxx x |
| *2. System Firmware Update | U11 Version... Vxxx.xxx x |
| *3. Engine Firmware Update | SYS Version... Vxxx.xxx x |
| *4. Scanner Firmware Update | ENG Version... xxxxx-xx |
| | SCN Version... xxxxx-xx |



Select items to be updated and press the [START] button to start updating the [System ROM], [Engine ROM] and [Scanner ROM] in parallel.


```

Download Board Firmware Update Mode

Download Board    -> FROM Update Start.  OS Update    .....
Check Devices    -   Completed
Update Status    -   Installing
Data Check       -

Engine MAIN Update .. Flash Update
Scanner Firm Update .. Flash Update

Engine Update Status
xxxx/nnnnn
Scanner Update Status
xxxx/nnnnn

```

↓ When the [System ROM]-[OS Update] has been updated, "OS Update...Completed" is displayed and the [UI Update] update will start.

```

Download Board Firmware Update Mode

Download Board    -> FROM Update Start.  OS Update    ..... Completed
Check Devices    -   Completed
Update Status    -   Installing
Data Check       -

Engine MAIN Update .. Flash Update
Scanner Firm Update .. Flash Update

Engine Update Status
xxxx/nnnnn
Scanner Update Status
xxxx/nnnnn

```

↓ When the [System ROM]-[UI Update] has been updated, "UI Data Update...Completed" is displayed and the [System Firmware Update] update will start.

```

Download Board Firmware Update Mode

Download Board    -> FROM Update Start.  OS Update    ..... Completed
Check Devices    -   Completed
Update Status    -   Installing
Data Check       -

Engine MAIN Update .. Flash Update
Scanner Firm Update .. Flash Update

Engine Update Status
xxxx/nnnnn
Scanner Update Status
xxxx/nnnnn

```



When the [Engine ROM] has been updated, "Engine MAIN Update..Flash Update" is changed to "Engine MAIN Update..Completed".

```

Download Board Firmware Update Mode

Download Board    -> FROM Update Start.  OS Update      ..... Completed
Check Devices    -   Completed          UI Data Update ..... Completed
Update Status    -   Installing          SysFirm Update .....
Data Check       -                               Engine MAIN Update .. Completed
                                           Scanner Firm Update .. Flash Update

Scanner Update Status
xxxx/nnnnn

```



When the [System ROM]-[System Firmware Update] has been updated, "SysFirm Update...Completed" is displayed.

```

Download Board Firmware Update Mode

OS Update      ..... Completed
UI Data Update ..... Completed
SysFirm Update ..... Completed
Engine MAIN Update .. Completed
Scanner Firm Update .. Flash Update

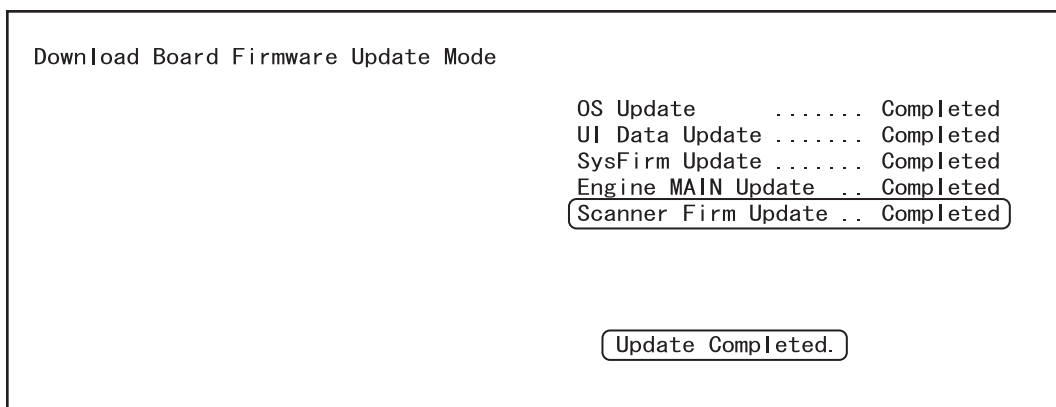
Scanner Update Status
xxxx/nnnnn

```

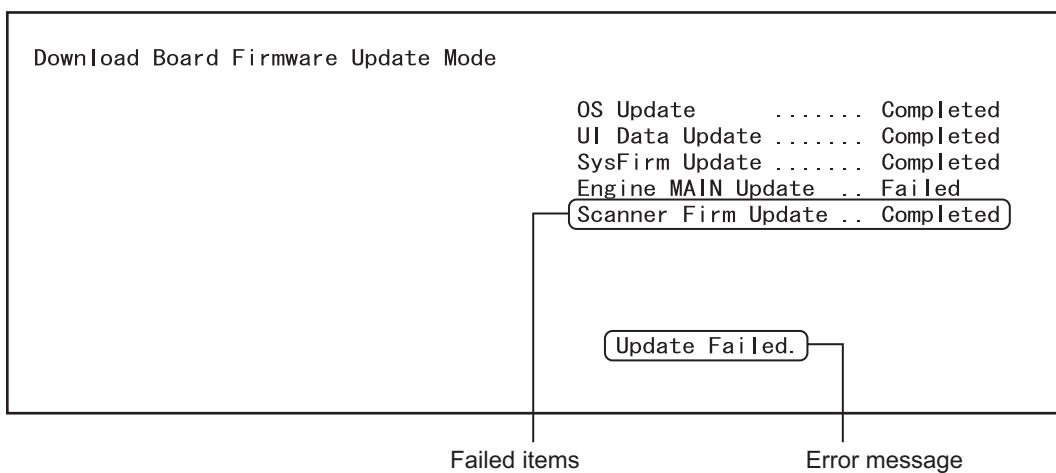


When the [Scanner ROM] has been updated, "Scanner Firm Update..Flash Update" is changed to "Scanner Firm Update..Completed".

When all data has been updated, "Update Completed" is displayed.



* "Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. "Failed" appears next to the failed item on the status display.



6.2.2 Writing the data to the download jig (PWA-DWNLD-350-JIG)

The download jig (PWA-DWNLD-350-JIG) is the jig in which the Flash ROM is mounted on the board directly. The ROM writer adapter (PWA-DL-ADP-350) is required to write data to these Flash ROMs. Connect the download jig with the ROM writer via ROM writer adapter to write data. For the procedure to write data, refer to the download procedure, instruction manual of each ROM writer, or others.

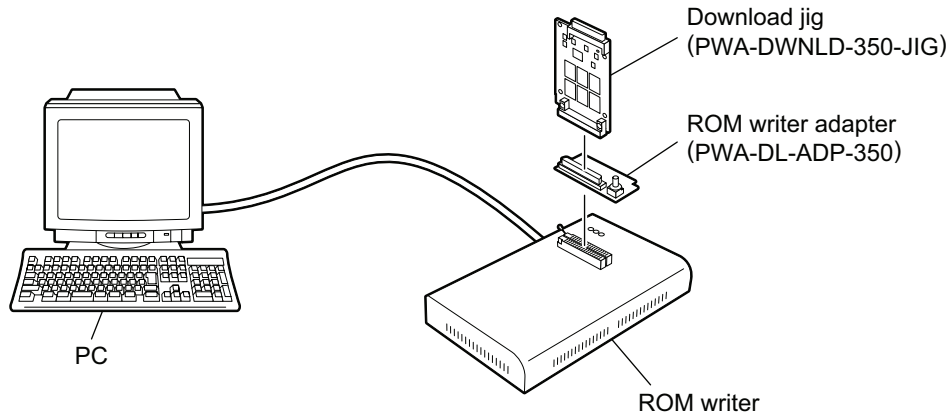


Fig.6-38

Note:

There are two types of the ROM writer adapter. Use the proper one according to the ROM writer to be used. Applicable type of the adapter for the ROM writer can be confirmed by the model name indicated on the board. Confirm that the adapter is available for the ROM writer to be used before connecting them. If an unapplied adapter is connected, the application of the ROM writer judges it as an error and writing the data cannot be implemented. Applicable combinations of the ROM writer and adapter are as follows.

| ROM writer | ROM writer adapter |
|---|----------------------------------|
| Minato Electronics MODEL 1881XP (or equivalent) | PWA-DL-ADP-350-1881 (model 1881) |
| Minato Electronics MODEL 1893/1895/1931/1940 (or equivalent) | PWA-DL-ADP-350-1931 (model 1931) |

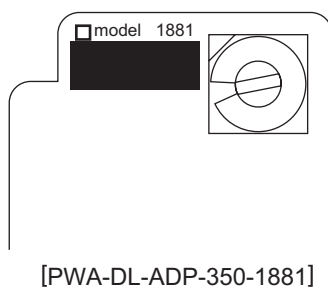


Fig.6-39 PWA-DL-ADP-350-1881

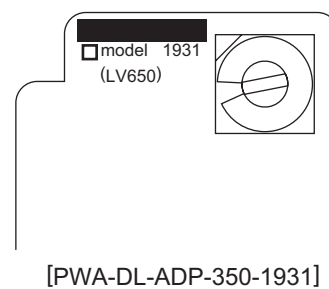


Fig.6-40 PWA-DL-ADP-350-1931

- Precaution when writing the data
 - Set the writing voltage (VID) to 3.3 V.
 - When writing the data, set the address from 0 to 3FFFFFF. The data may not be written correctly if it is not set.
 - The Flash ROM in which the data will be written, on the download jig is selected by switching the rotary switch on the adapter. Be sure to switch the rotary switch on the adapter depending on the data (file) to be written.

| RotarySwitch | File Name | Flash ROM |
|--------------|-----------------|-----------|
| 1 | firmImage 0.bin | ROM1 |
| 2 | firmImage 1.bin | ROM2 |
| 3 | firmImage 2.bin | ROM3 |
| 4 | N/A | ROM4 |
| 5 | N/A | ROM5 |
| 6 | N/A | ROM6 |

Note:

Be sure not to confuse different ROM Versions since the file name is identical although the ROM version is different.

6.2.3 K-PWA-DLM-320

The firmware of the equipment (engine ROM, scanner ROM) and the option (RADF ROM, Finisher ROM, FAX ROM) can be updated individually by using K-PWA-DLM-320. Update the ROM data written on each board according to the need such as the case of replacing the board.

The data to be overwritten by this update are as follows.

<Updating Engine ROM>

Engine ROM data

<Updating Scanner ROM>

Scanner ROM data

<Updating RADF ROM>

RADF ROM data

<Updating Finisher ROM>

Finisher ROM data

<Updating FAX ROM>

FAX ROM data

[A] Update Procedure

Since the procedure differs depending on the data, see the each procedure below.

Important:

- Turn OFF the power before installing or removing the download jig.
- Do not turn OFF the power during the update. The data could be damaged and not be operated properly.

<Updating Engine ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-32 "Fig.6-35").
- (2) Turn OFF the power of the equipment.
- (3) Take off the connector cover.

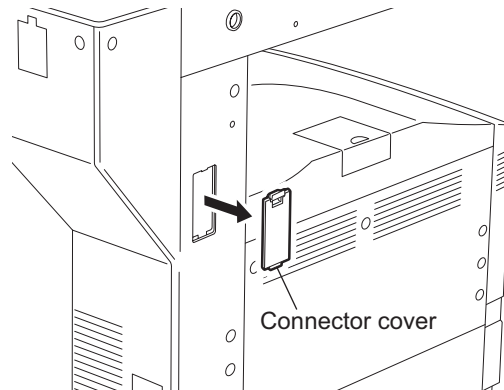


Fig.6-41

- (4) Remove the cover plate.

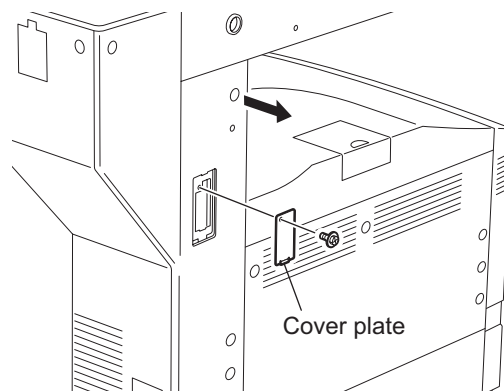


Fig.6-42

- (5) Connect the download jig with the jig connector (CN316) on the logic PC board (LGC board).

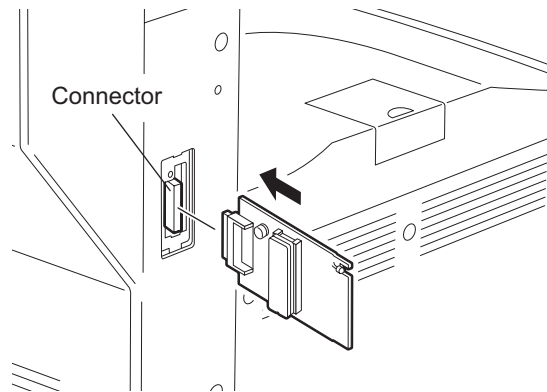


Fig.6-43

- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (7) When the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (8) Turn OFF the power, remove the download jig and install the cover plate and the connector cover.

<Updating Scanner ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-32 "Fig.6-35").
- (2) Turn OFF the power of the equipment.
- (3) Take off the right upper cover-1.

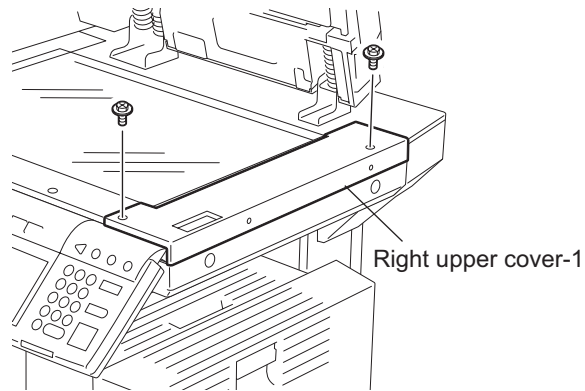


Fig.6-44

- (4) Take off the right upper cover-2.

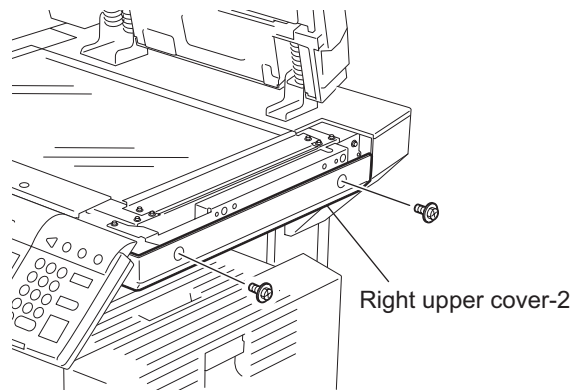


Fig.6-45

- (5) Remove the cover plate.

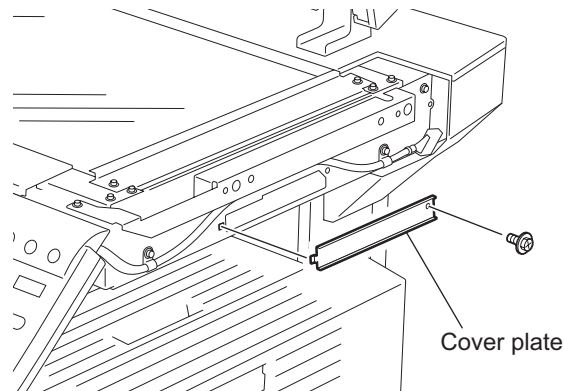


Fig.6-46

- (6) Connect the download jig with the jig connector (CN22) on the scanning section control PC board (SLG board).

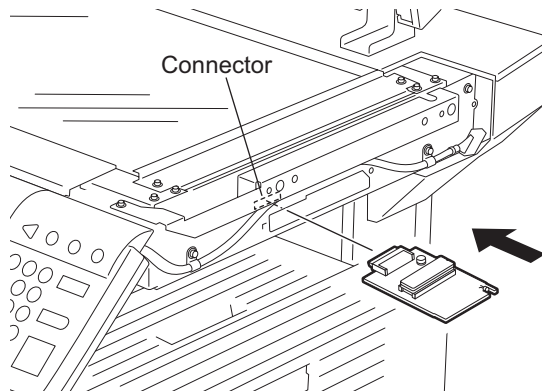


Fig.6-47

- (7) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (8) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (9) Turn OFF the power, remove the download jig and install the cover plate, the right upper cover-1 and the right upper cover-2.

<Updating RADF ROM (MR-3020)>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-32 "Fig.6-35").
- (2) Turning OFF the power of the equipment.
- (3) Take off the RADF rear cover.
- (4) Connect the download jig with the connector (CN81) on the PC board.

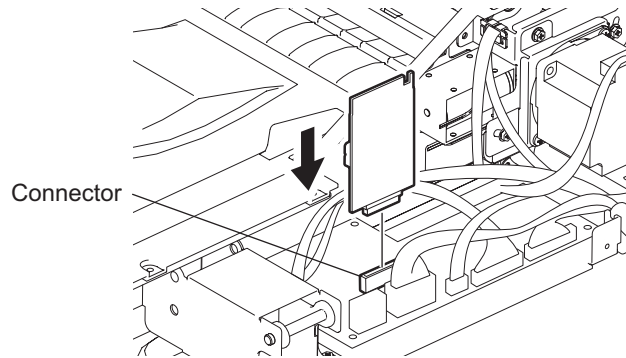


Fig.6-48

- (5) Turn ON the power while [0] button and [8] button are pressed simultaneously.
Updating starts automatically and the LED on the download jig lights.
- (6) When the data rewriting is completed, the LED blinks slowly (at an interval of 0.8 sec.).
If the LED blinks fast (at an interval of 0.1 sec.), the rewriting has been failed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (7) Turn OFF the power, remove the download jig and install the RADF rear cover.

<Updating Finisher ROM>

- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-32 "Fig.6-35").
- (2) Turn OFF the power of the equipment.
- (3) Take off the finisher rear cover.

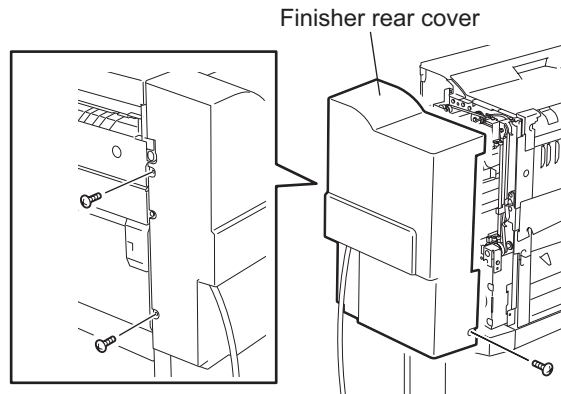


Fig.6-49

*Connect the finisher interface cable with the equipment after removing the finisher rear cover.

- (4) Connect the download jig with the jig connector on the finisher control PC board.

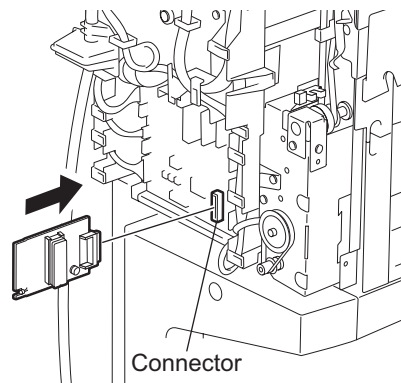


Fig.6-50

- (5) Change the setting of the DIP switch on the finisher control PC board.
Change all the setting of the DIP switch (1-8) to OFF.

Note:

Record the current settings of the DIP switch before changing them. After the updating is completed, return the DIP switch to the status as record.

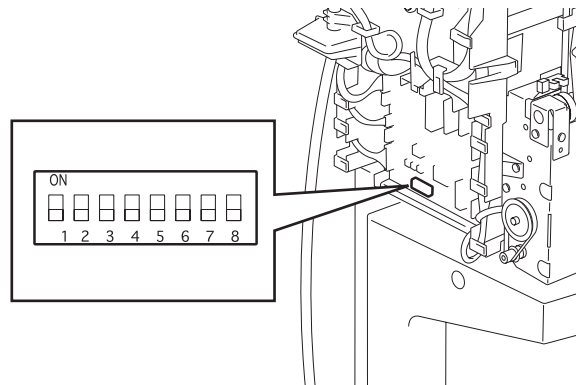


Fig.6-51

- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (7) After the update is completed properly, the LED on the download jig blinks slowly. The LED starts blinking in approx. 20 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed, or LED flashes fast. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
 - Is the DIP switch on the finisher control PC board set properly?
- (8) Turn OFF the power, remove the download jig and return the DIP switch to the status before updating.
- (9) Install the finisher rear cover.

<Updating FAX ROM>

Important:

- Before updating the FAX ROM, make sure to print out the current Function list for maintenance, Function list (ADMIN), Phone book number information and Group number information. In case the updating is failed and the registered information of the users is lost for some reason, re-register the user information referring to the lists and recover it.
 - Confirm the following items before turning OFF the power of the equipment. Turning OFF the power may clear the data below.
 - Confirm that the "MEMORY RX" LED is OFF and there are no memory reception data.
 - Print the "Mailbox/Relay box report" and then confirm that there are no F code data.
 - Press the [JOB STATUS] button to display the screen and then confirm that there are no memory transmission data.
- (1) Install the ROM to the download jig.
Make sure the direction is correct (P.6-32 "Fig.6-35").
 - (2) Turn OFF the power of the equipment.
 - (3) Remove the cover plate.

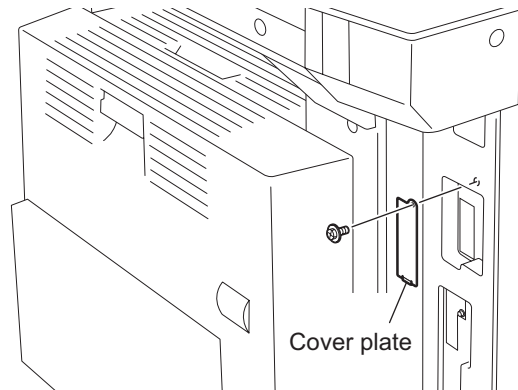


Fig.6-52

- (4) Connect the download jig with the jig connector (CN602) on the FAX board.

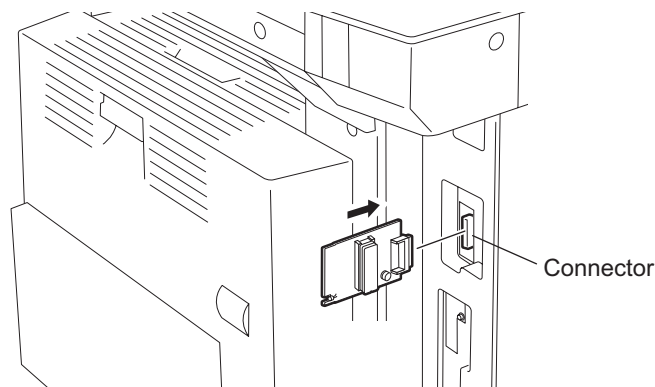


Fig.6-53

- (5) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (6) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 30 sec. since the update starts. It is assumed that the update is failed if it does not start blinking even though 1 min. has passed. In this case, turn OFF the power and check the following items. Then, clear the problem and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (7) Turn OFF the power, remove the download jig and install the cover plate.
- (8) In the FAX Clearing Mode, perform the "FAX Set up".
 - Confirm the destination setting is correct in the Setting Mode (08).
08-201: Destination setting of the equipment
08-701: Destination setting of the FAX machine
 - Turn ON the power while [1] button and [*] button are pressed simultaneously.
 - Key in "100".
 - Press the [START] button.

Notes:

If the equipment does not work properly after the operation (8), follow the procedure below and then perform the "Clearing the image data" in the FAX Clearing Mode to erase the image data in the memory.

- Confirm the destination setting is correct in the Setting Mode (08).
08-201: Destination setting of the equipment
08-701: Destination setting of the FAX machine
- Turn ON the power while [1] button and [*] button are pressed simultaneously.
- Key in "102".
- Press the [START] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data was overwritten properly.

<Updating Engine ROM>
08-903: Engine ROM version

<Updating Scanner ROM>
08-905: Scanner ROM version

<Updating RADF ROM>
08-907: RADF ROM version

<Updating Finisher ROM>
08-908: Finisher ROM version

<Updating FAX ROM>
08-915: FAX ROM version

6.3 Firmware Updating with FSMS (Field Service Manager) (e-STUDIO200L/230/280)

In this equipment, it is feasible to update the downloaded firmware from the PC connected with the equipment by using the utility software "FSMS (Field Service Manager)". Refer to the Field Service Manager Operator's Manual for the details about installation method and functions of FSMS.

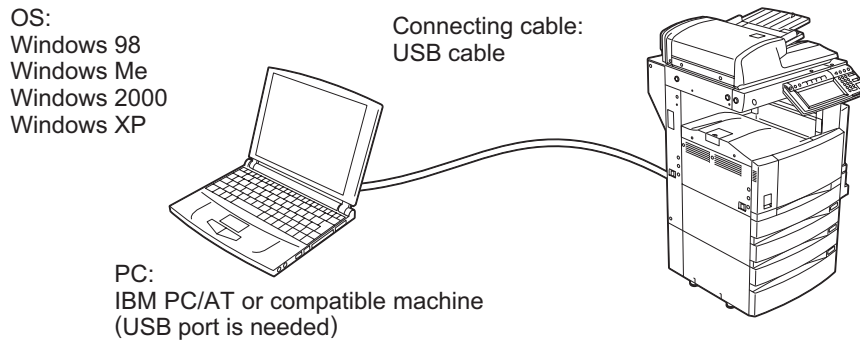


Fig.6-54

Important:

- Updating through USB is not feasible for Windows NT4.0 since this operating system does not support USB.
- When updating through USB (using FSMS), a printer driver needs to be installed in the PC in advance.

Refer to the Printing Guide about the installation method of the printer driver.

The types of firmware which can be updated with this method are as follows in the table below.

| Firmware | Stored | Data file name |
|-----------------|---|--|
| Master data | Hard disk | uidata2.tz, uidata3.tz, uidata4.tz, uidata5.tz, uidata6.tz, uidata7.tz, webdata1.tz, webdata2.tz, webdata3.tz, webdata4.tz, webdata5.tz, webdata6.tz, all.tz |
| System ROM | System control PC board (SYS board) | sysfirm.tz, uidataF.tz, uidata0.tz, uidata1.tz |
| Engine ROM | Logic PC board (LGC board) | mfirm.tz |
| Scanner ROM | Scanning section control PC board (SLG board) | scnfirm.tz |
| NIC ROM | NIC board | nicfirm.tz |

[A] Update procedure

Important:

- Do not operate the equipment or send a print job to the equipment during the update. This interferes the updating operation and the firmware may not be written properly.
- Do not turn OFF the power of equipment or PC during the update. The data could be damaged and not to be continued to function properly.
- When using FSMS, set "1" at FSMS permission code (08-258) in the Setting Mode (08) in advance.
- The data file (tz file format) of each firmware is recommended to save at the local drive in the PC (C drive, etc.) where FSMS program is installed.

- (1) Connect the equipment and PC with the cable.

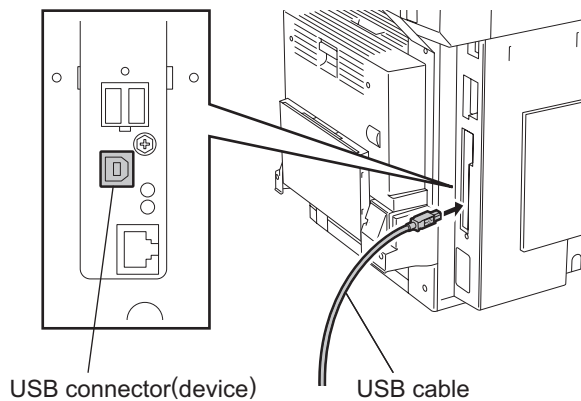


Fig.6-55 USB connection

- * Connect the PC end of the cable to the USB port on the PC.

- (2) Turn ON the power of the equipment.

Remark:

When updating with FSMS, updating can be performed in any of the normal mode, Adjustment Mode (05) and Setting Mode (08). To avoid an interruption during the update, using the Setting Mode (08) is recommended.

- (3) Turn ON the power of the PC.
- (4) Activate FSMS.
Select "TOSHIBA FSMS" starting with the Start menu.
- (5) Enter the login password and click the [OK] button.

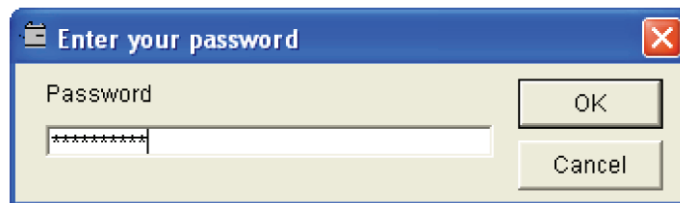


Fig.6-56

*Set the login password at the installation of FSMS.

- (6) Click the [F/W Download] button.

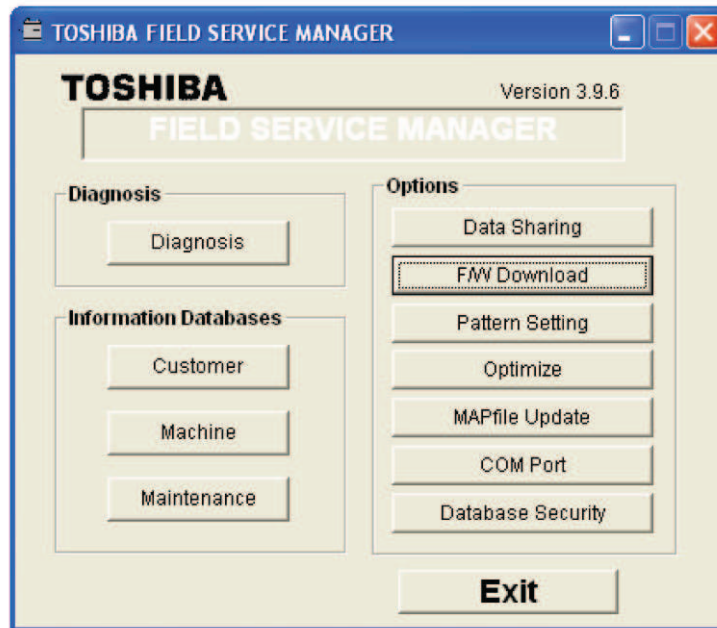


Fig.6-57

- (7) Select the model name of the equipment to be updated from the drop-down menu and click the [OK] button.

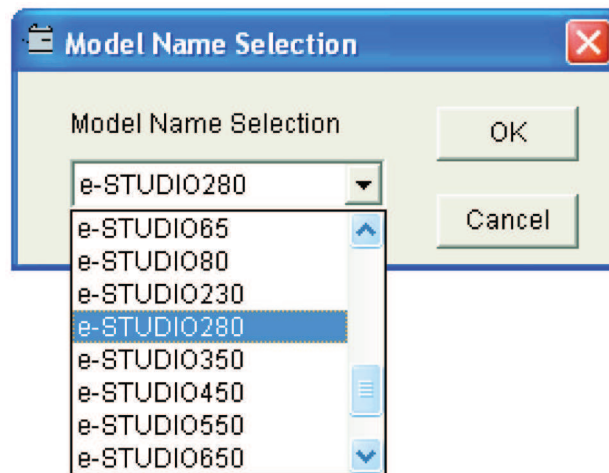


Fig.6-58

- (8) Click the [OFFLINE] button.

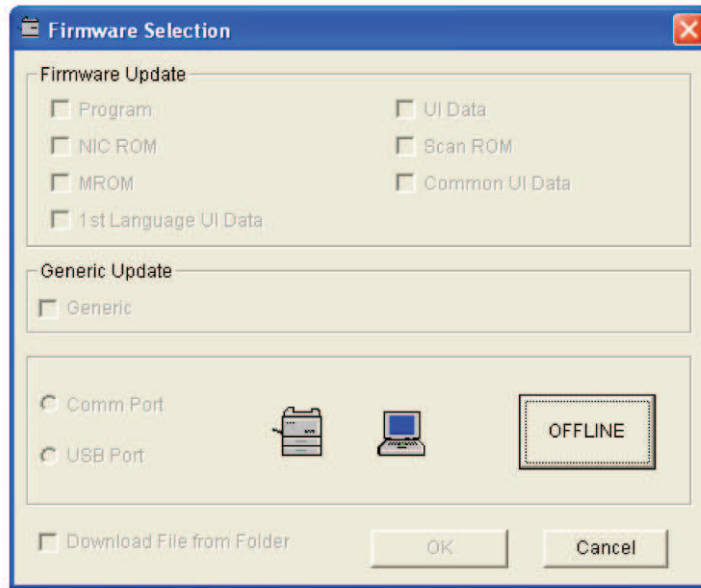


Fig.6-59

- (9) The connection status between the printer driver installed in the PC and the equipment to be connected is displayed. Select the equipment to be updated and click the [Activate FSMS] button.

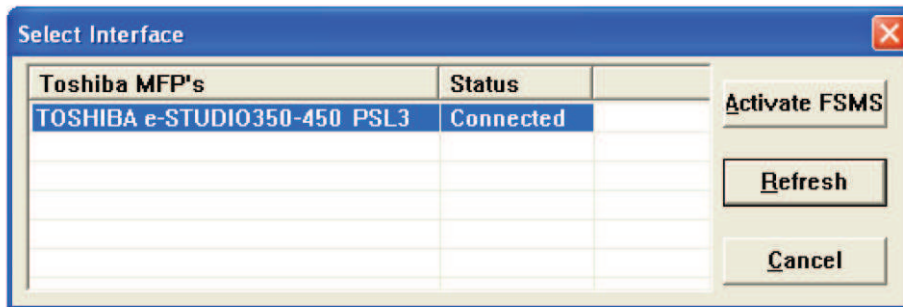


Fig.6-60

Remark:

The content of "Status" display can be renewed to the latest status by clicking the [Refresh] button. When the status is displayed as "Disconnected" because the start up of the equipment is delayed, the status can be renewed to "Connected" by clicking this.

(10) Check the firmware to be updated and click the [OK] button.

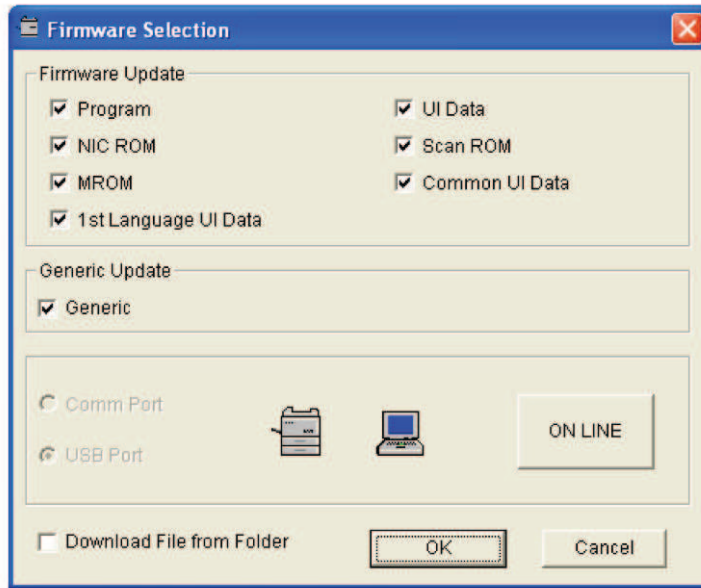


Fig.6-61

Remark:

The relation between the types of firmware to be updated and items to check is as follows in the table below.

| Item | Firmware | Data file name to update |
|----------------------|-------------|--|
| Program | System ROM | sysfirm.tz |
| UI Data | | uidataF.tz |
| Common UI Data | | uidata0.tz |
| 1st Language UI Data | | uidata1.tz |
| MROM | Engine ROM | mfirm.tz |
| Scan ROM | Scanner ROM | scnfirm.tz |
| NIC ROM | NIC ROM | nicfirm.tz |
| Generic | Master data | uidata2.tz, uidata3.tz, uidata4.tz, uidata5.tz, uidata6.tz, uidata7.tz, webdata1.tz, webdata2.tz, webdata3.tz, webdata4.tz, webdata5.tz, webdata6.tz, all.tz |

(11) Select the data file to be updated and click the [OK] button.
 There are two data filing methods: Selecting the multiple data files in a batch (select the folder where the files are saved) and selecting each data file individually.

- Selecting the multiple data files in a batch
 - Select “Download File Folder”.
 - Click the [Browse] button and select the folder where the files are saved.

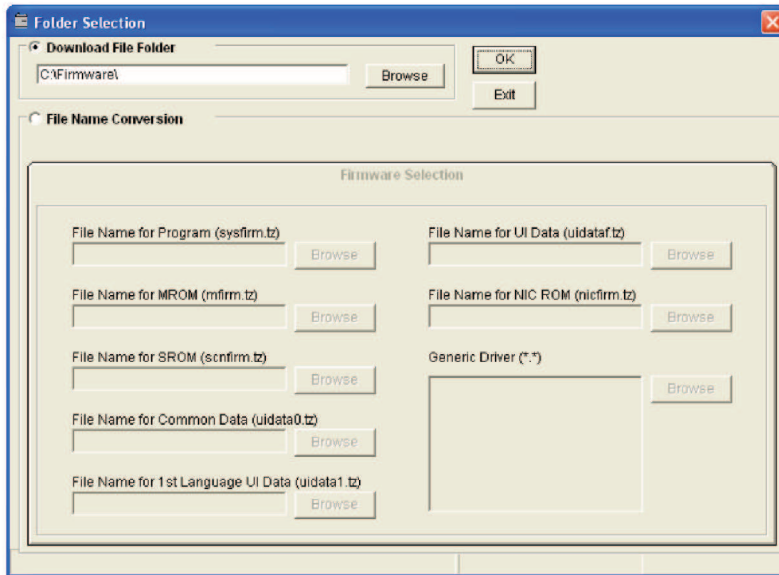


Fig.6-62

- Selecting each data file individually
 - Select “File Name Conversion”.
 - Click the [Browse] button of each data and select the file. When “Generic Driver” is used, check the checkbox of the file to be selected.

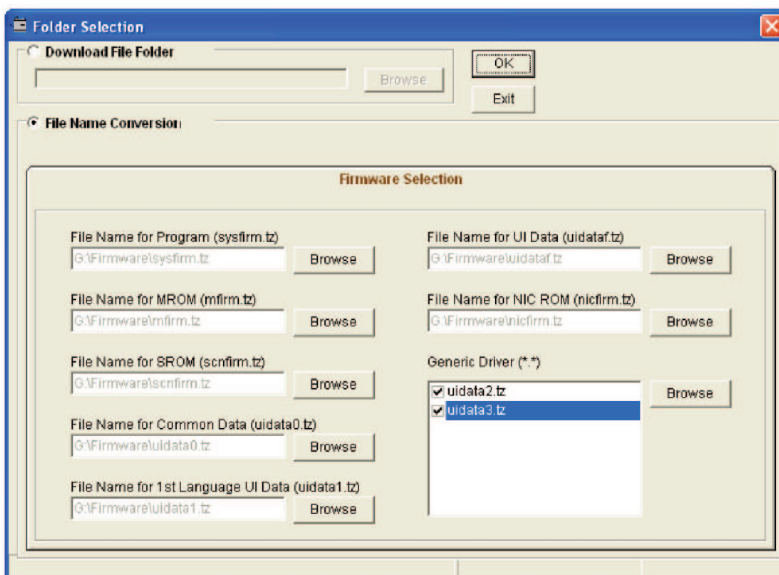


Fig.6-63

Remark:

When selecting the multiple files in a batch, the name of the unselected data file (not saved in the folder) may be displayed. In this case, click the [OK] button and then the update of all files except the displayed file starts.



Fig.6-64

- (12) The selected data is transmitted to the equipment.
The data file name being transmitted and transmission condition are displayed at the bottom.

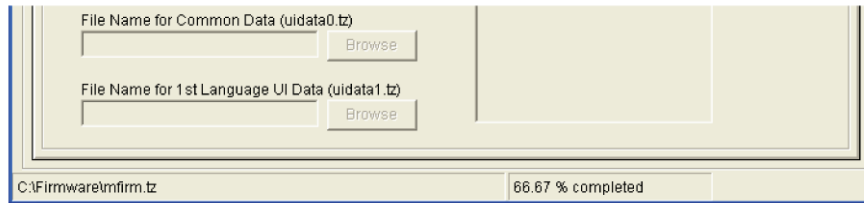


Fig.6-65

Remark:

During transmission, the message "WAIT" or "NOW SERVICING" is displayed on the LCD screen of the equipment. In this case, all the button operations are locked.

- (13) When the data transmission is completed, the following screen is displayed. Then click the [OK] button.

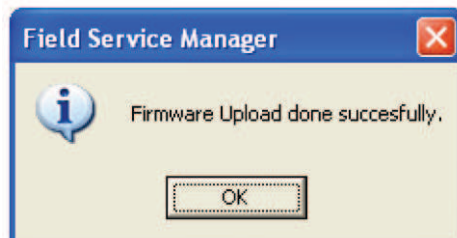


Fig.6-66

(14) The equipment restarts automatically and the items to be updated and processing status are displayed on the LCD screen.

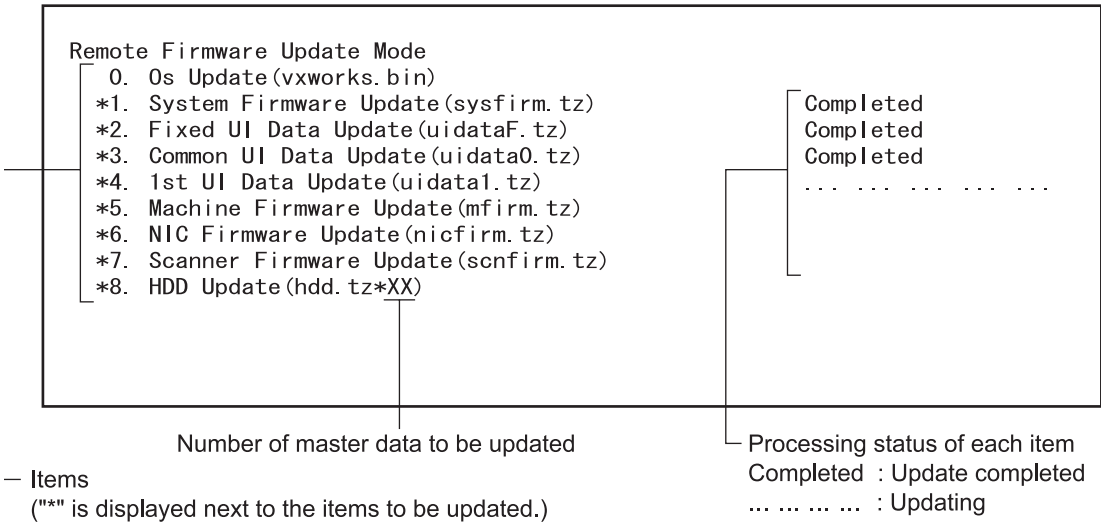


Fig.6-67

(15) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

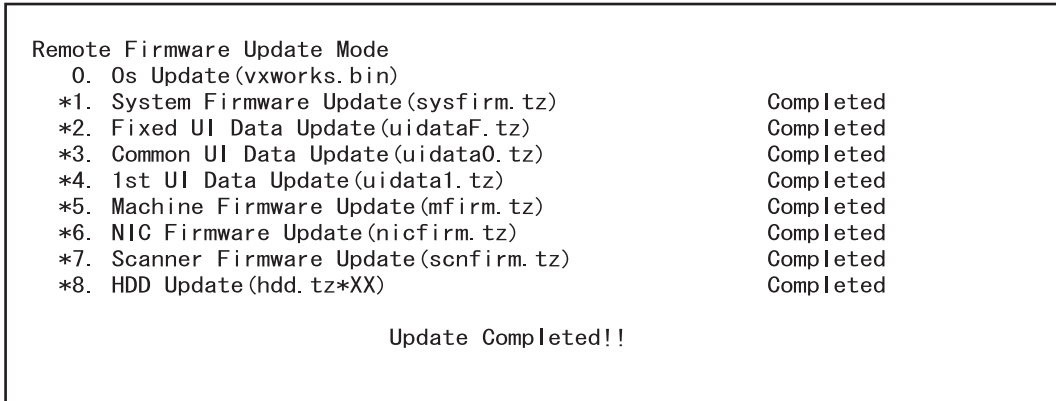


Fig.6-68

"Update Failed!!" is displayed at the bottom of the LCD screen when the updating is not completed properly. Turn OFF the power, and then check the following items. After confirming and clearing the problems, restart updating from the beginning.

- Are the equipment and PC properly connected?
- Is the selected data file proper?
- Do the cable, equipment and PC operate properly?
- Are FSMS and printer driver properly installed?

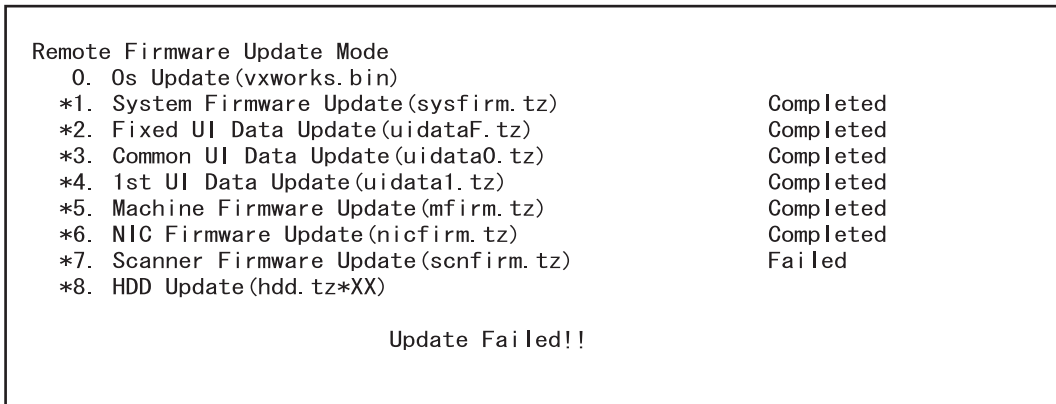


Fig.6-69

*When the updating of the NIC firmware is failed, an error message is displayed as the figure below. Turn OFF the power and then check the above-mentioned items. After confirming them, select only "NIC ROM" (6. NIC Firmware Update) and restart updating from the beginning. This may complete the updating properly.

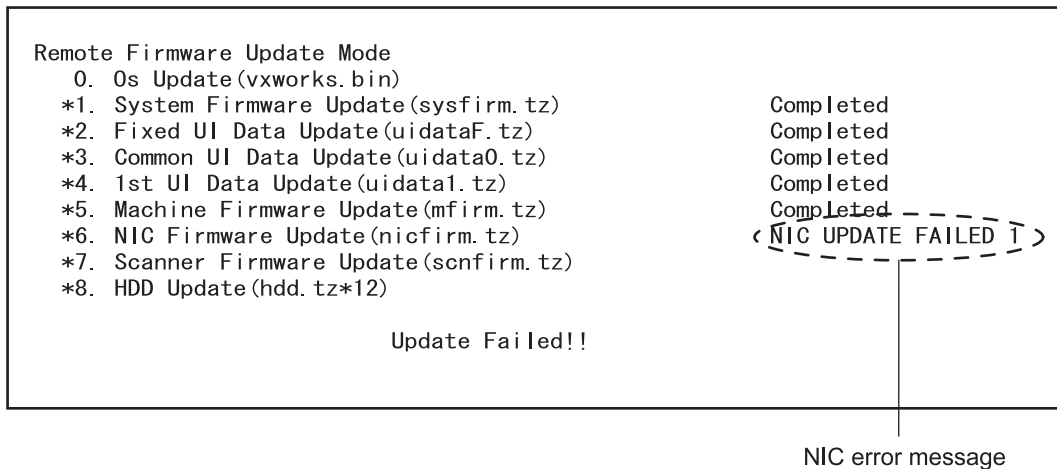


Fig.6-70

If the updating of the NIC firmware is still failed, check the prescription corresponding to the error message. After confirming and clearing the problem, restart updating from the beginning.

| NIC Error Message | Error Contents | Prescription |
|---------------------|--------------------------------------|---|
| NIC UPDATE FAILED 1 | NIC initialization time-out | The IP address may not be assigned correctly. <ul style="list-style-type: none"> • Is the IP address assigned correctly? • Does the IP address conflict with the other system? If the error still occurs, replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 2 | ATA driver initialization error | The HDD cable may be disconnected. <ul style="list-style-type: none"> • Is the HDD cable connected correctly? If the HDD cable is connected correctly, replace the SYS board because it may be destroyed. |
| NIC UPDATE FAILED 3 | HDD partition mount error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 4 | NIC setting information backup error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 5 | NIC firmware transfer error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 6 | NIC firmware writing error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 7 | NIC status time-out | Replace the NIC board because it may be destroyed. |

Note:

If the updating of the NIC firmware is not completed properly, wait 5 minutes or more from the beginning of the updating before turning OFF the power, and then restart updating from the beginning. If you turn OFF the power within 5 minutes, HDD may be destroyed.

(16) Turn OFF the power of the equipment.

(17) Perform the initialization of the updating data (NVRAM updating).

- Turn ON the power while [0] button and [8] button are pressed simultaneously.
- Key in "947", and then press the [START] button.
- Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

<Updating Master data>

- 08-925: Version of UI data language 2 in HDD
- 08-926: Version of UI data language 3 in HDD
- 08-927: Version of UI data language 4 in HDD
- 08-928: Version of UI data language 5 in HDD
- 08-929: Version of UI data language 6 in HDD
- 08-931: Version of UI data language 7 in HDD
- 08-933: HDD data unit version
- 08-934: Version of Web UI data language 1 in HDD
- 08-935: Version of Web UI data language 2 in HDD
- 08-936: Version of Web UI data language 3 in HDD
- 08-937: Version of Web UI data language 4 in HDD
- 08-938: Version of Web UI data language 5 in HDD
- 08-939: Version of Web UI data language 6 in HDD

<Updating System ROM>

- 08-900: System ROM version
- 08-922: UI data fixed section version
- 08-923: UI data common section version
- 08-924: Version of UI data language 1 in HDD
- 08-930: Version of UI data in FROM displayed at power ON

<Updating Engine ROM>

- 08-903: Engine ROM version

<Updating Scanner ROM>

- 08-905: Scanner ROM version

<Updating NIC ROM>

- 08-916: NIC ROM version

6.4 Firmware Updating with USB Storage Device (e-STUDIO200L/230/280)

In this equipment, it is feasible to update the firmware by connecting the USB storage device on which the firmware data is written to the USB connector mounted on the system control PC board and turning ON the power.

The type of firmware to be updated can be selected on the LCD screen in this method. This allows to update only the necessary firmware individually or to update all firmware in a batch.

The type of firmware which can be updated with this method are as follows in the table below. Also, the data file of each firmware can be used commonly in the updating methods with USB storage device and Download jig.

| Firmware | Stored | Data file name |
|-------------|--|--|
| Master data | Hard disk | 1, 2, 3 ... n * The file name should be consecutive numbers from 1 to "n" without file extension. The capacity of each file is approx. 8 MB. However, the file capacity of "n" (last number) may be less than 8 MB. |
| System ROM | System control PC board (SYS board) | sysfirm.bin, ROM.bin |
| Engine ROM | Logic PC board (LGC board) | ROM.bin |
| Scanner ROM | Scanning section control PC board (SLG board) | |
| NIC ROM | NIC board | |

Important:

- The following USB storage devices are recommended for updating.
 - MELCO ClipDrive (RUF-C128M)
 - Lexar Media JumpDrive (RD128-231)
 - Iomega Mini USB Drive (Mini 128 MB USB Drive)

- Only the USB storage device which meets the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
 - A combination USB storage device with a flash memory (to be connected directly to the USB port) and its capacity is 64 MB or more
 - A USB storage device which is complied with the following standards regulated by USB-IF (USB Implementers Forum)
 - Class number: 8 (=08h) (Mass-storage class)
 - Sub-class number: 6 (=06h) (SCSI transfer command set)
 - Protocol number: 80 (=50h) (Bulk-Only)
 - * Most common USB storage devices are complied with the specification above and can be used for updating. However, the operation in this equipment is not always guaranteed since the most of these devices are developed based on the use in PC environment (Windows or Macintosh).
Therefore, confirm thoroughly that the device is operational in this equipment when purchasing the device.

- The USB storage device complied with USB1.1 and USB2.0 can be used for updating. However, the update is performed in the speed of USB1.1 when the device complied with USB2.0 is used.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk) since it is never guaranteed.

[A] Update procedure

Important:

- The file system of USB storage device should be formatted in FAT format. Be careful since the devices formatted in FAT32 or NTFS format will not be operated. The file system can be confirmed on the properties in applications such as Explorer of Windows.
 - Do not turn OFF the power during the update. The data could be damaged and not to be operated properly.
- (1) Connect the USB storage device to the PC and write the data file.
- Confirm the data file name before writing (📖 P.6-66 "6.4 Firmware Updating with USB Storage Device (e-STUDIO200L/230/280)").
 - The file system of USB storage device should be formatted in FAT format.
 - Windows 95 and NT do not support USB. Be careful since the data can not be written on the devices in the PCs with these operating systems.
- (2) Turn OFF the power of equipment.

(3) Connect the USB storage device to the USB connector (host) on the SYS board.

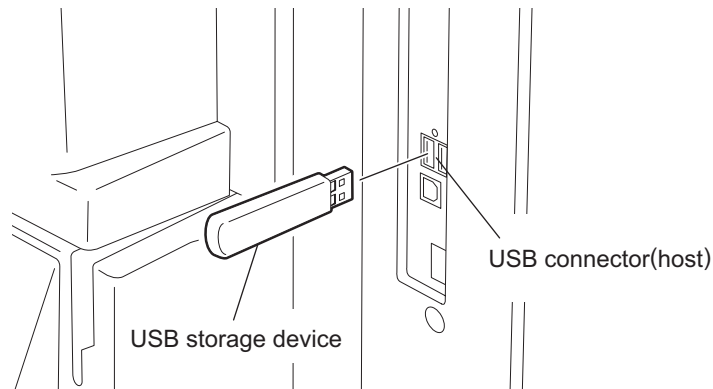


Fig.6-71

Notes:

- Do not connect multiple USB storage devices together.
- The USB storage device can be connected to either of 2 USB connectors (host).
- In case the printer kit (GM-1020 or 1030), printer/scanner kit (GM-2020 or 2030) and scanner upgrade kit (GM-3020 or 3030) are used, the update must be performed after all the "dongles" are disconnected from the USB connector (host) and only the USB storage device is connected.

- (4) Turn ON the power while [4] button and [9] button are pressed simultaneously. The screen for selecting the items to be updated is displayed after 3 minutes. "*" is displayed next to the items to be updated. (All items other than "0. OS Update" are selected in the default settings.)

| | Version in update media |
|---------------------------------------|----------------------------|
| Download Storage Firmware Update Mode | |
| Select Update Item | |
| 0. OS Update | UIF Version.. Vxxx.xxx.x |
| *1. HDD Update | U10 Version.. Vxxx.xxx.x |
| *2. UI Data Update | UI1 Version.. Vxxx.xxx.x |
| *3. System Firmware Update | SYS Version.. Vxxx.xxx.x |
| *4. NIC Firmware Update | NIC Version.. xxxxxxxx.xxx |
| *5. Scanner Firmware Update | SCN Version.. xxxxx-xxx |
| *6. Machine Firmware Update | MCN Version.. xxxxx-xxx |

Fig.6-72

Note:

The display of items on this screen varies depending on the types of data written on the USB storage device. Each item is displayed only when each data file is written on the USB storage device in the following conditions.

| Item | Condition |
|----------------------------|--|
| 0. OS Update | ROM.bin is written. |
| 1. HDD Update | All master data files (1, 2, 3 ... n) are written. |
| 2. UI Data Update | ROM.bin is written. |
| 3. System Firmware Update | sysfirm.bin and ROM.bin are written. |
| 4. NIC Firmware Update | ROM.bin is written. |
| 5. Scanner Firmware Update | ROM.bin is written. |
| 6. Machine Firmware Update | ROM.bin is written. |

If the USB storage device is not recognized properly, the following message is displayed. In this case, turn OFF the power of the equipment and connect the device properly. Then repeat the procedure from (4).

| |
|------------------------------------|
| Please Set Correct USB Storage Key |
|------------------------------------|

Fig.6-73

- (5) Select the item with the digital keys.
 “*” is displayed next to the selected item. Display or delete the “*” by pressing the number of the item. All items are selected in the default settings.
- Select all items to update the firmware of the equipment in a batch.
 - Select items as follows to update individually.

<Updating OS data>
 Select “0. OS Update” only.

<Updating Master data>
 Select “1. HDD Update” only.

<Updating System ROM>
 Select “2. UI Data Update” and “3. System Firmware Update”.

<Updating Engine ROM>
 Select “6. Machine Firmware Update” only.

<Updating Scanner ROM>
 Select “5. Scanner Firmware Update” only.

<Updating NIC ROM>
 Select “4. NIC Firmware Update” only.

Example: Updating the master data and system ROM
 (Updating the master data and system ROM is taken as an example and explained.)

| | Version in update media |
|---------------------------------------|-----------------------------|
| Download Storage Firmware Update Mode | |
| Select Update Item | |
| 0. OS Update | UIF Version.. Vxxx. xxx. x |
| *1. HDD Update | U10 Version.. Vxxx. xxx. x |
| *2. UI Data Update | U11 Version.. Vxxx. xxx. x |
| *3. System Firmware Update | SYS Version.. Vxxx. xxx. x |
| 4. NIC Firmware Update | NIC Version.. xxxxxxxx. xxx |
| 5. Scanner Firmware Update | SCN Version.. xxxxx-xxx |
| 6. Machine Firmware Update | MCN Version.. xxxxx-xxx |

Fig.6-74

- (6) Press the [START] button.
 Updating starts and the processing status is displayed on the LCD screen. When the multiple items are selected, updating starts in order of item number.

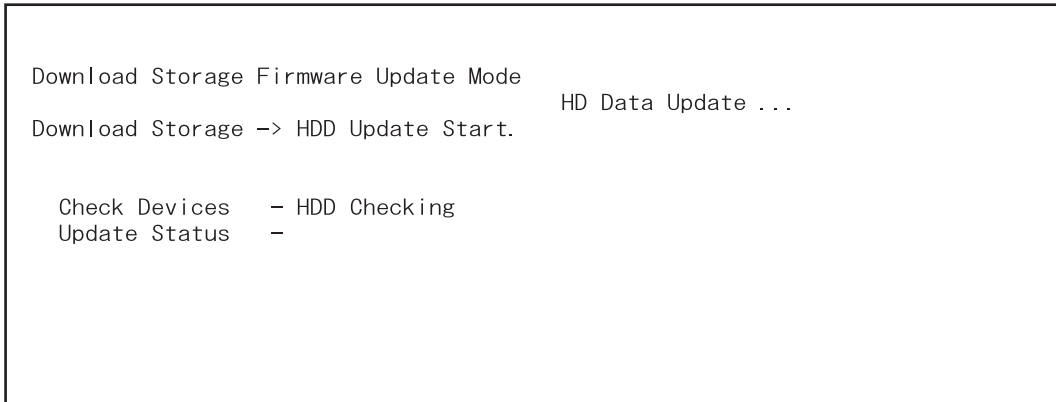


Fig.6-75

- (7) "Update Completed." is displayed at the bottom of the LCD screen after the updating is completed properly.

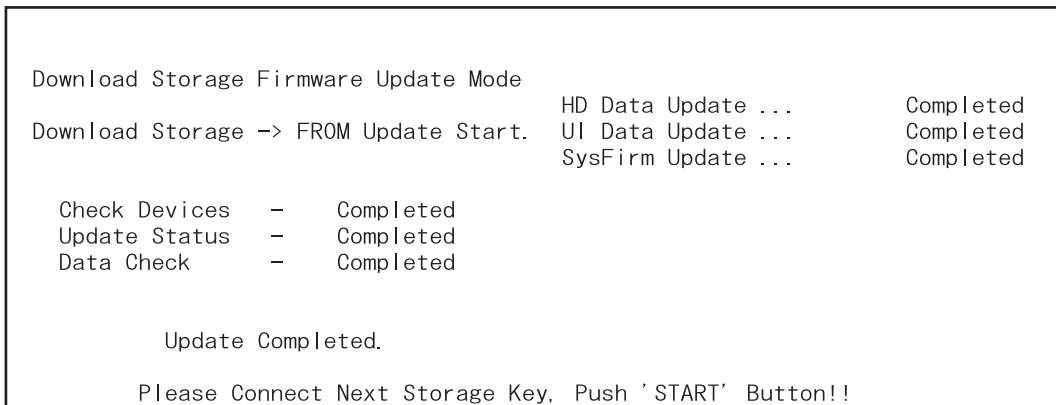


Fig.6-76

Remark:

Updating can be continued with another USB storage device on which the firmware data is written in the following procedure when the updating is completed.

1. Confirm the message "Please Connect Next Storage Key. Push 'START' Button!!" is displayed at the bottom of the LCD screen.
2. Replace the USB storage device while the power is left ON.
3. Press the [START] button.
4. The screen for selecting the items to be updated is displayed. Continue the updating from procedure (5). However, the items already updated are not displayed on the screen.

"Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. Turn OFF the power, and then check the following items. After confirming and clearing the problems, restart updating from the beginning.

- Does the USB storage device meet the conditions to be used for updating (P.6-66 "6.4 Firmware Updating with USB Storage Device (e-STUDIO200L/230/280)")?
- Is the data file written properly on the USB storage device?
- Is the USB storage device installed properly?
- Do the USB storage device and equipment operate properly?

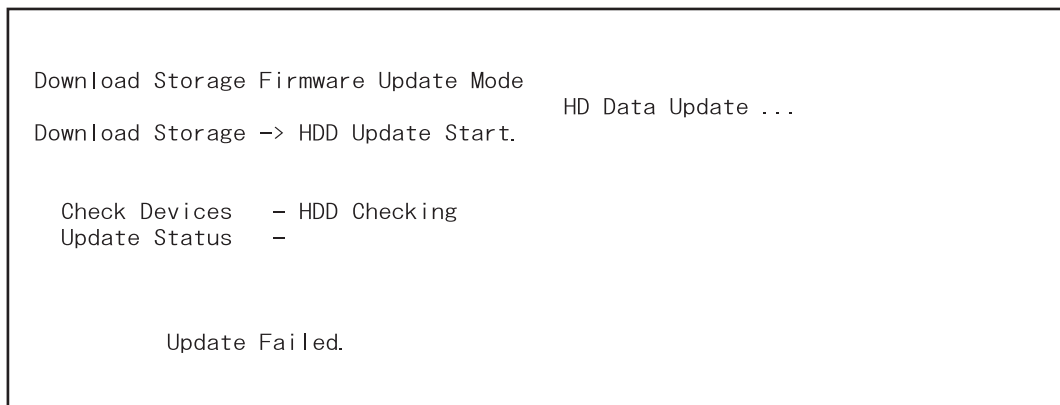


Fig.6-77

*When the updating of the NIC firmware is failed, an error message is displayed as the figure below. Turn OFF the power and then check the above-mentioned items. After confirming them, select only "4. NIC Firmware Update" and restart updating from the beginning. This may complete the updating properly.

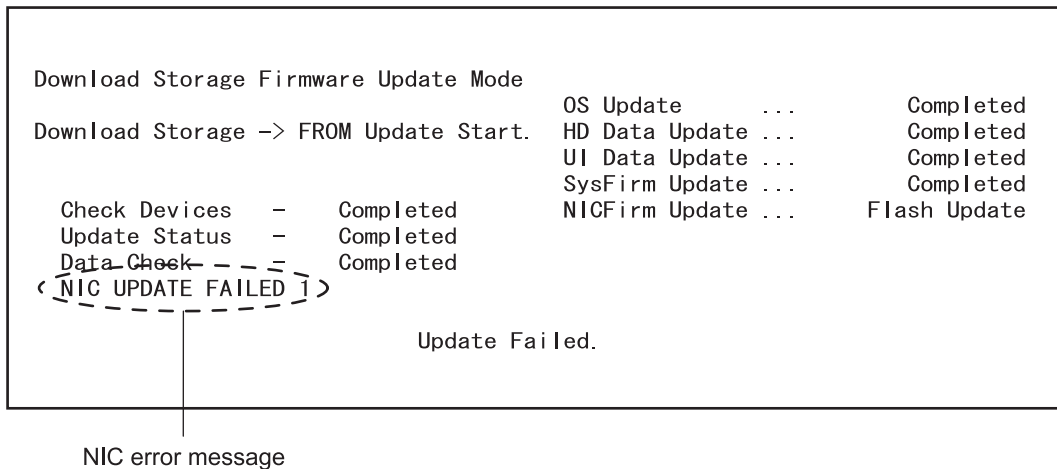


Fig.6-78

If the updating of the NIC firmware is still failed, check the prescription corresponding to the error message. After confirming and clearing the problem, restart updating from the beginning.

| NIC Error Message | Error Contents | Prescription |
|---------------------|--------------------------------------|---|
| NIC UPDATE FAILED 1 | NIC initialization time-out | The IP address may not be assigned correctly. <ul style="list-style-type: none"> Is the IP address assigned correctly? Does the IP address conflict with the other system? If the error still occurs, replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 2 | ATA driver initialization error | The HDD cable may be disconnected. <ul style="list-style-type: none"> Is the HDD cable connected correctly? If the HDD cable is connected correctly, replace the SYS board because it may be destroyed. |
| NIC UPDATE FAILED 3 | HDD partition mount error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 4 | NIC setting information backup error | Replace the HDD because it may be destroyed. |
| NIC UPDATE FAILED 5 | NIC firmware transfer error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 6 | NIC firmware writing error | Replace the NIC board because it may be destroyed. |
| NIC UPDATE FAILED 7 | NIC status time-out | Replace the NIC board because it may be destroyed. |

Note:

If the updating of the NIC firmware is not completed properly, wait 5 minutes or more from the beginning of the updating before turning OFF the power, and then restart updating from the beginning. If you turn OFF the power within 5 minutes, HDD may be destroyed.

- (8) Turn OFF the power, remove the USB storage device.
- (9) Perform the initialization of the updating data (NVRAM updating).
 - Turn ON the power while [0] button and [8] button are pressed simultaneously.
 - Key in "947", and then press the [START] button.
 - Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

<Updating Master data>

08-924: Version of UI data language 1 in HDD
08-925: Version of UI data language 2 in HDD
08-926: Version of UI data language 3 in HDD
08-927: Version of UI data language 4 in HDD
08-928: Version of UI data language 5 in HDD
08-929: Version of UI data language 6 in HDD
08-931: Version of UI data language 7 in HDD
08-933: HDD unit data version
08-934: Version of Web UI data language 1 in HDD
08-935: Version of Web UI data language 2 in HDD
08-936: Version of Web UI data language 3 in HDD
08-937: Version of Web UI data language 4 in HDD
08-938: Version of Web UI data language 5 in HDD
08-939: Version of Web UI data language 6 in HDD

<Updating System ROM>

08-900: System ROM version
08-920: FROM basic section software version
08-921: FROM internal program version
08-922: UI data fixed section version
08-923: UI data common section version
08-930: Version of UI data in FROM displayed at power ON

<Updating Engine ROM>

08-903: Engine ROM version

<Updating Scanner ROM>

08-905: Scanner ROM version

<Updating NIC ROM>

08-916: NIC ROM version

[C] Display during the update

The processing status is displayed as follows on the LCD screen during the update. (As an example, the display for updating the system ROM is explained below.)

Turn ON the power while [4] button and [9] button are pressed simultaneously.



The initial screen is displayed and the recognition of the USB storage device connected to the equipment is started.

```
Download Storage Update Mode
Please wait ... now Initialization
```



When the device is recognized properly after 3 minutes, the screen for selecting items is displayed.

```
Download Storage Firmware Update Mode
Select Update Item
0. OS Update
*1. HDD Update
*2. UI Data Update
*3. System Firmware Update
*4. NIC Firmware Update
*5. Scanner Firmware Update
*6. Machine Firmware Update

Version in update media
UIF Version.. Vxxx. xxx. x
U10 Version.. Vxxx. xxx. x
U11 Version.. Vxxx. xxx. x
SYS Version.. Vxxx. xxx. x
NIC Version.. xxxxxxxx. xxx
SCN Version.. xxxxx-xxx
MCN Version.. xxxxx-xxx
```



Press the [START] button after selecting the item to be updated. The device check starts.

```

Download Storage Firmware Update Mode      HD Data Update ...
Download Storage -> HDD Update Start.

Check Devices   -   HDD Checking
Update Status   -

```



When the device check completes, copying the data to the HDD starts.

```

Download Storage Firmware Update Mode      HD Data Update ...
Download Storage -> HDD Update Start.

Check Devices   -   Completed
Update Status   -   F-ROM -> HDD copying

```

1/n xxx/ yyy

File name of master data ———

Copied ———

Total files



When all files have been copied, the backup of RIP font starts.

```

Download Storage Firmware Update Mode      HD Data Update ...
Download Storage -> HDD Update Start.

Check Devices   -   Completed
Update Status   -   Backup file /PRF -> /PR2

1/n    xxx/    yyy
2/n    xxx/    yyy
3/n    xxx/    yyy
n/n    xxx/    yyy

```



When the backup of RIP font is completed, the following screen is displayed. Updating the master data is completed.

```

Download Storage Firmware Update Mode      HD Data Update ...      Completed
Download Storage -> HDD Update Start.

Check Devices - Completed
Update Status - Completed

1/n xxx/ yyy
2/n xxx/ yyy
3/n xxx/ yyy
4/n xxx/ yyy

```



Updating the system ROM starts subsequently.
The device check starts.

```

Download Storage Firmware Update Mode      HD Data Update ...      Completed
Download Storage -> FROM Update Start.

Check Devices - Checking
Update Status -
Data Check -

```



When the device check completes, copying the
data to the ROM of the equipment starts.

```

Download Storage Firmware Update Mode      HD Data Update ...      Completed
Download Storage -> FROM Update Start.      UI Data Update ...

Check Devices - Completed
Update Status - Installing
Data Check -

```



When copying the data completes, copying the
other data are implemented repeatedly.

| | | |
|--|--------------------|------------|
| Download Storage Firmware Update Mode | | |
| Download Storage -> FROM Update Start. | HD Data Update ... | Completed |
| | UI Data Update ... | Completed |
| | SysFirm Update ... | |
| Check Devices | - | Completed |
| Update Status | - | Installing |
| Data Check | - | |



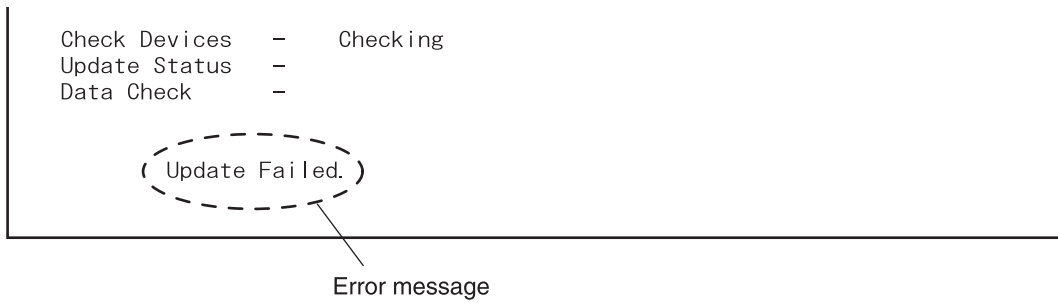
When copying all the data complete, the update completes with the following screen.

| | | |
|--|--------------------|-----------|
| Download Storage Firmware Update Mode | | |
| Download Storage -> FROM Update Start. | HD Data Update ... | Completed |
| | UI Data Update ... | Completed |
| | SysFirm Update ... | Completed |
| Check Devices | - | Completed |
| Update Status | - | Completed |
| Data Check | - | Completed |
| Update Completed. | | |
| Please Connect Next Storage Key, Push 'START' Button!! | | |

- * If the USB storage device is not recognized properly, the following message is displayed and the update is interrupted.

Please Set Correct USB Storage Key

- * If an error occurs, the following error message is displayed and the update is interrupted.



6.5 Firmware Updating with USB Storage Device (e-STUDIO202L/232/282)


In this equipment, it is feasible to update the firmware by connecting the USB storage device on which the firmware data is written to the USB connector mounted on the system control PC board and turning ON the power.

The type of firmware to be updated can be selected on the LCD screen in this method. This allows to update only the necessary firmware individually or to update all firmware in a batch.

The type of firmware which can be updated with this method are as follows in the table below.

| Firmware | Stored | Model specific folder name | Data file name |
|-------------|---|----------------------------|--|
| Master data | Hard disk | 202_282 | 1, 2, 3 ... n * The file name should be consecutive numbers from 1 to "n" without file extension. The capacity of each file is approx. 8 MB. However, the file capacity of "n" (last number) may be less than 8 MB. |
| System ROM | System control PC board (SYS board) | | firmImage0.bin, firmImage1.bin |
| Engine ROM | Logic PC board (LGC board) | | firmImage2.bin |
| Scanner ROM | Scanning section control PC board (SLG board) | | |

Important:

- Only the USB storage device which meets the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
 - A combination USB storage device with a flash memory (to be connected directly to the USB port) and its capacity is between 64 MB to 512 MB (or 1 GB).
 - Operation of the USB storage device used for updating has been confirmed at the input check of this equipment (Test mode 03).
( P.2-31 "2.2.2 Input check (Test mode 03) (e-STUDIO202L/232/282)")
 - A USB storage device which is complied with the following standards regulated by USB-IF (USB Implementers Forum)
 - Class number: 8 (=08h) (Mass-storage class)
 - Sub-class number: 6 (=06h) (SCSI transfer command set)
 - Protocol number: 80 (=50h) (Bulk-Only)
- * Most common USB storage devices are complied with the specification above and can be used for updating. However, the operation in all the Multi Functional Digital Color Systems and Multi Functional Digital Systems is not necessarily guaranteed since the most of these devices are developed based on the use in PC environment (Windows or Macintosh). Therefore, confirm thoroughly that the device is operational in the equipment for which the updating will be performed when purchasing the device.
- The data file for updating is stored in the model specific folder.
Never change the model specific folder name since it is used for discriminating the data file when the updating data files for multiple models are stored in the USB storage device.
- Store the model specific folder in the root directory of the USB storage device.
- Storing the data file directly in the root directory is possible when the updating data files for one specific model is stored in the USB storage device.
However, if the model specific folder for the same model as that of the data file stored in the root directory already exists, the model specific folder will have the priority.
- The USB storage device complied with USB1.1 and USB2.0 can be used for updating. However, the update is performed in the speed of USB1.1 when the device complied with USB2.0 is used.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk) since it is never guaranteed.

[A] Update procedure

Important:

- The file system of USB storage device should be formatted in FAT format. Be careful since the devices formatted in FAT32 or NTFS format will not be operated. The file system can be confirmed on the properties in applications such as Explorer of Windows.
- Do not turn OFF the power during the update. The data could be damaged and not to be operated properly.

- (1) Connect the USB storage device to the PC and write the model specific folder in which the data file is stored.
 - Confirm the model specific folder name and data file name before writing the data (P.6-80 "6.5 Firmware Updating with USB Storage Device (e-STUDIO202L/232/282)").
 - The file system of USB storage device should be formatted in FAT format.
 - Windows 95 and NT do not support USB. Be careful since the data can not be written on the devices in the PCs with these operating systems.
- (2) Shut down the equipment.
- (3) Connect the USB storage device to the USB connector (host) on the SYS board.

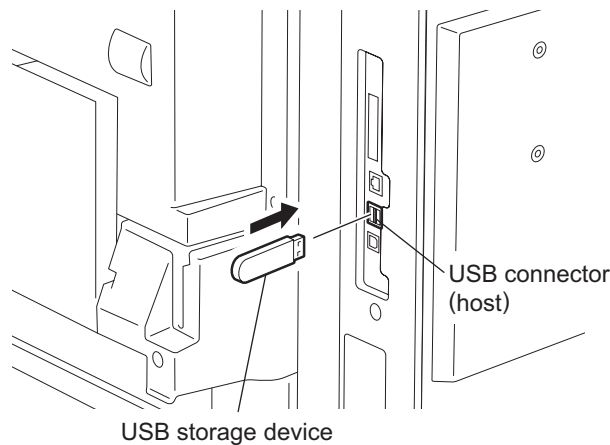


Fig.6-79

Notes:

- Do not connect multiple USB storage devices together.
- The USB storage device can be connected to either of 2 USB connectors (host).
- In case the printer kit (GM-1070 or GM-1080U), printer/scanner kit (GM-2070 or GM-2080U) and scanner upgrade kit (GM-4070 or GM-4080U) are used, the update must be performed after all the "dongles" are disconnected from the USB connector (host) and only the USB storage device is connected.

- (4) Turn ON the power while [4] button and [9] button are pressed simultaneously. The screen for selecting the items to be updated is displayed after 3 minutes. "*" is displayed next to the items to be updated. (All items other than "0. OS Update" are selected in the default settings.)

| Download Storage Firmware Update Mode Select Update Item | Version in update media |
|---|---------------------------|
| 0. OS Update | UIF Version... Vxxx.xxx.x |
| *1. HDD Update | UI0 Version... Vxxx.xxx.x |
| *2. UI Data Update | UI1 Version... Vxxx.xxx.x |
| *3. System Firmware Update | SYS Version... Vxxx.xxx.x |
| *4. Engine Firmware Update | ENG Version... xxxxx-xx |
| *5. Scanner Firmware Update | SCN Version... xxxxx-xx |

Note:

The display of items on this screen varies depending on the types of data written on the USB storage device. Each item is displayed only when each data file is written on the USB storage device in the following conditions.

| Item | Condition |
|----------------------------|--|
| 0. OS Update | firmImage0.bin is written. |
| 1. HDD Update | All master data files (1, 2, 3 ... n) are written. |
| 2. UI Data Update | firmImage0.bin is written. |
| 3. System Firmware Update | firmImage0.bin and firmImage1.bin are written. |
| 4. Engine Firmware Update | firmImage2.bin is written. |
| 5. Scanner Firmware Update | firmImage2.bin is written. |

If the USB storage device is not recognized properly, the following message is displayed. In this case, disconnect the USB storage device and connect it again within 3 minutes, or turn OFF the power of the equipment and connect the device properly. Then repeat the procedure from (4).

Please Set Correct USB Storage Device

If the updating data file does not exist or a data file for other model is stored, the following message is displayed. In this case, turn OFF the power of the equipment and confirm if the data file stored in the USB storage device is correct. Then repeat the procedure from (4).

-----WARNING: ROMDATA MISMATCH!-----
ROMDATA Version is V***.*** *
Please REBOOT to use Correct ROMDATA

If you still want to continue, Please Push Start Key

- (5) Select the item with the digital keys.
 “*” is displayed next to the selected item. Display or delete the “*” by pressing the number of the item. All items are selected in the default settings.
- Select all items to update the firmware of the equipment in a batch.
 - Select items as follows to update individually.

<Updating OS data>
 Select “0. OS Update” only.

<Updating Master data>
 Select “1. HDD Update” only.

<Updating System ROM>
 Select “2. UI Data Update” and “3. System Firmware Update”.

<Updating Engine ROM>
 Select “4. Machine Firmware Update” only.

<Updating Scanner ROM>
 Select “5. Scanner Firmware Update” only.

Example: Updating the master data and system ROM

| Download Storage Firmware Update Mode | Version in update media |
|---------------------------------------|---------------------------|
| Select Update Item | |
| *0. OS Update | UIF Version... Vxxx.xxx.x |
| *1. HDD Update | UI0 Version... Vxxx.xxx.x |
| *2. UI Data Update | UI1 Version... Vxxx.xxx.x |
| *3. System Firmware Update | SYS Version... Vxxx.xxx.x |
| 4. Engine Firmware Update | ENG Version... xxxxx-xx |
| 5. Scanner Firmware Update | SCN Version... xxxxx-xx |

(Updating all the items is taken as an example and explained in the following procedures.)

- (6) Press the [START] button.
Updating starts and the processing status is displayed on the LCD screen.

```

Download Storage Firmware Update Mode

Download Board  -> FROM Update Start.  OS Update      .....
Check Devices   -  Completed           HD Data Update .....
Update Status   -  Installing
Data Check      -

Engine MAIN Update .. Flash Update
Scanner Firm Update .. Flash Update
  
```

| Status display during update | Status display when update is completed |
|------------------------------------|---|
| OS Update | OS Update Completed |
| HD Data Update | HD Data Update Completed |
| UI Data Update | UI Data Update Completed |
| SysFirm Update | SysFirm Update Completed |
| Engine MAIN Update .. Flash Update | Engine MAIN Update .. Completed |
| Scanner Firm Update.. Flash Update | Scanner Firm Update.. Completed |

- (7) "Update Completed." is displayed at the bottom of the LCD screen after the updating is completed properly.

```

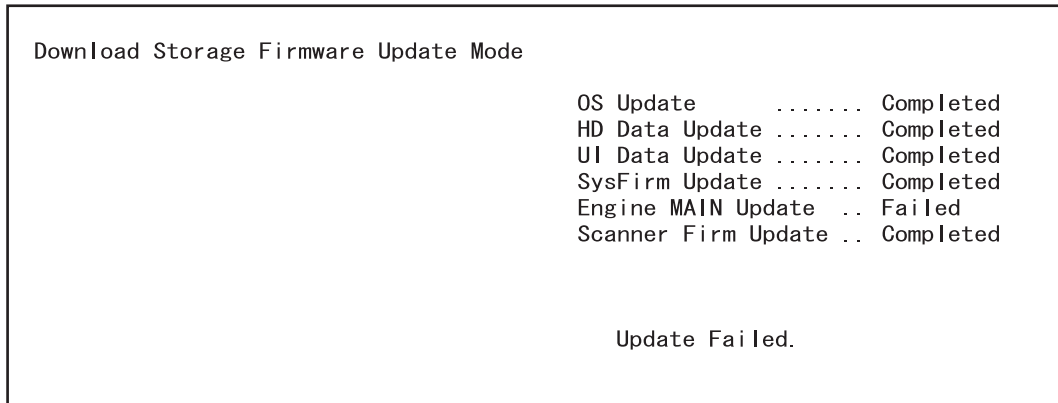
Download Storage Firmware Update Mode

OS Update      ..... Completed
HD Data Update ..... Completed
UI Data Update ..... Completed
SysFirm Update ..... Completed
Engine MAIN Update .. Completed
Scanner Firm Update .. Completed

Update Completed.
  
```


“Update Failed.” is displayed at the bottom of the LCD screen when the updating is not completed properly. “Failed” appears next to the failed item on the status display. Turn OFF the power, and then check the following items. After confirming and clearing the problems, restart updating from the beginning.

- Does the USB storage device meet the conditions to be used for updating (P.6-80 "6.5 Firmware Updating with USB Storage Device (e-STUDIO202L/232/282)")?
- Is the data file written properly on the USB storage device?
- Is the USB storage device installed properly?
- Do the USB storage device and equipment operate properly?



- (8) Turn OFF the power, remove the USB storage device and install the cover plate.
- (9) Perform the initialization of the updating data.
 - Turn ON the power while [0] button and [8] button are pressed simultaneously.
 - Key in “947”, and then press the [START] button.
 - Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

<Updating Master data>

08-924: Version of UI data language 1 in HDD
08-925: Version of UI data language 2 in HDD
08-926: Version of UI data language 3 in HDD
08-927: Version of UI data language 4 in HDD
08-928: Version of UI data language 5 in HDD
08-929: Version of UI data language 6 in HDD
08-931: Version of UI data language 7 in HDD
08-933: HDD unit data version
08-934: Version of Web UI data language 1 in HDD
08-935: Version of Web UI data language 2 in HDD
08-936: Version of Web UI data language 3 in HDD
08-937: Version of Web UI data language 4 in HDD
08-938: Version of Web UI data language 5 in HDD
08-939: Version of Web UI data language 6 in HDD

<Updating System ROM>

08-900: System ROM version
08-922: UI data fixed section version
08-923: UI data common section version
08-930: Version of UI data in FROM displayed at power ON

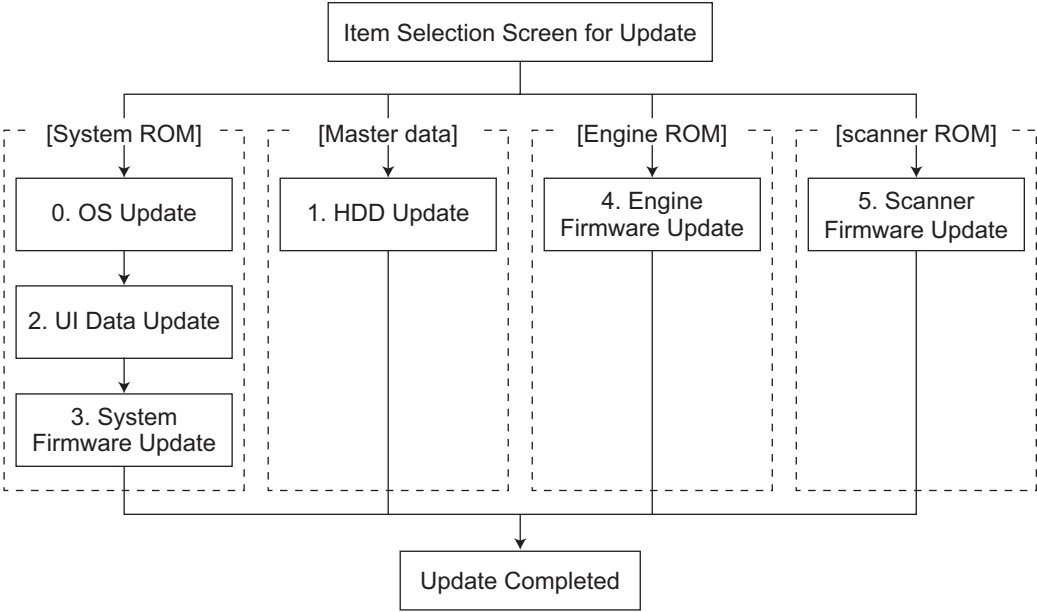
<Updating Engine ROM>

08-903: Engine ROM version

<Updating Scanner ROM>


08-905: Scanner ROM version

[C] Display during the update
Update is performed in parallel as shown in the transition diagram below.




Below is an example of the changes of the LCD screen during update.
Note that the screen order may be different from the actual one, because a parallel update is performed in the process.

Turn ON the power while [4] button and [9] button are pressed simultaneously


 The initial screen is displayed and the recognition of the USB storage device connected to the equipment is started.

```
Download Storage Update Mode
Please wait ... now Initialization
```

 When the device is recognized properly, the screen for selecting update items is displayed.

```
Download Storage Firmware Update Mode   Version in update media
Select Update Item

*0. OS Update                            UIF Version... Vxxx.xxx x
*1. HDD Update                            UI0 Version... Vxxx.xxx x
*2. UI Data Update                        UI1 Version... Vxxx.xxx x
*3. System Firmware Update                SYS Version... Vxxx.xxx x
*4. Engine Firmware Update                ENG Version... xxxxx-xx
*5. Scanner Firmware Update                SCN Version... xxxxx-xx
```

 Select items to be updated and press the [START] button to start updating the [System ROM], [Master Data], [Engine ROM] and [Scanner ROM] in parallel.

```

Download Storage Firmware Update Mode

Download Board  -> FROM Update Start.  OS Update      ..... Completed
Check Devices  - Completed              HD Data Update .....
Update Status  - Installing
Data Check     -

Download Storage -> HDD copying          Engine MAIN Update .. Flash Update
                  1/n                   Scanner Firm Update .. Flash Update

Engine Update Status
xxxx/nnnnn
Scanner Update Status
xxxx/nnnnn

```



When the [System ROM]-[OS Update] has been updated, "OS Update...Completed" is displayed and the [UI Update] update will start.

```

Download Storage Firmware Update Mode

Download Board  -> FROM Update Start.  OS Update      ..... Completed
Check Devices  - Completed              HD Data Update .....
Update Status  - Installing              UI Data Update .....
Data Check     -

Download Storage -> HDD copying          Engine MAIN Update .. Flash Update
                  1/n                   Scanner Firm Update .. Flash Update

Engine Update Status
xxxx/nnnnn
Scanner Update Status
xxxx/nnnnn

```



When the [System ROM]-[UI Update] has been updated, "UI Data Update...Completed" is displayed and the [System Firmware Update] update will start.

```

Download Storage Firmware Update Mode

Download Board  -> FROM Update Start.  OS Update      ..... Completed
Check Devices  - Completed              HD Data Update .....
Update Status  - Installing              UI Data Update ..... Completed
Data Check     -                        SysFirm Update .....
                                                Engine MAIN Update .. Flash Update
                                                Scanner Firm Update .. Flash Update

Download Storage -> HDD copying          Engine Update Status
                  1/n                   xxxx/nnnnn
                                                Scanner Update Status
                                                xxxx/nnnnn

```

↓ When the [Engine ROM] has been updated, "Engine MAIN Update..Flash Update" is changed to "Engine MAIN Update..Completed".

```

Download Storage Firmware Update Mode

Download Storage -> FROM Update Start.  OS Update      ..... Completed
Check Devices   - Completed             HD Data Update .....
Update Status   - Installing            UI Data Update  ..... Completed
Data Check      -                        SysFirm Update .....
                                           Engine MAIN Update .. Completed
                                           Scanner Firm Update .. Flash Update

Download Storage -> HDD copying
                    1/n xxx/ yyy
                    2/n xxx/ yyy

Scanner Update Status
xxxx/nnnnn
  
```

↓ When the [System ROM]-[System Firmware Update] has been updated, "SysFirm Update...Completed" is displayed.

```

Download Storage Firmware Update Mode

OS Update      ..... Completed
HD Data Update .....
UI Data Update  ..... Completed
SysFirm Update ..... Completed
Engine MAIN Update .. Completed
Scanner Firm Update .. Flash Update

Download Storage -> HDD copying
                    1/n xxx/ yyy
                    2/n xxx/ yyy
                    3/n
Scanner Update Status
xxxx/nnnnn
  
```

File name of master data ————

————— Total files

————— Copies

↓ When the [Master Data] has been updated, "HD Data Update...Completed" is displayed.

Download Storage Firmware Update Mode

```

OS Update ..... Completed
HD Data Update ..... Completed
UI Data Update ..... Completed
SysFirm Update ..... Completed
Engine MAIN Update .. Completed
Scanner Firm Update .. Flash Update

```

Scanner Update Status
xxxx/nnnn



When the [Scanner ROM] has been updated, "Scanner Firm Update..Flash Update" is changed to "Scanner Firm Update..Completed".

When all data has been updated, "Update Completed" is displayed.

Download Storage Firmware Update Mode

```

OS Update ..... Completed
HD Data Update ..... Completed
UI Data Update ..... Completed
SysFirm Update ..... Completed
Engine MAIN Update .. Completed
Scanner Firm Update .. Completed

```

Update Completed.

- * If the USB storage device is not recognized properly, the following message is displayed and the update is interrupted.

Please Set Correct USB Storage Device

- * "Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. "Failed" appears next to the failed item on the status display.

Download Storage Firmware Update Mode

| | | |
|---------------------|-------|-----------|
| OS Update | | Completed |
| HD Data Update | | Completed |
| UI Data Update | | Completed |
| SysFirm Update | | Completed |
| Engine MAIN Update | .. | Failed |
| Scanner Firm Update | .. | Completed |

Update Failed.

Failed items

Error message

6.6 Appendix

6.6.1 e-STUDIO200L/230/280

[A] Assist Mode

This equipment has the Assist Mode to enable the following functions.

1) NVRAM flag clearing ("Clear NvRAM flags.")

Even if the firmware downloading has been completed normally, the Recovery Mode may accidentally start up when the power is turned ON again. In this case, clear the NVRAM flags used in the download process with this function.

(Normally, the flags are automatically cleared in the download process.)

Also in the case the Recovery Mode accidentally starts up after the replacement of NVRAM on the SYS board, the flags are cleared with this function.

2) Data storage partition formatting ("Format UID rom PRF PR2 SMS Partition.")

When a deflection occurs on the UI data, etc. which are stored in the HDD, the partition with the stored UI data, etc. is formatted with this function.

(Do not use this function since it is not normally necessary.)

3) HDD partition creation ("All Partition delete and create UID rom PRF PR2 SMS Partition.")

When the HDD is replaced or UI data, etc. are downloaded using the FSMS or USB storage, it is necessary to format a partition in the HDD before downloading. In this case, the partition is created in the HDD with this function.

Notes:

- When downloading with a download jig, it is not necessary to format a partition in advance.
- Perform the HDD partition formatting only when a new HDD and scrambler board are installed since all data in the current HDD are erased by this operation.

[B] Operating Procedure of Assist Mode

- (1) Turn ON the power while [3] button and [CLEAR] button are pressed simultaneously.
 - The following screen is displayed.

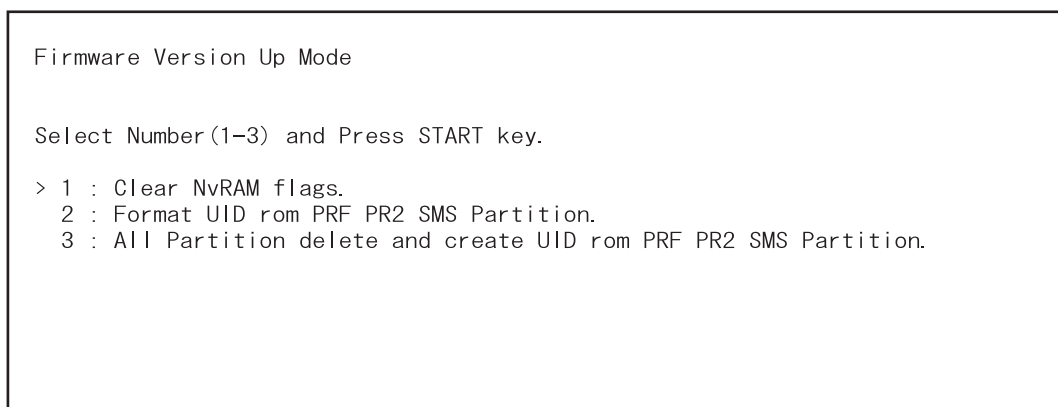


Fig.6-80

- (2) Select the item with the digital keys and press the [START] button.

6.6.2 e-STUDIO202L/232/282

[A] Assist Mode

This equipment has the Assist Mode to enable the following functions.

- (1) NVRAM flag clearing (“Clear NvRAM flags.”)
Even if the firmware downloading has been completed normally, the Recovery Mode may accidentally start up when the power is turned ON again. In this case, clear the NVRAM flags used in the download process with this function. (Normally, the flags are automatically cleared in the download process.)
Also in the case the Recovery Mode accidentally starts up after the replacement of NVRAM on the SYS board, the flags are cleared with this function.
- (2) Data storage partition formatting (“Format Loader Partition.”)
When a deflection occurs on the UI data, etc. which are stored in the HDD, the partition with the stored UI data, etc. is formatted with this function. (Do not use this function since it is not normally necessary.)
- (3) HDD partition creation (“All Partition Delete and Create Loader Partition.”)
When the HDD is replaced or UI data, etc. are downloaded using the USB storage, it is necessary to format a partition in the HDD before downloading. In this case, the partition is created in the HDD with this function.

Notes:

1. When downloading with a download jig, it is not necessary to format a partition in advance.
2. Perform the HDD partition formatting only when a new HDD and scrambler board are installed since all data in the current HDD are erased by this operation.

[B] Operating Procedure of Assist Mode

- (1) Turn ON the power while [3] button and [CLEAR] button are pressed simultaneously.
 - The following screen is displayed.

```
Firmware Version Up Mode

Select Number (1-3) and Press START key.

> 1 : Clear NvRAM flags.
   2 : Format Loader partition.
   3 : All Partition Delete and Create Loader Partition.
```

- (2) Select the item with the digital keys and press the [START] button.

7. POWER SUPPLY UNIT

7.1 Output Channel

The followings are five output channels which are not linked with the door switch.

1) +3.3V

- +3.3VA : CN705 Pins 13, 14, 15 and 16
Output to the SYS board
- +3.3VB : CN705 Pins 19 and 20
Output to the SYS board
- +3.3VB : CN706 Pin 30
Output to the LGC board
- +3.3VB : CN708 Pins 9 and 10
Output to the SLG board

2) +5.1V

- +5.1VA : CN705 Pins 24 and 26
Output to the SYS board
- +5.1VB : CN705 Pin 25
Output to the SYS board
- +5.1VB : CN706 Pin 26
Output to the FUS board
- +5.1VB : CN706 Pins 27 and 28
Output to the LGC board, PFP/ LCF (via LGC board),
Bridge unit / Job separator / Offset tray (via LGC board)
- +5.1VB : CN707 Pin 4
Output to the finisher
- +5.1VB : CN708 Pins 3 and 4
Output to the SLG board
- +5.1VB : CN708 Pins 5 and 6
Output to the RADF

3) +12V

- +12VA : CN705 Pin 7
Output to the SYS board
- +12VB : CN705 Pin 5
Output to the SYS board
- +12VB : CN706 Pin 22
Output to the LGC board
- +12VB : CN708 Pin 13
Output to the SLG board

4) -12V

- 12VA : CN705 Pin 9
Output to the SYS board
- 12VB : CN705 Pin 3
Output to the SYS board

5) +24V

- +24VB : Not used

The followings are two output channels which are linked with the door switch.

1) +5.1V

+5.1VD : CN706 Pin 2
Output to the LGC board

2) +24V

+24VD1 : CN706 Pins 11, 12, 13 and 14
Output to the LGC board, PFP/LCF (via LGC board)
+24VD1 : CN707 Pins 15 and 16
Output to the main motor
+24VD2 : CN706 Pins 5 and 6
Output to the LGC board, High-voltage transformer (via LGC board),
Bridge unit / Job separator / Offset tray (via LGC board)
+24VD2 : CN707 Pins 11 and 12
Output to the ADU board
+24VD3 : CN708 Pins 23 and 24
Output to the RADF
+24VD4 : CN708 Pins 19 and 20
Output to the SLG board
+24VD5 : CN707 Pin 8
Output to the finisher

<<Output connector>>

Not linked with the door switch

| Connector | Destination | Voltage |
|-----------|--|---|
| CN705 | For the SYS board | +3.3VA, +3.3VB, +5.1VA, +5.1VB, +12VA, +12VB, -12VA, -12VB |
| CN706 | For the LGC board, FUS board, PFP/LCF (via LGC board), Bridge unit / Job separator / Offset tray (via LGC board) | +3.3VB, +5.1VB, +12VB |
| CN707 | For the finisher | +5.1VB |
| CN708 | For the SLG board, RADF | +3.3VB, +5.1VB, +12VB |

Linked with the door switch

| Connector | Destination | Voltage |
|-----------|---|------------------------|
| CN706 | For the LGC board, High-voltage transformer (via LGC board), PFP/LCF (via LGC board), Bridge unit / Job separator / Offset tray (via LGC board) | +5.1VD, +24VD1, +24VD2 |
| CN707 | For the ADU board, finisher | +24VD1, +24VD2, +24VD5 |
| CN708 | For the SLG board, RADF | +24VD3, +24VD4 |

7.2 Fuse

When the power supply secondary fuse is blown out, confirm that there is no abnormality with each part using the following table.

| Voltage | Board/Unit | Part | Fuse type |
|---------|---|-------------------------------|-----------------------|
| +24VD1 | LGC | Main motor | F4:8A (Semi time-lag) |
| | | Toner motor | |
| | | Polygonal motor | |
| | | Tray-up motor | |
| | | Internal cooling fan 1 | |
| | | Internal cooling fan 2 | |
| | | Auto-toner sensor | |
| | | Upper drawer feed clutch | |
| | | Lower drawer feed clutch | |
| | | Registration roller clutch | |
| | | Upper transport clutch | |
| | | Middle transport clutch | |
| | | Lower transport clutch | |
| | | Discharge LED | |
| | Main switch | | |
| | PPF/LCF | | |
| +24VD2 | LGC | Exit motor | F5:5A (Semi time-lag) |
| | | ADU motor | |
| | | Exhaust fan | |
| | | Bypass feed clutch | |
| | | ADU clutch | |
| | | Bypass pickup solenoid | |
| | | High-voltage transformer | |
| | Key copy counter / Copy key card | | |
| | Bridge unit / Job separator / Offset tray | | |
| +24VD3 | RADF | | F6:4A (Semi time-lag) |
| +24VD4 | SLG | Scan motor | F7:4A (Semi time-lag) |
| | | Exposure lamp (Lamp inverter) | |
| +24VD5 | Finisher | | F8:5A (Semi time-lag) |

7.3 Configuration of Power Supply Unit

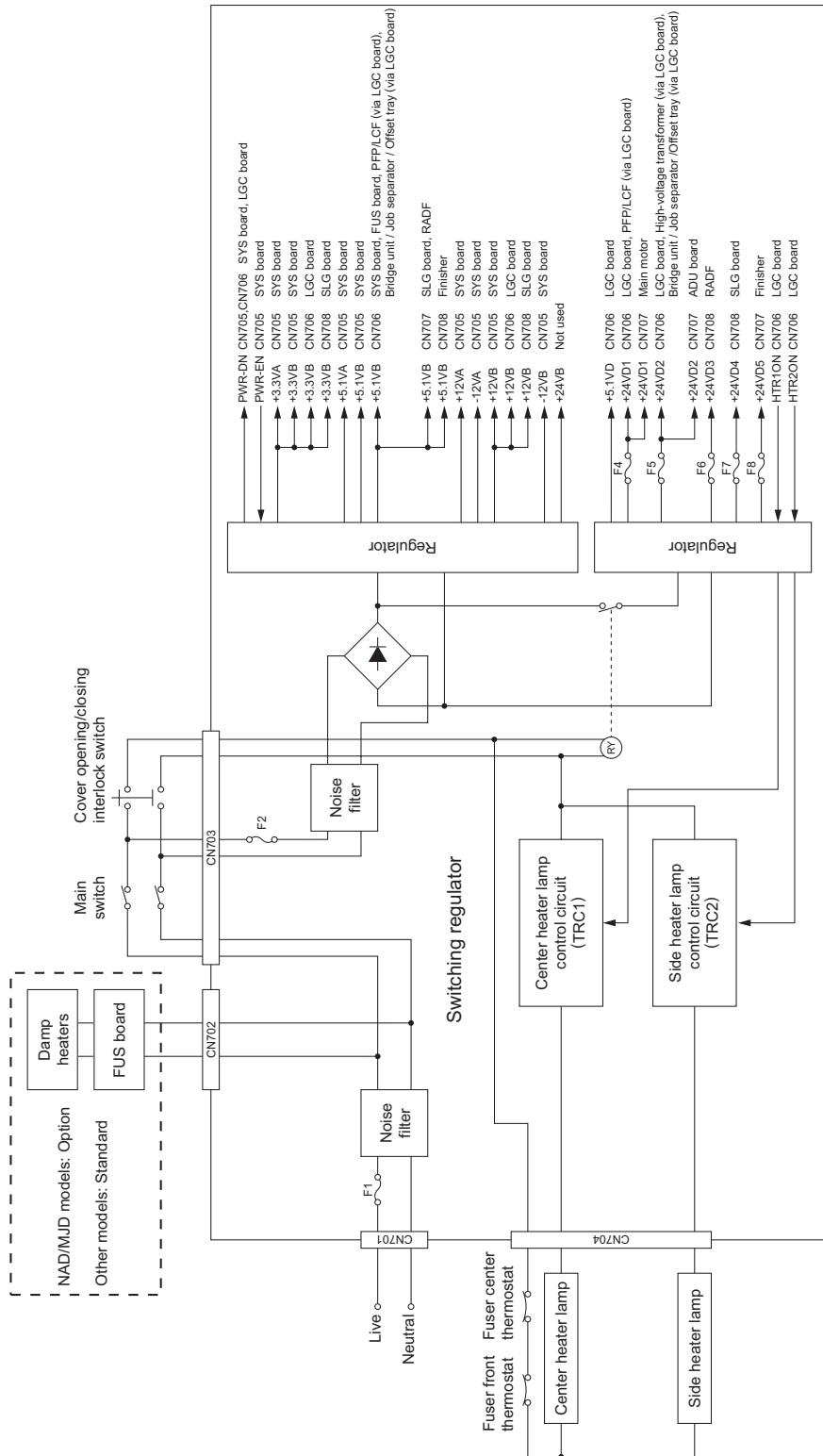


Fig.7-1

8. REMOTE SERVICE

There are following functions as Remote Service.

- 1) Auto Supply Order
Automatically orders the toner by FAX or E-mail.
- 2) Service Notification
Notifies the status of the equipment to the service technician by E-mail or FAX.

8.1 Auto Supply Order

8.1.1 Outline

Automatically orders the toner.

- 1) Placing an Order
There are two ways to place an order.
 - FAX
Installation of the FAX board is required.
If the FAX board has not been installed, it is regarded as OFF setting.
 - E-mail (E-mail body + TIFF image)
- 2) Order Intervals
When the toner empty occurs, the number of occurrences is counted. And when it reaches the specified number for CONDITION, the order is placed automatically.
- 3) If Order Failure Occurs
If some problems occur and the order cannot be placed after registering an order as a job, refer to the standard countermeasure for the FAX/E-mail transmission failure.

8.1.2 Setting Item

To enable Auto Supply Order, the following settings are required.

Note:

When selecting E-mail to place an order, it is required that sending and receiving E-mails are available. Confirm the details to the administrator.

1) Self-diagnosis (08) Setting

As the default setting, the Auto Supply Order setting screen is not displayed on the touch panel.

To display it, switching the Valid/Invalid setting (08-765) is required.

0: Valid (FAX/Internet FAX)

1: Valid (FAX/Internet FAX/HTTP)*

2: Invalid (Default)

When changing the setting value from "2" (default) to "0", the Auto Supply Order setting screen is displayed. (* HTTP has not been supported yet.)

2) Touch Panel Setting

Each item is set from the Auto Supply Order screen on the touch panel.

Entering the password and customer information is required because the setting is made from the ADMIN screen. Setting it with the administrator is a must.

- Basic setting

[ADMIN] > [SERVICE] > [SUPPLY ORDER SETUP] > [ORDER INFORMATION]

| | |
|--------------------|--|
| AUTO SUPPLY ORDER | Ordered by: [FAX], [MAIL], [HTTP] (*1) |
| FAX NUMBER | FAX number of supplier (*2) |
| E-MAIL | E-mail address of supplier (*3) |
| CUSTOMER | Customer information |
| NAME | |
| TEL NUMBER | |
| E-MAIL | |
| ADDRESS | |
| SUPPLIER | Supplier information |
| NAME | |
| ADDRESS | |
| SERVICE TECHNICIAN | Service technician information |
| NUMBER | |
| NAME | |
| TEL NUMBER | |
| E-MAIL | |

*1 HTTP has not been supported yet.

*2 Even when "FAX" is selected, the order is not placed without entering the FAX number.

*3 Even when "MAIL" is selected, the order is not placed without entering the E-mail address.

- Detailed setting for the order
[ADMIN] > [SERVICE] > [SUPPLY ORDER SETUP] > [TONER ORDERING]

| | |
|------------------|---------------------------------------|
| **** TONER ORDER | Order information (TONER) |
| PART NUMBER | Part number to be ordered |
| CONDITION | The number of conditions (*1) |
| QUANTITY | The quantity to be ordered |
| AUTO ORDER | ON/OFF setting of order for each part |

*1 The order is placed when the number of replacement reaches the number specified for the CONDITION.

- FAX number of this equipment (common information)
[ADMIN] > [FAX] > [TERMINAL ID]

| | |
|------------|------------------------------|
| ID NAME | ID name of this equipment |
| FAX NUMBER | FAX number of this equipment |

- E-mail information of this equipment (common information)
[ADMIN] > [E-MAIL]

| | |
|--------------|---------------------------------------|
| FROM ADDRESS | E-mail address of this equipment (*1) |
| FROM NAME | E-mail username of this equipment |

*1 When sending an E-mail, validity of the address is checked. If the address is invalid, it is not sent.

3) Output of setting list of the Auto Supply Order

Keying in the following buttons and keys prints the setting list.

[USER FUNCTIONS] [USER] [LISTS] [*] [#] [*] [*] [3] [8] [START]

8.1.3 Setting procedure

- (1) Start up the self-diagnosis setting mode 08-765, and then change the setting value to "0".
- (2) Turn the power OFF, and then ON.
- (3) Press the [USER FUNCTIONS] button to enter the user function screen.
- (4) Press the [ADMIN] button.
 - When the Administrator Password has been set, ADMINISTRATOR PASSWORD screen is displayed.

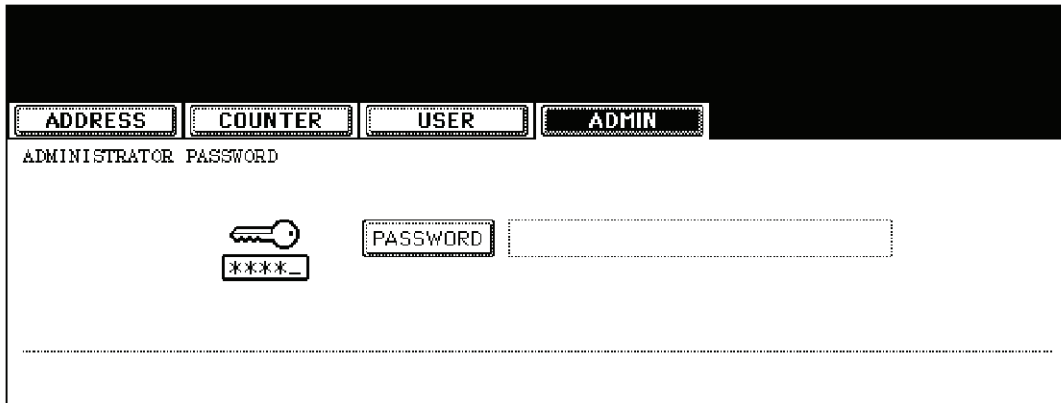


Fig.8-1

- (5) Press the [PASSWORD] button and the screen is switched to a full keyboard. Then key in the Administrator Password and press the [ENTER] button.
 - * Confirm the password to the administrator.

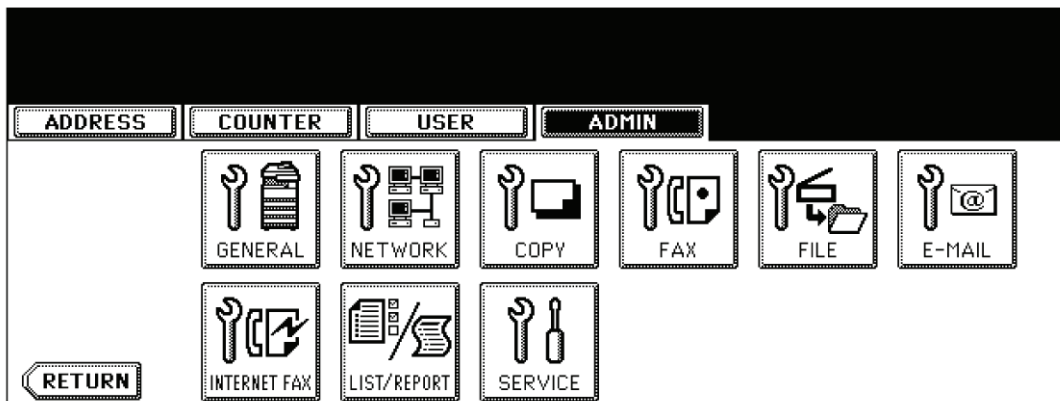


Fig.8-2

- (6) Press the [SERVICE] button in the ADMIN screen.

(7) The SERVICE screen is displayed.

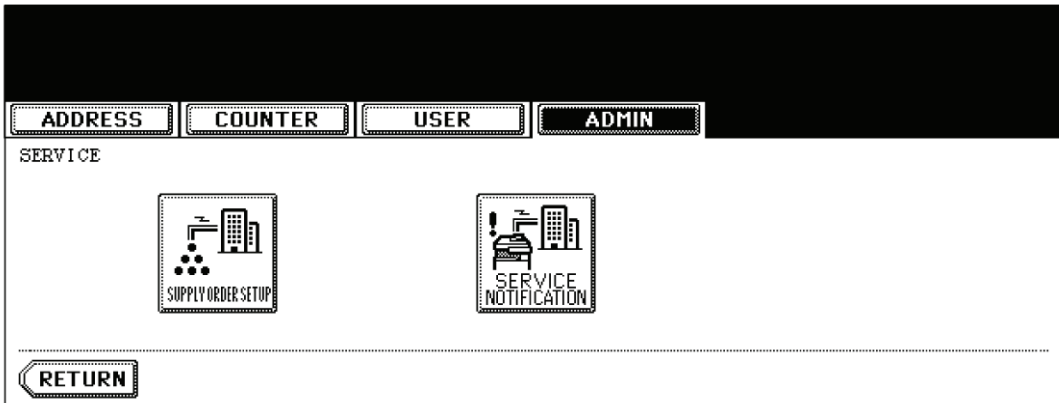


Fig.8-3

(8) Press the [SUPPLY ORDER SETUP] button.

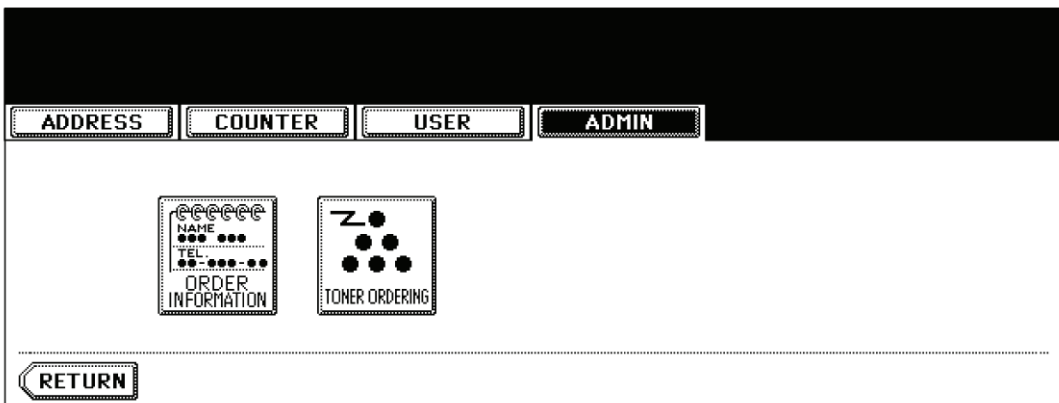


Fig.8-4

(9) Press the [ORDER INFORMATION] button.

(10) The ORDER INFORMATION screen is displayed.

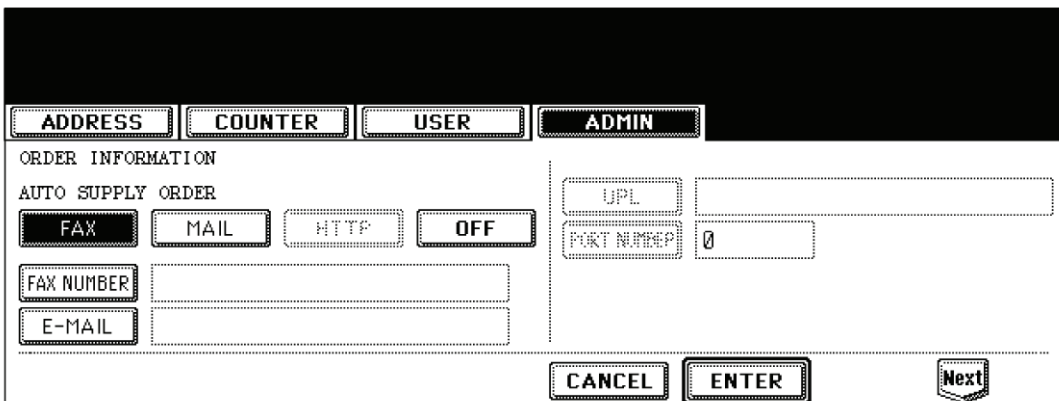


Fig.8-5

- (11) Press the buttons on the screen of ORDER INFORMATION to set the required item.
 [FAX]/[MAIL]/[OFF] ---
 Select the [FAX] or the [MAIL] button for the transmitting way of order.
 (HTTP has not been supported yet.)
 [OFF]: Turn off the AUTO SUPPLY ORDER function.
- [FAX NUMBER] --- Input the FAX number of supplier.
 (To transmit by FAX, the order cannot be placed automatically if you do not input the number.)
- [E-MAIL] --- Input the E-mail address of supplier.
 (To transmit by E-mail, the order cannot be placed automatically if you do not input the address.)
- (12) Press the [NEXT] button.
 (Press the [ENTER] button to register, and then the screen returns to the (7) SERVICE screen.
 Press the [CANCEL] button to cancel this register, and then the screen returns to the (7) SERVICE screen.)
- (13) The CUSTOMER/SUPPLIER screen is displayed.

The screenshot shows a screen with a black header bar containing four tabs: ADDRESS, COUNTER, USER, and ADMIN. Below the tabs, the screen is divided into two main sections: CUSTOMER and SUPPLIER. The CUSTOMER section has four input fields labeled NAME, TEL NUMBER, E-MAIL, and ADDRESS. The SUPPLIER section has two input fields labeled NAME and ADDRESS. At the bottom of the screen, there are three buttons: CANCEL, ENTER, and Next. The Next button is a small icon with the text 'Next' inside. To the right of the Next button is another small icon with the text 'Prev' inside.

Fig.8-6

- (14) Press the buttons of the screen of CUSTOMER/SUPPLIER to set the required item.

CUSTOMER

[NAME] --- Input the name of customer.
 [TEL NUMBER] --- Input the telephone number of customer.
 [E-MAIL] --- Input the E-mail address of customer.
 [ADDRESS] --- Input the address of customer.

SUPPLIER

[NAME] --- Input the name of supplier.
 [ADDRESS] --- Input the address of supplier.

- (15) Press the [NEXT] button.

(16) The SERVICE TECHNICIAN/ RESULT PRINTING screen is displayed.

ADDRESS COUNTER USER ADMIN

SERVICE TECHNICIAN

NUMBER DESCRIPTION

NAME

TEL NUMBER RESULT PRINTING

E-MAIL OFF ALWAYS ON ERROR

CANCEL ENTER Prev

Fig.8-7

(17) Press a button on the screen of SERVICE TECHNICIAN/ RESULT PRINTING to set the required item.

SERVICE TECHNICIAN

[NUMBER] --- Input the number of SERVICE TECHNICIAN.

[NAME] --- Input the name of SERVICE TECHNICIAN.

[TEL NUMBER] --- Input the telephone number of SERVICE TECHNICIAN.

[E-MAIL] --- Input the E-mail address of SERVICE TECHNICIAN.

[DESCRIPTION] --- Input the remarks if you want to register.

RESULT PRINTING

[OFF] / [ALWAYS] / [ON ERROR] --- Whichever you press, the result list is printed.

(18) Press the [ENTER] button to register and complete the order information setting.

(19) The SERVICE screen is returned.

ADDRESS COUNTER USER ADMIN

SERVICE

SUPPLY ORDER SETUP SERVICE NOTIFICATION

RETURN

Fig.8-8

(20) Press the [SUPPLY ORDER SETUP] button.

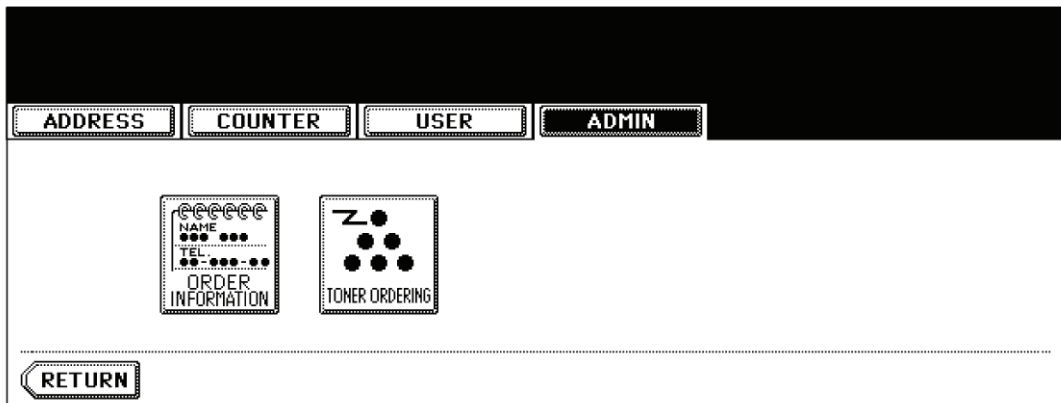


Fig.8-9

(21) Press the [TONER ORDERING] button.

(22) The TONER ORDERING screen is displayed.

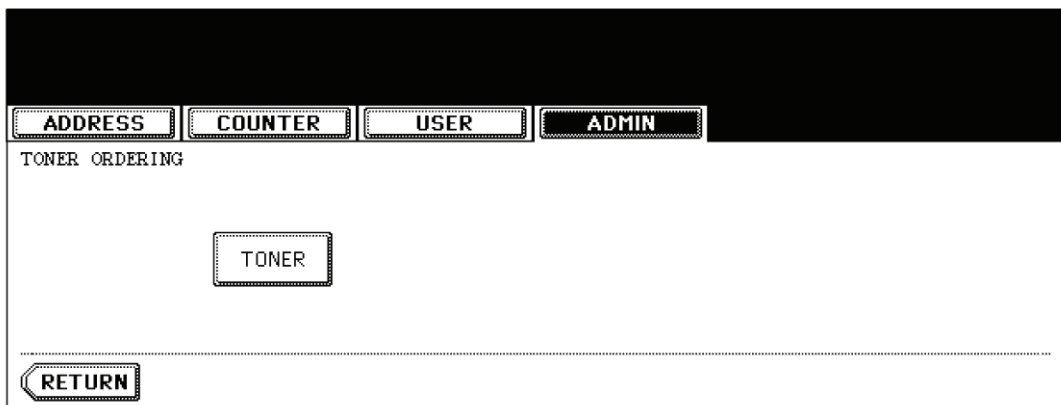


Fig.8-10

(23) Press the [TONER] button. (Select the part to be ordered.)

ADDRESS COUNTER USER ADMIN

BLACK(K) TONER ORDER

PART NUMBER

CONDITION 1

QUANTITY 1

AUTO ORDER

ON OFF

CANCEL ENTER

Fig.8-11

(24) Input the order information of TONER.
[PART NUMBER] --- Toner number

[CONDITION] ---

The order is placed when the number of toner empty reaches the number specified for the CONDITION.

[QUANTITY] --- Quantity to be ordered

AUTO ORDER

[ON]/[OFF]--- Allows you to select whether each part to be ordered is placed automatically or not.

(25) Press the [ENTER] button to register the setting of toner order.

(26) The screen returns to the TONER ORDERING.

(27) Press the [USER FUNCTION] button to be switched from the ADMIN screen on touch panel and returned to the BASIC screen, so that the setting of Auto Supply Order is finished.

Note:

Auto Supply Order setting is also available from the following setting mode (08).

| Items | 08 code | Contents |
|---|---------|---|
| The transmitting way of order [FAX] / [MAIL] / [OFF] | 732 | 0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF |
| SUPPLIER [FAX NUMBER] | 733 | Maximum 32 digits |
| SUPPLIER [E-MAIL] | 734 | Maximum 192 letters |
| CUSTOMER [NAME] | 738 | Maximum 50 letters |
| CUSTOMER [TEL NUMBER] | 739 | Maximum 32 letters |
| CUSTOMER [E-MAIL] | 740 | Maximum 192 letters |
| CUSTOMER [ADDRESS] | 741 | Maximum 100 letters |
| SUPPLIER [NAME] | 746 | Maximum 50 letters |
| SUPPLIER [ADDRESS] | 747 | Maximum 100 letters |
| SERVICE TECHNICIAN [NUMBER] | 742 | Maximum 5 digits |
| SERVICE TECHNICIAN [NAME] | 743 | Maximum 50 letters |
| SERVICE TECHNICIAN [TEL NUMBER] | 744 | Maximum 32 digits |
| SERVICE TECHNICIAN [E-MAIL] | 745 | Maximum 192 letters |
| Remarks [DESCRIPTION] | 748 | Maximum 128 letters |
| RESULT PRINTING [OFF] / [ALWAYS] / [ON ERROR] | 764 | 0: OFF 1: Always 2: ON Error |
| TONER [PART NUMBER] | 758 | Maximum 20 digits |
| TONER [CONDITION] | 760 | 1-99 |
| TONER [QUANTITY] | 759 | 1-99 |

8.1.4 Order Sheet Format

The sample of order sheet is as follows.

- 1) FAX (This format is the same as that of TIFF image attached E-mail.)

| | |
|-------------------------------|---------------------------------------|
| DATE & TIME | :99-99-'99 99:99 |
| CUSTOMER NUMBER | :XXX |
| CUSTOMER NAME | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| CUSTOMER ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| CUSTOMER TEL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| CUSTOMER E-MAIL ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| SERVICE TECHNICIAN TEL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| SERVICE TECHNICIAN E-MAIL | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| SUPPLIER NAME | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| SUPPLIER ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |

| TONER CARTRIDGE | PART NUMBER | QUANTITY |
|-----------------|---------------|----------|
| BLACK | :XXXXXXXXXXXX | 99 |

DESCRIPTION AREA

.....

| | |
|-----------------------|-------------------------------|
| DEVICE DESCRIPTION | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| SERIAL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| DEVICE FAX NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| DEVICE E-MAIL ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX |

TOTAL

| | |
|---------------|-----------|
| PRINT COUNTER | 999999999 |
| SCAN COUNTER | 999999999 |

Fig.8-12

- 2) E-MAIL (TIFF image attached with the E-mail is the same format with that of the FAX order sheet.)
SUBJECT: SUPPLY ORDER REQUEST

```

Date&Time: '04-07-11 00:17
Customer Number: svc02
MachineName: TOSHIBA e-STUDIO450
SerialNumber: CV
Device FAX Number: 1122
Device Email: sss@linux.nam1.local
OrderInformation:
BLACK PartNumber: kuro-01
Quantity: 1
CounterInformation:
PrintCounter(Small) FullColor: 0 TwinColor:0 Black:5
PrintCounter(Large) FullColor: 0 TwinColor:0 Black:0
ScanCounter FullColor: 0 TwinColor: 0 Black: 0
    
```

Fig.8-13

3) Result list

| | | |
|---------------------------|---------------------------------------|----------|
| DATE & TIME | ORDER XXXXXXXXX | |
| CUSTOMER NUMBER | :99-99-'99 99:99 | |
| CUSTOMER NAME | :XXX | |
| CUSTOMER ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| CUSTOMER TEL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| CUSTOMER E-MAIL ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| SERVICE TECHNICIAN | | |
| TEL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| SERVICE TECHNICIAN E-MAIL | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| SUPPLIER NAME | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| SUPPLIER ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| <hr/> | | |
| | PART NUMBER | QUANTITY |
| TONER CARTRIDGE | | |
| BLACK | :XXXXXXXXXXXX | 99 |
| <hr/> | | |
| DESCRIPTION AREA | | |
| | | |
| DEVICE DESCRIPTION | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| SERIAL NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| DEVICE FAX NUMBER | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| DEVICE E-MAIL ADDRESS | :XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| | | |
| TOTAL | | |
| PRINT COUNTER | 99999999 | |
| SCAN COUNTER | 99999999 | |

Fig.8-14

8.2 Service Notification

8.2.1 Outline

This function automatically notifies the status of the equipment to the service technician by E-mail or FAX. The following three are the items to be notified.

- Total Counter Transmit
When this function is effective, it notifies each counter information periodically (on the set date and time every month).
- Service Call Transmit (E-mail only)
When this function is effective, it notifies the corresponding error code and such at a service call error.
- PM Counter Transmit
When this function is effective, it notifies that the PM timing has come when the present PM count has reached to its setting value, or the present PM driving count has reached to its setting value.

8.2.2 Setting

Note:

When using this function, it is required that sending and receiving E-mails or FAXes are available. Confirm the details to the administrator.

[1] Preparation

The screen to set this function is not displayed at the default setting.
Set this screen to be displayed with the following code (08).

08-774 Setting of notification display
0: Invalid (Default)
1: Valid

[2] Setting procedure

- (1) Press the [USER FUNCTIONS] button and select the [ADMIN] button. Then enter the password and press the [ENTER] button.
 - Confirm the password to the administrator.

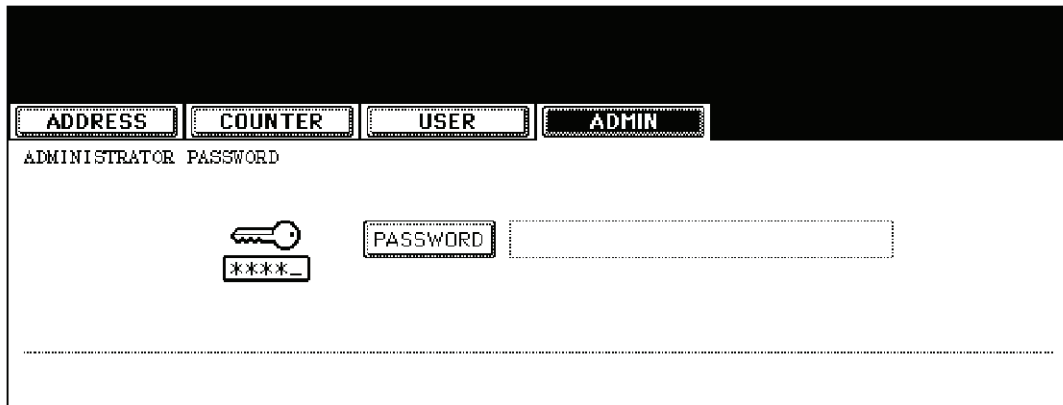


Fig.8-15

- (2) Press the [SERVICE] button.

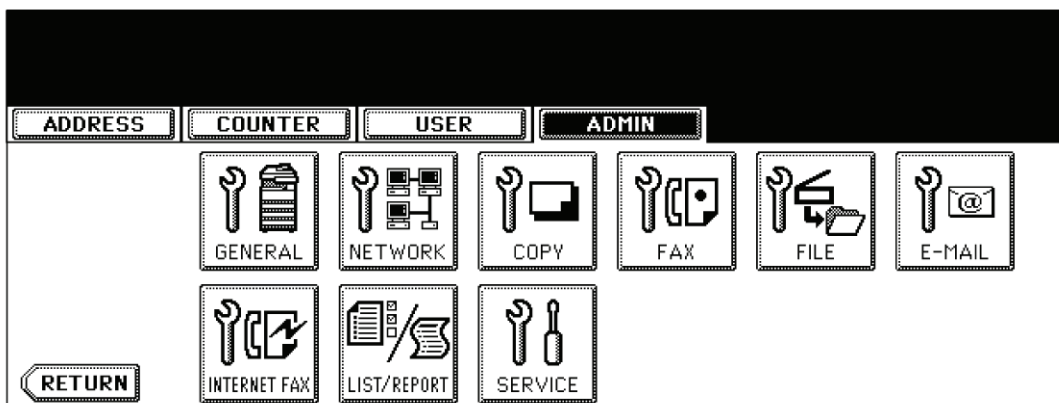


Fig.8-16

(3) Press the [SERVICE NOTIFICATION] button.

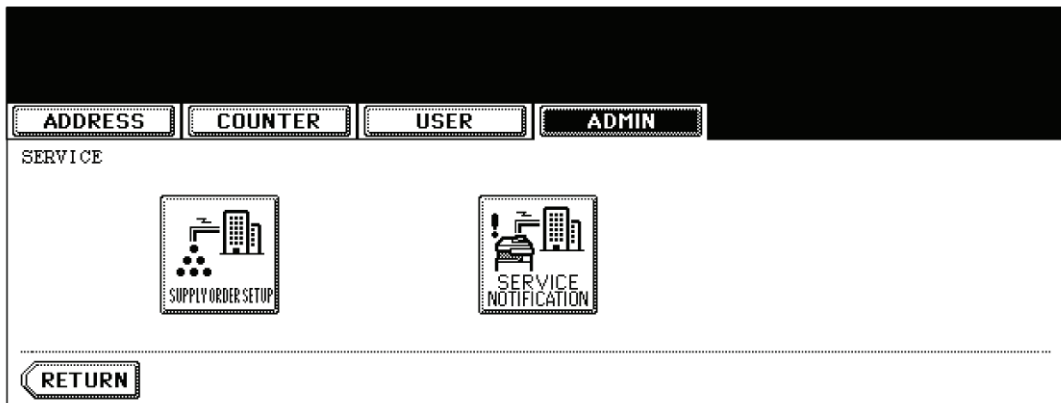


Fig.8-17

(4) Press the [E-MAIL] or [FAX] button in "SERVICE NOTIFICATION".

- When the [OFF] button is pressed, all functions related Service Notification become ineffective.

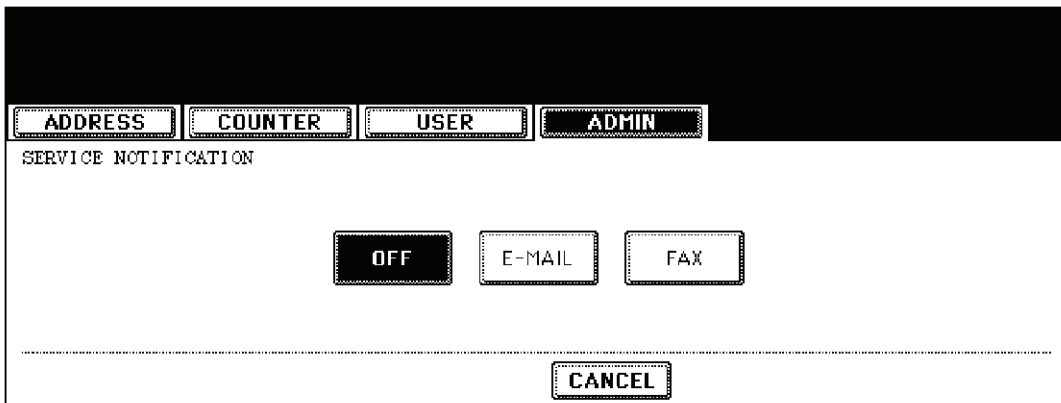


Fig.8-18

- (5) Enter the E-mail address or FAX number of the destination.
- When pressing the [E-MAIL] button, the screen is switched to a full keyboard. Then enter the E-mail addresses and press the [ENTER] button. (Maximum 3 addresses can be set.)

The screenshot shows a menu with four tabs: ADDRESS, COUNTER, USER, and ADMIN. The ADMIN tab is selected. Under 'SERVICE NOTIFICATION', there are three 'E-MAIL' buttons, each followed by a dotted-line input field. The first field contains 'aaa@toshiba.com'. To the right, under 'TOTAL COUNTER TRANSMIT', 'PM COUNTER TRANSMIT', and 'SERVICE CALL TRANSMIT', there are pairs of 'ON' and 'OFF' buttons. At the bottom are 'CANCEL' and 'ENTER' buttons.

Fig.8-19

- Press the [FAX NUMBER] button, key in the FAX number and then press the [ENTER] button.

The screenshot shows the same menu as Fig.8-19, but the 'FAX NUMBER' button is selected in the 'SERVICE NOTIFICATION' section, followed by a dotted-line input field. The 'ON' and 'OFF' buttons for the transmit options are visible on the right side.

Fig.8-20

- (6) Press the [ON] button to notify or [OFF] button not to notify of each item for E-mail and FAX. When the Total Count Transmit is set ON, the screen to set the notification date is displayed. Then set the notification date with the following procedure. (The information is notified on the set date and time every month.)

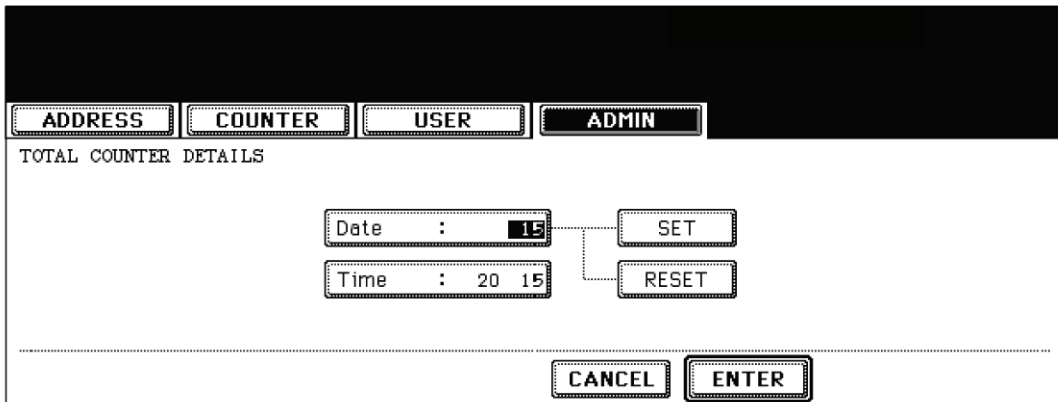


Fig.8-21

- Key in the date (acceptable values: 1-31) in “Date” and press the [SET] button. (Correct the value by pressing the [CLEAR] button if the [SET] button is not yet pressed. Correct the value by pressing the [RESET] button to move the cursor back to the digit to be corrected if the [SET] button is already pressed.)
- Key in the time (acceptable values: 00:00-23:59) in “Time”. Key in the time in the hour column of “Time”, press the [SET] button, key in the time in the minute column of “Time” and press the [SET] button. (Correct the value by pressing the [CLEAR] button if the [SET] button is not yet pressed. Correct the value by pressing the [RESET] button to move the cursor back to the digit to be corrected if the [SET] button is already pressed.)
- Press the [ENTER] button to set all. The display returns to the screen at procedure (5).

- (7) Press the [ENTER] button. The setting completes.

Note:

Service Notification setting is also available from the following setting mode (08).

| Items | 08 code | Contents |
|--|---------|-----------------------------------|
| Service Notification setting | 767 | 0: OFF (Invalid) 1: E-mail 2: FAX |
| E-mail address 1 | 768 | Maximum 192 letters |
| E-mail address 2 | 777 | Maximum 192 letters |
| E-mail address 3 | 778 | Maximum 192 letters |
| FAX number | 1145 | Maximum 32 digits |
| Total Counter Transmit setting | 769 | 0: OFF (Invalid) 1: ON (Valid) |
| Total counter transmission date setting | 770 | 1 to 31 |
| Total counter transmission interval setting (Hour/Minute/Minute) | 776 | 00:00-23:59 |
| Service Call Transmit setting | 775 | 0: OFF (Invalid) 1: ON (Valid) |
| PM Counter Transmit setting | 771 | 0: OFF (Invalid) 1: ON (Valid) |

8.2.3 Items to be notified

The items to be notified are shown below.

1) Total Counter Transmit / PM Counter Transmit by E-mail (XML file attached to E-mail has also the same format.)

Subject: Counter Notification

(In case of the PM Counter Transmit, it is shown as "Periodical Maintenance Notification".)

| | | | |
|---------------------------------|--------------------------------|-----------------------|-----------|
| ① | Date | : 07/11/2004 15:54 | |
| ② | Machine Model | : TOSHIBA e-STUDIO280 | |
| ③ | Serial Number | : 1234567890 | |
| ④ | Total Counter | : 00300000 | |
| ChargeCounterFormat: | | | |
| ⑤ | LargeSizeChargeCount | 1 | |
| ⑥ | LargeSizeChargePaperDefinition | 1 | |
| PMCounterFormat: | | | |
| ⑦ | LargeSizePMCount | 1 | |
| ⑧ | LargeSizePMPaperDefinition | 1 | |
| Charge Counter: | | | |
| | | Large | Small |
| <Print Counter> | | | |
| ⑨ | Copy | 00000000 | 00000000 |
| ⑩ | Print | 00000000 | 00000000 |
| ⑪ | List | 00000000 | 00000000 |
| ⑫ | FAX | 00000000 | 00000000 |
| <Scan Counter> | | | |
| ⑬ | Copy Scan | 00000000 | 00000000 |
| ⑭ | FAX Scan | 00000000 | 00000000 |
| ⑮ | Net Scan | 00000000 | 00000000 |
| <FAX Counter> | | | |
| ⑯ | Transmit | 00000000 | 00000000 |
| ⑰ | Receive | 00000000 | 00000000 |
| Periodical Maintenance Counter: | | | |
| ⑱ | Set PM | 00000000 | |
| ⑲ | Current PM | 00000000 | |
| ⑳ | Set PMTime | 00000000 | |
| ㉑ | Current PMTime | 00000000 | |
| ㉒ | Printer Error History: | | |
| | Date | Time | ErrorCode |
| | 05/08/2004 | 16:44 | F110 |
| | 05/15/2004 | 22:28 | F110 |
| | 05/15/2004 | 22:23 | F110 |
| | 04/15/2004 | 22:23 | F110 |
| | 03/25/2004 | 11:12 | F110 |
| | | | (*1) |

Fig.8-22

- ① Date
- ② Machine model name
- ③ Serial number
- ④ Total counter value
- ⑤ Count setting of large-sized paper (Fee charging system counter)
- ⑥ Definition setting of large-sized paper (Fee charging system counter)
- ⑦ Count setting of large-sized paper (PM)
- ⑧ Definition setting of large-sized paper (PM)
- ⑨ Number of output pages in the Copier Function
- ⑩ Number of output pages in the Printer Function
- ⑪ Number of output pages at the List Print Mode
- ⑫ Number of output pages in the FAX Function
- ⑬ Number of scanning pages in the Copier Function
- ⑭ Number of scanning pages in the FAX Function
- ⑮ Number of scanning pages in the Network Scanning Function
- ⑯ Number of transmitted pages in the FAX Function
- ⑰ Number of received pages in the FAX Function
- ⑱ PM count setting value
- ⑲ PM count present value
- ⑳ PM driving count setting value
- ㉑ PM driving count present value
- ㉒ History of error

*1 The latest 20 errors are displayed.

2) Total Counter Transmit / PM Counter Transmit by FAX

*1 In case of the PM Counter Transmit, the title is replaced to "PERIODICAL MAINTENANCE NOTIFICATION".

```

COUNTER NOTIFICATION (*1)
①— DATE           : 05/03/10 13:47
②— MACHINE MODEL  : TOSHIBA e-STUDIO280
③— SERIAL NUMBER  : 1234567890
④— TOTAL COUNTER : 00004787

CHARGE COUNTER FORMAT          PM COUNTER FORMAT
⑤— LARGE SIZE CHARGE COUNT      : 1 ⑦— LARGE SIZE PM COUNT          : 1
⑥— LARGE SIZE CHARGE PAPER DEFINITION : 1 ⑧— LARGE SIZE PM PAPER DEFINITION : 1

CHARGE COUNTER
PRINT COUNTER
          LARGE  SMALL
⑨— COPY      00000000 00000000
⑩— PRINT     00000000 00000000
⑪— LIST      00000000 00000000
⑫— FAX       00000000 00000000

          LARGE  SMALL
⑬— COPY SCAN 00000000 00000000
⑭— FAX SCAN  00000000 00000000
⑮— NET SCAN  00000000 00000000

FAX COUNTER
          LARGE  SMALL
⑯— TRANSMIT 00000000 00000000
⑰— RECEIVE  00000000 00000000

          LARGE  SMALL
⑲— SET PM   :00000000
⑲— CURRENT PM :00000000
⑳— SET PM TIME :00000000
㉑— CURRENT PM TIME :00000000

⑳— PRINTER ERROR HISTORY
          DATE  TIME  ERROR CODE          DATE  TIME  ERROR CODE
          05/03/09 16:44  F110          05/03/09 16:44  F110
          05/03/05 22:28  F110          05/03/05 22:28  F110
          05/03/05 22:23  F110          05/03/05 22:23  F110
          05/02/15 22:23  F110          05/02/15 22:23  F110
          05/01/25 11:12  F110          05/01/25 11:12  F110
    
```

Fig.8-23

- ① Date
 - ② Machine model name
 - ③ Serial number
 - ④ Total counter value
 - ⑤ Count setting of large-sized paper (Fee charging system counter)
 - ⑥ Definition setting of large-sized paper (Fee charging system counter)
 - ⑦ Count setting of large-sized paper (PM)
 - ⑧ Definition setting of large-sized paper (PM)
 - ⑨ Number of output pages in the Copier Function
 - ⑩ Number of output pages in the Printer Function
 - ⑪ Number of output pages at the List Print Mode
 - ⑫ Number of output pages in the FAX Function
 - ⑬ Number of scanning pages in the Copier Function
 - ⑭ Number of scanning pages in the FAX Function
 - ⑮ Number of scanning pages in the Network Scanning Function
 - ⑯ Number of transmitted pages in the FAX Function
 - ⑰ Number of received pages in the FAX Function
 - ⑱ PM count setting value
 - ⑲ PM count present value
 - ⑳ PM driving count setting value
 - ㉑ PM driving count present value
 - ㉒ History of error
- *2 The latest 20 errors are displayed.

3) Service Call Transmit
 Subject: Serviceman Call Notification

① Date: 07/11/2004 13:47
 Machine Name: e-STUDIO280 SerialNumber: 1234567890
 ④ Function: Print
 ⑤ Severity: Error
 ⑥ Error Code: XXXX
 ⑦ Message:
 XX
 ⑧ Printer Error History:

| Date | Time | ErrorCode |
|------------|-------|-----------|
| 05/18/2004 | 16:44 | F110 |
| 05/15/2004 | 22:28 | F110 |
| 05/15/2004 | 22:23 | F110 |
| 04/15/2004 | 22:23 | F110 |
| 03/25/2004 | 11:12 | F110 |

Fig.8-24

- ① Date (When an error occurs)
 - ② Machine model name
 - ③ Serial number
 - ④ Function: Fixed at "Print"
 - ⑤ Severity: Fixed at "Error"
 - ⑥ Error code
 - ⑦ Error message: The content of error is displayed.
 - ⑧ History of error
- *1 The latest 20 errors are displayed.

9. DATA CLONING with USB STORAGE DEVICE (e-STUDIO202L/232/282)

In this equipment, the user data, setting items and SRAM data can be backed up / restored by turning the power ON after connecting the USB storage device on which the data cloning programs have been written to the USB connector mounted on the SYS board.

The type of data to be backed up/restored can be selected on the LCD screen in this method.

This allows you to back up/restore only the necessary data individually or to back up/restore all data in a batch.

Programs needed for data cloning with this method are given in the following table.

| Storage location | Program file name |
|------------------|------------------------|
| Root directory | rootusb, clone_202_282 |

Important:

- It is assumed that data cloning is to be performed when equipment is installed or options are installed. If the address book has been registered, do not perform data cloning. Registered / set data are lost.
- The USB storage device for the data cloning must meet the following conditions. A data cloning operation with any devices other than the following will not be guaranteed.
 - A combination USB storage device with a flash memory (to be connected directly to the USB port) and its capacity is between 128 MB and 512 MB (or 1 GB).
 - A device compliant with the following specifications established by USB-IF (USB Implementers Forum)

| | | |
|-------------------|-----------|-----------------------------|
| Class number: | 8 (=08h) | (Mass storage class) |
| Sub-Class number: | 6 (=06h) | (SCSI transfer command set) |
| Protocol number: | 80 (=50h) | (Bulk-only) |
- * Most of the common USB storage devices are compliant with the above specifications and are therefore applicable to this data cloning. However, most of these devices were originally developed to be used in an environment for PCs (e.g. Windows or Macintosh) and thus operations exclusively with this equipment have not been fully guaranteed. Therefore, the user must thoroughly check in advance whether there will be any problem in operating with this equipment when adopting one of these devices.
- The USB storage devices compliant with both USB 1.1 and USB 2.0 can be used for this data cloning. However, the operating speed when using a device compliant with USB 2.0 is equivalent to the one with a device compliant with USB 1.1.
- Data cloning with any storage devices other than a flash memory (e.g. USB-connectable memory card reader, CD/DVD drive, hard disk) will never be guaranteed. Therefore never use them for this operation.
- Be sure to unplug the LAN cable and Fax line before data are backed up / restored. Also, do not use the RADF and open the cover, drawer, etc. during the data cloning.
- Data can be backed up / restored only for the same model and version. If the version is different, update the firmware and back up / restore data in the same version.
- Restore data to equipment which has the same options as when the data are backed up.
- If "Department management" or "User management information" is restored, the counter values are copied as well, so clear all of them. However, the total counter is not copied.
- Delete the backed up data in the USB storage device after the data cloning.

[A] Data cloning procedure (Backup)

Important:

- The file system for the USB storage device should be in the FAT format. Note that any device formatted in FAT32 or NTFS will not be operated. Its file system can be confirmed by opening the properties of the device from Windows Explorer.
 - Never turn the power of the equipment OFF during data cloning, or the data could be damaged and the operation not carried out properly.
- (1) Connect the USB storage device to the PC and delete all data in the USB storage device.
 - The file system for the USB storage device should be in the FAT format.
 - Windows95 and NT do not support USB. The data cannot be written into the device with the PC in which these OS are installed.
 - (2) Write the program file.
 - Write the data cloning program into the root directory.
 - (3) Shut down the equipment.
 - (4) Connect the USB storage device to the USB connector (host) on the SYS board.

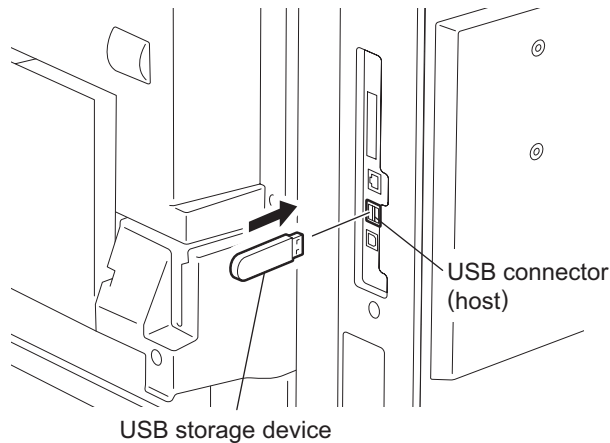


Fig. 9-1

Notes:

- Do not connect multiple USB storage devices together.
- The USB storage device can be connected to either of 2 USB connectors (host).
- In case the printer kit (GM-1070 or GM-1080U), printer/scanner kit (GM-2070 or GM-2080U) and scanner kit (GM-4070 or GM-4080U) are used, the data must be backed up after all the "dongles" are disconnected from the USB connector (host) and only the USB storage device is connected.

<User Data Backup>

- (5) Turn the power ON while pressing the [5] and [9] button simultaneously. The screen to select the backup/restore items is displayed.

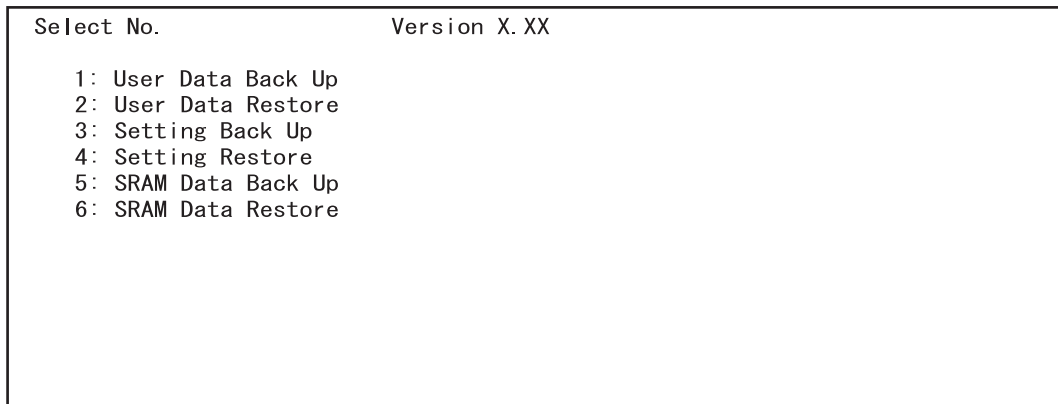


Fig. 9-2

- (6) Select the items to be performed with the digital keys.
- In case of backup, select one of the following items.
 - <Backing up User data>
Select "1: User Data Back Up".
 - <Backing up Setting item>
Select "3: Setting Back Up".
 - <Backing up SRAM data>
Select "5: SRAM Data Back Up".

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

- (7) Press the [1] button. The screen to select the user data backup item is displayed. In this screen, the items to be backed up are shown after the mark "*". (The items "4", "5" and "6" are selected in the screen by default.)



Fig. 9-3

- (8) Select the items to be backed up with the digital keys.
The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.
- To back up the data in a batch, select "4", "5" or "6". (Selecting "4" performs "1", "2" and "3" together.)
 - To back up the data individually, select the following items.
 - <Backing up Address book>
Select "1: Address Book" only.
 - <Backing up Mail box>
Select "2: Mail Box" only.
 - < Backing up Template>
Select "3: Template" only.
 - <Backing up 1: Address Book, 2: Mail Box and 3: Template in a batch>
Select "4: Combined" only.
 - <Backing up Department management>
Select "5: Department Code" only.
 - < Backing up User management information>
Select "6: User Info" only.

E.g.:

In case of backing up the department management and user management information

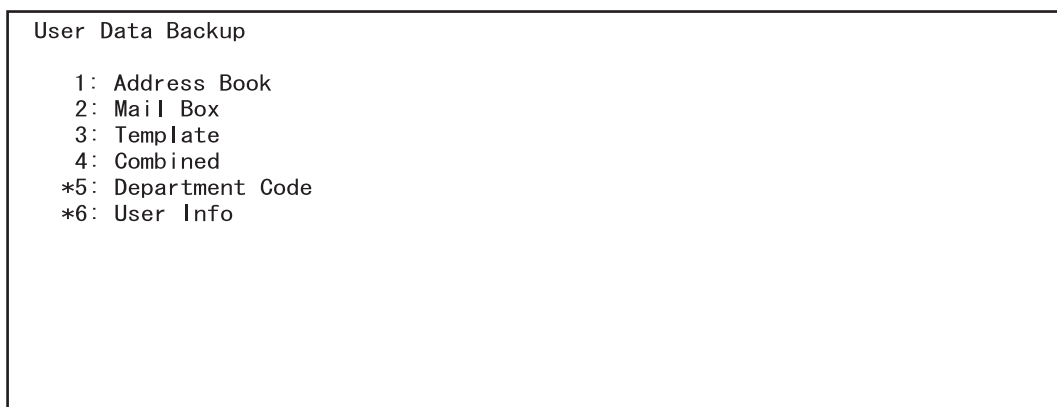


Fig. 9-4

(The following screens are given as an example of when all items are backed up.)

- (9) Press the [Start] button.
The backup starts and the backing up status is displayed on the LCD screen.

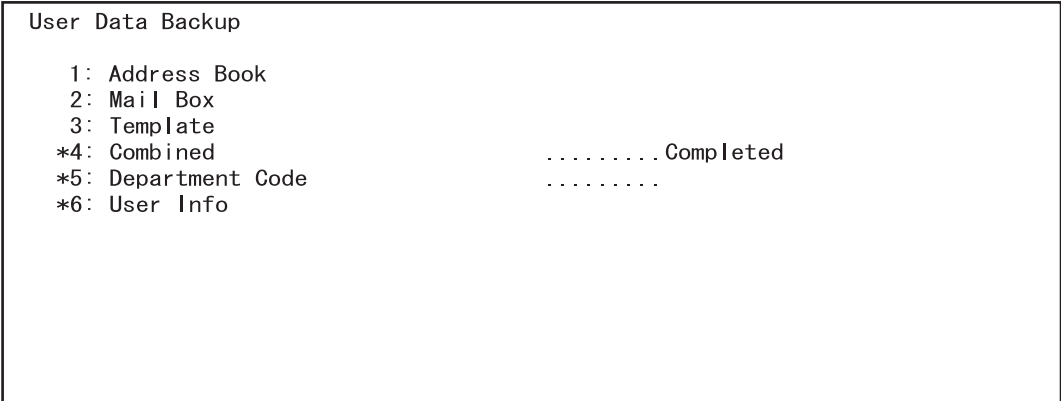


Fig. 9-5

- (10) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

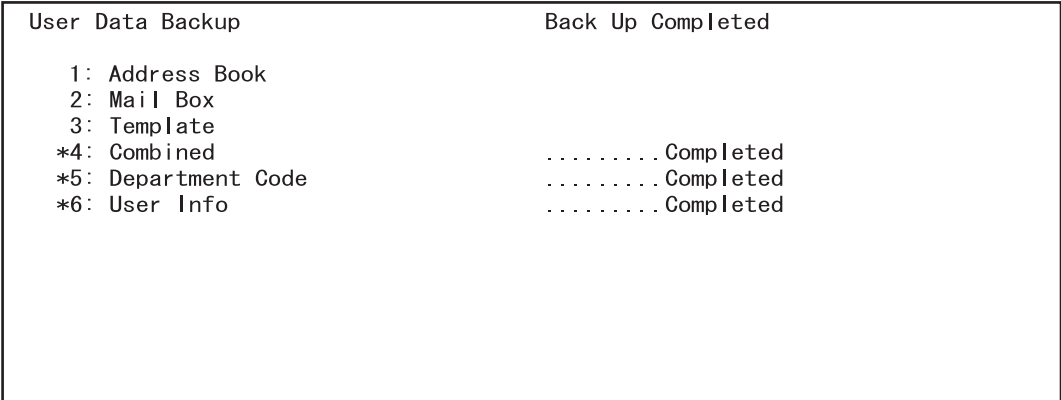


Fig. 9-6

- (11) Turn the power OFF and remove the USB storage device.

<Setting Backup>

- (12) Connect the USB storage device to the USB connector (host) on the SYS board.
- (13) Turn the power ON while pressing the [5] and [9] button simultaneously.
The screen to select the backup/restore items is displayed.

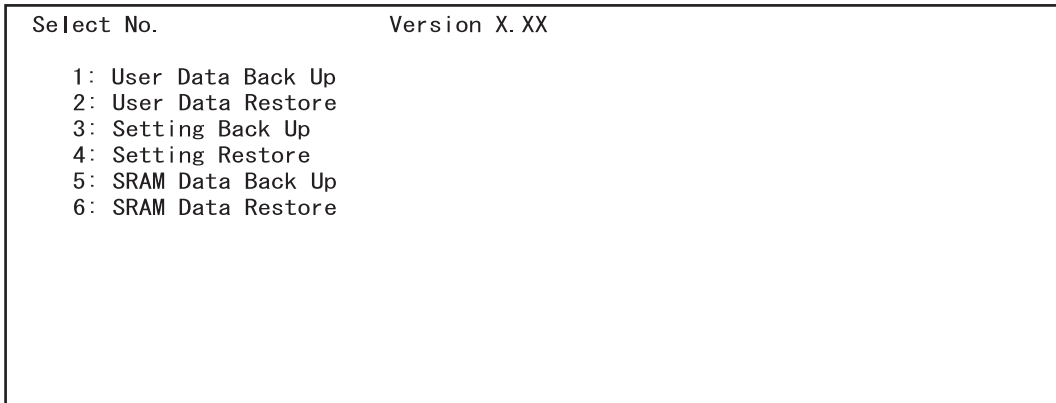


Fig. 9-7

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

- (14) Press the [3] button.
The screen to select the setting backup item is displayed. In this screen, the items to be backed up are shown after the mark "***". (No items are selected in the screen by default.)

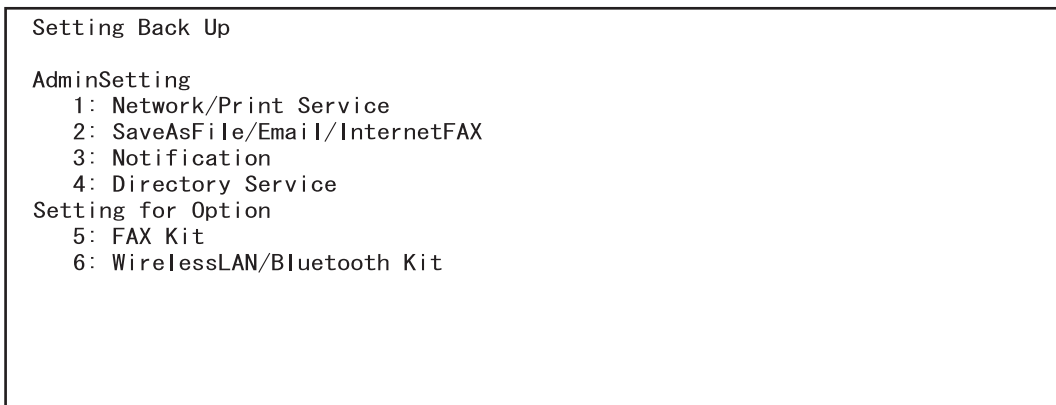


Fig. 9-8

- (15) Select the items to be backed up with the digital keys.
 The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.
- To back up the data individually, select the following items.
 - <Backing up TopAccess: Network/Print Service>
 Select "1: Network/Print Service" only.
 - <Backing up TopAccess: SaveAsFile/Email/InternetFAX>
 Select "2: SaveAsFile/Email/InternetFAX" only.
 - <Backing up TopAccess: Notification >
 Select "3: Notification" only.
 - <Backing up TopAccess: Directory Service>
 Select "4: Directory Service" only.
 - <Backing up Option: Fax setting>
 Select "5: FAX Kit" only.
 - <Backing up Option: WirelessLAN/Bluetooth setting>
 Select "6: WirelessLAN/Bluetooth Kit" only.

(The following screens are given as an example of when all TopAccess items are backed up.)

- (16) Press the [Start] button.
 The backup starts and the backing up status is displayed on the LCD screen.

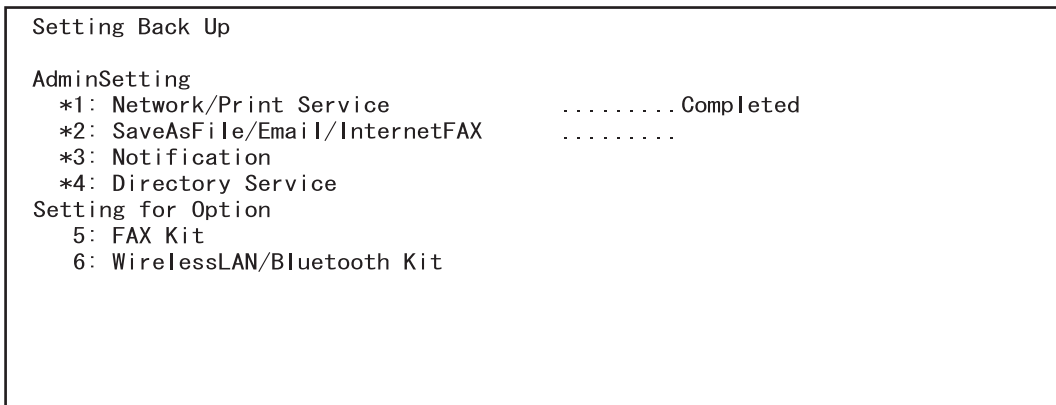


Fig. 9-9

- (17) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

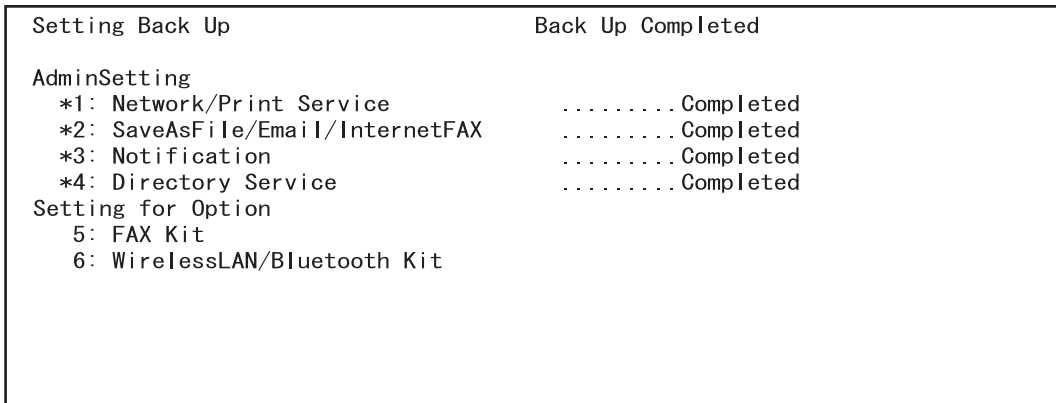


Fig. 9-10

- (18) Turn the power OFF and remove the USB storage device.

<SRAM Data Backup>

- (19) Connect the USB storage device to the USB connector (host) on the SYS board.
- (20) Turn the power ON while pressing the [5] and [9] button simultaneously. The screen to select the backup/restore items is displayed.

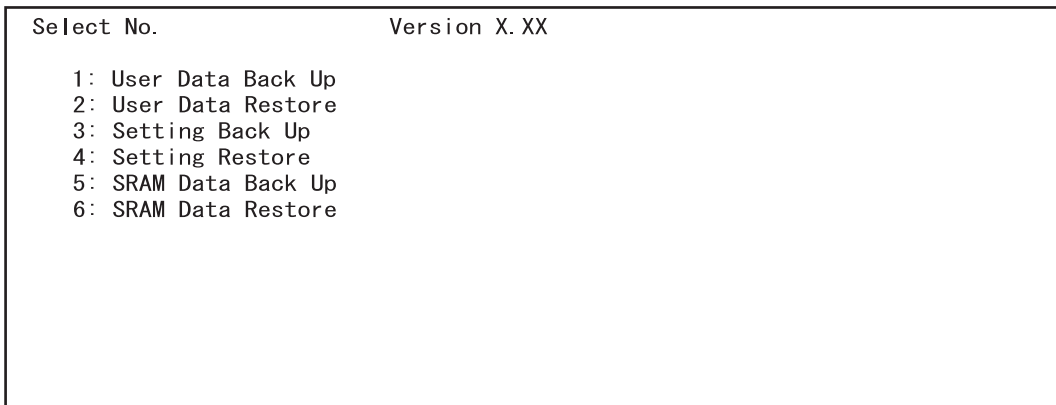


Fig. 9-11

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

- (21) Press the [5] button.
The screen to select the SRAM data backup item is displayed. In this screen, the item to be backed up is shown after the mark "*". (The item is not selected in the screen by default.)



Fig. 9-12

- (22) Select the item to be backed up with the digital keys.
The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.
- To back up the data individually, select the following item.
<Backing up SRAM Data>
Select "1. SRAM".

Note:

The backup/restore of the SRAM data can be performed only for the same model.
The ROM version must be the same when the data are backed up and restored.

(The following screens are given as an example of when SRAM data are backed up.)

- (23) Press the [Start] button.
The backup starts and the backing up status is displayed on the LCD screen.

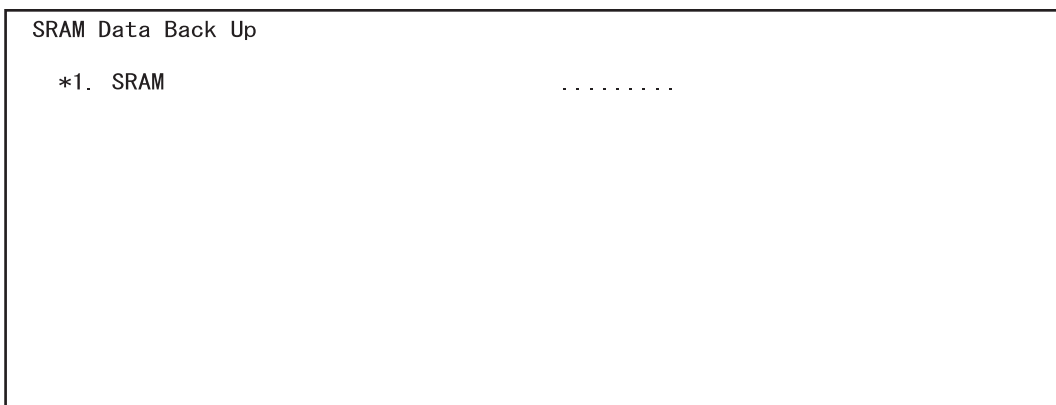


Fig. 9-13

(24) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

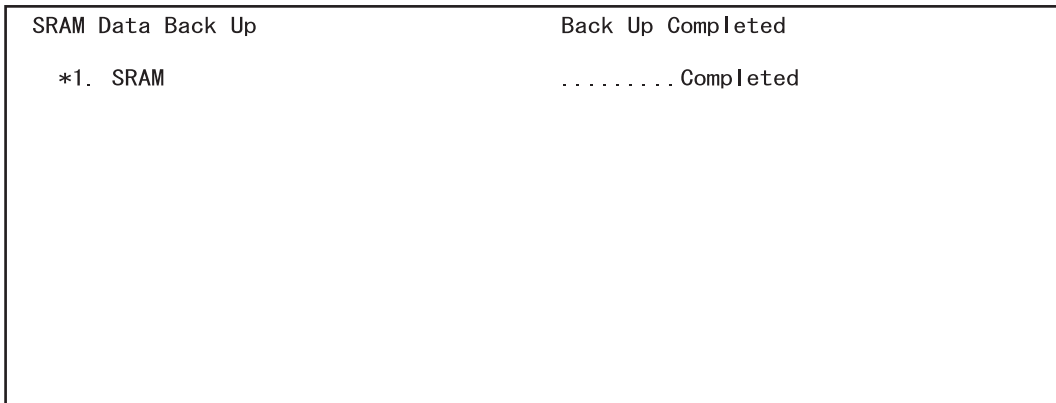


Fig. 9-14

(25) Turn the power OFF and remove the USB storage device.

[B] Data cloning procedure (Restore)

Important:

- The file system for the USB storage device should be in the FAT format. Note that any device formatted in FAT32 or NTFS will not be operated. Its file system can be confirmed by opening the properties of the device from Windows Explorer.
- Never turn the power of the equipment OFF during data cloning, or the data could be damaged and the operation not carried out properly.

- (1) Shut down the equipment.
- (2) Connect the USB storage device to the USB connector (host) on the SYS board.

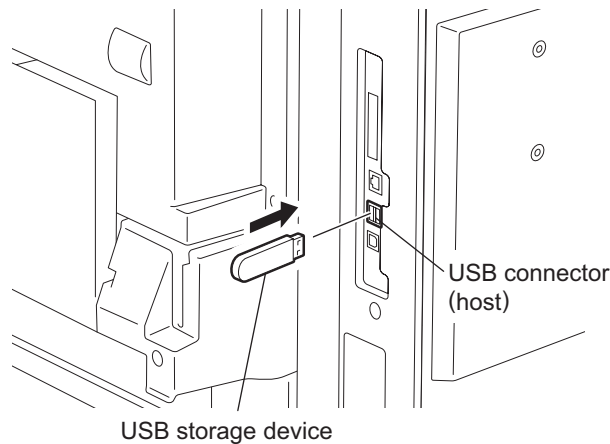


Fig. 9-15

Notes:

- Do not connect multiple USB storage devices together.
- The USB storage device can be connected to either of 2 USB connectors (host).
- In case the printer kit (GM-1070 or GM-1080U), printer/scanner kit (GM-2070 or GM-2080U) and scanner kit (GM-4070 or GM-4080U) are used, the data must be restored after all the "dongles" are disconnected from the USB connector (host) and only the USB storage device is connected.

<User Data Restore>

- (3) Turn the power ON while pressing the [5] and [9] button simultaneously.
The screen to select the backup/restore items is displayed.

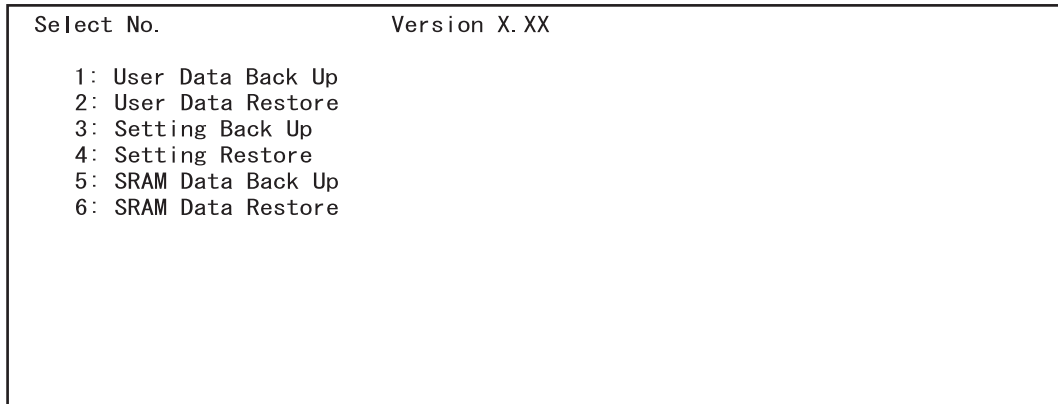


Fig. 9-16

- (4) Select the items to be performed with the digital keys.

- In case of restore, select the following items.

<Restoring User data>

Select "2: User Data Restore".

<Restoring Setting item>

Select "4: Setting Restore".

<Restoring SRAM data>

Select "6: SRAM Data Restore".

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

- (5) Press the [2] button.

The screen to select the user data restore item is displayed. In this screen, the items to be restored are shown after the mark "*". (The items "4", "5" and "6" are selected in the screen by default.)



Fig. 9-17

- (6) Select the items to be restored with the digital keys.
The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.
- To restore the data in a batch, select "4", "5" or "6". (Selecting "4" performs "1", "2" and "3" together.)
 - To restore the data individually, select the following items.
Be sure to select the same item as the one backed up individually.
- <Restoring Address book>
Select "1: Address Book" only.
- <Restoring Mail box>
Select "2: Mail Box" only.
- < Restoring Template>
Select "3: Template" only.
- <Restoring 1: Address Book, 2: Mail Box and 3: Template in a batch>
Select "4: Combined" only.
- <Restoring Department management>
Select "5: Department Code" only.
- <Restoring User management information>
Select "6: User Info" only.

E.g.:

In case of restoring the department management and user management information



Fig. 9-18

(The following screens are given as an example of when all items are restored.)

- (7) Press the [Start] button.
The restore starts and the restoring status is displayed on the LCD screen.

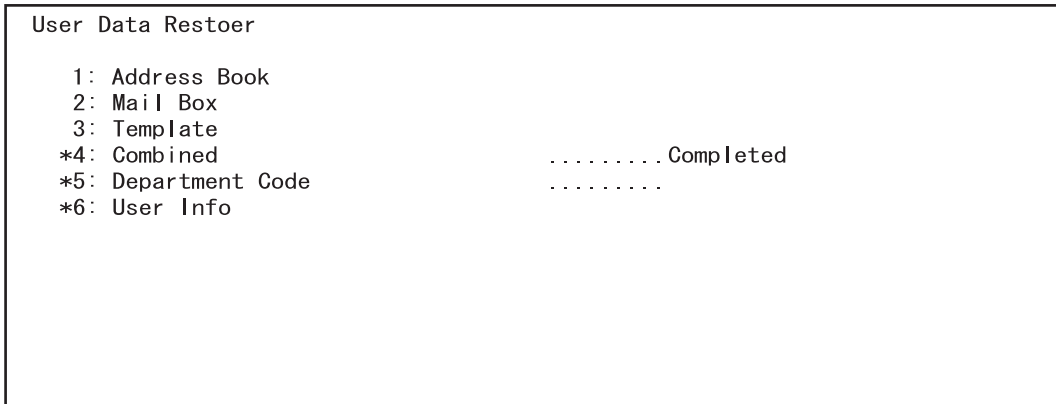


Fig. 9-19

- (8) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

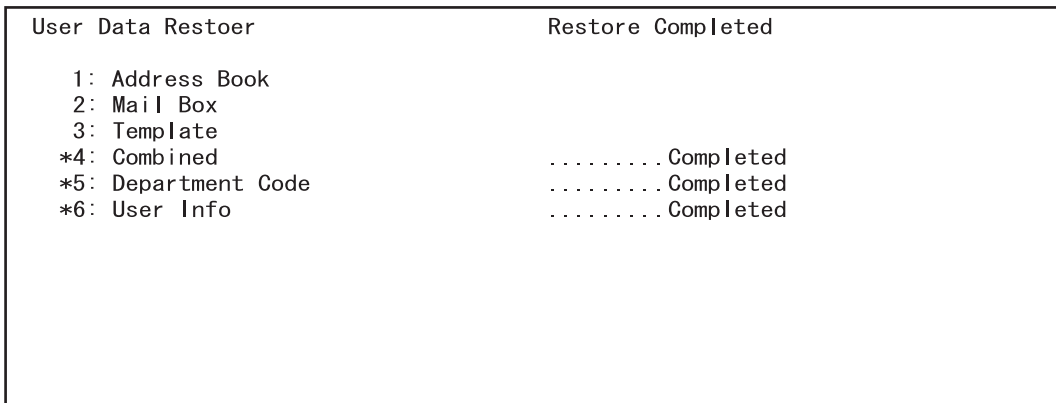


Fig. 9-20

- (9) Turn the power OFF and remove the USB storage device.
- (10) Clear the counter (in case of restoring "Department Code" and "User Info").
Since the counter values are also copied, clear all of them. However, the total counter is not copied.
<Procedure>
Press the buttons as follows: [USER FUNCTION] → [ADMIN] → Enter the password → [COUNTER] → [DEPARTMENT SETTING] → Enter the password → [RESET ALL COUNTERS]
* Enable the department management when the [RESET ALL COUNTERS] button is set to be disabled.

<Setting Restore>

- (11) Connect the USB storage device to the USB connector (host) on the SYS board.
- (12) Turn the power ON while pressing the [5] and [9] button simultaneously.
The screen to select the backup/restore items is displayed.

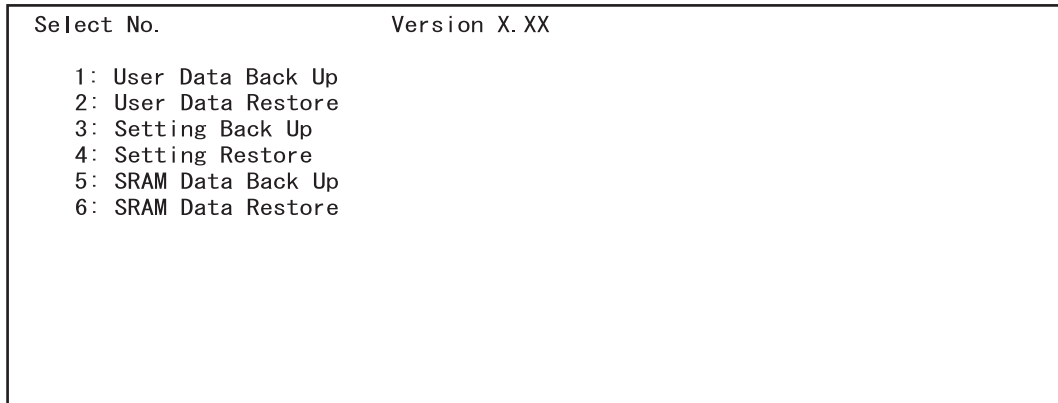


Fig. 9-21

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

- (13) Press the [4] button.
The screen to select the setting restore item is displayed. In this screen, the items to be restored are shown after the mark "***". (No items are selected in the screen by default.)

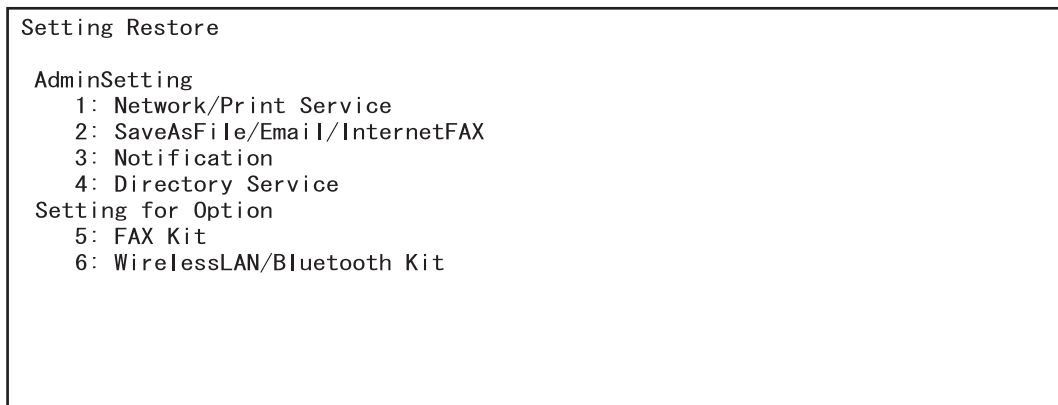


Fig. 9-22

- (14) Select the items to be restored with the digital keys.
 The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.
- To restore the data individually, select the following items.
 - <Restoring TopAccess: Network/Print Service>
 Select "1: Network/Print Service" only.
 - <Restoring TopAccess: SaveAsFile/Email/InternetFAX>
 Select "2: SaveAsFile/Email/InternetFAX" only.
 - <Restoring TopAccess: Notification >
 Select "3: Notification" only.
 - <Restoring TopAccess: Directory Service>
 Select "4: Directory Service" only.
 - <Restoring Option: Fax setting>
 Select "5: FAX Kit" only.
 - <Restoring Option: WirelessLAN/Bluetooth setting>
 Select "6: WirelessLAN/Bluetooth Kit" only.

Note:

Be sure to restore the same option items in the same condition as when the option items were backed up.

(The following screens are given as an example of when all TopAccess items are restored.)

- (15) Press the [Start] button.
 The restore starts and the restoring status is displayed on the LCD screen.

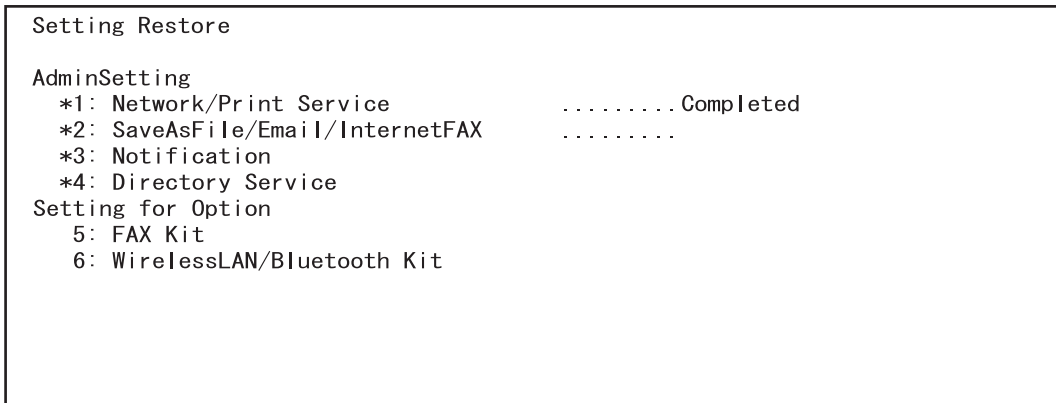


Fig. 9-23

- (16) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

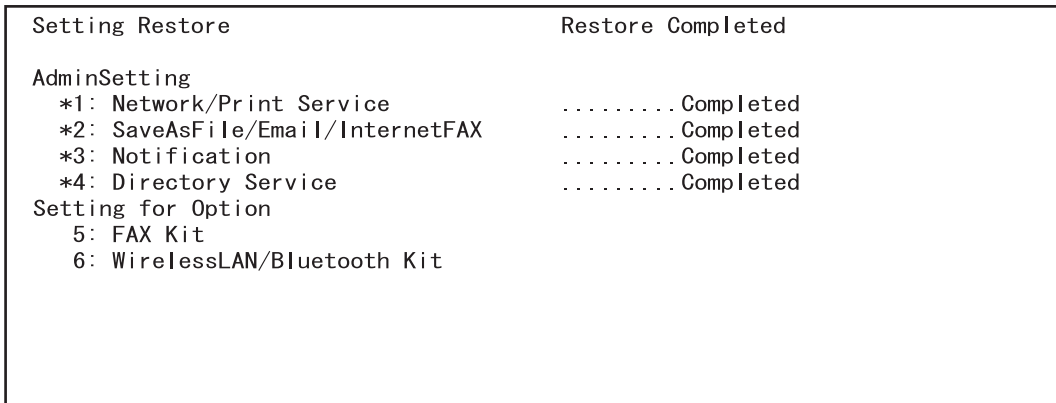


Fig. 9-24

- (17) Turn the power OFF and remove the USB storage device.

<SRAM Data Restore>

- (18) Connect the USB storage device to the USB connector (host) on the SYS board.
- (19) Turn the power ON while pressing the [5] and [9] button simultaneously.
The screen to select the backup/restore items is displayed.

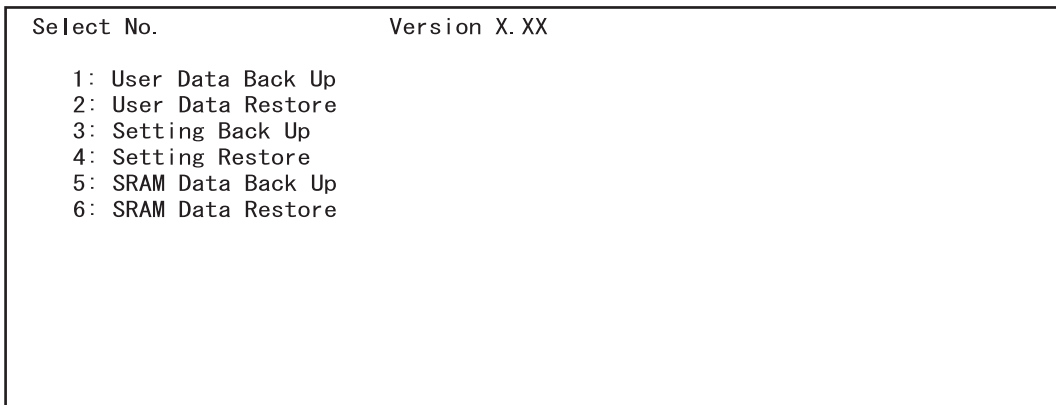


Fig. 9-25

Note:

After the item is selected with the digital keys, displaying the next menu may take a long time.

(20) Press the [6] button.

The screen to select the SRAM data restore item is displayed. In this screen, the item to be restored is shown after the mark "**". (The item is not selected in the screen by default.)



Fig. 9-26

(21) Select the item to be restored with the digital keys.

The mark "*" is shown on the selected item. The mark "*" can be deleted or added each time the corresponding digital key is pressed.

- To restore the data individually, select the following item.
<Restoring SRAM Data>
Select "1. SRAM".

Note:

The backup/restore of the SRAM data can be performed only for the same model.
The ROM version must be the same when the data are backed up and restored.

(The following screens are given as an example of when SRAM data are restored.)

(22) Press the [Start] button.

The restore starts and the restoring status is displayed on the LCD screen.



Fig. 9-27

(23) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

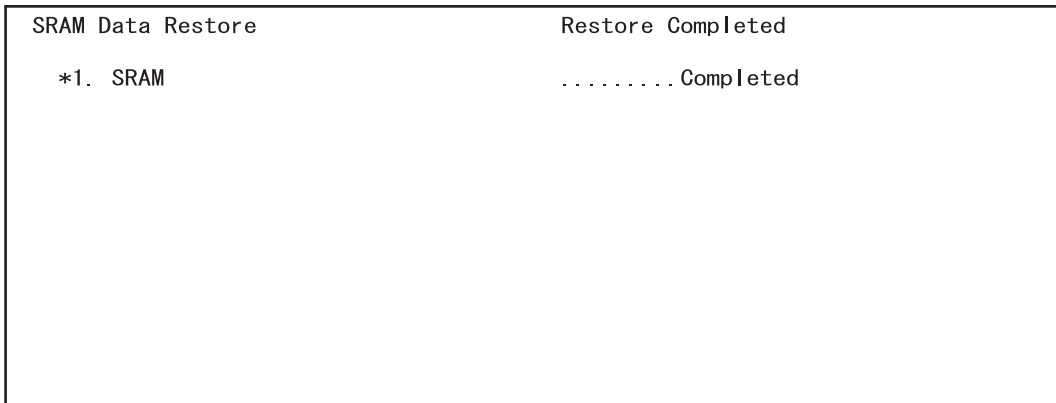


Fig. 9-28

(24) Turn the power OFF and remove the USB storage device.

[C] Confirmation of the error

"Back Up ERROR X" (X: Error number) is displayed at the top of the LCD screen when the data have not been properly backed up / restored. In this case, turn the power OFF and then check the following items. After confirming and solving the problem, back up / restore the data again from the beginning.

- Does the USB storage device meet the conditions being used for this cloning?
- Is the updated program file written on the USB storage device properly?
- Is the USB storage device installed properly?
- Is the USB storage device or the equipment damaged?

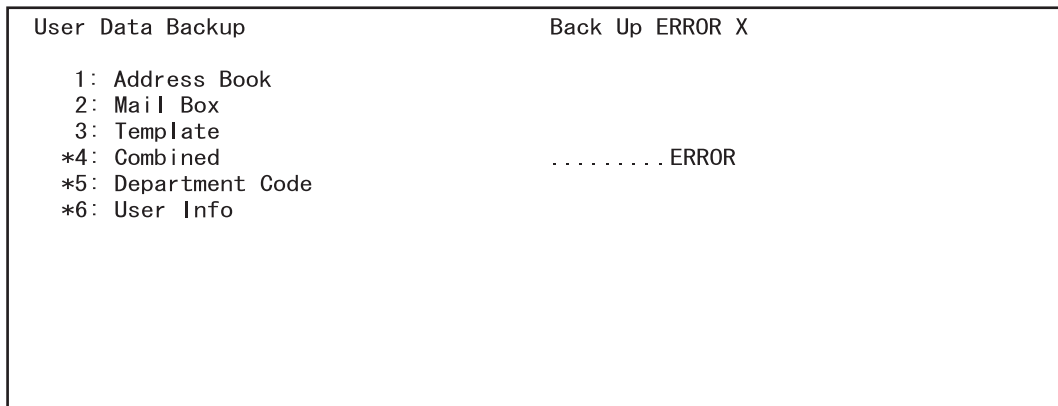


Fig. 9-29

| Error number | Error content |
|---------------------|---------------------------|
| ERROR 1 | Copy error |
| ERROR 2 | I/F error |
| ERROR 3 | USB memory full error |
| ERROR 4 | Working folder error |
| ERROR 5 | File not found error |
| ERROR 6 | Security error |
| ERROR 7 | Checksum error |
| ERROR 8 | Model check error |
| ERROR 9 | Version check error |
| ERROR 10 | Destination check error |
| ERROR 11 | Serial number check error |

[D] Backup file

Backed up data files are encrypted.

<User data file>

The folder "user_data" is created in the root directory and the following files are stored in it.

| Data item | File name |
|---|-----------------------|
| Address book | BACKUP_ADDR.sct |
| Mailbox | BACKUP_MBOX.sct |
| Template | BACKUP_TEMP.sct |
| Back up the Address book, Mailbox and Template in a batch | BACKUP_ALL.sct |
| Department management information | BACKUP_Department.sct |
| User management information | BACKUP_User.sct |

<Setting data file>

The folder "setting_data" is created in the root directory and the following files are stored in it.

| Data item | File name |
|--|----------------|
| Network / Print service | network.sct |
| SaveAsFile / Email / InternetFAX | scan.sct |
| Notification setting | notice.sct |
| Directory Service | ldap.sct |
| FAX setting | fax.sct |
| Wireless LAN setting / Bluetooth setting | wl.sct, bl.sct |

<SRAM data file>

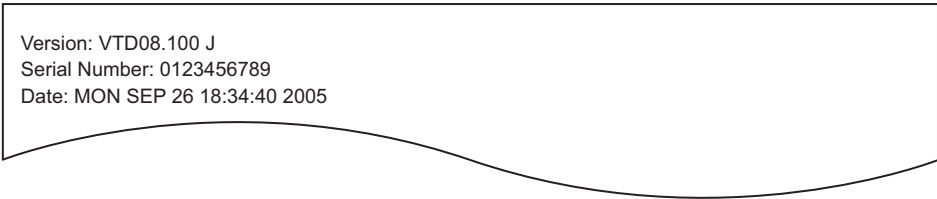
The folder "sram_data" is created in the root directory and the following file is stored in it.

| Data item | File name |
|-----------|-----------|
| SRAM | sram.sct |

* In addition to the backed up data, the following files are created in each folder.

| Back up item | File name |
|-------------------|------------------|
| User data | user_data.txt |
| Setting item data | setting_data.txt |
| SRAM data | sram_data.txt |

<Contents of file>



```
Version: VTD08.100 J
Serial Number: 0123456789
Date: MON SEP 26 18:34:40 2005
```

- File format (user_data.txt, setting_data.txt, sram_data.txt: all in common)
 - Line 1: Version
 - Line 2: Serial number
 - Line 3: Date

10. WIRE HARNESS CONNECTION DIAGRAMS

10.1 AC Wire Harness

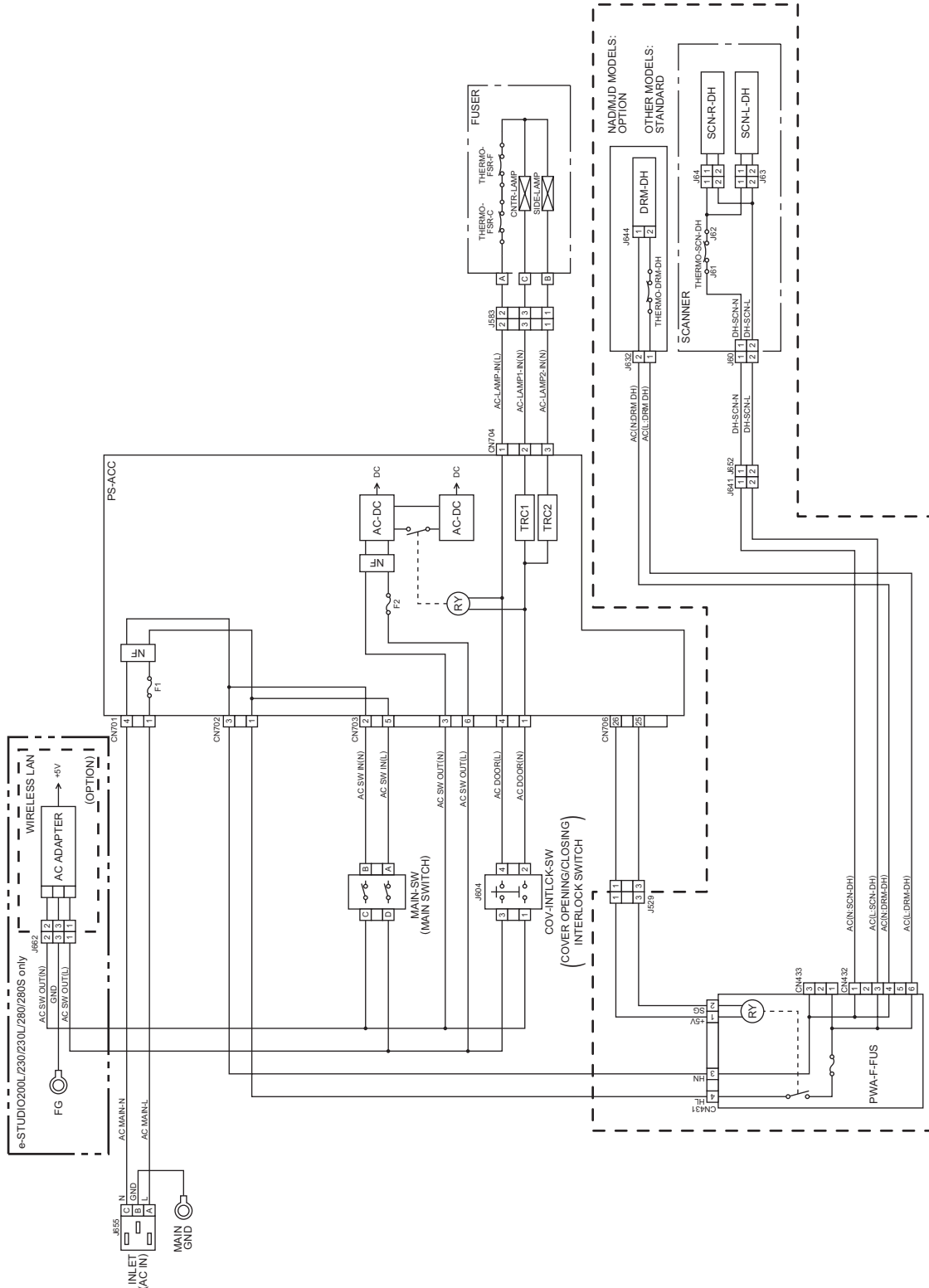


Fig.10-1

10.5 Connector Table (e-STUDIO202L/232/282)

| Pin No. | Symbol | Name | Active |
|---------|--------|------|--------|
| 1 | AV | AV | |
| 2 | AV | AV | |
| 3 | AV | AV | |
| 4 | AV | AV | |
| 5 | AV | AV | |
| 6 | AV | AV | |
| 7 | AV | AV | |
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| 199 | AV | AV | |
| 200 | AV | AV | |

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