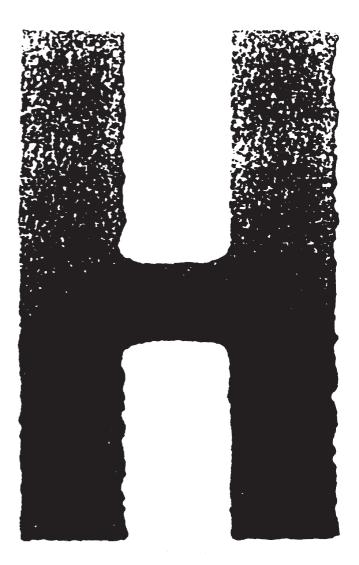
TOSHIBA

SERVICE HANDBOOK MULTIFUNCTIONAL DIGITAL SYSTEMS

e-STUDI0200L/202L/230/232/280/282



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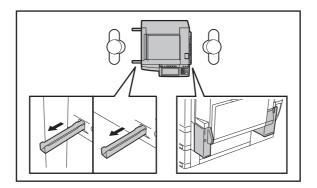
GENERAL PRECAUTIONS REGARDING THE SERVICE FOR e-STUDIO200L/202L/230/232/280/282 SERIES

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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SPECIFICATIONS / ACCESSORIES /

1.

- 9. DATA CLONING with USB STORAGE DEVICE (e-STUDIO202L/232/282)
- **10. WIRE HARNESS CONNECTION DIAGRAMS**

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 •Type	Indirect electrophotographic process (dry) Desktop type (console type: when paper feed pedestal (PFP) and large capacity feeder (LCF) are installed)
 Original table Accepted originals 	Fixed type (the left rear corner used as guide to place 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

Papar siza	Drawer	Bypas	PFP	LCF	
Paper size	Diawei	Size specified	Size not specified	FFF	LOF
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	Вура	PFP	LCF	
Paper Size	Diawei	Size specified	Size not specified	FFF	LOF
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	1

e-STUDIO280/280S/282/282S

Paper size	Drawer	Bypas	PFP	LCF	
raper size	Diawei	Size specified	Size not specified	F I'F	LOI
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.

1

- * When the RADF is used, the copy speed of {20}23[28] sheets per minute is only available under the following conditions: Single side original/A4/LT size. APS/automatic density are not selected.
 - Original/Mode:
 - {20}23[28] or more. • Number of sheets:
 - 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	Bypas	PFP	LCF	
raper size	Drawer	Size specified	Size not specified	FFF	LOF
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)

Bapar aiza	Drower	Bypass feed		PFP	LCF
Paper size	Drawer	Size specified	Size not specified	FTF	LOF
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)

Dener eize	Drawer	Вура	PFP	LCF		
Paper size	Diawei	Size specified	Size not specified	FFF	LOF	
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

		Sec.					
Copy mode		e-STUDIO200L/202	e-STUDIO230/230L/ 232/232S	e-STUDIO280/280S/ 282/282S			
Single-sided originals	1 set	34.18	31.5	27.6			
\downarrow	3 sets	95.53	84.8	72.2			
Single-sided copies	5 sets	154.28	136.2	114.0			
Single-sided originals	1 set	37.44	34.5	31.6			
\downarrow	3 sets	96.81	85.9	73.4			
Double-sided copies	5 sets	155.54	137.4	116.4			
Double-sided originals	1 set	70.26	64.8	58.9			
\downarrow	3 sets	188.48	167.7	143.8			
Double-sided copies	5 sets	306.64	270.6	228.5			
Double-sided originals	1 set	64.65	57.8	50.5			
\downarrow	3 sets	184.73	163.1	137.3			
Single-sided copies	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	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	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 rec- ommended 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 99	99 copies; Key in set numbers	
·	•Reproduction ratioActual ratio: 100±0.5% Zooming: 25 to 400% in increments of 1% (25 to 200% when using RADF)					
•Resolut	•Resolution/GradationScanning: 600 dpi x 600 dpi Printing: Equivalent to 2400 dpi x 600 dpi Gradation: 256 steps					
.lune 2004 @						

•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 feeding	Standard drawers: 1 or 2 drawers (stack height 60.5 mm, equivalent to 550 sheets; 64 to 80 g/m ² (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/m ² (17 to 22 lb. Bond))
	LCF: Option (Stack height 137.5 mm x 2: equivalent to 2500 sheets; 64 to 80 g/m ² (17 to 22 lb. Bond))
	Bypass feeding: Stack height 11 mm: equivalent to 100 sheets; 64 to 80 g/m ² (17 to 22 lb. Bond)
•Capacity of originals in the re	versing automatic document feeder (Option)
	100 sheets / 80 g/m ² (Stack height 16 mm or less)
•Automatic duplexing unit (AD	U is available as standard equipment for some destinations or versions.) Stackless, Switchback type
•Toner supply	Stackless, Switchback type Automatic toner density detection/supply Toner cartridge replacing method (There is a recovered toner supply
Toner supply Density control Weight	Stackless, Switchback type Automatic toner density detection/supply Toner cartridge replacing method (There is a recovered toner supply mechanism.) Automatic density mode and manual density mode selectable in 11
 Toner supply Density control Weight 	 Stackless, Switchback type Automatic toner density detection/supply Toner cartridge replacing method (There is a recovered toner supply mechanism.) Automatic density mode and manual density mode selectable in 11 steps Approximately 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.) AC 110 V / 13.2 A, 115 V or 127 V / 12 A 220-240 V or 240 V / 8 A (50/60 Hz)
 Toner supply Density control Weight Power requirements	Stackless, Switchback type Automatic toner density detection/supply Toner cartridge replacing method (There is a recovered toner supply mechanism.) Automatic density mode and manual density mode selectable in 11 steps Approximately 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.) AC 110 V / 13.2 A, 115 V or 127 V / 12 A 220-240 V or 240 V / 8 A (50/60 Hz) each voltage is ±10%. 1.5 kW or less (115 V series, 200 V series) oplied to the RADF, (ADU), Finisher, Job Separator, Offset Tray, PFP and

•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

When the tilt angle of the control panel is 45 degrees.

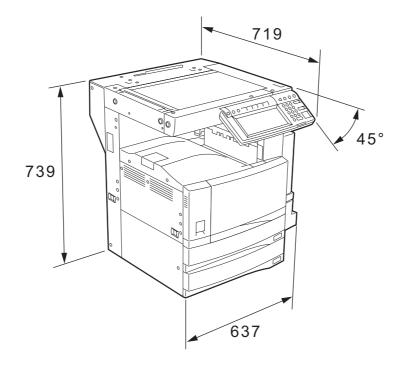


Fig. 1-1

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1.2 Accessories

1 set
3 pcs. (except for MJD)
1 pc.
1 pc.
1 pc. (for NAD)
1 set (for NAD and MJD)
1 pc. (for MJD)
1 pc.
1 pc. (except for NAD, MJD)
1 pc. (except for NAD, MJD)
1 pc.
1 pc.
5 pcs.
4 pcs. *2
1 pc.
1 pc.
1 рс.

Machine version

achine versio	[]
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).

e-STUDIO200L/202L/230/232/280/282 SPECIFICATIONS / ACCESSORIES / OPTIONS / SUPPLIES

• 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).
- 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.

e-STUDIO200L/202L/230/232/280/282 SPECIFICATIONS / ACCESSORIES / OPTIONS / SUPPLIES

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

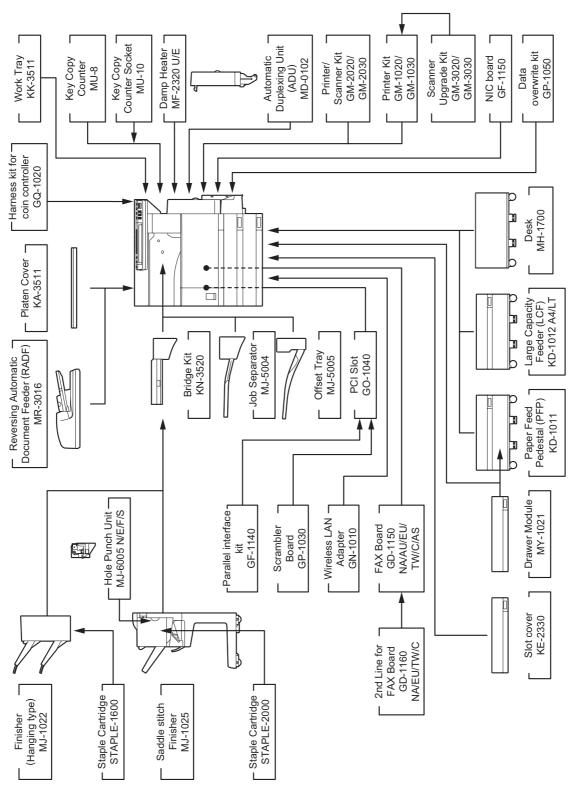


Fig. 1-2

e-STUDIO200L/202L/230/232/280/282 SPECIFICATIONS / ACCESSORIES / OPTIONS / SUPPLIES

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

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04/09

Area	Saudi Arabia	Iran	Ch	ina	Taiwan
Machine version (destination)	SAD (127V)	IRD (220-240V)	Ct (220-2		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	Eur	ope
Machine version (destination)	NAD (115V)	ASD (220-240V)	AUD (220-240V)		JD 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

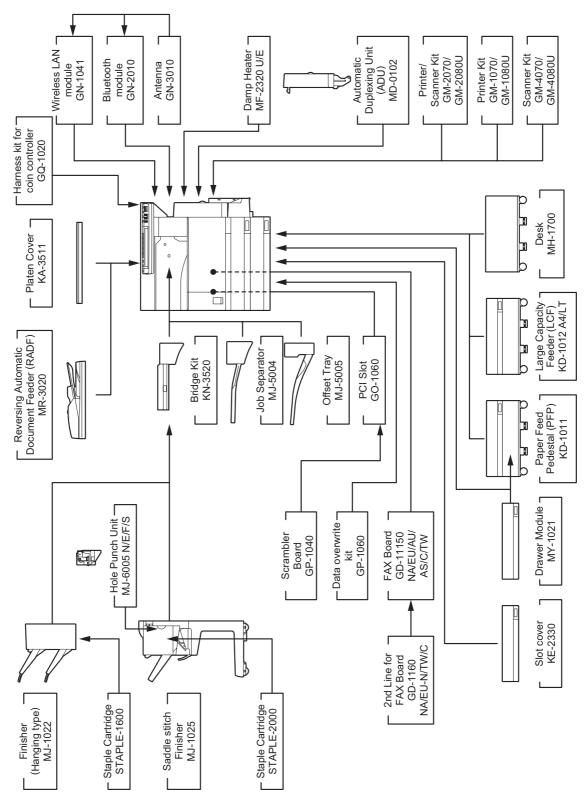
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Area	Asia	Saudi Arabia	China	Taiwan
Machine version (destination)	ASU (220-240V)	SAD (127V)	CND (220-240V)	TWD (110V)
Model name	e-STUDIO230	e-STUDIO230	e-STUDIO230	e-STUDIO230
Platen cover	KA-3511PC	KA-3511PC	Standard	KA-3511PC
RADF	MR-3016	MR-3016	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

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

e-STUDIO200L

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





e-STUDIO200L/202L/230/232/280/282 SPECIFICATIONS / ACCESSORIES / OPTIONS / SUPPLIES

e-STUDIO282/282S

Area	North America	Central and South Amer- ica/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	Ch	ina
Machine version (destination)	ASU (220-240V)	SAD (127V)		ND 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	TWD	KRD
(destination)	(110V)	(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 Amer- ica/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	Ch	ina
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	TWD	KRD
(destination)	(110V)	(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	NAD	ARD
(destination)	(115V)	(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 SER-VICE" 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 trans- port 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 regis- tration sensor): The paper does not reach the regis- tration sensor after it has passed the 1st transport sensor.	P. 5-5
E280		ADU transport jam (paper not reaching the registra- tion 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 reach- ing 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 reach- ing 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 reach- ing 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 reach- ing 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 reach- ing 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 reach- ing 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 reach- ing 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 sen- sor.	P. 5-7
E3C0		LCF transport jam (Paper not reaching the registra- tion sensor): The paper does not reach the registra- tion 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 print- ing.	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.	P. 5-8
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 origi- nal 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 scan- ning): The original which passed the read sensor does not reach the reverse sensor when it is trans- ported 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 sen- sor.	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 equip- ment 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 trail- ing 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 sen- sor: 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 sec- tion)	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]	P. 5-45
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 communica- tion 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 fin- isher.	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 sys- tem related ser-	PFP motor abnormality: The PFP motor is not rotating normally.	P. 5-48
C130	vice call	Upper drawer tray abnormality: The upper drawer tray motor is not rotating or the upper drawer tray is not mov- ing normally.	P. 5-49
C140		Lower drawer tray abnormality: The lower drawer tray motor is not rotating or the lower drawer tray is not mov- ing 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.	P. 5-54
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: Abnor- mality 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 tem- perature of the fuser roller has exceeded the range of control (in this case, the main switch turns OFF automati- cally) 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 communi- cation related ser-	RADF I/F error: Communication error has occurred between the RADF and the scanner.	P. 5-58
C570	vice call	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 ser- vice 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 nor- mally.	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 per- forming the code 05-356.	P. 5-59

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

Error code	Classification	Contents	Troubleshooting
C940	Circuit related ser- vice 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 can- not 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 rotat- ing 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 nor- mally. [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 process- ing motor is not rotating normally or the stack delivery belt is not moving normally. [MJ-1022] Paddle motor abnormality: The paddle motor is not rotat- ing 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	P. 5-73
		(rear) is not rotating normally or the rear alignment plate is not moving normally. [MJ-1025]	

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 adjust- ment 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 per- formed 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 Scan- ner-CPU	P. 5-58
F111		Scanner response abnormality	P. 5-58
F120	Other service call	Database abnormality: Database is not operating nor- mally.	P. 5-78
F130		Invaid 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 unrecog- nized	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 imple- mented	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

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 Maxi- mum)	Exceeding maximum number of docu- ments	P. 5-84	
2BF2	Maximum number of folders has been exceeded (list Maximum)	Exceeding maximum number of folders	P. 5-84	

3) Electronic Filing related error

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 for- mat	Image conversion abnormality	P. 5-85	
2C60	Failed to process your Job. Insuf- ficient 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 Authentica- tion Failed		POP before SMTP error	P. 5-87	
2C80 Failed to process received E-mail job		E-mail transmission failure when pro- cessing 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 for- mat	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 des- tination. 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. Insuf- ficient 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 avail- able	File sharing service not available	P. 5-89
2DA0	Expired scan documents deleted from share folder.	Periodical deletion of scanned docu- ments 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 doc- uments 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 doc- uments completed properly.	-
2DA5 Received Fax Documents in shared folder deleted upon user's request.		Manual deletion of received FAX docu- ments 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 adminis- trator.	nail. This mail has	
3A12	MIME Error has been detected in the received mail. This mail could not be transferred to the adminis- trator.		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 set- ting has been changed to Dis- able.	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 trans- ferred to the administrator.		P. 5-91
3C52	Offramp Destination Error has been detected in the received mail. This mail could not be trans- ferred 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	File I/O error	P. 5-92	
3F10	in this mail. The mail could not be received until File I/O is recov-		P. 5-92	
3F20	ered.		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 per- formed.	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 speci- fied 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 speci- fied with the user code.	P. 5-93
A292	Limit over error: The number of output pages has exceeded the one speci- fied 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	ABCDEFHIJLO
4 digits	12 digits (Year is indicated with its last two digits.)	3 digits	3 digits	11 digits

А	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
В	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
С	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
Н	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
К	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
0	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.

$[9][START] \longrightarrow (Code) \longrightarrow [START] \longrightarrow [Digital keys] \longrightarrow [START] \rightarrow [Digital keys] \longrightarrow [START] \rightarrow [Digital keys] \longrightarrow [START] \rightarrow [POWER] OFF/ON$ $101: Adjustment mode (05) (Key in the first code to be printed) (List starts to) (Exit) (Code to be printed) (List starts to) (Exit) (Digital keys) \longrightarrow [START] \rightarrow [POWER] OFF/ON$ $(Code) \longrightarrow (Code) \longrightarrow (Code) (Cod$
106: Error history
PM support mode (6S):
[6][START] [POWER] 1: Auto-toner adjustment 2: PM Support Screen [START]
Firmware update mode (89): Refer to "6. FIRMWARE UPDATING".
IPOWER] ON
[0][1] [0][3] [0][4] [0][5] [0][8] [9][START] [6][START] [8][9]
Warming up Control panel, Test mode Test print mode Adjustment Setting List print mode PM support Update mode Update mode
Ready
State transition diagram of self-diagnosis modes

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.

100% 2 Test Mode	
A	
B	
C G	
D	

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)

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

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

			Con	tents
Digital key	Button	Items to check	Highlighted display	Normal dis- play
-			e.g. 🔺	e.g. 🔺
	Α	-	-	-
	В	-	-	-
	С	-	-	-
[0]	D	Lower drawer detection switch	Drawer not installed	Drawer present
[0]	E	Lower drawer paper stock sensor	Paper almost empty	Paper present
	F	-	-	-
	G	-	-	-
	Н	-	-	-

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

Bypass	s paper-width	Paper-width size	
2	1	0	raper-width size
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

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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

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

				tents
Digital key	Button	Items to check	Highlighted display	Normal dis- play
			e.g.	e.g. 🔺
	Α	-	-	-
	В	-	-	-
	С	-	-	-
	D	-	-	-
	E	-	-	-
[5]	F	RADF connection	RADF con- nected	Not connected
	G	Platen sensor	Platen cover opened	Platen cover closed
	Н	Carriage home position sensor	Carriage at home position	Other than home position
	Α	-	-	-
	В	-	-	-
	С	-	-	-
	D	APS sensor (APS-R)	No original	Original present
[6]	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
	Н	APS sensor (APS-1)	No original	Original present
	A	RADF tray sensor	Original present	No original
	В	RADF empty sensor	Original present	No original
	С	RADF jam access cover switch	Cover opened	Cover closed
	D	RADF opening/closing sensor	RADF opened	RADF closed
[7]	E	RADF exit sensor	Original present	No original
	F	RADF reverse sensor	Original present	No original
	G	RADF read sensor	Original present	No original
	Н	RADF registration sensor	Original present	No original
	A	-	-	-
	В	-	-	-
	С	-	-	-
	D	-	-	-
[8]	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
	Н	RADF original width sensor-3	Original present	No original

2

			Cont	tents
Digital	Button	Items to check	Highlighted	Normal dis-
key	Бишоп	items to check	display	play
			e.g. 🔺	e.g. 🔺
	A	Bridge unit/Job Separator/Offset Tray connection detection- 3	Refer to table 2	
	В	Bridge unit/Job Separator/Offset Tray connection detection-2	Refer to table 2	
[9]	С	Bridge unit/Job Separator/Offset Tray connection detection- 1	Refer to table 2	
[-]	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	Н	-	-	-
	A	Dongle (for Printer/Scanner kit (GM-2020 or 2030))	Connectable	Not connect- able
	В	Dongle (for Printer kit (GM-1020 or 1030))	Connectable	Not connect- able
	С	Dongle (for Scanner upgrade kit (GM-3020 or 3030))	Connectable	Not connect- able
[0]	D	Dongles for other equipments/Other USB devices	Connectable	Not connect- able
	E	-	-	-
	F	-	-	-
	G	-	-	-
	Н	-	-	-

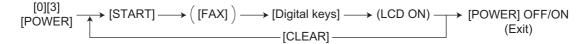
Table 2. Connecting status of additional options at inner area of the equipment

	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.

100% TEST MODE	_2_	
A		
B		
C G		
D		

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)

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

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

Digital key	Button	Items to check	Con	Contents	
			Highlighted display	Normal dis- play	
			e.g.	e.g. 🔺	
	Α	-	-	-	
	В	-	-	-	
	С	-	-	-	
[0]	D	Lower drawer detection switch	Drawer not installed	Drawer present	
	E	Lower drawer paper stock sensor	Paper almost empty	Paper present	
	F	-	-	-	
	G	-	-	-	
	Н	-	-	-	

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

Bypass	s paper-width	Paper-width size		
2	1	0	Faper-width Size	
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)

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

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e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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

			Cont	ents
Digital key	Button	Items to check	Highlighted display	Normal dis- play
			e.g. 🔺	e.g. 🔺
	A	Bridge unit/Job Separator/Offset Tray connection detection- 3	Refer to table 2	
	В	Bridge unit/Job Separator/Offset Tray connection detection-2	Refer to table 2	
[9]	С	Bridge unit/Job Separator/Offset Tray connection detection- 1	Refer to table 2	
[-]	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	Н	-	-	-
	A	Dongle (for Printer/Scanner kit (GM-2020 or 2030))	Connectable	Not connect- able
	В	Dongle (for Printer kit (GM-1020 or 1030))	Connectable	Not connect- able
101	С	Dongle (for Scanner upgrade kit (GM-3020 or 3030))	Connectable	Not connect- able
[0]	D	Dongles for other equipments/Other USB devices	Connectable	Not connect- able
	E	-	-	-
	F	-	-	-
	G	-	-	-
	Н	-	-	-

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

			Con	tents
Digital key	Button	Items to check	Highlighted display	Normal dis- play
			e.g.	e.g. 🔺
	A	Dongle (for Printer/Scanner kit (GM-2070 or 2080U)) Con- nected	Connectable	Not connect- able
	В	Dongle (for Printer kit (GM-1070 or 1080U)) Connected	Connectable	Not connect- able
101	С	Dongle (for Scanner kit (GM-4070 or 4080U)) Connected	Connectable	Not connect- able
[0]	D	Dongles for other equipments/Other USB devices Con- nected	Connectable	Not connect- able
	E	Judgement for acceptable USB storage device (*1)	Acceptable	Not acceptable
	F	-	-	-
	G	-	-	-
	Н	-	-	-

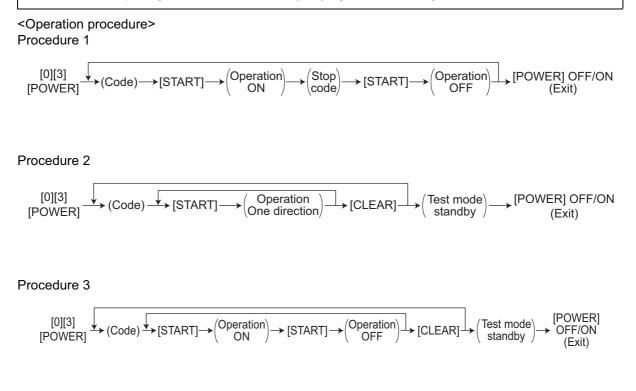
[FAX] button: OFF/ [COPY] button: ON ([FAX] LED: OFF/ [COPY] LED: ON)

*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.



Procedure 4

 $[0][3] \\ [POWER] \longrightarrow (Code) \longrightarrow [START] \longrightarrow [POWER] OFF$

101 102 103	Main motor ON (operational without developer unit)	151	Code No. 101 function OFF	
		101	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 m	ovement)		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	nt		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/OFI			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)	(n)		3
242	Upper drawer tray-up motor ON (tray u Lower drawer tray-up motor ON (tray u	.,		2
243 248	Developer bias [+DC] ON/OFF	ւի)		2
248	Developer bias [+DC] ON/OFF Developer bias [-DC] ON/OFF			3
249 252	Main charger ON/OFF			3
252	Separation bias ON/OFF			3
255	Transfer guide bias ON/OFF			3
255	Transfer transformer ON/OFF			3
250 261	Scan motor ON (Automatically stops a [ZOOM] button	t limit pos	ition; speed can be changed with the	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>

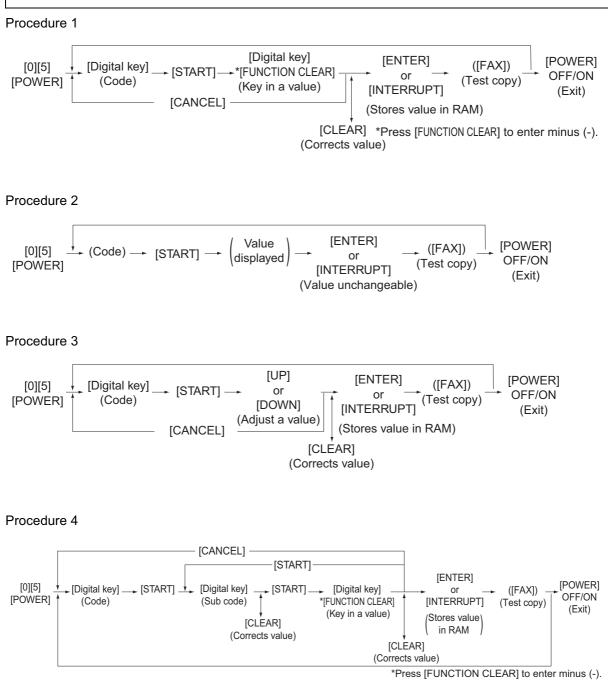
Notes:

- 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.

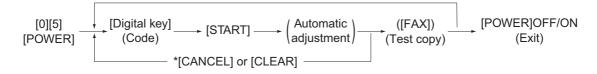
Code	Types of test pattern	Remarks
111	Primary scanning direction 33 gradation steps	Error diffusion
113	Secondary scanning direction 33 gradation steps	Error diffusion
142	Grid pattern	Pattern width: 2 dots, Pitch: 10 mm

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.

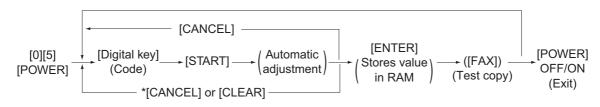


Procedure 6



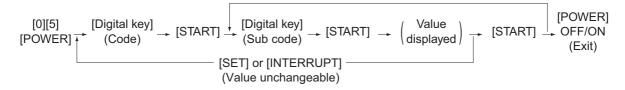
* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 7

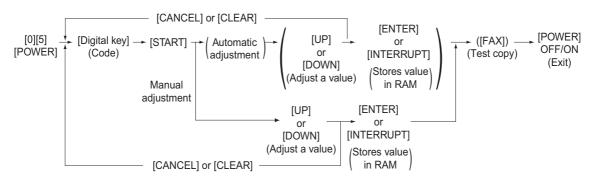


* When the automatic adjustment ends abnormally, error message is displayed.

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	e (05) <e< th=""><th>r</th><th>0L/230/</th><th>280></th><th></th></e<>	r	0L/230/	280>	
Code	Classi- fication	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
200	Devel- oper	Automatic adjustment of auto-toner sensor (Fuser heater ON)	ALL	-	-	As the value increases, the sensor output increases correspond- ingly. The value starts chang- ing approx. 2 minutes after this adjustment was started and is automati- cally 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	Devel- oper	Correction of auto-toner sensor (Fuser heater ON)	ALL	164 <0-255>	М	Corrects the control value of the auto-toner sensor setup in 05-200. * Selection is disable when developer unit is not installed.	3
205	Devel- oper	Developer bias DC output adjustment	ALL	135 <0-255>	М	As the value increases, the transformer output	3
210	Charger	Main charger grid bias out- put adjustment	ALL	90 <0-255>	М	increases correspond- ingly. Remove the devel-	3
220	Transfer	Transfer transformer DC output adjustment (H)	ALL	165 <0-255>	М	oper unit and install the adjustment jig to make adjustment.	3
221	Transfer	Transfer transformer DC output adjustment (C)	ALL	179 <0-255>	М	(Chap. 3.6)	3
222	Transfer	Transfer transformer DC output adjustment (L)	ALL	126 <0-255>	М		3
233	Separa- tion	Separation transformer DC output adjustment (H)	ALL	64 <0-255>	М		3
234	Separa- tion	Separation transformer DC output adjustment (C)	ALL	65 <0-255>	М		3
235	Separa- tion	Separation transformer DC output adjustment (L)	ALL	46 <0-255>	М		3
280	Process	Forced performing of idling for toner recycle	ALL	-	М	Perform this adjustment before the replacement of the developer mate- rial. (The toner is forcibly removed from the cleaner.)	6
286	Laser	Laser power adjustment	ALL	63 <0-255>	М	When the value increases, the laser out- put increases corre- spondingly.	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

		Aajus	tment mode	e (UD) <e< th=""><th></th><th>UL/230/</th><th>2002</th><th>1</th></e<>		UL/230/	2002	1
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
306	Scanner	Image location of primary scan tion (scanner sectio	ning direc-	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 adjust- ment of secondary scan- ning 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 orig- inal	ALL	10 <0-20>	SYS	When the value increases by "1", the aligning amount	1
355			for double sided orig- inal	ALL	10 <0-20>	SYS	increases by approx. 0.5 mm.	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 adjust- ment during scanning from RADF		ALL	128 <0-255>	SYS	When the value increases by "1", the car- riage position when using the RADF shifts by approx. 0.1 mm toward the original feeding side.	1
365	RADF	RADF lead- ing edge posi- tion	for single - sided orig- inal	ALL	50 <0-100>	SYS	When the value increases by "1", the copied image of original	1
366		adjustment	for double sided orig- inal	ALL	50 <0-100>	SYS	fed from the RADF shifts toward the trailing edge of paper by approx. 0.1 mm.	1

		Adjustment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>	
Code	Classi- fication	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 per- formed.	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. Per- form this adjustment when the RADF board or volume is replaced, or when the code (05-356) is performed.	6
401	Laser	Fine adjustment of polygo- nal motor rotation speed (adjustment of primary	PRT	136 <0-255>	М	When the value increases by "1", the reproduction ratio of pri-	1
405	-	scanning direction repro- duction ratio)	PPC	134 <0-255>	М	mary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/ step)	1
410	Laser	Adjustment of primary scanning laser writing start	PPC	128 <0-255>	М	When the value increases by "1", the writ-	1
411	-	position.	PRT	153 <0-255>	М	ing start position shifts to the front side by approx. 0.0423 mm.	1
421	Drive	Adjustment of secondary scanning direction repro- duction ratio	PPC/ PRT	129 <0-255>	М	When the value increases by "1", the reproduction ratio of sec-	1
422	-	(fine adjustment of main motor speed)	FAX	139 <0-255>	М	ondary scanning direc- tion increases by approx. 0.04%.	1
424	Drive	Fine adjustment of exit motor speed	PPC/ PRT	160 <0-255>	М	When the value increases by "1", the	1
425			FAX	121 <0-255>	М	rotation becomes faster by approx. 0.05%.	1

		Adjust	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th>i</th></e<>	-STUDIO20	0L/230/	280>	i
Code	Classi- fication	Items	5	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
430	Image	Top margin adju (blank area at th edge of the pape	e leading	PPC	0 <0-255>	М	When the value increases by "1", the blank area becomes	1
431	Image	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)		PPC	0 <0-255>	М	wider by approx. 0.0423 mm.	1
432	Image	Right margin ad (blank area at th the paper along feeding directior	he right of the paper	PPC	0 <0-255>	М		1
433	Image	Bottom margin a (blank area at th edge of the pape	ne trailing	PPC	0 <0-255>	М		1
434-0	Image	Bottom margin a (blank area at th edge of the pape Reverse side at	ne trailing er)/	PPC/ PRT	29 <0-255>	М		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>	М		4
435	Image	Top margin adjustment (blank area at the leading edge of the paper)		PRT	24 <0-255>	М		1
436	Image	Left margin adju (blank area at th paper along the feeding directior	e left of the paper	PRT	0 <0-255>	М		1
437	Image	Right margin ad (blank area at th the paper along feeding direction	justment ne right of the paper	PRT	0 <0-255>	М		1
438	Image	Bottom margin a (blank area at th edge of the pape	ne trailing	PRT	0 <0-255>	М	-	1
440	Laser	Adjustment of secondary scanning	Upper drawer	ALL	8 <refer to<br="">content></refer>	М	When the value increases by "1", the image shifts toward the	1
441	-	laser writing start position	Lower drawer	ALL	21 <0-40>	М	leading edge of the paper by approx.	1
442	1		Bypass feeding	ALL	8 <0-15>	М	0.2 mm. <acceptable value=""></acceptable>	1
443	1		LCF	ALL	8 <0-15>	М	e-STUDIO230, e-STUDIO280: 0-15	1
444	-		PFP	ALL	8 <0-15>	М	e-STUDIO200L, e-STUDIO230L/S, e-STUDIO280S: 0-40	1
445	-		Duplex feeding	ALL	8 <0-15>	М		1

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>	
Code	Classi- fication	ltem		Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
448-0	Paper	Paperaligning	Long size	ALL	10	М	When the value	4
	feeding	amount	J		<0-63>		increases by "1", the	
448-1		adjustment at the registra-	Middle size	ALL	10 <0-63>	М	aligning amount increases by approx.	4
448-2		tion section (PFP upper drawer/Plain paper)	Short size	ALL	8 <0-63>	М	0.8 mm. <paper length=""> Long size: 330 mm or longer</paper>	4
449-0	Paper feeding	Paperaligning amount	Long size	ALL	10 <0-63>	М	Middle size: 220 mm to 329 mm	4
449-1		adjustment at the registra-	Middle size	ALL	10 <0-63>	М	Short size: 219 mm or shorter	4
449-2	-	tion section (PFP lower drawer/Plain paper)	Short size	ALL	8 <0-63>	М	-	4
450-0	Paper feeding	Paperaligning amount	Long size	ALL	17 <0-63>	М		4
450-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
450-2	-	tion section (Upper drawer/Plain paper)	Short size	ALL	17 <0-63>	М	-	4
452-0	Paper feeding	Paperaligning amount	Long size	ALL	12 <0-63>	М		4
452-1		adjustment at the registra-	Middle size	ALL	10 <0-63>	М		4
452-2		tion section (Lower drawer/Plain paper)	Short size	ALL	10 <0-63>	М		4
455-0	Paper feeding	Paperaligning amount	Long size	ALL	20 <0-63>	М		4
455-1		adjustment at the registra-	Middle size	ALL	20 <0-63>	М		4
455-2		tion section (Duplex feed- ing/Plain paper)	Short size	ALL	30 <0-63>	М		4
457	Paper feeding	Paper aligning adjustment at the tion section (LCF/Plain pap	he registra-	ALL	8 <0-63>	М		1

		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
458-0	Paper feeding	Paperaligning amount	Long size	ALL	26 <0-63>	М	When the value increases by "1", the	4
458-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М	aligning amount increases by approx.	4
458-2		tion section (Bypass feed- ing/Plain paper)	Short size	ALL	25 <0-63>	М	0.8 mm. <paper length=""> Long size: 330 mm or longer</paper>	4
460-0	Paper feeding	Paperaligning amount	Long size	ALL	26 <0-63>	М	Middle size: 220 mm to 329 mm	4
460-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М	Short size: 219 mm or shorter	4
460-2	-	tion section (Bypass feed- ing/Thick paper 1)	Short size	ALL	26 <0-63>	М	 Postcard is sup- ported only for JPN model. 	4
461-0	Paper feeding	Paper aligning amount	Long size	ALL	17 <0-63>	М		4
461-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
461-2	-	tion section (Bypass feed- ing/Thick paper 2)	Short size	ALL	17 <0-63>	М		4
462-0	Paper feeding	Paperaligning amount	Long size	ALL	17 <0-63>	М		4
462-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
462-2		tion section (Bypass feed-	Short size	ALL	17 <0-63>	М		4
462-3		ing/Thick paper 3)	Postcard	ALL	14 <0-63>	М		4
463-0	Paper feeding	Paper aligning amount	Long size	ALL	26 <0-63>	М		4
463-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М		4
463-2		tion section (Bypass feed- ing/OHP film)	Short size	ALL	26 <0-63>	М		4
464-0	Paper feeding	Paper aligning amount	Long size	ALL	26 <0-63>	М		4
464-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М		4
464-2		tion postion	Short size	ALL	26 <0-63>	М		4

		Adjus	tment mode	e (05) <e< th=""><th></th><th>0L/230/</th><th>280></th><th>1</th></e<>		0L/230/	280>	1
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
466-0	Paper feeding	Adjustment of paper push-	Plain paper	ALL	0 <0-255>	М	When the value increases by "1", the	4
466-1	-	ing amount/ Bypass feed-	Postcard	ALL	0 <0-255>	М	driving speed of bypass feed roller increases by	4
466-3		ing	Envelope	ALL	0 <0-255>	М	approx. 0.2 ms when the paper transport is started	4
466-4			Thick paper 1	ALL	0 <0-255>	М	from the registration sec- tion. * Postcard is sup-	4
466-5			Thick paper 2	ALL	0 <0-255>	М	ported only for JPN model.	4
466-6	-		Thick paper 3	ALL	0 <0-255>	М	model.	4
466-7	-		OHP film	ALL	0 <0-255>	М		4
468-0	Finisher	Fine adjust- ment of bind-	A4-R/LT-R	ALL	0 <-14-14>	М	When the value increases by "1", the	4
468-1	-	ing position/ folding posi-	B4	ALL	0 <-14-14>	М	binding/folding position shifts toward the right	4
468-2	-	tion	A3/LD	ALL	0 <-14-14>	М	page by 0.25 mm.	4
469-0	Paper feeding	Paperaligning amount adjustment at	Thick paper 1 Long size	ALL	20 <0-63>	М	When the value increases by "1", the aligning amount	4
469-1	-	the registra- tion section (Upper drawer)	Thick paper 1 Middle size	ALL	20 <0-63>	М	increases by approx. 0.8 mm. <paper length=""> Long size:</paper>	4
469-2	-		Thick paper 1 Short size	ALL	20 <0-63>	М	330 mm or longer Middle size: 220 mm to 329 mm	4
469-3	-		Thick paper 2 Long size	ALL	20 <0-63>	М	Short size: 219 mm or shorter	4
469-4	-		Thick paper 2 Middle size	ALL	22 <0-63>	М		4
469-5			Thick paper 2 Short size	ALL	19 <0-63>	М	-	4
470-0	Paper feeding	Paper aligning amount	Long size	ALL	20 <0-63>	М		4
470-1		adjustment at the registra-	Middle size	ALL	22 <0-63>	М	-	4
470-2		tion section (Lower drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М		4
471-0	Paper feeding	Paper aligning amount	Long size	ALL	20 <0-63>	М		4
471-1		adjustment at the registra-	Middle size	ALL	22 <0-63>	М		4
471-2		tion section (PFP upper drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М		4

		Aujus	tment mode	- (UJ) ~C			200-	1
Code	Classi-	ltem	s	Func-	Default <accept-< th=""><th>RAM</th><th>Contents</th><th>Proce</th></accept-<>	RAM	Contents	Proce
	fication		•	tion	able			dure
472-0	Paper	Paperaligning	Long size	ALL	value> 20	М	When the value	4
	feeding	amount	-		<0-63>		increases by "1", the	
472-1		adjustment at the registra-	Middle size	ALL	22 <0-63>	М	aligning amount increases by approx.	4
472-2		tion section (PFP lower drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М	0.8 mm. <paper length=""> Long size: 330 mm or longer</paper>	4
473	Paper feeding	Paper aligning adjustment at th tion section (LCF/Thick pap	ne registra-	ALL	8 <0-63>	М	Middle size: 220 mm to 329 mm Short size: 219 mm or shorter	1
474-0	Paper feeding	Paperaligning amount	Long size	ALL	24 <0-63>	М		4
474-1	-	adjustment at the registra-	Middle size	ALL	24 <0-63>	М		4
474-2		tion section (Duplex feed- ing/Thick paper 1)	Short size	ALL	33 <0-63>	М		4
497-0	Laser	Adjustment of drawer side-	Upper drawer	ALL	128 <0-255>	М	When the value increases by "1", the	4
497-1	-	ways devia- tion	Lower drawer	ALL	128 <0-255>	М	image shifts toward the front side by 0.0423 mm.	4
497-2	-		PFP upper drawer	ALL	128 <0-255>	М		4
497-3	-		PFP lower drawer	ALL	128 <0-255>	М		4
497-4	-		LCF	ALL	128 <0-255>	М		4
497-5	_		Bypass feeding	ALL	128 <0-255>	М		4
498-0	Laser	Adjustment of primary scan-	Long size	ALL	148 <0-255>	М	When the value increases by "1", the	4
498-1		ning laser writing start position at duplex feed- ing	Short size (A4/LT or smaller)	ALL	148 <0-255>	М	image shifts toward the front side by 0.0423 mm.	4
501	Image	Density adjustment	Photo	PPC	128 <0-255>	SYS	When the value increases, the image at	1
503		Fine adjust- ment of "man-	Text/Photo	PPC	128 <0-255>	SYS	the center step becomes darker.	1
504		ual density"/ Center value	Text	PPC	128 <0-255>	SYS		1
505	Image	Density adjustment	Text/Photo	PPC	20 <0-255>	SYS	When the value increases, the image of	1
506	-	Fine adjust- ment of "man-	Photo	PPC	20 <0-255>	SYS	the "light" steps becomes lighter.	1
507	-	ual density"/ Light step value	Text	PPC	20 <0-255>	SYS		1

	1	Adjus	tment mode	e (05) <e< th=""><th></th><th>0L/230/</th><th>280></th><th></th></e<>		0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
508	Image	Density adjustment Fine adjust- ment of "man-	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		ual density"/ Dark step value	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	Photo	PPC	128 <0-255>	SYS	When the value increases, the image	1
514		Fine adjust- ment of "auto- matic density"	Text/Photo	PPC	128 <0-255>	SYS	becomes darker.	1
515			Text	PPC	128 <0-255>	SYS		1
532	Image	Range correc- tion/Back-	Text/Photo	PPC	40 <0-255>	SYS	When the value increases, the back-	1
533		ground peak adjustment	Photo	PPC	16 <0-255>	SYS	ground becomes more brightened.	1
534			Text	PPC	64 <0-255>	SYS	-	1
570	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
571			Photo	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background	1
572			Text	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	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

		Adjus	tment mode	e (05) <e< th=""><th>I</th><th>0L/230/</th><th>280></th><th></th></e<>	I	0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
593	Image	Gamma data slope adjust-	Text/Photo	PPC	0 <0-99>	SYS	One's place: 0: Equivalent to the set	1
594	Image	ment	Photo	PPC	0 <0-99>	SYS	value 5 1 to 9: Select the slope of	1
595	Image		Text	PPC	0 <0-99>	SYS	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
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	1
621	-		Photo	PPC	2 <0-99>	SYS	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	1
622			Text	PPC	EUR: 45 UC: 45 JPN: 45 <0-99>	SYS	 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
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 sup- pressed.	1
654	Image	Adjustment of smudged/faint text	PS	PRT	5 <0-9>	М	Adjustment of the smudged/faint text. With decreasing the value, the faint text is	1
655			PCL	PRT	5 <0-9>	М	suppressed, and with increasing it, the smudged text is sup- pressed.	1

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		Adjus	tment mode	(05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>				
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure			
667-0	Image	Density adjustn ied image	nent of cop-	PPC	0 <0-10>	М	Adjusts the density level of copied image.	4			
667-1	-			PPC	4 <0-10>	М	When the value decreases, the text	4			
667-2				PPC	5 <0-10>	М	becomes lighter.	4			
667-3	-			PPC	6 <0-10>	М	-	4			
667-4				PPC	10 <0-10>	М		4			
672-0	Image	Adjustment of printer image	Normal	PRT	0 <0-10>	М	Adjustment of the image density.	4			
672-1	-	density		PRT	4 <0-10>	М	With decreasing the value, the text becomes	4			
672-2				PRT	5 <0-10>	М	lighter.	4			
672-3				PRT	6 <0-10>	М		4			
672-4	-			Toner sav- ing			PRT	10 <0-10>	М		4
676-0					PRT	0 <0-10>	М		4		
676-1	-			PRT	2 <0-10>	М		4			
676-2	-			PRT	3 <0-10>	М	-	4			
676-3	-			PRT	4 <0-10>	М	-	4			
676-4	-			PRT	5 <0-10>	М	-	4			
693	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1			
694			Photo	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the back- ground peak and text	1			
695			Text	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	peak affect the reproduc- tion 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			

		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 adjust-	Photo	FAX	128 <0-255>	SYS	When the value increases, the image at the center step becomes	1
714	-	ment of "man- ual density"/ Center value	Text/Photo	FAX	128 <0-255>	SYS	darker.	1
715	Image	Density adjustment Fine adjust-	Photo	FAX	20 <0-255>	SYS	When the value increases, the image of the "light" steps becomes	1
719	-	ment of "man- ual density"/ Light step value	Text/Photo	FAX	20 <0-255>	SYS	lighter.	1
720	Image	Density adjustment Fine adjust-	Photo	FAX	20 <0-255>	SYS	When the value increases, the image of the "dark" steps	1
724	-	ment of "man- ual density"/ Dark step value	Text/Photo	FAX	20 <0-255>	SYS	becomes darker.	1
725	Image	Density adjustment	Photo	FAX	128 <0-255>	SYS	When the value increases, the image	1
729	Fine adju	Fine adjust- ment of "auto- matic density"	Text/Photo	FAX	128 <0-255>	SYS	becomes darker.	1
820	Image	Range correc- tion/Text peak	Text/Photo	SCN	224 <0-255>	SYS	When the value decreases, the text	1
821	-	adjustment	Text	SCN	224 <0-255>	SYS	becomes darker.	1
822	F	Photo	SCN	239 <0-255>	SYS	-	1	

	1	Adjus	tment mode	e (05) <e< th=""><th></th><th>0L/230/</th><th>280></th><th>1</th></e<>		0L/230/	280>	1
Code	Classi- fication	ltem		Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
825	Image	Range correc- tion on origi- nal 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 "auto-	1
826			Text	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	matic density" and ten's place is for "manual den- sity". Once they are fixed, the range correc- tion is performed with	1
827			Photo	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	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
830	Image	Range correc- tion on origi- nal 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 "auto-	1
831	-		Text	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	matic density" and ten's place is for "manual den- sity". Once they are fixed, the range correc- tion is performed with	1
832			Photo	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	standard values. The values of the back- ground peak and text peak affect the reproduc- tion 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
835	Image	Range correc- tion/Back-	Text/Photo	SCN	48 <0-255>	SYS	When the value increases, the back-	1
836		ground peak adjustment	Text	SCN	48 <0-255>	SYS	ground becomes more brightened.	1
837		Density	Photo	SCN	40 <0-255>	SYS	Million the surface	1
845	Image	Density adjustment Fine adjust-	Text/Photo Text	SCN SCN	128 <0-255> 128	SYS SYS	When the value increases, the image at the center step becomes	1
847	-	ment of "man- ual density"/	Photo	SCN	<0-255> 128	SYS	darker.	1
÷.,		Center value		2.5.1	<0-255>			

		Adjus	tment mode	e (05) <e< th=""><th></th><th>0L/230/</th><th>280></th><th></th></e<>		0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
850	Image	Density adjustment	Text/Photo	SCN	20 <0-255>	SYS	When the value increases, the image of	1
851	-	Fine adjust- ment of "man-	Text	SCN	20 <0-255>	SYS	the "light" steps becomes lighter.	1
852		ual density"/ Light step value	Photo	SCN	20 <0-255>	SYS		1
855	Image	Density adjustment	Text/Photo	SCN	20 <0-255>	SYS	When the value increases, the image of	1
856	=	Fine adjust- ment of "man-	Text	SCN	20 <0-255>	SYS	the "dark" steps becomes darker.	1
857	-	ual density"/ Dark step value	Photo	SCN	20 <0-255>	SYS		1
860	Image	Density adjustment	Text/Photo	SCN	128 <0-255>	SYS	When the value increases, the image	1
861	-	Fine adjust- ment of "auto-	Text	SCN	128 <0-255>	SYS	becomes darker.	1
862	-	matic density"	Photo	SCN	128 <0-255>	SYS		1
865-0	Image	Sharpness adjustment (Text/Photo)	Reproduc- tion ratio 40% or smaller	SCN	1 <0-99>	SYS	When the value increases, the image becomes sharper. When the value decreases, the	4
865-1	-		Reproduc- tion ratio 41-80%	SCN	1 <0-99>	SYS	image becomes softer. The smaller the value is, the less the moire	4
865-2	-		Reproduc- tion ratio 81% or larger	SCN	1 <0-99>	SYS	becomes. One's place: Fixed value (05-865 is "1", 05-866 is	4
866-0	Image	Sharpness adjustment (Text)	Reproduc- tion ratio 40% or smaller	SCN	2 <0-99>	SYS	"2", 05-867 is "5") Ten's place: Sharpness intensity (0: Use default value, 1-9: Filter inten-	4
866-1	-		Reproduc- tion ratio 41-80%	SCN	2 <0-99>	SYS	sity)	4
866-2	-		Reproduc- tion ratio 81% or larger	SCN	2 <0-99>	SYS		4
867-0	Image	Sharpness adjustment (Photo)	Reproduc- tion ratio 40% or smaller	SCN	5 <0-99>	SYS		4
867-1			Reproduc- tion ratio 41-80%	SCN	5 <0-99>	SYS		4
867-2			Reproduc- tion ratio 81% or larger	SCN	5 <0-99>	SYS		4

Code	Classi- fication	ltem		Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
913	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
914			Custom Mode 2	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background peak and text peak affect	1
915	-		Custom Mode 3	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	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
916	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
917	-		Custom Mode 2	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background peak and text peak affect the reproduction of the	1
918	-		Custom Mode 3	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak	1
919	Image	Range correc- tion Background	Custom Mode 1	PPC	40 <0-255>	SYS	When the value increases, the back- ground becomes more	1
920		peak adjust-	Custom Mode 2	PPC	64 <0-255>	SYS	brightened.	1

		Adjus	tment mode	e (05) <e< th=""><th></th><th>UL/230/</th><th>280></th><th>1</th></e<>		UL/230/	280>	1
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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	1
923			Custom Mode 2	PPC	EUR:45 UC:45 JPN:45 <0-99>	SYS	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	1
924			Custom Mode 3	PPC	2 <0-99>	SYS	 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
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 sup- pressed.	1
931	Image	Density adjustment	Custom Mode 1	PPC	128 <0-255>	SYS	When the value increases, the image of	1
932		Fine adjust- ment of "man-	Custom Mode 2	PPC	128 <0-255>	SYS	the center step becomes darker.	1
933		ual density"/ Center value	Custom Mode 3	PPC	128 <0-255>	SYS		1
934	Image	Density adjustment	Custom Mode 1	PPC	20 <0-255>	SYS	When the value increases, the image of	1
935		Fine adjust- ment of "man-	Custom Mode 2	PPC	20 <0-255>	SYS	the "light" step density becomes lighter.	1
936		ual density"/ Light step value	Custom Mode 3	PPC	20 <0-255>	SYS		1
937	Image	Density adjustment	Custom Mode 1	PPC	20 <0-255>	SYS	When the value increases, the image of	1
938		Fine adjust- ment of "man-	Custom Mode 2	PPC	20 <0-255>	SYS	the "dark" step density becomes darker.	1
939		ual density"/ Dark step value	Custom Mode 3	PPC	20 <0-255>	SYS		1
940	Image	Density adjustment	Custom Mode 1	PPC	128 <0-255>	SYS	When the value increases, the image	1
941	Fine adjust- ment of "auto-	Custom Mode 2	PPC	128 <0-255>	SYS	becomes darker.	1	
942			Custom Mode 3	PPC	128 <0-255>	SYS		1

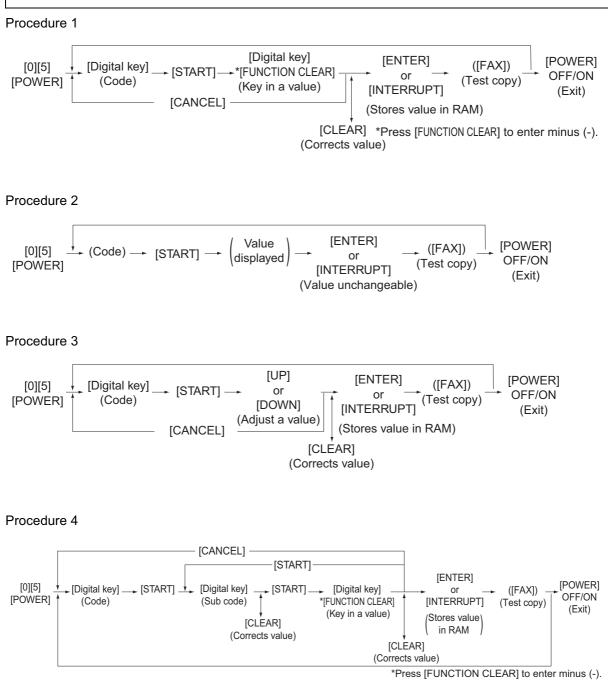
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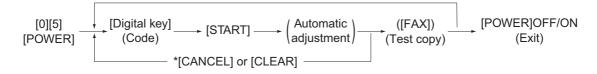
		Adjus	stment mode	e (05) <e< th=""><th>-STUDIO20</th><th>0L/230/</th><th>280></th><th></th></e<>	-STUDIO20	0L/230/	280>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
943	Image	Gamma data slope adjust- ment	Custom Mode 1	PPC	0 <0-99>	SYS	One's place: 0: Equivalent to the set value 5 1 to 9: Select the slope of Gamma curve (The	1
944	-		Custom Mode 2	PPC	0 <0-99>	SYS	larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set	1
945	-		Custom Mode 3	PPC	0 <0-99>	SYS	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
976	Mainte- nance	Equipment nun number) entry	hber (serial	ALL	-	SYS	When this adjustment is performed with this code, the setting code (08-995) is also performed automatically (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.

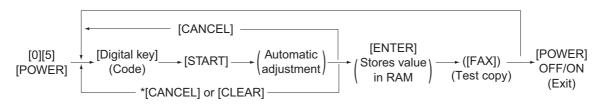


Procedure 6



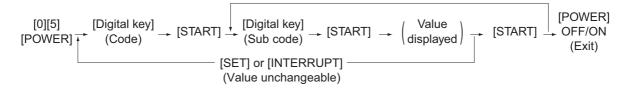
* When the automatic adjustment ends abnormally, error message is displayed.

Procedure 7

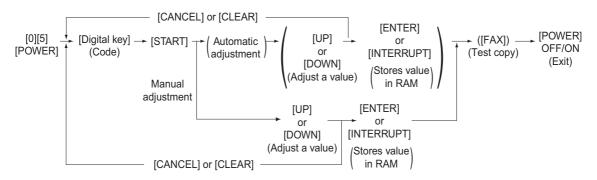


* When the automatic adjustment ends abnormally, error message is displayed.

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.

	1	Adjustment mode	e (05) <e< th=""><th>r</th><th>2L/232/</th><th>282></th><th>I</th></e<>	r	2L/232/	282>	I
Code	Classi- fication	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
200	Devel- oper	Automatic adjustment of auto-toner sensor (Fuser heater ON)	ALL	-	-	As the value increases, the sensor output increases correspond- ingly. The value starts chang- ing approx. 2 minutes after this adjustment was started and is automati- cally 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	Devel- oper	Correction of auto-toner sensor (Fuser heater ON)	ALL	164 <0-255>	М	Corrects the control value of the auto-toner sensor setup in 05-200. * Selection is disable when developer unit is not installed.	3
205	Devel- oper	Developer bias DC output adjustment	ALL	135 <0-255>	М	As the value increases, the transformer output	3
210	Charger	Main charger grid bias out- put adjustment	ALL	90 <0-255>	М	increases correspond- ingly. Remove the devel-	3
220	Transfer	Transfer transformer DC output adjustment (H)	ALL	165 <0-255>	М	oper unit and install the adjustment jig to make adjustment.	3
221	Transfer	Transfer transformer DC output adjustment (C)	ALL	179 <0-255>	М	(Chap. 3.6)	3
222	Transfer	Transfer transformer DC output adjustment (L)	ALL	126 <0-255>	М		3
233	Separa- tion	Separation transformer DC output adjustment (H)	ALL	64 <0-255>	М	-	3
234	Separa- tion	Separation transformer DC output adjustment (C)	ALL	65 <0-255>	М	-	3
235	Separa- tion	Separation transformer DC output adjustment (L)	ALL	46 <0-255>	М		3
280	Process	Forced performing of idling for toner recycle	ALL	-	М	Perform this adjustment before the replacement of the developer mate- rial. (The toner is forcibly removed from the cleaner.)	6
286	Laser	Laser power adjustment	ALL	63 <0-255>	М	When the value increases, the laser out- put increases corre- spondingly.	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

		Aajus	tment mode	e (UD) <e< th=""><th></th><th>2L/232/</th><th><i>L0L></i></th><th></th></e<>		2L/232/	<i>L0L></i>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
306	Scanner	Image location adjustment of primary scanning direc- tion (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 adjust- ment of secondary scan- ning 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 posi- tion adjust- ment	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 orig- inal	ALL	10 <0-20>	SYS	When the value increases by "1", the aligning amount	1
355			for double sided orig- inal	ALL	10 <0-20>	SYS	increases by approx. 0.5 mm.	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 adjust- ment during scanning from RADF		ALL	128 <0-255>	SYS	When the value increases by "1", the car- riage position when using the RADF shifts by approx. 0.1 mm toward the original feeding side.	1
365	RADF	RADF lead- ing edge posi- tion	for single - sided orig- inal	ALL	50 <0-100>	SYS	When the value increases by "1", the copied image of original	1
366		adjustment	for double sided orig- inal	ALL	50 <0-100>	SYS	fed from the RADF shifts toward the trailing edge of paper by approx. 0.1 mm.	1

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		Adjustment mode	e (05) <e< th=""><th>-STUDIO202</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO202	2L/232/	282>		
Code	Classi- fication	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure	
401	Laser	Fine adjustment of polygo- nal motor rotation speed (adjustment of primary	PRT	136 <0-255>	М	When the value increases by "1", the reproduction ratio of pri-	1	
405		scanning direction repro- duction ratio)	PPC	134 <0-255>	М	mary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/ step)	1	
410	Laser	Adjustment of primary scanning laser writing start	PPC	128 <0-255>	М	When the value increases by "1", the writ- ing start position shifts to the front side by approx. 0.0423 mm.	1	
411		position.	PRT	153 <0-255>	М		1	
421	Drive	Drive	Adjustment of secondary scanning direction repro- duction ratio	PPC/ PRT	129 <0-255>	М	When the value increases by "1", the reproduction ratio of sec-	1
422		(fine adjustment of main motor speed)	FAX	139 <0-255>	М	ondary scanning direc- tion increases by approx. 0.04%.	1	
424	Drive	Fine adjustment of exit motor speed	PPC/ PRT	160 <0-255>	М	When the value increases by "1", the	1	
425			FAX	121 <0-255>	М	rotation becomes faster by approx. 0.05%.	1	

		Adjustr	nent mode	e (05) <e< th=""><th>-STUDIO20</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO20	2L/232/	282>	
Code	Classi- fication	ltems		Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
430	Image	Top margin adjus (blank area at the edge of the pape	e leading	PPC	0 <0-255>	М	When the value increases by "1", the blank area becomes	1
431	Image	Left margin adjus (blank area at the paper along the p feeding direction)	PPC	0 <0-255>	М	wider by approx. 0.0423 mm.	1	
432	Image	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)		PPC	0 <0-255>	М		1
433	Image	Bottom margin ac (blank area at the edge of the pape	e trailing	PPC	0 <0-255>	М	-	1
434-0	Image	Bottom margin ac (blank area at the edge of the pape Reverse side at c	e trailing r)/	PPC/ PRT	29 <0-255>	М		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>	М		4
435	Image	Top margin adjustment (blank area at the leading edge of the paper)		PRT	24 <0-255>	М		1
436	Image	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)		PRT	0 <0-255>	М		1
437	Image	Right margin adju (blank area at the the paper along t feeding direction)	ustment e right of he paper	PRT	0 <0-255>	М	-	1
438	Image	Bottom margin ac (blank area at the edge of the pape	e trailing	PRT	0 <0-255>	М		1
440	Laser	Adjustment of	Upper drawer	ALL	8 <refer to<br="">content></refer>	М	When the value increases by "1", the image shifts toward the	1
441	-		_ower drawer	ALL	21 <0-40>	М	leading edge of the paper by approx.	1
442	-	E	Bypass feeding	ALL	8 <0-15>	М	0.2 mm. <acceptable value=""></acceptable>	1
443	-		_CF	ALL	8 <0-15>	М	e-STUDIO232/282: 0-15 e-STUDIO202L: 0-40	1
444	-	F	PFP	ALL	8 <0-15>	М		1
445	-		Duplex eeding	ALL	8 <0-15>	М	-	1

		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO20	2L/232/	282>	
Code	Classi- fication	si-		Func- tion	Default < Accept- able value>		Contents	Proce- dure
448-0	Paper	Paperaligning amount	Long size	ALL	10 <0-63>	М	When the value increases by "1", the	4
448-1	feeding	adjustment at the registra-	Middle size	ALL	<0-03> 10 <0-63>	М	aligning amount increases by approx.	4
448-2		tion section (PFP upper drawer/Plain paper)	Short size	ALL	8 <0-63>	М	0.8 mm. <paper length=""> Long size: 330 mm or longer</paper>	4
449-0	Paper feeding	Paperaligning amount	Long size	ALL	10 <0-63>	М	Middle size: 220 mm to 329 mm	4
449-1		adjustment at the registra-	Middle size	ALL	10 <0-63>	М	Short size: 219 mm or shorter	4
449-2		tion section (PFP lower drawer/Plain paper)	Short size	ALL	8 <0-63>	М		4
450-0	Paper feeding	Paper aligning amount	Long size	ALL	17 <0-63>	М		4
450-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
450-2		tion section (Upper drawer/Plain paper)	Short size	ALL	17 <0-63>	М		4
452-0	Paper feeding	Paper aligning amount	Long size	ALL	12 <0-63>	М		4
452-1		adjustment at the registra-	Middle size	ALL	10 <0-63>	М		4
452-2		tion section (Lower drawer/Plain paper)	Short size	ALL	10 <0-63>	М		4
455-0	Paper feeding	Paperaligning amount	Long size	ALL	20 <0-63>	М		4
455-1		adjustment at the registra-	Middle size	ALL	20 <0-63>	М		4
455-2		tion section (Duplex feed- ing/Plain paper)	Short size	ALL	30 <0-63>	М		4
457	Paper feeding	Paper aligning adjustment at the tion section (LCF/Plain pap	he registra-	ALL	8 <0-63>	М		1

		Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th></th></e<>		2L/232/	282>	
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
458-0	Paper feeding	Paperaligning amount	Long size	ALL	26 <0-63>	М	When the value increases by "1", the	4
458-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М	aligning amount increases by approx.	4
458-2	-	tion section (Bypass feed- ing/Plain paper)	Short size	ALL	25 <0-63>	М	0.8 mm. <paper length=""> Long size: 330 mm or longer</paper>	4
460-0	Paper feeding	Paper aligning amount	Long size	ALL	26 <0-63>	М	Middle size: 220 mm to 329 mm	4
460-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М	Short size: 219 mm or shorter	4
460-2		tion section (Bypass feed- ing/Thick paper 1)	Short size	ALL	26 <0-63>	М	 * Postcard is sup- ported only for JPN model. 	4
461-0	Paper feeding	Paperaligning amount	Long size	ALL	17 <0-63>	М		4
461-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
461-2	-	tion section (Bypass feed- ing/Thick paper 2)	Short size	ALL	17 <0-63>	М		4
462-0	Paper feeding	Paper aligning amount	Long size	ALL	17 <0-63>	М		4
462-1		adjustment at the registra-	Middle size	ALL	17 <0-63>	М		4
462-2		tion section (Bypass feed-	Short size	ALL	17 <0-63>	М		4
462-3		ing/Thick paper 3)	Postcard	ALL	14 <0-63>	М		4
463-0	Paper feeding	Paperaligning amount	Long size	ALL	26 <0-63>	М		4
463-1	-	adjustment at the registra-	Middle size	ALL	26 <0-63>	М		4
463-2		tion section (Bypass feed- ing/OHP film)	Short size	ALL	26 <0-63>	М	-	4
464-0	Paper feeding	Paperaligning amount	Long size	ALL	26 <0-63>	М		4
464-1		adjustment at the registra-	Middle size	ALL	26 <0-63>	М		4
464-2		tion section (Bypass feed- ing /Envelope)	Short size	ALL	26 <0-63>	М		4

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e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

		Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th></th></e<>		2L/232/	282>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
466-0	Paper feeding	Adjustment of paper push-	Plain paper	ALL	0 <0-255>	М	When the value increases by "1", the	4
466-1		ing amount/ Bypass feed-	Postcard	ALL	0 <0-255>	М	driving speed of bypass feed roller increases by	4
466-3	-	ing	Envelope	ALL	0 <0-255>	М	approx. 0.2 ms when the paper transport is started	4
466-4	-		Thick paper 1	ALL	0 <0-255>	М	from the registration sec- tion.	4
466-5	_		Thick paper 2	ALL	0 <0-255>	М	 * Postcard is sup- ported only for JPN model. 	4
466-6	-		Thick paper 3	ALL	0 <0-255>	М	model.	4
466-7	_		OHP film	ALL	0 <0-255>	М		4
468-0	Finisher	Fine adjust- ment of bind-	A4-R/LT-R	ALL	0 <-14-14>	М	When the value increases by "1", the	4
468-1	-	ing position/ folding posi-	B4	ALL	0 <-14-14>	М	binding/folding position shifts toward the right page by 0.25 mm.	4
468-2	-	tion	A3/LD	ALL	0 <-14-14>	М		4
469-0	Paper feeding	Paperaligning amount adjustment at	Thick paper 1 Long size	ALL	20 <0-63>	М	When the value increases by "1", the aligning amount	4
469-1		the registra- tion section (Upper drawer)	Thick paper 1 Middle size	ALL	20 <0-63>	М	increases by approx. 0.8 mm. <paper length=""> Long size:</paper>	4
469-2	-		Thick paper 1 Short size	ALL	20 <0-63>	М	330 mm or longer Middle size: 220 mm to 329 mm	4
469-3	-		Thick paper 2 Long size	ALL	20 <0-63>	М	Short size: 219 mm or shorter	4
469-4	-		Thick paper 2 Middle size	ALL	22 <0-63>	М	-	4
469-5			Thick paper 2 Short size	ALL	19 <0-63>	М		4
470-0	Paper feeding	Paper aligning amount	Long size	ALL	20 <0-63>	М		4
470-1		adjustment at the registra-	Middle size	ALL	22 <0-63>	М	-	4
470-2	tion (Low draw	tion section (Lower drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М		4
471-0	Paper feeding	Paper aligning amount	Long size	ALL	20 <0-63>	М		4
471-1		adjustment at the registra-	Middle size	ALL	22 <0-63>	М	-	4
471-2		tion section (PFP upper drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М		4

	1	Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th>1</th></e<>		2L/232/	282>	1
Code	Classi- fication	Item	s	Func- tion	Default <accept- able</accept- 	RAM	Contents	Proce- dure
472-0	Paper	Paperaligning	Long size	ALL	value> 20	М	When the value	4
472-1	feeding	amount adjustment at	Middle	ALL	<0-63> 22	М	increases by "1", the aligning amount	4
		the registra- tion section	size		<0-63>		increases by approx. 0.8 mm.	
472-2		(PFP lower drawer/Thick paper 1)	Short size	ALL	19 <0-63>	М	<paper length=""> Long size: 330 mm or longer</paper>	4
473	Paper feeding	Paper aligning adjustment at th tion section (LCF/Thick pap	ne registra-	ALL	8 <0-63>	М	Middle size: 220 mm to 329 mm Short size: 219 mm or shorter	1
474-0	Paper feeding	Paperaligning amount	Long size	ALL	24 <0-63>	М	-	4
474-1	-	adjustment at the registra-	Middle size	ALL	24 <0-63>	М		4
474-2		tion section (Duplex feed- ing/Thick paper 1)	Short size	ALL	33 <0-63>	М	-	4
497-0	Laser	Adjustment of drawer side-	Upper drawer	ALL	128 <0-255>	М	When the value increases by "1", the	4
497-1	-	ways devia- tion	Lower drawer	ALL	128 <0-255>	М	image shifts toward the front side by 0.0423 mm.	4
497-2	-		PFP upper drawer	ALL	128 <0-255>	М		4
497-3	-		PFP lower drawer	ALL	128 <0-255>	М		4
497-4	-		LCF	ALL	128 <0-255>	М		4
497-5	-		Bypass feeding	ALL	128 <0-255>	М		4
498-0	Laser	Adjustment of primary scan-	Long size	ALL	148 <0-255>	М	When the value increases by "1", the	4
498-1	-	ning laser writing start position at duplex feed- ing	Short size (A4/LT or smaller)	ALL	148 <0-255>	М	image shifts toward the front side by 0.0423 mm.	4
501	Image	Density adjustment	Photo	PPC	128 <0-255>	SYS	When the value increases, the image at	1
503	-	Fine adjust- ment of "man-	Text/Photo	PPC	128 <0-255>	SYS	the center step becomes darker.	1
504	-	ual density"/ Center value	Text	PPC	128 <0-255>	SYS		1
505	Image	Density adjustment	Text/Photo	PPC	20 <0-255>	SYS	When the value increases, the image of	1
506	-	Fine adjust- ment of "man-	Photo	PPC	20 <0-255>	SYS	the "light" steps becomes lighter.	1
507	-	ual density"/ Light step value	Text	PPC	20 <0-255>	SYS	-	1

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		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO20	2L/232/	282>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
508	Image	Density adjustment Fine adjust- ment of "man-	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		ual density"/ Dark step value	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	Photo	PPC	128 <0-255>	SYS	When the value increases, the image	1
514		Fine adjust- ment of "auto- matic density"	Text/Photo	PPC	128 <0-255>	SYS	becomes darker.	1
515			Text	PPC	128 <0-255>	SYS		1
532	Image	Range correc- tion/Back-	Text/Photo	PPC	40 <0-255>	SYS	When the value increases, the back-	1
533		ground peak adjustment	Photo	PPC	16 <0-255>	SYS	ground becomes more brightened.	1
534			Text	PPC	64 <0-255>	SYS		1
570	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
571	-		Photo	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background	1
572			Text	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	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

		Adjus	tment mode	(05) <e< th=""><th>-STUDIO20</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO20	2L/232/	282>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
593	Image	Gamma data slope adjust-	Text/Photo	PPC	0 <0-99>	SYS	One's place: 0: Equivalent to the set	1
594	Image	ment	Photo	PPC	0 <0-99>	SYS	value 5 1 to 9: Select the slope of	1
595	Image		Text	PPC	0 <0-99>	SYS	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
596-0	Image	Gamma bal- ance adjust-	Low density	PRT	128 <0-255>	SYS	When the value increases, the density in	4
596-1	Image	ment (PS/Photo)	Medium density	PRT	128 <0-255>	SYS	the target area becomes higher.	4
596-2	Image	-	High density	PRT	128 <0-255>	SYS		4
597-0	Image	Gamma bal- ance adjust-	Low density	PRT	128 <0-255>	SYS	When the value increases, the density in	4
597-1	Image	ment (PS/Text)	Medium density	PRT	128 <0-255>	SYS	the target area becomes higher.	4
597-2	Image		High density	PRT	128 <0-255>	SYS		4
598-0	Image	Gamma bal- ance adjust-	Low density	PRT	128 <0-255>	SYS	When the value increases, the density in	4
598-1	Image	ment (PCL/Photo)	Medium density	PRT	128 <0-255>	SYS	the target area becomes higher.	4
598-2	Image		High density	PRT	128 <0-255>	SYS		4
599-0	Image	Adjustment of gamma bal-	Low density	PRT	128 <0-255>	SYS	When the value increases, the density in	4
599-1	Image	ance (PCL/Detail)	Medium density	PRT	128 <0-255>	SYS	the target area becomes higher.	4
599-2	Image		High density	PRT	128 <0-255>	SYS		4

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	T	Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th></th></e<>		2L/232/	282>	
Code	Classi- fication	ltem	-	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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	1
621			Photo	PPC	2 <0-99>	SYS	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 stan- dard (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. Adjusts the level of the	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 sup- pressed.	1
654	Image	Adjustment of smudged/faint text	PS	PRT	5 <0-9>	М	Adjustment of the smudged/faint text. With decreasing the value, the faint text is	1
655			PCL	PRT	5 <0-9>	М	suppressed, and with increasing it, the smudged text is sup- pressed.	1
667-0	Image	Density adjustm ied image	nent of cop-	PPC	0 <0-10>	М	Adjusts the density level of copied image.	4
667-1				PPC	4 <0-10>	М	When the value decreases, the text	4
667-2				PPC	5 <0-10>	М	becomes lighter.	4
667-3				PPC	6 <0-10>	М		4
667-4				PPC	10 <0-10>	М		4

	-	Adjus	tment mode	(05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th></th></e<>		2L/232/	282>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
672-0	Image	Adjustment of printer image	Normal	PRT	0 <0-10>	М	Adjustment of the image density.	4
672-1		density		PRT	4 <0-10>	М	With decreasing the value, the text becomes	4
672-2	-			PRT	5 <0-10>	М	lighter.	4
672-3				PRT	6 <0-10>	М		4
672-4				PRT	10 <0-10>	М		4
676-0			Toner sav- ing	PRT	0 <0-10>	М		4
676-1				PRT	2 <0-10>	М		4
676-2				PRT	3 <0-10>	М		4
676-3				PRT	4 <0-10>	М		4
676-4	-			PRT	5 <0-10>	М		4
693	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
694			Photo	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the back- ground peak and text	1
695	-		Text	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	peak affect the reproduc- tion 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
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

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

		Aujus	tment mode	. (00) 78		- LI 2 J 2 I		
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able</accept- 	RAM	Contents	Proce dure
	incation			uon	value>			uure
710	Image	Density adjustment Fine adjust-	Photo	FAX	128 <0-255>	SYS	When the value increases, the image at	1
714	-	ment of "man- ual density"/ Center value	Text/Photo	FAX	128 <0-255>	SYS	the center step becomes darker.	1
715	Image	Density adjustment Fine adjust-	Photo	FAX	20 <0-255>	SYS	When the value increases, the image of the "light" steps becomes	1
719	_	ment of "man- ual density"/ Light step value	Text/Photo	FAX	20 <0-255>	SYS	lighter.	1
720	Image	Density adjustment Fine adjust-	Photo	FAX	20 <0-255>	SYS	When the value increases, the image of the "dark" steps	1
724		ment of "man- ual density"/ Dark step value	Text/Photo	FAX	20 <0-255>	SYS	becomes darker.	1
725	Image	Density adjustment	Photo	FAX	128 <0-255>	SYS	When the value increases, the image	1
729		Fine adjust- ment of "auto- matic density"	Text/Photo	FAX	128 <0-255>	SYS	becomes darker.	1
820	Image	Range correc- tion/Text peak	Text/Photo	SCN	224 <0-255>	SYS	When the value decreases, the text	1
821	_	adjustment	Text	SCN	224 <0-255>	SYS	becomes darker.	1
822			Photo	SCN	239 <0-255>	SYS	-	1
825	Image	Range correc- tion on origi- nal 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 "auto-	1
826	_		Text	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	matic density" and ten's place is for "manual den- sity". Once they are fixed, the range correc- tion is performed with	1
827			Photo	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	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

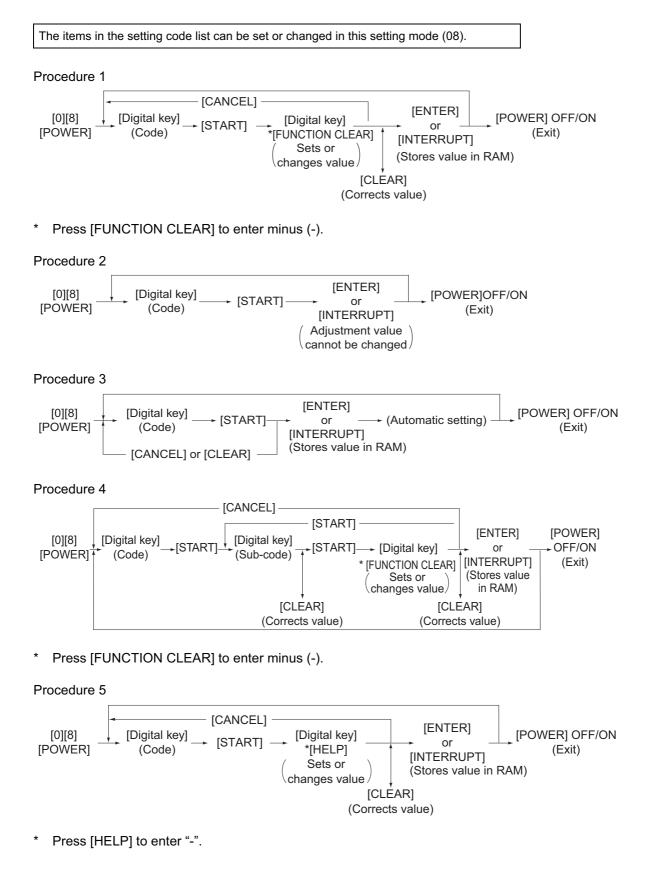
	1	Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th>1</th></e<>		2L/232/	282>	1
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
830	Image	Range correc- tion on origi- nal set on the RADF	Text/Photo	SCN	12 <11-14, 21-24, 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 "auto-	1
831			Text	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	matic density" and ten's place is for "manual den- sity". Once they are fixed, the range correc- tion is performed with	1
832			Photo	SCN	12 <11-14, 21-24, 31-34, 41-44>	SYS	standard values. The values of the back- ground peak and text peak affect the reproduc- tion 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
835	Image	Range correc- tion/Back-	Text/Photo	SCN	48 <0-255>	SYS	When the value increases, the back-	1
836	_	ground peak adjustment	Text	SCN	48 <0-255>	SYS	ground becomes more brightened.	1
837		_	Photo	SCN	40 <0-255>	SYS		1
845	Image	Density adjustment	Text/Photo	SCN	128 <0-255>	SYS	When the value increases, the image at	1
846	-	Fine adjust- ment of "man-	Text	SCN	128 <0-255>	SYS	the center step becomes darker.	1
847	-	ual density"/ Center value	Photo	SCN	128 <0-255>	SYS		1
850	Image	Density adjustment	Text/Photo	SCN	20 <0-255>	SYS	When the value increases, the image of	1
851		Fine adjust- ment of "man-	Text	SCN	20 <0-255>	SYS	the "light" steps becomes lighter.	1
852	-	ual density"/ Light step value	Photo	SCN	20 <0-255>	SYS		1
855	Image	Density adjustment	Text/Photo	SCN	20 <0-255>	SYS	When the value increases, the image of	1
856	-	Fine adjust- ment of "man-	Text	SCN	20 <0-255>	SYS	the "dark" steps becomes darker.	1
857	ual dapaitu"/	Photo	SCN	20 <0-255>	SYS		1	
860	Image	Density adjustment	Text/Photo	SCN	128 <0-255>	SYS	When the value increases, the image	1
861	ך Fine adjust- ment of "auto-	Text	SCN	128 <0-255>	SYS	becomes darker.	1	
862	1	matic density"	Photo	SCN	128 <0-255>	SYS		1

		Adjus	tment mode	e (05) <e< th=""><th>-STUDIO20</th><th>2L/232/</th><th>282></th><th></th></e<>	-STUDIO20	2L/232/	282>	
Code	Classi- fication	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
865-0	Image	Sharpness adjustment (Text/Photo)	Reproduc- tion ratio 40% or smaller	SCN	1 <0-99>	SYS	When the value increases, the image becomes sharper. When the value decreases, the	4
865-1			Reproduc- tion ratio 41-80%	SCN	1 <0-99>	SYS	image becomes softer. The smaller the value is, the less the moire	4
865-2			Reproduc- tion ratio 81% or larger	SCN	1 <0-99>	SYS	becomes. One's place: Fixed value (05-865 is "1", 05-866 is "2", 05-867 is "5")	4
866-0	Image	Sharpness adjustment (Text)	Reproduc- tion ratio 40% or smaller	SCN	2 <0-99>	SYS	Ten's place: Sharpness intensity (0: Use default value, 1-9: Filter inten- sity)	4
866-1			Reproduc- tion ratio 41-80%	SCN	2 <0-99>	SYS		4
866-2			Reproduc- tion ratio 81% or larger	SCN	2 <0-99>	SYS		4
867-0	Image	Sharpness adjustment (Photo)	Reproduc- tion ratio 40% or smaller	SCN	5 <0-99>	SYS		4
867-1			Reproduc- tion ratio 41-80%	SCN	5 <0-99>	SYS		4
867-2			Reproduc- tion ratio 81% or larger	SCN	5 <0-99>	SYS	-	4
913	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1
914			Custom Mode 2	PPC	22 <11-14, 21-24, 31-34, 41-44>	SYS	sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background peak and text peak affect	1
915			Custom Mode 3	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	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

	1	Adjus	tment mode	e (05) <e< th=""><th></th><th>2L/232/</th><th>282></th><th>1</th></e<>		2L/232/	282>	1	
Code	Classi- fication	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure	
916	Image	Range correc- tion on origi- nal 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 "auto- matic density" and ten's place is for "manual den-	1	
917			Mode 2<11-14, 21-24, 31-34,fixed, the r tion is perf standard v values of ti peak and ti		sity". Once they are fixed, the range correc- tion is performed with standard values. The values of the background peak and text peak affect the reproduction of the	1			
918			Custom Mode 3	PPC	12 <11-14, 21-24, 31-34, 41-44>	SYS	background density and text density respectively. 1: fixed/fixed 2: varied/fixed 3: fixed/varied 4: varied/varied * Background peak/ Text peak	1	
919	Image	Range correc- tion	Custom Mode 1	PPC	40 <0-255>	SYS	When the value increases, the back-	1	
920		Background peak adjust-		Custom Mode 2	PPC	64 <0-255>	SYS	ground becomes more brightened.	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	1	
923			Custom Mode 2	PPC	EUR:45 UC:45 JPN:45 <0-99>	SYS	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	1	
924			Custom Mode 3	PPC	2 <0-99>	SYS	default value as the stan- dard (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	
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 sup- pressed.	1	

Code	Classi- fication	Item		Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
931	Image	Density adjustment	Custom Mode 1	PPC	128 <0-255>	SYS	When the value increases, the image of	1
932		Fine adjust- ment of "man- ual density"/	Custom Mode 2	PPC	128 <0-255>	SYS	the center step becomes darker.	1
933		Center value	Custom Mode 3	PPC	128 <0-255>	SYS		1
934	Image	Density adjustment	Custom Mode 1	PPC	20 <0-255>	SYS	When the value increases, the image of	1
935		Fine adjust- ment of "man-	Custom Mode 2	PPC	20 <0-255>	SYS	the "light" step density becomes lighter.	1
936	_	ual density"/ Light step value	Custom Mode 3	PPC	20 <0-255>	SYS		1
937	Image	Density adjustment	Custom Mode 1	PPC	20 <0-255>	SYS	When the value increases, the image of	1
938		Fine adjust- ment of "man-	Custom Mode 2	PPC	20 <0-255>	SYS	the "dark" step density becomes darker.	1
939	-	ual density"/ Dark step value	Custom Mode 3	PPC	20 <0-255>	SYS		1
940	Image	Density adjustment	Custom Mode 1	PPC	128 <0-255>	SYS	When the value increases, the image	1
941		Fine adjust- ment of "auto-	Custom Mode 2	PPC	128 <0-255>	SYS	becomes darker.	1
942		matic density"	Custom Mode 3	PPC	128 <0-255>	SYS		1
943	Image	Gamma data slope adjust- ment	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	1
944			Custom Mode 2	PPC	0 <0-99>	SYS	larger the value is, the larger the slope becomes.) Ten's place: 0: Equivalent to the set	1
945			Custom Mode 3	PPC	0 <0-99>	SYS	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
976	Mainte- nance	Equipment nun number) entry	nber (serial	ALL	-	SYS	When this adjustment is performed with this code, the setting code (08-995) is also performed auto- matically (10 digits).	1

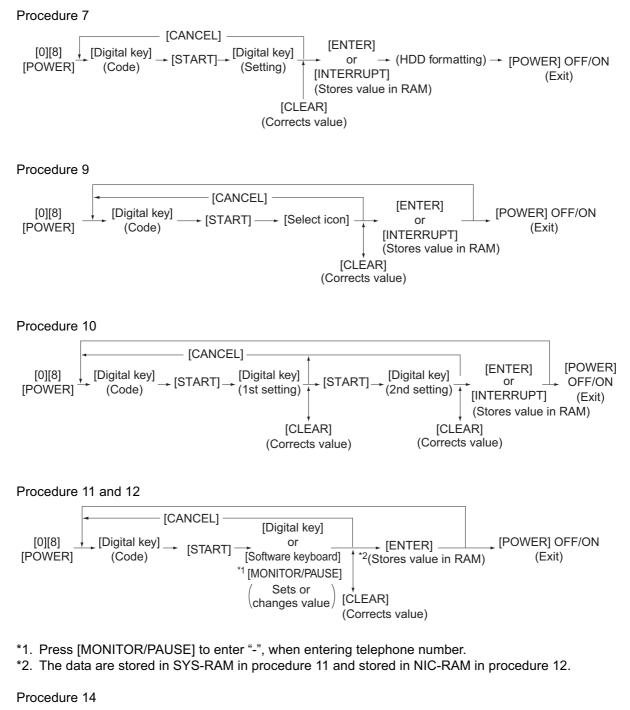
2.2.7 Setting mode (08) (e-STUDIO200L/230/280)

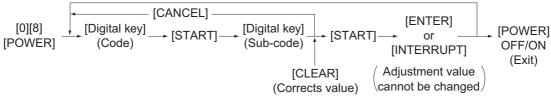


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e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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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 (0	8) <e-s1< th=""><th></th><th>230/280</th><th>></th><th></th></e-s1<>		230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
200	General	Date and time setting	ALL	- <13 dig- its>	-	Year/month/date/day/ hour/minute/second Example: 03 07 0 13 13 27 48 "Day" - "0" is for "Sunday". Pro- ceeds Monday through Saturday from "1" to "6".	5
201	General	Destination selection	ALL	EUR: 0 UC: 1 JPN: 2 <0-2>	М	0: EUR 1: UC 2: JPN	1
202	User interface	Counter installed externally	ALL	0 <0-3>	М	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>	М	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 (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th></th></e-st<>		230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 automati- cally when the equip- ment 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. 19: 240min. 19: 240min. 20: Not used Cefault value> The models except e-STUDIO200L: EUR: 7 	1
207	User interface	Highlighting display on LCD	ALL	0 <0-1>	SYS	 Black letter on white background White letter on black background 	1
209	User interface	Default setting of filing for- mat 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>	М		10
219	User interface	Default setting of filing for- mat 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 (0	c, -c- 0 1	Default	0		
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce dure
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	М	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	М	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	М	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	М	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>	М		10
230	Paper feeding	Paper size (A4-R) feeding/ widthwise direction	ALL	297/210 <182- 432/140- 297>	М		10
231	Paper feeding	Paper size (A5-R) feeding/ widthwise direction	ALL	210/148 <182- 432/140- 297>	М		10
232	Paper feeding	Paper size (B4) feeding/ widthwise direction	ALL	364/257 <182- 432/140- 297>	М		10
233	Paper feeding	Paper size (B5-R) feeding/ widthwise direction	ALL	257/182 <182- 432/140- 297>	М		10
234	Paper feeding	Paper size (LT-R) feeding/ widthwise direction	ALL	279/216 <182- 432/140- 297>	М		10
235	Paper feeding	Paper size (LD) feeding/ widthwise direction	ALL	432/279 <182- 432/140- 297>	М		10
236	Paper feeding	Paper size (LG) feeding/ widthwise direction	ALL	356/216 <182- 432/140- 297>	М		10
237	Paper feeding	Paper size (ST-R) feeding/ widthwise direction	ALL	216/140 <182- 432/140- 297>	М		10
238	Paper feeding	Paper size (COMPUTER) feeding/widthwise direction	ALL	356/257 <182- 432/140- 297>	М		10

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>T.</th></e-st<>		230/280	>	T.
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
239	Paper feeding	Paper size (FOLIO) feed- ing/widthwise direction	ALL	330/210 <182- 432/140- 297>	М		10
240	Paper feeding	Paper size (13" LG) feed- ing/widthwise direction	ALL	330/216 <182- 432/140- 297>	М		10
241	Paper feeding	Paper size (8.5"X8.5") feeding/widthwise direction	ALL	216/216 <182- 432/140- 297>	М		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 feed- ing/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>	М		10
245	Paper feeding	Paper size (16K-R) feed- ing/widthwise direction	ALL	270/195 <182- 432/140- 297>	М		10
247	Paper feeding	Memory 2 Paper size (bypass feed- ing/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 feed- ing/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 feed- ing/non-standard type) feeding/widthwise direction	ALL	148/100 <148- 432/100- 297>	SYS		10
250	Mainte- nance	Service technician tele- phone number	ALL	0 <32 dig- its>	SYS	A telephone number can be entered up to 32 digits. Use the [Monitor/ Pause] button to enter a hyphen (-).	11
251	Mainte- nance	Setting value of PM counter	ALL	Refer to content <8 digits>	М	<pre><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</default></pre>	1
252	Mainte- nance	Current value of PM counter Display/0 clearing	ALL	0 <8 digits>	М	Counts up when the registration sensor is ON.	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th></th></e-st<>		230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
253	Mainte- nance	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	PFP/LCF installation	ALL	0 <0-4>	М	 O: Automatic PFP single-drawer type installed PFP dual-drawer type installed LCF installed Not installed 	1
256	Paper feeding	Paper size setting /LCF	ALL	EUR: A4 UC: LT JPN: A4	М	Press the button on the LCD to select the size.	9
257	Counter	Counter copy	ALL	- <1-2>	-	 Electrical counter → Backup counter Backup counter → Electrical counter (P. 2-150 "Fig. 2-4") 	-
258	Mainte- nance	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 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 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

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		Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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
270	Elec- tronic Fil- ing	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 dis- played 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 tem- plate. 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 creat- ing a template. 0: Not divide 1: 128 2: 512 3: 1024 4: 2048 (Unit: KB)	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>i</th></e-st<>		230/280	>	i
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 den- sity)	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 delet- ing expired flies	ALL	12 <1-24>	SYS	Sets the search inter- val 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

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/2</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/2	230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
	Counter	Number of	A3	PPC	0	SYS	Counts the output	4
305-1		output pages in copier func-	A4		<8 digits>		pages in the copier function for each paper	
305-2		tion	A5				size according to the	
305-3		lion	A6				setting for the count	
305-4			B4				setting of large-sized	
305-5			B5				paper (08-352) and the	
305-6			FOLIO				definition setting of large-sized paper (08-	
305-7			LD				353).	
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		-		• · · ·	
	Counter	Number of	A3	PRT	0 <8 digits>	SYS	Counts the output pages in the printer	4
306-1		output pages in printer func-	A4	-			function for each paper	
306-2		tion	A5	-			size according to the	
306-3			A6				setting for the count	
306-4			B4				setting of large-sized	
306-5			B5				paper (08-352) and the definition setting of	
306-6			FOLIO				large-sized paper (08-	
306-7 306-8			LD LG	-			353).	
306-8			LG	-				
306-9			ST					
306-10			COMP					
306-11			13"LG					
306-12			8.5" x 8.5"	-				
306-13			16K	-				
306-14			8K					
306-16			Others	1				

		Set	ting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	lten	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
307-0	Counter	Number of	A3	PRT	0	SYS	Counts the output	4
307-1		output pages	A4		<8 digits>		pages at the list print	
307-2		at list print mode	A5				mode for each paper size according to the	
307-3		mode	A6				setting for the count	
307-4			B4				setting of large-sized	
307-5			B5				paper (08-352) and the	
307-6			FOLIO				definition setting of large-sized paper (08-	
307-7			LD				353).	
307-8			LG				000).	
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	A3	FAX	0 <8 digitas	SYS	Counts the output	4
308-1		output pages in FAX func-	A4	_	<8 digits>		pages in the FAX func- tion for each paper size	
308-2		tion	A5	=			according to the setting	
308-3	-		A6	_			for the count setting of	
308-4			B4	-			large-sized paper (08-	
308-5			B5	-			352) and the definition setting of large-sized	
308-6	-		FOLIO	=			paper (08-353).	
308-7	-		LD LG	-				
308-8 308-9	-		LG	-				
308-9	-		ST	-				
308-10			COMP	-				
308-11			13"LG	-				
308-12	1		8.5" x 8.5"	-				
308-13	1		16K	4				
308-14			8K	-				
308-15			Others	-				
300-10			Others					

		Set	ting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	lter	ns	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
312-0	Counter	Number of	A3	PPC	0	SYS	Counts the scanning	4
312-1		scanning	A4		<8 digits>		pages in the copier function for each paper	
312-2		pages in copier func-	A5				size according to the	
312-3		tion	A6				setting for the count	
312-4			B4				setting of large-sized	
312-5			B5				paper (08-352) and the	
312-6			FOLIO				definition setting of large-sized paper (08-	
312-7			LD				353).	
312-8			LG				000).	
312-9			LT					
312-10			ST					
312-11			COMP					
312-12			13"LG					
312-13			8.5" x 8.5"	_				
312-14			16K	_				
312-15			8K	_				
312-16			Others					
313-0	Counter	Number of	A3	SCN	0	SYS	Counts the scanning	4
313-1		scanning pages in	A4	-	<8 digits>		pages in the scanning function for each paper	
313-2		scanning	A5	-			size according to the	
313-3		function	A6	-			setting for the count	
313-4			B4	-			setting of large-sized	
313-5			B5	-			paper (08-352) and the	
313-6			FOLIO	-			definition setting of large-sized paper (08-	
313-7			LD	-			353).	
313-8			LG	-				
313-9			LT	-				
313-10			ST	-				
313-11			COMP	-				
313-12			13"LG	-				
313-13			8.5" x 8.5"	-				
313-14			16K	-				
313-15			8K	-				
313-16			Others					

$ \begin{array}{ c c c c c c } \hline Code \\ \hline Classification \\ \hline cation \\ \hline catio$			Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
314-1 scanning pages in FAX function A4 A5 A5 314-1 A5 A6 314-3 B4 B4 314-4 B4 B5 314-6 B4 B5 314-7 B4 B5 314-8 FOLIO LG 14-10 ST COMP 314-11 ST COMP 314-12 ST COMP 314-13 B5''' ST 314-14 ST Others 314-13 B5''' FAX 314-16 Number of transmitted pages in FAX function A3 314-16 Number of transmitted pages in FAX FAX 0 ST Star Star Star 315-1 Star A4 A4 315-1 B5 FOLIO A4 315-1 G A4 A5 315-1 G A4 A4 315-1 G B5 FOLIO 31	Code		ltem	IS		<accept- able</accept- 	RAM	Contents	
314-2 pages in FAX A5 314-3 A6 314-4 A6 314-4 A6 314-4 A6 314-4 B5 314-6 B4 314-7 B4 314-6 B4 314-7 LG 314-10 LG 314-11 ST 314-12 ST 314-13 COMP 314-14 T 314-15 ST 314-16 Others 314-16 A3 314-16 A4 315-1 A5 315-2 Counter Number of transmitted pages in FAX function A4 B4 B5 315-3 A5 315-3 A6 B5 B4 B5 B4 B5 B4 B5 B4 B5 B4 B5 B4 B5 B4 <th></th> <th>Counter</th> <th></th> <th>A3</th> <th>FAX</th> <th>U U</th> <th>SYS</th> <th></th> <th>4</th>		Counter		A3	FAX	U U	SYS		4
314-2 314-3 314-4 314-6 314-6 314-6 314-7 314-10 314-10 314-10 314-10 314-11 314-14 314-16 function AG AG B4 B5 FOLIO LG LT ST COMP 13"LG 8.5" x 8.5" 16K according to the setting or the count setting of large-sized paper (08- 352) and the definition setting of large-sized paper (08-353). 314-10 314-11 314-12 314-13 314-14 314-16 Number of transmitted pages in FAX function ST COMP SYS A6 B4 Counts the transmitted pages in the FAX func- tion for each paper size A6 B4 SYS A6 B4 Counts the transmitted pages in the FAX func- tion for each paper size paper (08-353). 4 315-10 315-6 315-7 315-10 315-11 315-11 315-11 315-11 315-12 Number of transmitted pages in FAX function FAX A5 A6 B5 FOLIO LD LD LD LG B5 FOLIO LD LG B5 ST COMP SYS S Counts the transmitted pages in the FAX func- tion for each paper size paper (08-353). 4 315-10 315-11 315-12 315-13 315-11 315-13 COMP B4 B5 FOLIO LD LD B4 B5 FOLIO B4 B5 FOLIO B4 B5 FOLIO B4 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B4 B5 B5 FOLIO B4 B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B4 B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B5 B5 FOLIO B4 B5 B5 B5 FOLIO B5 B5 FOLIO B4 B5 B5 FOLIO B4 B5 B5 B5 FOLIO B4 B5 B5 FOLIO B4 B5 B5 B5 FOLIO B4 B5 B5 B5 FOLIO B4 B5 B5 B5 FOLIO B5 B5 B5 FOLIO B5 B5 B5 B5 FOLIO B5 B5 B5 B5 B5 B5 B5 B5 B5 B5 B5 B5 B5						<8 digits>			
314-3 A6 314-4 B4 314-4 B5 314-6 B5 314-6 FOLIO 314-7 LG 314-8 LG 314-10 ST 314-11 ST 314-12 ST 314-13 ST 314-14 ST 314-15 RK 314-16 Others 314-16 SYS 314-16 A4 314-17 A4 314-16 A4 314-16 A4 314-16 A4 314-16 A4 315-0 Counter Altorion A4 A5 A6 A15-2 A6 315-3 B5 315-6 FOLIO 135-6 LG 315-7 ST 315-8 COMP 315-10 ST 315-11 G 315-12 ST 315-13 ST 315-13 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
314-5 B5 314-6 FOLIO 314-7 LG 314-9 LT 314-10 ST 314-11 ST 314-12 ST 314-13 ST 314-14 ST 314-15 Others 314-16 Others 315-0 Counter Number of transmitted pages in FAX function A3 315-1 A4 315-2 A4 315-3 B4 315-4 B5 FOLIO LD 135-6 B4 315-7 LG 315-8 LG 315-7 B5 135-8 LG 315-10 ST 315-11 ST 315-12 ST 315-13 ST 315-13 ST 315-13 ST 315-13 ST 315-13 ST 315-14 B5			lanouon						
314-6 FOLIO FOLIO Setting of large-sized paper (08-353). 314-9 14-11 16 13"LG 14"L1 314-10 13"LG 8.5" x 8.5" 16K 8K 0 314-11 13"LG 8.5" x 8.5" 16K 8K 0 SYS Counts the transmitted pages in FAX function 44 315-0 Counter Number of transmitted pages in FAX function A4 A4 A4 315-13 A4 A5 A4 A5 A5 A6 352) and the definition setting of large-sized paper (08-353). 4 4 315-13 15-13 15-11 13"LG 8.5" x 8.5" 11 4 315-13 ST Counter Number of transmitted pages in FAX function A4 7 8 digits> SYS Counts the transmitted pages in the FAX function of large-sized paper (08-353). 4 315-13 ST COMP ST SST									
314-7 314-7 314-7 16 314-9 11 314-10 11 314-11 ST 314-12 13"IG 314-13 600 314-14 13"IG 314-15 8.5" x 8.5" 314-16 0 Others 64 315-0 Counter Number of transmitted pages in FAX function A4 A5 A5 A6 B4 315-1 B4 315-5 B5 315-6 ST 315-7 LG 315-8 LG 315-10 ST 315-11 ST 315-12 ST 315-13 ST 315-14 ST 315-13 ST 315-14 SK 315-15 SK									
314-7 314-8 314-8 314-9 314-10 IT 314-11 ST 314-12 ST 314-13 8.5" x 8.5" 314-14 8.5" x 8.5" 314-15 8K 314-16 Number of transmitted pages in FAX function for each pages in the definition setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). 315-6 ID 315-7 IG 315-8 IT 315-9 IIT 315-10 ST 315-12 8.5" x 8.5" 315-13 8.5" x 8.5" 315-14 8K									
314-9 IT ST 314-10 ST COMP 314-11 13"LG 8.5" x 8.5" 314-12 8.5" x 8.5" 314-13 8.5" x 8.5" 314-14 13"LG 314-15 8.5" x 8.5" 314-16 0 314-16 8K 0thers 0 315-0 Counter 315-1 A4 315-2 A4 315-3 A4 315-4 A5 315-5 A6 B5 B5 FOLIO B4 B5 B5 70LD LG 115-10 13"LG 315-3 8.5" x 8.5" 315-11 13"LG 315-12 8.5" x 8.5" 315-13 16K 315-14 8K					-			paper (00-555).	
314.10 ST COMP 314.11 13"LG 8.5" x 8.5" 314.12 13"LG 8.5" x 8.5" 314.13 16K 8K 314.14 0thers 0thers 314.16 0thers 0thers 315-0 Counter Number of transmitted pages in FAX function A4 315-1 A5 A6 315-3 A6 B4 315-4 B5 FOLIO 315-6 ST COMP 315-7 ST Counter 315-8 LG LG 315-10 ST COMP 315-13 ST COMP 315-13 ST COMP 315-13 ST COMP 315-14 ST ST 315-14 SK SK					-				
314-11 314-12 314-13 314-14 314-15 314-16 COMP 13"LG 8.5" x 8.5" COMP 13"LG 314-14 314-15 Number of transmitted pages in FAX function A3 FAX 0 SYS Counts the transmitted 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). 4 315-0 315-1 315-10 315-10 315-11 315-14 Number of transmitted pages in FAX function A3 FAX 0 SYS Counts the transmitted 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). 4 315-10 315-11 315-14 315-15 ST ST 13"LG 8.5" x 8.5" 14 14 315-14 315-15 N N N N 14 14					_				
314-12 13"LG 8.5" x 8.5" 13"LG 8.5" x 8.5" 16K 8.5" x 8.5" 16K 8.5" x 8.5" 16K 8K 0 13"LG 8K 0 13"LG 8K 0 16K 16K 16K 16K 13"LG 8K 0 15"LG 0 16K				-	_				
314-13 314-14 314-15 8.5" x 8.5" 16K 8.5" x 8.5" 8.5" x 8.5" 314-14 0 16K 8K 0 57 x 8.5" 314-16 0 0 16K 8K 0 57 x 8.5" 314-16 0 0 16K 8K 0 57 x 8.5" 58 digits> 59 counts the transmitted pages in the FAX function for each paper size according to the setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). 46 315-5 85 57 60 120 counts 10 cou					_				
314-14 314-15 Number of transmitted pages in FAX function A3 FAX 0 SYS Counts the transmitted 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). 4 315-0 315-1 315-10 Number of transmitted pages in FAX function A3 FAX 0 < 8 digits> SYS Counts the transmitted 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). 4 315-6 315-7 315-10 LG LT ST COMP 13"LG 315-11 315-13 8.5" x 8.5" 16K 8K 8K 16K 16K					_				
314-15 8K Others SYS Counts the transmitted pages in the FAX function for each pages in the FAX function for each pages in the FAX function for each pages in the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). 4 315-0 Image: Size setting of setting of setting of large-sized paper (08-353). Image: Size setting of large-sized paper (08-353). Image: Size setting of large-sized paper (08-353). Image: Size setting of large-sized paper (08-353). 315-10 Image: Size setting of large-sized paper (08-353). Image: Size setting of large-sized paper (08-353). Image: Size setting of large-sized paper (08-353). 315-10 Image: Size setting of large-size setting sett					=				
314-16 Others Others 315-0 Counter Number of transmitted pages in FAX function A3 FAX 0 SYS Counts the transmitted pages in the FAX function for each paper size according to the setting of large-sized paper (08-315-5) A6 B4 B5 S52) and the definition setting of large-sized paper (08-352). A15-5 A15-5 A15-5 A15-5 A15-6 A15-7 A15-6 A15-7				-	_				
315-0 315-1 315-2CounterNumber of transmitted pages in FAX functionA3 A4 A5 A6FAX A60 SVSCounts the transmitted 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).4315-7 315-8 315-10 315-11 315-12 315-13 315-13 315-14COMP 13"LG 8.5" x 8.5" 16KSYSCounts the transmitted 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				-	_				
315-1 A4 315-2 pages in FAX function 315-3 A6 315-4 A6 315-5 A6 315-6 B4 315-7 B5 315-7 B5 315-8 LD 315-9 LT 315-10 ST 315-12 COMP 315-13 B5" x 8.5" 315-14 BK		a <i>i</i>			= • > /		01/0		
315-1 pages in FAX function A5 315-3 A6 A6 315-4 A6 B4 315-5 B5 B5 315-6 FOLIO B5 315-7 LD LD 315-8 LT ST 315-10 ST COMP 315-12 8.5" x 8.5" 315-13 8.K		Counter			FAX		SYS		4
315-2 AS 315-3 A6 315-4 B4 315-5 B5 315-6 FOLIO 315-7 LD 315-8 LG 315-9 LT 315-10 ST 315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K 315-15 8K					-	so digitar			
315-4 B4 large-sized paper (08-352) and the definition setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353). 315-6 FOLIO LD 315-7 LD LG 315-8 LG setting of large-sized paper (08-353). 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				-	-				
315-5 B5 3520 and the definition setting of large-sized paper (08-353). 315-6 LD LD 315-7 LG paper (08-353). 315-9 LT 315-10 ST 315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K					_				
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					-				
1000 1000 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					-				
315-8 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					-				
315-9 LT 315-10 ST 315-11 COMP 315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K 315-15 8K					-				
315-10 ST 315-11 COMP 315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K 315-15 8K					_				
315-11 COMP 315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K 315-15 8K					-				
315-12 13"LG 315-13 8.5" x 8.5" 315-14 16K 315-15 8K					1				
315-13 8.5" x 8.5" 315-14 16K 315-15 8K					1				
315-14 16K 315-15 8K					1				
315-15 8K					4				
					1				
	315-16			-	1				

		Sett	ing mode (0	8) <e-s1< th=""><th></th><th>230/280</th><th>></th><th></th></e-s1<>		230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
316-0 316-1	Counter	Number of received	A3 A4	FAX	0 <8 digits>	SYS	Counts the received pages in the FAX func-	4
316-2		pages in FAX function	A5				tion for each paper size	
316-3	-	Tunction	A6				according to the setting for the count setting of	
316-4			B4				large-sized paper (08-	
316-5			B5				352) and the definition	
316-6			FOLIO				setting of large-sized	
316-7			LD				paper (08-353).	
316-8			LG					
316-9			LT					
316-10			ST					
316-11			COMP	-				
316-12			13"LG	=				
316-13	-		8.5" x 8.5"	_				
316-14			16K	-				
316-15			8K	-				
316-16	Countor	Diaplay of	Others	DDC	0	SYS	Counto the number of	14
320-0	Counter	Display of number of output pages in copier func- tion	Large	PPC	0 <8 digits>	515	Counts the number of output pages in the Copier Function according to its size (large/small). Large:	14
320-1	Counter	-	Small	PPC	0	SYS	Number of output	14
320-2	Counter	Display of	Total	PPC	<8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes. Counts the number of	14
321-0	Counter	number of output pages in printer func- tion	Large	PRI	<8 digits>	515	output pages in the Printer Function according to its size (large/small). Large:	14
321-1	Counter		Small	PRT	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
321-2	Counter		Total	PRT	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

		Set	ting mode (0)8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	lterr	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
322-0	Counter	Display of number of output pages at list print mode	Large	PRT	0 <8 digits> 0	SYS	Counts the number of output pages at the List Print Mode Function according to its size (large/small). Large: Number of output	14
522-1	Counter		Small		<8 digits>		pages of large-sized paper defined at 08- 353 Small: Number of output	14
322-2	Counter		Total	PRT	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
323-0	Counter	Display of number of output pages in FAX func- tion	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	14
323-1	Counter	_	Small	PRT	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
323-2	Counter		Total	PRT	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
327-0	Counter	Display of number of scanning pages in copier func- tion	Large	PPC	0 <8 digits>	SYS	Counts the number of scanning pages in the Copier Function according to its size (large/small). Large:	14
327-1	Counter	-	Small	PPC	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
327-2	Counter		Total	PPC	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

		Set	ing mode (08) <e-s1< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-s1<>	UDIO200L/	230/280	>	
Code	Classifi- cation	lterr	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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	14
328-1	Counter		Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
328-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	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:	14
329-1	Counter		Small	SCN	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
329-2	Counter		Total	SCN	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	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	14
330-1	Counter		Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
330-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

	I	Sett	ing mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>п</th></e-st<>		230/280	>	п
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 recov- ered 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	14
332-1	Counter		Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
332-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
335-0	Counter	Display of total number	Large	ALL	0 <8 digits>	SYS	Displays the total num- ber of pages in the	14
335-1	Counter	of pages	Small	ALL	0 <8 digits>	SYS	copier/printer/scanning/ FAX functions.	14
335-2	Counter	-	Total	ALL	0 <8 digits>	SYS	-	14
337	Paper feeding	Paper size (#10 feeding/widthw		ALL	241/105 <148- 432/105- 297>	М		10
338	Paper feeding	Paper size (DL feeding/widthw		ALL	220/110 <148- 432/105- 297>	М		10
339	Paper feeding	Paper size (En Monarch-R) feeding/widthw	-	ALL	191/98 <148- 432/98- 297>	М		10
340	Paper feeding	Paper size (Envelope: CHO-3-R) feeding/widthwise direction		ALL	235/120 <148- 432/105- 297>	М		10
341	Paper feeding	Paper size (En YOU-4-R) feeding/widthw	-	ALL	235/105 <148- 432/105- 297>	М		10
345	Counter	Count setting o (PM)	f envelope	ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1
346	Counter	Count setting of sized paper (Pl		ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1

Setting mode (08) <e-studio200l 230="" 280=""></e-studio200l>										
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure			
347	Counter	Definition setting of large- sized paper (PM)	ALL	1 <0-1>	М	0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP	1			
348	Counter	Count setting of thick paper (PM)	ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1			
349	Counter	Count setting of OHP film (PM)	ALL	1 <0-1>	М	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>	Μ	 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>	М	0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP/8K	1			
356	Counter	Counter for upper drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from upper drawer	2			
357	Counter	Counter for lower drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from lower drawer	2			
358	Counter	Counter for bypass feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from bypass feed	2			
359	Counter	Counter for LCF feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from LCF	2			
360	Counter	Counter for PFP upper drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from PFP upper drawer	2			
370	Counter	Counter for PFP lower drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from PFP lower drawer	2			
372	Counter	Counter for ADU	ALL	0 <8 digits>	М	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>	Μ	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 format-ting.	2			
391	Counter	Number of errors in HDD (FAX)	FAX	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2			
392	Counter	Number of errors in HDD (Scanning)	SCN	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2			

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
393	Counter	Number of erro (Printer)	PRT	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2	
398	Laser	Number of polygonal motor rotational speed switching		ALL	0 <8 digits>	М	Counts the number of time the polygonal motor has switched its rotational speed between normal rota- tion and standby rota- tion.	2
399	Laser	Accumulated tin onal motor at n tion	ALL	0 <8 digits>	М	Accumulates the time the polygonal motor has rotated at normal rota- tion.	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	The first drop	ALL	1 <0-10>	М	This code is valid only when "20" is set to 08- 886. Setting value x -5°C:	4
404-1	-	ready status (Center ther-	The sec- ond drop	ALL	1 <0-10>	М		4
404-2	-	mistor)	The third drop	ALL	1 <0-10>	М	from 0°C to -50°C	4
404-3	_		The fourth drop	ALL	1 <0-10>	М		4
405-0	Fuser	Temperature drop setting in	The first drop	ALL	4 <0-10>	М		4
405-1	-	ready status (Side ther-	The sec- ond drop	ALL	4 <0-10>	М		4
405-2	-	mistor)	The third drop	ALL	4 <0-10>	М	-	4
405-3			The fourth drop	ALL	4 <0-10>	М	-	4
407	Fuser	Fuser roller ten ready status (Side thermisto	perature in	ALL	8 <0-12>	М	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 (0	8) <e-s1< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-s1<>	UDIO200L/	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
409	Fuser	Fuser roller temperature at energy saver mode (Center thermistor)	ALL	0 <0-13>	М	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>	М	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>	М	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>	Μ	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>	М	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

	Classifi		ing mode (0		Default			Drees
Code	Classifi- cation	Items		Func- tion	<accept- able value></accept- 	RAM	Contents	Proce- dure
414	Devel- oper	Toner density life correc- tion switching Pre-running time for first printing (Thick paper 3)		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			ALL	10 <0-15>	М	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	The first drop	ALL	15 <2-60>	М	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	-	time setting in ready status	The sec- ond drop	ALL	15 <2-60>	М		4
424-2		(Center ther- mistor)	The third drop	ALL	15 <2-60>	М		4
424-3			The fourth drop	ALL	15 <2-60>	М		4
425-0	Fuser	Temperature drop switching	The first drop	ALL	15 <2-60>	М		4
425-1		time setting in ready status	The sec- ond drop	ALL	15 <2-60>	М		4
425-2	-	(Side ther- mistor)	The third drop	ALL	15 <2-60>	М		4
425-3	1		The fourth drop	ALL	15 <2-60>	М	-	4
433-0	Fuser	Temperature control lower limit (Plain paper/	Center thermistor	ALL	7 <0-12>	М	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
433-1		at ordinary temperature)	Side ther- mistor	ALL	5 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4

		Setting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
437	Fuser	Fuser roller temperature during printing (Center thermistor /Thick paper 2)	ALL	8 <0-14>	М	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>	М	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>	М	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>	М	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

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

2 - 105

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		Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
448	Fuser	Fuser roller temperature in Energy Saving Mode (Side thermistor)	ALL	0 <0-13>	Μ	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>	М	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>	М	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>	Μ	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>	Μ	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 process- ing	Toner supply amount cor- rection/Toner motor control	ALL	0 <0-5>	М	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

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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. O: Invalid- Judges as A4-R without trans- porting 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 trans- ported 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 set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
463-1		ting (upper drawer)	Others	ALL	5 <0-5>	М	retry from the upper drawer.	4
464-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
464-1		ting (lower drawer)	Others	ALL	5 <0-5>	М	retry from the lower drawer.	4
465-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
465-1		ting (PFP upper drawer)	Others	ALL	5 <0-5>	М	retry from the PFP upper drawer.	4
466-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
466-1		ting (PFP lower drawer)	Others	ALL	5 <0-5>	М	retry from the PFP lower drawer.	4
467-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
467-1		ting (bypass feed)	Others	ALL	5 <0-5>	М	retry from the bypass tray.	4
468-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
468-1]	ting (LCF)	Others	ALL	5 <0-5>	М	retry from the LCF.	4
471	Paper feeding	Paper size (Po feeding/widthw		ALL	148/100 <148- 432/100- 297>	М	 Postcard is sup- ported only for JPN model. 	10

		Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
477	General	Machine identification information	ALL	Refer to content <0-1>	М	<default value=""> Lower drawer refer- ence: 0 Upper drawer refer- ence: 1</default>	2
478	Laser	Judged number of polygo- nal motor rotation error (Normal rotation)	ALL	0 <0-1>	М	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 polygo- nal motor rotation error (At acceleration/decelera- tion)	ALL	0 <0-1>	Μ	 Waiting time for polygonal motor rotation overshoot- ing 0.6 sec. Waiting time for polygonal motor rotation overshoot- ing 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. OFF ON (Changes to the drawer with the same paper direc- tion and size: ex. A4 to A4) ON (Changes to the drawer with the same paper size. Paper with the dif- ferent 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>	М	0: ON 1: OFF	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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 origi- nal is set on the RADF or the platen cover is opened. 0: Valid (when using RADF and the origi- nal 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 polygo- nal 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-run- ning 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 effec- tive when "0" or "2" is set at 08-483.	1
488	Laser	Setting of polygonal motor type	ALL	0 <0-3>	Μ	Set the type of polygo- nal 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>	М	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>	М	0: Stopped 1: 10,000 rpm	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th></th><th></th></e-st<>		230/280		
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
491	Transfer	Transfer charger bias cor- rection (H) at duplexing	ALL	149 <0-255>	М	Corrects the transfer charger bias output value of the leading edge area of paper at duplexing.	1
492	Transfer	Transfer charger bias cor- rection (C) at duplexing	ALL	139 <0-255>	М	Corrects the transfer charger bias output value of the center area of paper at duplexing.	1
493	Transfer	Transfer charger bias cor- rection (L) at duplexing	ALL	128 <0-255>	М	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 repro- duction 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	 Not used Custom Mode 1 when Text/Photo is set as a base Custom Mode 2 when Text is set as a base 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>	М	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>	Μ	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

	1	Sett	ing mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
518	Fuser	Fuser roller tem during printing (Side thermisto paper 3)		ALL	9 <0-14>	Μ	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 tem during printing (Center thermis lope)		ALL	9 <0-14>	Μ	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 tem during printing (Side thermisto		ALL	9 <0-14>	Μ	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 tim printing (Envelope)	e for first	ALL	10 <0-15>	Μ	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	The first drop	ALL	20 <0-200>	М	This code is valid only when "20" is set to 08-	4
525-1		time setting during printing	The sec- ond drop	ALL	38 <0-200>	М	535. Setting value x 5 sec.:	4
525-2		(Center ther- mistor)	The third drop	ALL	75 <0-200>	М	from 0 to 1,000 sec. later	4
525-3			The fourth drop	ALL	75 <0-200>	М		4

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
526	Fuser	Pre-running tim printing (OHP fi	lm)	ALL	0 <0-15>	Μ	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
527-0 527-1	Fuser	Temperature drop switching time setting	The first drop The sec-	ALL	20 <0-200> 30	M	This code is valid only when "20" is set to 08- 535.	4
527-1		during printing	ond drop	ALL	<0-200>	IVI	Setting value x 5 sec.:	4
527-2		(Side ther- mistor)	The third drop	ALL	48 <0-200>	М	from 0 to 1,000 sec. later	4
527-3	-		The fourth drop	ALL	75 <0-200>	М		4
535	Fuser	Temperature dr setting during p (Temperature/T	rinting ime)	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 7 8: Pattern 8 9: Pattern 9 10: Pattern 10 11: Pattern 10 11: Pattern 11 12: Pattern 12 13: Pattern 13 14: Pattern 14 15: Pattern 15 16: Pattern 17 18: Pattern 18 19: Pattern 19 20: Manual adjustment This code is valid only	1
536-0	Fuser	Temperature drop setting	The first drop	ALL	1 <0-10>	М	This code is valid only when "20" is set to 08-	4
536-1		during printing (Center ther-	The sec- ond drop	ALL	2 <0-10>	М	535. Setting value x -5°C:	4
536-2		mistor)	The third drop	ALL	3 <0-10>	М	from 0°C to -50°C	4
536-3			The fourth drop	ALL	3 <0-10>	М		4
537-0 537-1	Fuser	Temperature drop setting during printing	The first drop	ALL	1 <0-10> 2	M		4
007-1		(Side ther-	The sec- ond drop	ALL	2 <0-10>	IVÍ		4
537-2		mistor) Tidi	The third drop	ALL	3 <0-10>	М		4
537-3			The fourth drop	ALL	5 <0-10>	М		4

	T	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th></th></e-st<>		230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 Sav- ing 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	 Invalid Single-sided to duplex copying Double-sided to duplex copying User selection 	1
604	User interface	Default setting for APS/ AMS	PPC	0 <0-2>	SYS	 O: APS (Automatic Paper Selection) AMS (Automatic Magnification Selec- tion) 2: Not selected 	1
605	User interface	Centering printing of pri- mary/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	 Left page to right page 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 par- allel). 1: 1.0 sec. 2: 1.5 sec. -50: 25.5 sec. (in increments of 0.5 sec.)	1

		Setting mode (0	c, .c-01	Default			
Code	Classifi- cation	Items	Func- tion	Accept- able value>	RAM	Contents	Proce dure
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 mem- ory is properly recog- nized.	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	 Scanned as all in same size 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 jam- ming	PPC	0 <0-1>	SYS	 0: OFF 1: ON (Start printing when the scanning of each page is fin- ished) 	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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>I</th></e-st<>		230/280	>	I
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 mag- azine 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

2

Default									
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce dure		
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	 Left page to right page 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 auto- matically into the equip- ment 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 auto- matically into the equip- ment 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		

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>i</th></e-st<>		230/280	>	i
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 Elec- tronic Filing.	3
667	General	/SHA partition clearing	ALL	-	SYS	Initializes the shared folder.	3
670	General	HDD diagnostic menu dis- play	ALL	-	SYS	Display the HDD infor- mation	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 depart- ment management information * Key in the code and press the [INITIAL- IZE] button to per- form the initialization. If the area storing the department man- agement informa- tion is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management func- tion 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 advertis- ing display	ALL	0 <0-1>	SYS	Sets whether or not dis- playing 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 dis- played alternately. 0: Not displayed 1: Displayed	1
679	General	Banner advertising display 1	ALL	-	SYS	Maximum 27 letters (one-byte character)	11

	1	Setting mode (0	8) <e-s i<="" th=""><th></th><th>230/280</th><th>></th><th>1</th></e-s>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
680	General	Banner advertising display 2	ALL	-	SYS	Maximum 27 letters (one-byte character)	11
681	General	Display of [BANNER MES- SAGE] button	ALL	0 <0-1>	SYS	0: Not displayed 1: Displayed * This button enables the entry of "Banner advertising display 1 (08-679)" and "Ban- ner advertising dis- play 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	Mainte- nance	Performing panel calibra- tion	ALL	-	SYS	Performs the calibration of the pressing position on the touch panel (LCD screen). The cali- bration is performed by pressing 2 reference positions after this code is started up.	1
693	General	Initialization of NIC infor- mation	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 (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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	Scram- bler 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 pri- ority during copying. 1: Plain paper 2: Thick paper 1	1
698	Scram- bler 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 can- not be set again on security grounds. This setting is effective	5
	bler board	Erasing all data in HDD			-	only when the scram- bler board is installed.	
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	Mainte- nance	Remote-controlled service function	ALL	2 <0-2>	SYS	0: Valid (Remote-con- trolled server) 1: Valid (L2) 2: Invalid	1
703	Mainte- nance	Remote-controlled service HTTP server URL setting	ALL	-	SYS	Maximum 256 Bytes	11

2

	1	Setting mode (0	Ľ.	Default	1		
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
707	Mainte- nance	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	Mainte- nance (Remote)	Short time interval setting of recovery from Emer- gency Mode	ALL	24 <1-48>	SYS	Sets the time interval to recover from the Emer- gency Mode to the Nor- mal Mode. (Unit: Hour)	1
711	Mainte- nance (Remote)	Short time interval setting of Emergency Mode	ALL	60 <30-360>	SYS	Unit: Minute	1
715	Mainte- nance	Remote-controlled service periodical polling timing (Hour/Hour/Minute/Minute)	ALL	1230	SYS	0 (0:00) to 2359 (23:59)	1
716	Mainte- nance	Remote-controlled service Writing data of self-diag- nostic code	ALL	0 <0-1>	SYS	0: Prohibited 1: Accepted	1
717	Mainte- nance	Remote-controlled service response waiting time (Timeout)	ALL	3 <1-30>	SYS	Unit: Minute	1
718	Mainte- nance	Remote-controlled service initial registration	ALL	0 <0-2>	SYS	0: OFF 1: Start 2: Only certification is scanned	1
719	Mainte- nance	Remote-controlled service tentative password	ALL	-	SYS	Maximum 10 letters	11
720	Mainte- nance	Status of remote-con- trolled service initial regis- tration (Display only)	ALL	0 <0-1>	SYS	0: Not registered 1: Registered	2
721	Mainte- nance	Service center call function	ALL	2 <0-2>	SYS	 OFF Notifies all service calls Notifies all but paper jams 	1
723	Mainte- nance	Service center call HTTP server URL setting	ALL	-	SYS	Maximum 256 letters	11
726	Mainte- nance	HTTP proxy setting	ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1
727	Mainte- nance	HTTP proxy IP address setting	ALL	-	SYS	000.000.000.000- 255.255.255.255 (Default value 000.000.000.000)	11
728	Mainte- nance	HTTP proxy port number setting	ALL	0 <0- 65535>	SYS		1
729	Mainte- nance	HTTP proxy ID setting	ALL	-	SYS	Maximum 30 letters	11
730	Mainte- nance	HTTP proxy password set- ting	ALL	-	SYS	Maximum 30 letters	11
731	Mainte- nance	HTTP proxy panel display	ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>T</th></e-st<>		230/280	>	T
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
732	Mainte- nance (Remote)	Automatic ordering func- tion of supplies	ALL	3 <0-3>	SYS	0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF	1
733	Mainte- nance (Remote)	Automatic ordering func- tion of supplies FAX number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
734	Mainte- nance (Remote)	Automatic ordering func- tion of supplies E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
738	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's name	ALL	-	SYS	Maximum 50 letters	11
739	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's telephone number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
740	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
741	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's address	ALL	-	SYS	Maximum 100 letters	11
742	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service number	ALL	0 <5 digits>	SYS	Maximum 5 digits	11
743	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's name	ALL	-	SYS	Maximum 50 letters	11
744	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's tele- phone number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
745	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
746	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Supplier's name	ALL	-	SYS	Maximum 50 letters	11
747	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Supplier's address	ALL	-	SYS	Maximum 100 letters	11
748	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Notes	ALL	-	SYS	Maximum 128 letters	11
758	Mainte- nance (Remote)	Information about supplies Part number of toner car- tridge	ALL	-	SYS	Maximum 20 digits	11
759	Mainte- nance (Remote)	Information about supplies Order quantity of toner car- tridge	ALL	1 <1-99>	SYS		1
760	Mainte- nance (Remote)	Information about supplies Condition number of toner cartridge	ALL	1 <1-99>	SYS		1
764	Mainte- nance (Remote)	Automatic ordering sup- plies Result table printout	ALL	1 <0-2>	SYS	0: OFF 1: Always 2: ON Error	1

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th> ></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
765	Mainte- nance (Remote)	Automatic ordering sup- plies Display	ALL	2 <0-2>	SYS	 Valid (FAX/Internet FAX) Valid (FAX/Internet FAX/HTTP) Invalid 	1
767	Mainte- nance (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	Mainte- nance (Remote)	Destination E-mail address	ALL	-	SYS	Maximum 192 letters	11
769	Mainte- nance (Remote)	Total counter information transmission setting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
770	Mainte- nance (Remote)	Total counter transmission date setting	ALL	1 <1-31>	SYS	1 to 31	1
771	Mainte- nance (Remote)	PM counter notification set- ting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
772	Mainte- nance	Dealer's name	ALL	-	SYS	Maximum 100 letters Needed at initial regis- tration	11
773	Mainte- nance	Login name	ALL	-	SYS	Maximum 20 letters Needed at initial regis- tration	11
774	Mainte- nance (Remote)	Display setting of [Service Notification] button	ALL	0 <0-1>	SYS	0: Not displayed 1: displayed	1
775	Mainte- nance (Remote)	Sending error contents of equipment	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
776	Mainte- nance (Remote)	Setting total counter trans- mission interval (Hour/Hour/Minute/Minute)	ALL	-	SYS		1
777	Mainte- nance (Remote)	Destination E-mail address 2	ALL	-	SYS	Maximum 192 letters	11
778	Mainte- nance (Remote)	Destination E-mail address 3	ALL	-	SYS	Maximum 192 letters	11
779	Mainte- nance (Remote)	Notification format selec- tion	ALL	0 <0-1>	SYS	0: Text 1: Text + XML data	1
780	Mainte- nance	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	Mainte- nance	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	Mainte- nance	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

	1	Jelli	ng mode (u	8) <e-3 i<="" th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th>1</th></e-3>	UDIO200L/	230/280	>	1
Code	Classifi- cation	Items	5	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
783	Mainte- nance	Remote-controll polling day select Day-4		ALL	0 <0-31>	SYS	0: OFF 1 to 31: 1st to 31st of a month	1
784	Mainte- nance	Remote-controll polling day select Sunday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
785	Mainte- nance	Remote-controll polling day select Monday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
786	Mainte- nance	Remote-controll polling day select Tuesday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
787	Mainte- nance	Remote-controll polling day sele Wednesday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
788	Mainte- nance	Remote-controll polling day selec Thursday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
789	Mainte- nance	Remote-controll polling day select Friday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
790	Mainte- nance	Remote-controll polling day select Saturday		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
794	Mainte- nance	Information of st ting of toner car		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
796	Mainte- nance	Remote-controll lengthened inter (End of month)		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
797	Mainte- nance	Firmware downl		ALL	0 <0-1>	SYS	0: Accepted 1: Prohibited	1
798	General	Notifying addres period end	es of trial	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]: Forc- ible end When the "Forcible end of trial period" is per- formed, "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>	М	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>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4

		Set	ting mode (0	8) <e-s1< th=""><th></th><th>230/280</th><th>)></th><th></th></e-s1<>		230/280)>	
Code	Classifi- cation	Item	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
801-0	Fuser	Temperature control lower limit (Thick paper 1)	Center themistor Side	ALL	8 <0-12> 6	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
801-1		')	themistor		o <0-12>	IVI	10: 180°C 11: 185°C 12: 120°C	4
802-0	Fuser	Temperature control lower limit (Thick paper	Center themistor	ALL	8 <0-12>	М	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
802-1		2)	Side themistor	ALL	9 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
803-0	Fuser	Temperature control lower limit (Thick paper	Center themistor	ALL	8 <0-12>	М	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
803-1	-	3)	Side themistor	ALL	10 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
804-0	Fuser	Temperature control lower limit (Envelope)	Center themistor	ALL	8 <0-12>	М	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
804-1			Side themistor	ALL	10 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
805	Charger	Main charger b tion (Text/Photo/OF	IP film)	PRT	98 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
806	Charger	Main charger b tion (Toner Saving film)		PRT	98 <0-255>	м		1
807	Charger	Main charger b tion (Text/Photo/OF		PPC	98 <0-255>	М		1
808	Charger	Main charger b tion (Text/OHP film		PPC	98 <0-255>	М		1
809	Charger	Main charger b tion (Photo/OHP file	m)	PPC	98 <0-255>	М]	1
826	Charger	Main charger b tion (Toner saving r	node)	PRT	128 <0-255>	М		1
830	Transfer	Transfer transf correction (C)	ormer DC	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-221).	1

		Setting mode (0	ŏ) ≤e-⊃ i		230/280	>	-
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
831	Separa- tion	Separation transformer DC correction (C)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-234).	1
833	Devel- oper	Developer bias DC correc- tion (Text/Photo/OHP film)	PRT	108 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
834	Devel- oper	Developer bias DC correc- tion (Toner Saving Mode/OHP film)	PRT	108 <0-255>	М		1
835	Devel- oper	Developer bias DC correc- tion (Text/Photo/OHP film)	PPC	108 <0-255>	М		1
836	Devel- oper	Developer bias DC correc- tion (Text/OHP film)	PPC	108 <0-255>	М		1
837	Devel- oper	Developer bias DC correc- tion (Photo/OHP film)	PPC	108 <0-255>	М		1
838	Image process- ing	Switching of recycled toner saving control	ALL	0 <0-1>	М	0: Switched 1: Not switched	1
839	Image process- ing	Correction by temperature/ humidity	ALL	0 <0-3>	Μ	 Sets the correction by temperature/humidity. 0: All valid 1: All invalid 2: Valid only in autotoner sensor 3: All valid except transfer and separation 	1
849	General	Power source setting for destination	ALL	SAD: 1 Others: 0 <0-1>	М	0: Other than SAD 1: SAD	1
859	Devel- oper	Developer bias DC correc- tion (Toner saving mode)	PRT	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
860	Devel- oper	Developer bias DC correc- tion (Normal)	PRT	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
861	Devel- oper	Developer bias DC correc- tion (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
862	Devel- oper	Developer bias DC correc- tion (Text)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
863	Devel- oper	Developer bias DC correc- tion (Photo)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
864	Charger	Main charger bias correc- tion (Normal)	PRT	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1

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05/05

				Default			
Code	Classifi- cation	ltems	Func- tion	<accept- able value></accept- 	RAM	Contents	Proce dure
865	Charger	Main charger bias correc- tion (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
866	Charger	Main charger bias correc- tion (Text)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
867	Charger	Main charger bias correc- tion (Photo)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
868	Transfer	Transfer transformer DC correction (H)	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-220).	1
869	Transfer	Transfer transformer DC correction (L)	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-222).	1
870	Separa- tion	Separation transformer DC correction (H)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-233).	1
871	Separa- tion	Separation transformer DC correction (L)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-235).	1
872	Laser	Laser power correction (Normal)	PRT	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
873	Laser	Laser power correction (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
875	Laser	Laser power correction (Toner saving mode)	PRT	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
876	Laser	Laser power correction (Text)	PPC	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
877	Laser	Laser power correction (Photo)	PPC	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
886	Fuser	Temperature dr setting in ready (Temperature/T	status ime)	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 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/	Center themistor	ALL	7 <0-12>	М	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
896-1		Low tempera- ture)	Side themistor	ALL	5 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
900	Version	System firmwar sion	e ROM ver-	ALL	-	-	JPN: T371SY0JXXX UC: T371SY0UXXX EUR: T371SY0EXXX Others: T371SY0XXXX	2
903	Version	Engine ROM ve	ersion	ALL	-	-	371M-XXX	2
905	Version	Scanner ROM	version	ALL	-	-	371S-XXX	2
907	Version	RADF ROM ve	rsion	ALL	-	-	DF-XXXX	2
908	Version	Finisher ROM v	rsion	ALL	-	-	SDL-XX FIN-XX	2
915	Version	Fax board ROM	I version	FAX	-	-	F562-XXX	2
916	Version	NIC board ROM	I version	ALL	-	-	X.XXX	2
920	Version	FROM basic se ware version		ALL	-	-	VX.XX/X.XX	2
921	Version	FROM internal		ALL	-	-	VXXX.XXX X	2
922	Version	UI data fixed se sion		ALL	-	-	VXXX.XXX X	2
923	Version	UI data commo version		ALL	-	-	VXXX.XXX X	2
924	Version	Version of UI da guage 1 in HDD)	ALL	-	-	VXXX.XXX X	2
925	Version	Version of UI da guage 2 in HDE)	ALL	-	-	VXXX.XXX X	2
926 927	Version	Version of UI da guage 3 in HDE Version of UI da)	ALL	-	-	VXXX.XXX X VXXX.XXX X	2
927	Version	guage 4 in HDE)	ALL	-	-	VXXX.XXX X	2
520	VEISIOIT	guage 5 in HDE			_			2

		Setting mode (0	-,	Default			
Code	Classifi- cation	Items	Func- tion	Accept- able value>	RAM	Contents	Proce dure
929	Version	Version of UI data lan- guage 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 lan- guage 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: T371HD0EXXX	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	Elec- tronic Fil- ing	Start-up method of Elec- tronic Filing	ALL	0 <0-2>	SYS	Sets the start-up method of the Elec- tronic 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	 Renewed automati- cally Enter every time 	1
954	User interface	Clearing timing for files and Electronic Filing Agent	ALL	1 <0-1>	SYS	 Immediately after the completion of scanning Cleared by Auto Clear 	1

		Setting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 print- ing 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	Elec- tronic Fil- ing	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

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	1	Setting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th>1</th></e-st<>	UDIO200L/	230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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, Latin 2 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 International 15: Ventura US 16: Microsoft Publishing 17: Math-8 18: PS Math 19: Ventura Math 20: Pi Font 21: ISO 4: United Kingdom 23: ISO 6: ASCII 24: ISO 11 25: ISO 15: Italian 26: ISO 17 27: ISO 21: German 28: ISO 60: Danish/Norwegian 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 mode1: Function priority mode	1

	1	Setting mode (0	o) <e-51< th=""><th></th><th>230/200</th><th></th><th>1</th></e-51<>		230/200		1
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 \rightarrow 13"LG 2: FOLIO \rightarrow 13"LG	1
995	Version	Equipment number (serial number) display	ALL	0 <10 dig- its>	SYS	This code can be also keyed in from the adjustment mode (05- 976). 10 digits	11
999	Mainte- nance	FSMS total counter	ALL	0 <8 digits>	SYS	Refers to values of total counter	1
1001	Mainte- nance	Reset of NIC board	ALL	3 <1-3>	NIC	1: Cold 2: Warm 3: Not reset	12
1002	Network	Selection of NIC board sta- tus information	ALL	1 <1-2>	NIC	 Not printed out when the equipment is restarted 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 dis- played.) 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	 Fixed IP address Dynamic IP address Dynamic IP address without AutoIP Dynamic IP address without BOOTP Dynamic IP address without BOOTP 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

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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		Setting mode (0		Default		-	
Code	Classifi- cation	Items	Func- tion	Accept- able value>	RAM	Contents	Proce dure
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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>- 1</th></e-st<>		230/280	>	- 1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 (0	0) 78-31	Default	230/200		
Code	Classifi- cation	Items	Func- tion	Accept- able value>	RAM	Contents	Proce- dure
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 cli- ent	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 Com- munity	ALL	private	NIC	Maximum 31 letters	12
1067	Network	Authentication TRAP func- tion	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 opera- tor	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

			-		1		
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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_seri al	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</default>	12
1112	Network	Host name	ALL	MFP_seri al	NIC	Maximum 63 letters	12
1114	Network	Sending mail text of Inter- netFAX	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

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
1120	Network	Backup/Restore of NIC setting information	ALL	0 <0-1>	SYS	 Read (Reads all of the setting informa- tion in NIC and cre- ate a file NAM1B (no extension) in USB) Write (Writes all of the setting informa- tion read from a file NAM1B (no exten- sion) in USB) 	1
1124	Network	Workgroup name	ALL	work- group	UTY	Maximum 15 letters	12
1126	Counter	Validity of interrupt copy- ing 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 per- formed. 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. D: 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 simulta- neously 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 (0	8) <e-st< th=""><th>1</th><th>230/280</th><th>></th><th></th></e-st<>	1	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1138	Network	LDAP search method set- ting	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 set- ting	ALL	0 <0-1>	SYS	0: Not authenticated1: Authenticated	1
1140	User interface	Restriction of the template function with the adminis- trator privilege	ALL	0 <0-1>	SYS	Selects the restriction of the template function usage setting.0: No restriction1: Only available with the administrator privilege.	1
1145	Mainte- nance (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 Dis- play/0 clearing	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (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>	М	Counts the rotation number of the toner cartridge.	1
1378	Counter	Counter for period of time fuser unit is at ready tem- perature	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (when the equip- ment 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 tem- perature	ALL	0 <8 digits>	М	Counts up the heater control time accumu- lated (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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
1382	Counter	Counter for period of time fuser unit is at energy sav- ing temperature/Counter reset	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (when the equip- ment 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 process- ing	Number of output pages (Thick paper 1)	ALL	0 <8 digits>	М	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 process- ing	Number of output pages (Thick paper 2)	ALL	0 <8 digits>	Μ	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 process- ing	Number of output pages (Thick paper 3)	ALL	0 <8 digits>	М	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 process- ing	Number of output pages (OHP film)	ALL	0 <8 digits>	Μ	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>	М	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>	М	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>	М	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>	М	Counts the number of times of the feeding retry from the PFP lower drawer.	1

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>-</th></e-st<>		230/280	>	-
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1394	Paper feeding	Feeding retry counter (bypass feed)	ALL	0 <8 digits>	М	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>	М	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>	М	When the number of feeding retry (08-1390 to 08-1395) exceeds	1
1397	Paper feeding	Feeding retry counter upper limit value (Lower drawer)	ALL	0 <8 digits>	М	the setting value, the feeding retry will not be performed subse-	1
1398	Paper feeding	Feeding retry counter upper limit value (PFP upper drawer)	ALL	0 <8 digits>	М	quently. In case "0" is set as a setting value, however, the feeding	1
1399	Paper feeding	Feeding retry counter upper limit value (PFP lower drawer)	ALL	0 <8 digits>	М	retry continues regard- less of the counter set- ting value.	1
1400	Paper feeding	Feeding retry counter upper limit value (Bypass feed)	ALL	0 <8 digits>	М		1
1401	Paper feeding	Feeding retry counter upper limit value (LCF)	ALL	0 <8 digits>	М		1
1410	Counter	Counter for period of toner cartridge rotation time	ALL	0 <8 digits>	М	Counts up the period of rotation time of the toner cartridge.	1
1411	Counter	Counter for envelope	ALL	0 <8 digits>	М	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 ON) 	1

		Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th></th></e-st<>		230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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" + random number overwriting (validation ON) 4: "00" + "FF" + random number overwriting (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	 Function OFF (no restriction on data saving or other operations) Function ON (Data saving or other operations are restricted) 	1
1434	Network	"Disable local file save" function	ALL	0 <0-1>	SYS	 Function OFF (no restriction on data saving or other operations) Function ON (Data saving or other operations are restricted) 	1

		Setting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1484	Network	Authentication method of "Scan to Email"	ALL	0 <0-2>	SYS	 Disable SMTP authentication 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 assign- ment method when it is given an authentication	ALL	0 <0-2>	SYS	 "User name" + @ + "Domain name" LDAP search Use the address registered in "From" field of E-mail set- ting 	1
1488	Network	ID setting of LDAP server for "From" address assign- ment	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) charac- ter ASCII sequence only	11

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

		. .		Default			
Code	Classifi- cation	Items	Func- tion	<accept- able value></accept- 	RAM	Contents	Proce dure
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 refer- ence 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 car- tridge reference pixel counter.	3
1504	Pixel counter	Pixel counter display set- ting	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 set- ting	ALL	0 <0-1>	SYS	Selects the reference when displaying the pixel counter on the LCD screen.0: Service technician reference1: Toner cartridge ref- erence	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 out- put pages to determine toner empty. This set- ting 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 refer- ence	ALL	0 <0-1>	SYS	Becomes "1" when 08- 1502 is performed.	2
1510	Pixel counter	Service technician refer- ence cleared date	ALL	-	SYS	Displays the date on which 08-1502 was per- formed.	2
1514	Pixel counter	Toner cartridge reference cleared date	ALL	-	SYS	Displays the date on which 08-1503 was per- formed.	2
1518	Pixel counter	Toner cartridge reference count started date	ALL	-	SYS	Displays the date on which 08-1503 was per- formed.	2

	1	Setting mode (0	8) <e-st< th=""><th></th><th>230/280</th><th>></th><th>1</th></e-st<>		230/280	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
1548	Pixel counter	Number of output pages (Service technician refer- ence)	PPC	<8 digits>	SYS	Counts the number of output pages con- verted 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 refer- ence)	PRT	<8 digits>	SYS	Counts the number of output pages con- verted 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 refer- ence)	FAX	<8 digits>	SYS	Counts the number of output pages con- verted 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 con- verted to the standard paper size in the copy function and toner car- tridge reference. [Unit. page]	2
1555	Pixel counter	Number of output pages (Toner cartridge reference)	PRT	<8 digits>	SYS	Counts the number of output pages con- verted to the standard paper size in the printer function and toner car- tridge reference. [Unit. page]	2
1556	Pixel counter	Number of output pages (Toner cartridge reference)	FAX	<8 digits>	SYS	Counts the number of output pages con- verted to the standard paper size in the FAX function and toner car- tridge reference. [Unit. page]	2
1566	Pixel counter	Toner cartridge replace- ment counter	ALL	<3 digits>	SYS	Counts the number of time of the toner car- tridge replacement.	2
1592	Pixel counter	Average pixel count (Service technician refer- ence)	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 refer- ence)	PRT	0 <0- 10000>	SYS	Displays the average pixel count in the printer function and service technician reference. [Unit: 0.01%]	2

		Setting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1594	Pixel counter	Average pixel count (Service technician refer- ence)	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 refer- ence)	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 refer- ence)	PPC	0 <0- 10000>	SYS	Displays the latest pixel count in the copy func- tion and service techni- cian reference. [Unit: 0.01%]	2
1607	Pixel counter	Latest pixel count (Service technician refer- ence)	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 refer- ence)	FAX	0 <0- 10000>	SYS	Displays the latest pixel count in the FAX func- tion and service techni- cian 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 car- tridge 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 car- tridge 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 ref- erence. [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 car- tridge 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 func- tion 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 func- tion and toner cartridge reference. [Unit: 0.01%]	2

		Set	ting mode (0	8) <e-st< th=""><th>UDIO200L/</th><th>230/280</th><th>></th><th></th></e-st<>	UDIO200L/	230/280	>	
Code	Classifi- cation	lter	ns	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1640	Pixel counter	Latest pixel co (Toner cartrido	je reference)	PRT	0 <0- 10000>	SYS	Displays the latest pixel count in the printer function and toner car- tridge reference. [Unit: 0.01%]	2
1649-0	Pixel	Pixel count	0-5%	PPC	<8 digits>	SYS	The pixel count data	14
1649-1	counter	distribution	5.1-10%	PPC	<8 digits>	SYS	are divided into 10	14
1649-2			10.1-15%	PPC	<8 digits>	SYS	ranges. The number of output pages in each	14
1649-3			15.1-20%	PPC	<8 digits>	SYS	range is displayed. In	14
1649-4			20.1-25%	PPC	<8 digits>	SYS	this code, the distribu-	14
1649-5			25.1-30%	PPC	<8 digits>	SYS	tions in the copy func-	14
1649-6			30.1-40%	PPC	<8 digits>	SYS	tion are displayed.	14
1649-7			40.1-60%	PPC	<8 digits>	SYS	[Unit: page]	14
1649-8			60.1-80%	PPC	<8 digits>	SYS		14
1649-9			80.1- 100%	PPC	<8 digits>	SYS		14
1650-0	Pixel	Pixel count	0-5%	PRT	<8 digits>	SYS	The pixel count data	14
1650-1	counter	distribution	5.1-10%	PRT	<8 digits>	SYS	are divided into 10	14
1650-2			10.1-15%	PRT	<8 digits>	SYS	ranges. The number of output pages in each	14
1650-3			15.1-20%	PRT	<8 digits>	SYS	range is displayed. In	14
1650-4			20.1-25%	PRT	<8 digits>	SYS	this code, the distribu-	14
1650-5			25.1-30%	PRT	<8 digits>	SYS	tions in the printer func-	14
1650-6			30.1-40%	PRT	<8 digits>	SYS	tion are displayed.	14
1650-7			40.1-60%	PRT	<8 digits>	SYS	[Unit: page]	14
1650-8			60.1-80%	PRT	<8 digits>	SYS		14
1650-9			80.1- 100%	PRT	<8 digits>	SYS		14
1651-0	Pixel	Pixel count	0-5%	FAX	<8 digits>	SYS	The pixel count data	14
1651-1	counter	distribution	5.1-10%	FAX	<8 digits>	SYS	are divided into 10	14
1651-2			10.1-15%	FAX	<8 digits>	SYS	ranges. The number of output pages in each	14
1651-3			15.1-20%	FAX	<8 digits>	SYS	range is displayed. In	14
1651-4			20.1-25%	FAX	<8 digits>	SYS	this code, the distribu-	14
1651-5			25.1-30%	FAX	<8 digits>	SYS	tions in the FAX func-	14
1651-6			30.1-40%	FAX	<8 digits>	SYS	tion are displayed.	14
1651-7			40.1-60%	FAX	<8 digits>	SYS	[Unit: page]	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 set- ting <procedure 4=""> *Indicated in 8 digits</procedure>	Date of previous replacement <procedure 2=""></procedure>	Remarks
Photoconductive drum	1150-0 to 8	1151	<default 1150<br="" code="" of="" values="">(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</default>
Drum cleaning blade	1158-0 to 8	1159	<default 1158<br="" code="" of="" values="">(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</default>
Drum separation finger	1172-0 to 8	1173	<default 1172<br="" code="" of="" values="">(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</default>
Main charger grid	1174-0 to 8	1175	<default 1174<br="" code="" of="" values="">(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</default>
Needle electrode	1182-0 to 8	1183	<default 1182<br="" code="" of="" values="">(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</default>
Ozone filter	1198-0 to 8	1199	<default 1198<br="" code="" of="" values="">(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</default>
Developer material	1200-0 to 8	1201	<default 1200<br="" code="" of="" values="">(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</default>
Transfer charger wire	1214-0 to 8	1215	<default 1214<br="" code="" of="" values="">(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</default>
Separation charger wire	1224-0 to 8	1225	<default 1224<br="" code="" of="" values="">(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</default>
Fuser roller	1246-0 to 8	1247	<default 1246<br="" code="" of="" values="">(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</default>
Pressure roller	1250-0 to 8	1251	<default 1250<br="" code="" of="" values="">(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</default>

2

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

Items	PM management set- ting <procedure 4=""> *Indicated in 8 digits</procedure>	Date of previous replacement <procedure 2=""></procedure>	Remarks
Separation roller (LCF)	1310-0,1,2,8	1311	<default 1310<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000</default>
Separation roller (PFP upper drawer)	1312-0,1,2,8	1313	<default 1312<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Separation roller (PFP lower drawer)	1314-0,1,2,8	1315	<default 1314<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Separation roller (Bypass unit)	1316-0,1,2,8	1317	<default 1316<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (PFP upper drawer)	1320-0,1,2,8	1321	<default 1320<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (PFP lower drawer)	1322-0,1,2,8	1323	<default 1322<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (Bypass unit)	1324-0,1,2,8	1325	<default 1324<br="" code="" of="" values="">(e-STUDIO200L/230/280> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (PFP upper drawer)	1328-0,1,2,8	1329	<default 1328<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (PFP lower drawer)	1330-0,1,2,8	1331	<default 1330<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (Bypass unit)	1332-0,1,2,8	1333	<default 1332<br="" code="" of="" values="">(e-STUDIO200L/230/280)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Recovery blade	1336-0 to 8	1337	<default 1336<br="" code="" of="" values="">(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</default>

<< 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.

0% 257	
SYSTEM MODE	
99999999 99999999	
CANCEL	

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).

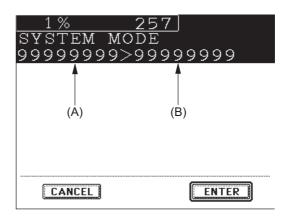


Fig. 2-5

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

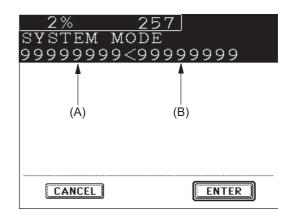


Fig. 2-6

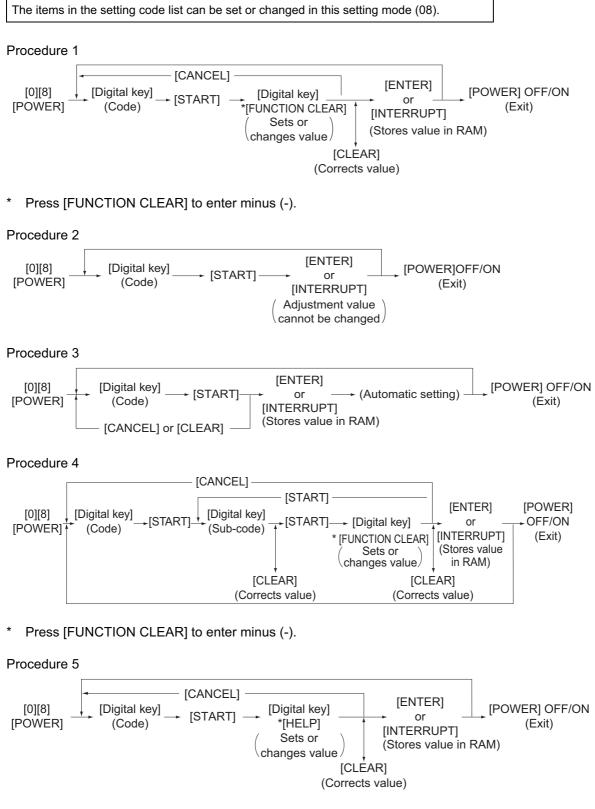
(4) Press the [ENTER] button to complete overwriting of the counter value.

Note:

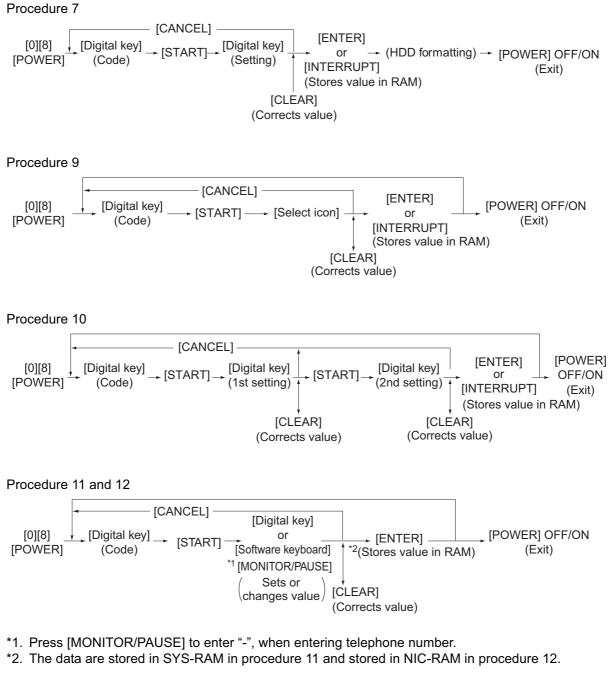
The screen returns to the code entry screen without copying (overwriting) the value when the [CANCEL] button is pressed.

2

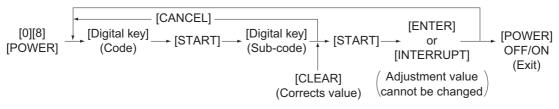
2.2.8 Setting mode (08) (e-STUDIO202L/232/282)



* Press [HELP] to enter "-".







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 (0	o) <e-si< th=""><th></th><th>232/282</th><th></th><th></th></e-si<>		232/282		
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
200	General	Date and time setting	ALL	- <13 dig- its>	-	Year/month/date/day/ hour/minute/second Example: 03 07 0 13 13 27 48 "Day" - "0" is for "Sunday". Pro- ceeds Monday through Saturday from "1" to "6".	5
201	General	Destination selection	ALL	EUR: 0 UC: 1 JPN: 2 <0-2>	М	0: EUR 1: UC 2: JPN	1
202	User interface	Counter installed externally	ALL	0 <0-3>	М	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>	М	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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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. 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</default>	1
207	User interface	Highlighting display on LCD	ALL	0 <0-1>	SYS	 Black letter on white background White letter on black background 	1
209	User interface	Default setting of filing for- mat 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>	М		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 for- mat 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

	1	Setting mode (0	୪) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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	М	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	М	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	М	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	М	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>	М		10
230	Paper feeding	Paper size (A4-R) feeding/ widthwise direction	ALL	297/210 <182- 432/140- 297>	М		10
231	Paper feeding	Paper size (A5-R) feeding/ widthwise direction	ALL	210/148 <182- 432/140- 297>	М		10
232	Paper feeding	Paper size (B4) feeding/ widthwise direction	ALL	364/257 <182- 432/140- 297>	М		10
233	Paper feeding	Paper size (B5-R) feeding/ widthwise direction	ALL	257/182 <182- 432/140- 297>	М		10
234	Paper feeding	Paper size (LT-R) feeding/ widthwise direction	ALL	279/216 <182- 432/140- 297>	М		10
235	Paper feeding	Paper size (LD) feeding/ widthwise direction	ALL	432/279 <182- 432/140- 297>	М		10
236	Paper feeding	Paper size (LG) feeding/ widthwise direction	ALL	356/216 <182- 432/140- 297>	М		10

	1	Setting mode (0	8) <e-st< th=""><th>1</th><th>232/282</th><th>></th><th>1</th></e-st<>	1	232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
237	Paper feeding	Paper size (ST-R) feeding/ widthwise direction	ALL	216/140 <182- 432/140- 297>	М		10
238	Paper feeding	Paper size (COMPUTER) feeding/widthwise direction	ALL	356/257 <182- 432/140- 297>	М		10
239	Paper feeding	Paper size (FOLIO) feed- ing/widthwise direction	ALL	330/210 <182- 432/140- 297>	М		10
240	Paper feeding	Paper size (13" LG) feed- ing/widthwise direction	ALL	330/216 <182- 432/140- 297>	М		10
241	Paper feeding	Paper size (8.5"X8.5") feeding/widthwise direction	ALL	216/216 <182- 432/140- 297>	М		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 feed- ing/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>	М		10
245	Paper feeding	Paper size (16K-R) feed- ing/widthwise direction	ALL	270/195 <182- 432/140- 297>	М		10
247	Paper feeding	Memory 2 Paper size (bypass feed- ing/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 feed- ing/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 feed- ing/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	Mainte- nance	Service technician tele- phone number	ALL	0 <32 dig- its>	SYS	A telephone number can be entered up to 32 digits. Use the [Monitor/ Pause] button to enter a hyphen (-).	11

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		Setting mode (0	8) <e-s1< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-s1<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
251	Mainte- nance	Setting value of PM counter	ALL	Refer to content <8 digits>	Μ	<pre><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</default></pre>	1
252	Mainte- nance	Current value of PM counter Display/0 clearing	ALL	0 <8 digits>	М	Counts up when the registration sensor is ON.	1
253	Mainte- nance	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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
255	Paper feeding	PFP/LCF installation	ALL	0 <0-4, 16-20, 32-36>	M	Sets the installation sta- tus of the PFP or LCF, and also disables its functions and the lower drawer of the equip- ment. 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. 0: Auto When only the upper drawer is installed as the paper feeder of the equipment. 1: PFP upper-drawer type installed 2: PFP upper-drawer and lower-drawer type installed 3: LCF installed 4: Disables PFP or LCF When the upper and lower drawers are installed as the paper feeder of the equip- ment. 16: PFP and LCF not installed 17: PFP upper-drawer type installed 18: PFP upper-drawer and lower-drawer type installed 19: LCF installed 18: PFP upper-drawer and lower-drawer type installed 19: LCF installed 20: Disables functions of PFP or LCF Disables the lower drawer when the upper and lower drawers are installed as the paper feeder of the equip- ment. 32: PFP upper-drawer and lower-drawer type installed 33: PFP upper-drawer and lower-drawer and lower-drawer type installed 34: PFP upper-drawer and lower-drawer type installed 35: LCF installed 36: Disables functions of PFP or LCF	1
256	Paper feeding	Paper size setting /LCF	ALL	EUR: A4 UC: LT JPN: A4	М	Press the button on the LCD to select the size.	9

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
257	Counter	Counter copy	ALL	- <1-2>	-	 Electrical counter → Backup counter Backup counter → Electrical counter (P. 2-239 "Fig. 2-7") 	-
258	Mainte- nance	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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
270	Elec- tronic Fil- ing	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-Filling partitions are filled	ALL	90 <0-100>	SYS	Sets the percentage of HDD partition filled when warning notifica- tion 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 tem- plate. 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 creat- ing 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 den- sity)	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

				Default			
Code	Classifi- cation	Items	Func- tion	<accept- able value></accept- 	RAM	Contents	Proce dure
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 delet- ing expired flies and check- ing capacity of HDD partitions	ALL	12 <1-24>	SYS	Sets the search inter- val of deleting expired files and checking capacity of HDD parti- tion. (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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 <0,2,4>	SYS	Sets whether the origi- nal counter is dis- played or not. 0: Not displayed 2: Displayed 4: Displayed (Double- sized original is counted as 2.)	1

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>2></th><th></th></e-st<>	UDIO202L/	232/282	2>	
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
305-0	Counter	Number of	A3	PPC	0	SYS	Counts the output	4
305-1		output pages in copier func-	A4	-	<8 digits>		pages in the copier function for each paper	
305-2		tion	A5	-			size according to the	
305-3			A6	-			setting for the count	
305-4			B4	-			setting of large-sized	
305-5			B5	-			paper (08-352) and the	
305-6			FOLIO	-			definition setting of large-sized paper (08-	
305-7			LD	-			353).	
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	-				
305-16 306-0	Counter	Number of	Others A3	PRT	0	SYS	Counts the output	4
306-0	Counter	output pages	A3 A4	PRI	0 <8 digits>	515	Counts the output pages in the printer	4
306-1		in printer func-	A4 A5	-	to algitor		function for each paper	
306-2		tion	A5 A6	-			size according to the	
306-3			B4	-			setting for the count	
306-5			B4 B5	-			setting of large-sized paper (08-352) and the	
306-6			FOLIO	-			definition setting of	
306-7			LD	-			large-sized paper (08-	
306-8			LG	-			353).	
306-9			LT	-				
306-10			ST	-				
306-11			COMP	1				
306-12			13"LG	-				
306-13			8.5" x 8.5"	ł				
306-14			16K	4				
306-15			8K	-				
306-16			Others	1				

		Sett	ting mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
307-0	Counter	Number of	A3	PRT	0	SYS	Counts the output	4
307-1		output pages at list print	A4		<8 digits>		pages at the list print mode for each paper	
307-2		mode	A5				size according to the	
307-3		mouo	A6	-			setting for the count	
307-4			B4	-			setting of large-sized	
307-5			B5	-			paper (08-352) and the	
307-6			FOLIO	-			definition setting of large-sized paper (08-	
307-7			LD	-			353).	
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	a ,		Others	= 4) (0.10		
308-0	Counter	Number of output pages	A3	FAX	0 <8 digits>	SYS	Counts the output pages in the FAX func-	4
308-1		in FAX func-	A4	-	so digitar		tion for each paper size	
308-2 308-3		tion	A5 A6	-			according to the setting	
308-3			Ao B4	-			for the count setting of	
308-5			Б4 В5	-			large-sized paper (08- 352) and the definition	
308-5			FOLIO	-			setting of large-sized	
308-0			LD	-			paper (08-353).	
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	-				

		Set	ting mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	lter	ns	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
312-0	Counter	Number of	A3	PPC	0	SYS	Counts the scanning	4
312-1		scanning pages in	A4		<8 digits>		pages in the copier function for each paper	
312-2		copier func-	A5				size according to the	
312-3		tion	A6				setting for the count	
312-4			B4				setting of large-sized	
312-5			B5				paper (08-352) and the	
312-6			FOLIO				definition setting of large-sized paper (08-	
312-7			LD	-			353).	
312-8			LG	_			,-	
312-9			LT	_				
312-10			ST	=				
312-11			COMP	_				
312-12			13"LG	-				
312-13			8.5" x 8.5"	-				
312-14 312-15			16K 8K	-				
312-15			Others	_				
312-16	Counter	Number of	A3	SCN	0	SYS	Counts the scanning	4
313-0	Counter	scanning	A3 A4	SCN	<8 digits>	515	pages in the scanning	4
313-1		pages in	A4 A5	-	o algito		function for each paper	
313-2		scanning	A5 A6	-			size according to the	
313-4		function	B4	-			setting for the count	
313-5			B5	-			setting of large-sized paper (08-352) and the	
313-6			FOLIO				definition setting of	
313-7			LD	_			large-sized paper (08-	
313-8			LG	-			353).	
313-9			LT					
313-10			ST	1				
313-11			COMP	1				
313-12			13"LG	1				
313-13			8.5" x 8.5"	1				
313-14			16K	1				
313-15			8K	1				
313-16			Others	1				

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
314-0	Counter	Number of	A3	FAX	0	SYS	Counts the scanning	4
314-1		scanning pages in FAX	A4	_	<8 digits>		pages in the FAX func- tion for each paper size	
314-2		function	A5	-			according to the setting	
314-3			A6	-			for the count setting of	
314-4			B4	-			large-sized paper (08-	
314-5			B5	-			352) and the definition	
314-6			FOLIO	-			setting of large-sized paper (08-353).	
314-7			LD	-			paper (00-000).	
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	-				
314-15 314-16			8K Others	-				
314-16	Counter	Number of	A3	FAX	0	SYS	Counts the transmitted	4
315-0	Counter	transmitted	A3 A4	FAA	<8 digits>	313	pages in the FAX func-	4
315-2		pages in FAX	A4 A5	-	e algite		tion for each paper size	
315-3		function	A6	-			according to the setting	
315-4			B4	-			for the count setting of	
315-5			B5	-			large-sized paper (08- 352) and the definition	
315-6			FOLIO	-			setting of large-sized	
315-7			LD	-			paper (08-353).	
315-8			LG					
315-9			LT	-				
315-10			ST	-				
315-11			COMP	-				
315-12			13"LG	-				
315-13			8.5" x 8.5"	ł				
315-14			16K	-				
315-15			8K	-				
315-16			Others	1				

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
316-0	Counter	Number of	A3	FAX	0	SYS	Counts the received	4
316-1		received	A4		<8 digits>		pages in the FAX func-	
316-2		pages in FAX function	A5				tion for each paper size according to the setting	
316-3		lanotion	A6				for the count setting of	
316-4			B4				large-sized paper (08-	
316-5			B5				352) and the definition	
316-6			FOLIO				setting of large-sized paper (08-353).	
316-7			LD				paper (00-000).	
316-8			LG					
316-9			LT					
316-10			ST					
316-11			COMP					
316-12			13"LG					
316-13			8.5" x 8.5"					
316-14			16K					
316-15			8K					
316-16		5	Others		-	01/0		
320-0	Counter	Display of number of output pages in copier func- tion	Large	PPC	0 <8 digits>	SYS	Counts the number of output pages in the Copier Function according to its size (large/small). Large:	14
320-1	Counter		Small	PPC	0	SYS	Number of output	14
					<8 digits>		pages of large-sized paper defined at 08- 353 Small: Number of output	
320-2	Counter		Total	PPC	0 <8 digits>	SYS	pages other than set as large-sized paper Total:	14
							Total number out- put pages of all paper sizes.	
321-0	Counter	Display of number of output pages in printer func- tion	Large	PRT	0 <8 digits>	SYS	Counts the number of output pages in the Printer Function according to its size (large/small). Large:	14
321-1	Counter		Small	PRT	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
321-2	Counter		Total	PRT	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

		Set	ting mode (08) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Iten	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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:	14
322-1	Counter		Small	PRT	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
322-2	Counter		Total	PRT	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
323-0	Counter	Display of number of output pages in FAX func- tion	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	14
323-1	Counter		Small	PRT	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
323-2	Counter		Total	PRT	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
327-0	Counter	Display of number of scanning pages in copier func- tion	Large	PPC	0 <8 digits>	SYS	Counts the number of scanning pages in the Copier Function according to its size (large/small). Large:	14
327-1	Counter		Small	PPC	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
327-2	Counter		Total	PPC	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

2

	Classifi-			Func-	Default <accept-< th=""><th></th><th></th><th>Proce</th></accept-<>			Proce
Code	cation	ltem	IS	tion	able value>	RAM	Contents	dure
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	14
328-1	Counter		Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
328-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	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:	14
329-1	Counter		Small	SCN	0 <8 digits>	SYS	Number of output pages of large-sized paper defined at 08- 353 Small: Number of output	14
329-2	Counter		Total	SCN	0 <8 digits>	SYS	pages other than set as large-sized paper Total: Total number out- put pages of all paper sizes.	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	14
330-1	Counter		Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
330-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 recov- ered 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	14
332-1	Counter	-	Small	FAX	0 <8 digits>	SYS	pages of large-sized paper defined at 08- 353 Small: Number of output pages other than	14
332-2	Counter		Total	FAX	0 <8 digits>	SYS	set as large-sized paper Total: Total number out- put pages of all paper sizes.	14
335-0	Counter	Display of total number	Large	ALL	0 <8 digits>	SYS	Displays the total num- ber of pages in the	14
335-1	Counter	of pages	Small	ALL	0 <8 digits>	SYS	copier/printer/scanning/ FAX functions.	14
335-2	Counter		Total	ALL	0 <8 digits>	SYS		14
337	Paper feeding	Paper size (#10 feeding/widthw		ALL	241/105 <148- 432/105- 297>	М		10
338	Paper feeding	Paper size (DL feeding/widthw		ALL	220/110 <148- 432/105- 297>	М		10
339	Paper feeding	Monarch-R)	Paper size (Envelope: Monarch-R) feeding/widthwise direction		191/98 <148- 432/98- 297>	М		10
340	Paper feeding	CHO-3-R)	Paper size (Envelope: CHO-3-R) feeding/widthwise direction		235/120 <148- 432/105- 297>	М		10
341	Paper feeding	Paper size (En YOU-4-R) feeding/widthw	-	ALL	235/105 <148- 432/105- 297>	М		10

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
342	User interface	Displaying number of origi- nal pages placed on origi- nal glass	PPC	0 <0-1>	SYS	This setting is whether the number of pages of originals placed on the original glass is dis- played or not. 0: Not displayed 1: Displayed	1
345	Counter	Count setting of envelope (PM)	ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1
346	Counter	Count setting of large- sized paper (PM)	ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1
347	Counter	Definition setting of large- sized paper (PM)	ALL	1 <0-1>	М	0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP	1
348	Counter	Count setting of thick paper (PM)	ALL	1 <0-1>	М	0: Counted as 1 1: Counted as 2	1
349	Counter	Count setting of OHP film (PM)	ALL	1 <0-1>	М	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>	М	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>	М	0: A3/LD 1: A3/LD/B4/LG/ FOLIO/COMP/8K	1
356	Counter	Counter for upper drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from upper drawer	2
357	Counter	Counter for lower drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from lower drawer	2
358	Counter	Counter for bypass feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from bypass feed	2
359	Counter	Counter for LCF feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from LCF	2
360	Counter	Counter for PFP upper drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from PFP upper drawer	2
370	Counter	Counter for PFP lower drawer feeding	ALL	0 <8 digits>	М	Counts the number of sheets fed from PFP lower drawer	2
372	Counter	Counter for ADU	ALL	0 <8 digits>	М	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 (0	8) <e-s1< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-s1<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
381	Counter	Setting for counter installed externally	ALL	1 <0-7>	М	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 format- ting.	2
391	Counter	Number of errors in HDD (FAX)	FAX	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2
392	Counter	Number of errors in HDD (Scanning)	SCN	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2
393	Counter	Number of errors in HDD (Printer)	PRT	0 <8 digits>	SYS	The number of error is reset at HDD format- ting.	2
398	Laser	Number of polygonal motor rotational speed switching	ALL	0 <8 digits>	М	Counts the number of time the polygonal motor has switched its rotational speed between normal rota- tion and standby rota- tion.	2
399	Laser	Accumulated time of polyg- onal motor at normal rota- tion	ALL	0 <8 digits>	М	Accumulates the time the polygonal motor has rotated at normal rota- tion.	2
400	Fuser	Fuser unit error status counter	ALL	0 <0-19>	Μ	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

		Sett	ing mode (0	8) <e-s1< th=""><th>UDIO202L/</th><th>232/282</th><th>2></th><th></th></e-s1<>	UDIO202L/	232/282	2>	
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
404-0	Fuser	Temperature drop setting in	The first drop	ALL	1 <0-10>	М	This code is valid only when "20" is set to 08-	4
404-1	-	ready status (Center ther-	The sec- ond drop	ALL	1 <0-10>	М	886. Setting value x -5°C:	4
404-2	-	mistor)	The third drop	ALL	1 <0-10>	М	from 0°C to -50°C	4
404-3	-		The fourth drop	ALL	1 <0-10>	М	-	4
405-0	Fuser	Temperature drop setting in	The first drop	ALL	4 <0-10>	М	-	4
405-1	-	ready status (Side ther-	The sec- ond drop	ALL	4 <0-10>	М	-	4
405-2	-	mistor)	The third drop	ALL	4 <0-10>	М	-	4
405-3	-		The fourth drop	ALL	4 <0-10>	М	_	4
407	Fuser	Fuser roller temperature in ready status (Side thermistor)		ALL	8 <0-12>	Μ	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>	М	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>	М	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 tem standby (Center thermis		ALL	8 <0-12>	М	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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
412	Fuser	Fuser roller temperature during printing (Center thermistor/Thick paper 3)	ALL	9 <0-14>	М	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>	Μ	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	Devel- oper	Toner density life correc- tion switching	ALL	0 <0-7>	Μ	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>	Μ	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

	1		ing mode (0	-,	Default	,	-	1
Code	Classifi- cation	ltem	IS	Func- tion	<pre><accept- able value></accept- </pre>	RAM	Contents	Proce dure
424-0	Fuser	Temperature	The first	ALL	15 <2-60>	М	This code is valid only when "20" is set to 08-	4
424-1	-	drop switching time setting in ready status	drop The sec- ond drop	ALL	<2-60> 15 <2-60>	М	886. Setting value x 1 min.:	4
424-2	-	(Center ther- mistor)	The third drop	ALL	15 <2-60>	М	from 2 to 60 min. later	4
424-3	-		The fourth drop	ALL	15 <2-60>	М		4
425-0	Fuser	Temperature drop switching	The first drop	ALL	15 <2-60>	М]	4
425-1		time setting in ready status	The sec- ond drop	ALL	15 <2-60>	М		4
425-2	_	(Side ther- mistor)	The third drop	ALL	15 <2-60>	М	_	4
425-3			The fourth drop	ALL	15 <2-60>	М		4
433-0	Fuser	Temperature control lower limit (Plain paper/	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	4
433-1		at ordinary temperature)	Side ther- mistor	ALL	5 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
437	Fuser	Fuser roller temperature during printing (Center thermistor /Thick paper 2)		ALL	8 <0-14>	М	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>	М	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 tim printing (Thick paper 2)		ALL	10 <0-15>	М	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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
440	Fuser	Pre-running time for first printing (Plain paper)	ALL	0 <0-15>	М	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>	М	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>	Μ	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>	М	0: Enabled 1: Disabled	1
450	Fuser	Fuser roller temperature during printing (Side thermistor/Plain paper)	ALL	8 <0-14>	Μ	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>	Μ	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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
452	Fuser	Fuser roller temperature during printing (Side thermistor/Thick paper 2)	ALL	8 <0-14>	М	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>	М	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 process- ing	Toner supply amount cor- rection/Toner motor control	ALL	0 <0-5>	Μ	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

	-	Sett	ting mode (0		232/282	>		
Code	Classifi- cation	ltem	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
462	RADF	Setting for swit operation in mi copying using F	xed-size	ALL	0<0-2>	M	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. 0: Disabled - AMS: A series - Judges as A4-R without trans- porting 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. 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 trans- porting in reverse with no scanning. LT series - Judges whether it is LT-R or LG without trans- porting in reverse with no scanning. 1: Enable 1 AMS: A series - Judges whether it is A4-R or FOLIO by transport- ing without scanning in reverse to detect its length. LT series - Judges whether it is LT-R or LG by transport- ing without scanning in reverse to detect its length. APS: The same as that of APS in 0: Disabled. 2: Enable 2 AMS/APS: The same as that of AMS in 1: Enable 1.	1
463-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
463-1		ting (upper	Others	ALL	5 <0-5>	М	retry from the upper drawer.	4

			ing mode (0	,	Default			1
Code	Classifi- cation	Items		Func- tion	<pre>Accept- able value></pre>	ept- le RAM	M Contents	Proce- dure
464-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
464-1		ting (lower drawer)	Others	ALL	5 <0-5>	М	retry from the lower drawer.	4
465-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
465-1	_	ting (PFP upper drawer)	Others	ALL	5 <0-5>	М	retry from the PFP upper drawer.	4
466-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
466-1	_	ting (PFP lower drawer)	Others	ALL	5 <0-5>	М	retry from the PFP lower drawer.	4
467-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
467-1		ting (bypass feed)	Others	ALL	5 <0-5>	М	retry from the bypass tray.	4
468-0	Paper feeding	Feeding retry number set-	Plain paper	ALL	5 <0-5>	М	Sets the number of times of the feeding	4
468-1		ting (LCF)	Others	ALL	5 <0-5>	М	retry from the LCF.	4
471	Paper feeding	Paper size (Po feeding/widthw		ALL	148/100 <148- 432/100- 297>	М	 Postcard is sup- ported only for JPN model. 	10
477	General	Machine identif information	ication	ALL	Refer to content <0-1>	М	<default value=""> Lower drawer model: 0 Upper drawer model: 1</default>	2
478	Laser	Judged number of polygo- nal motor rotation error (Normal rotation)		ALL	0 <0-1>	М	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 polygo- nal motor rotation error (At acceleration/decelera- tion)		ALL	0 <0-1>	Μ	 Waiting time for polygonal motor rotation overshoot- ing 0.6 sec. Waiting time for polygonal motor rotation overshoot- ing 2.2 sec. 	1
480	Paper feeding	Default setting source	of paper	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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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. OFF ON (Changes to the drawer with the same paper direc- tion and size: ex. A4 to A4) ON (Changes to the drawer with the same paper size. Paper with the dif- ferent 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>	М	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 origi- nal is set on the RADF or the platen cover is opened. 0: Valid (when using RADF and the origi- nal 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 polygo- nal 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

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
486	Laser	Timing of auto-clearing of polygonal motor pre-run- ning 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 effec- tive when "0" or "2" is set at 08-483.	1
488	Laser	Setting of polygonal motor type	ALL	0 <0-3>	М	Set the type of polygo- nal 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>	М	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>	М	0: Stopped 1: 10,000 rpm	1
491	Transfer	Transfer charger bias cor- rection (H) at duplexing	ALL	149 <0-255>	М	Corrects the transfer charger bias output value of the leading edge area of paper at duplexing.	1
492	Transfer	Transfer charger bias cor- rection (C) at duplexing	ALL	139 <0-255>	М	Corrects the transfer charger bias output value of the center area of paper at duplexing.	1
493	Transfer	Transfer charger bias cor- rection (L) at duplexing	ALL	128 <0-255>	Μ	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 repro- duction 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

	I	Setting mode (08) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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>	М	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>	Μ	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>	М	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>	М	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

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
521	Fuser	Fuser roller terr during printing (Side thermisto	-	ALL	9 <0-14>	Μ	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 tim printing (Envelope)	e for first	ALL	10 <0-15>	М	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	The first drop	ALL	20 <0-200>	М	This code is valid only when "20" is set to 08-	4
525-1	-	time setting during printing	The sec- ond drop	ALL	38 <0-200>	М	535. Setting value x 5 sec.:	4
525-2		(Center ther- mistor)	The third drop	ALL	75 <0-200>	М	from 0 to 1,000 sec. later	4
525-3			The fourth drop	ALL	75 <0-200>	М		4
526	Fuser	Pre-running tim printing (OHP fi		ALL	0 <0-15>	М	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	The first drop	ALL	20 <0-200>	М	This code is valid only when "20" is set to 08-	4
527-1	-	time setting during printing (Side ther- mistor)	The sec- ond drop	ALL	30 <0-200>	М	535. Setting value x 5 sec.:	4
527-2			The third drop	ALL	48 <0-200>	М	from 0 to 1,000 sec. later	4
527-3			The fourth drop	ALL	75 <0-200>	М		4

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
535	Fuser	Temperature dr setting during p (Temperature/T	rinting	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 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	drop setting during printing (Center ther-	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 sec- ond drop	ALL	2 <0-10>	M		4
536-2	_		The third drop	ALL	3 <0-10>	М		4
536-3			The fourth drop	ALL	3 <0-10>	М	_	4
537-0	Fuser	Temperature drop setting	The first drop	ALL	1 <0-10>	М		4
537-1		during printing (Side ther-	The sec- ond drop	ALL	2 <0-10>	М		4
537-2		mistor)	The third drop	ALL	3 <0-10>	М		4
537-3	-		The fourth drop	ALL	5 <0-10>	М		4
550	Image	Default setting mode	of original	PPC	0 <0-3>	SYS	0: Text/Photo 1: Photo 2: Text 3: Custom Mode	1
601	User interface	Setting for the I ing Mode	Energy Sav-	ALL	0 <0-1>	SYS	0: Auto Shut Off Mode 1: Sleep Mode	1
602	User interface	Screen setting power Save Mo Auto Shut OFF	de and	ALL	EUR: 0 UC: 1 JPN: 1 <0-1>	SYS	0: OFF 1: ON	1
603	User interface	Setting for auto duplexing mode		PPC	0 <0-3>	SYS	 Invalid Single-sided to duplex copying Double-sided to duplex copying User selection 	1

06/01

		Setting mode (0	.,	Default			
Code	Classifi- cation	Items	Func- tion	<accept- able</accept- 	RAM	Contents	Proce dure
604	User interface	Default setting for APS/ AMS	PPC	value> 0 <0-2>	SYS	 0: APS (Automatic Paper Selection) 1: AMS (Automatic Magnification Selec- tion) 2: Not selected 	1
605	User interface	Centering printing of pri- mary/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	 Continuous feeding (by pressing the [START] button) 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 par- allel). 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 mem- ory is properly recog- nized.	2
617	User	Print setting without	ALL	1	SYS	0: Printed	1
	interface	department code		<0-2>		 Not printed (pooled in the invalid queue) Deleted forcibly 	
618	User interface	Default setting when mixed size originals are set on RADF	PPC	0 <0-1>	SYS	 Scanned as all in same size Scanned as each original size 	1

		Setting mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 jam- ming	PPC	0 <0-1>	SYS	0: OFF 1: ON (Start printing when the scanning of each page is fin- ished)	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 (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 mag- azine 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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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 auto- matically into the equip- ment 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 auto- matically into the equip- ment 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 (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 Elec- tronic Filing.	3
667	General	/SHA partition clearing	ALL	-	SYS	Initializes the shared folder.	3
670	General	HDD diagnostic menu dis- play	ALL	-	SYS	Display the HDD infor- mation	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 depart- ment management information * Key in the code and press the [INITIAL- IZE] button to per- form the initialization. If the area storing the department man- agement informa- tion is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management func- tion 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 advertis- ing display	ALL	0 <0-1>	SYS	Sets whether or not dis- playing 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 dis- played alternately. 0: Not displayed 1: Displayed	1
679	General	Banner advertising display 1	ALL	-	SYS	Maximum 27 letters (one-byte character)	11

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
680	General	Banner advertising display 2	ALL	-	SYS	Maximum 27 letters (one-byte character)	11
681	General	Display of [BANNER MES- SAGE] button	ALL	0 <0-1>	SYS	0: Not displayed 1: Displayed * This button enables the entry of "Banner advertising display 1 (08-679)" and "Ban- ner advertising dis- play 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	Mainte- nance	Performing panel calibra- tion	ALL	-	SYS	Performs the calibration of the pressing position on the touch panel (LCD screen). The cali- bration is performed by pressing 2 reference positions after this code is started up.	1
693	General	Initialization of NIC infor- mation	ALL	-	SYS	Returns the value to the factory shipping default value.	3
694	General	Performing HDD testing	ALL	-	SYS	Checks the bad sector.	3

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
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	Scram- bler 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 pri- ority during copying. 1: Plain paper 2: Thick paper 1	1
698	Scram- bler 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 can- not be set again on security grounds.	5
699	Scram- bler board	Erasing all data in HDD	ALL	-	-	This setting is effective only when the scram- bler 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	Mainte- nance	Remote-controlled service function	ALL	2 <0-2>	SYS	0: Valid (Remote-con- trolled server) 1: Valid (L2) 2: Invalid	1
703	Mainte- nance	Remote-controlled service HTTP server URL setting	ALL	-	SYS	Maximum 256 Bytes	11

	1	Sett	ing mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	ltem	s	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
704-0	User interface	Interruption of stapling oper- ation (no sta- ple)	Copying	ALL	1 <0-1>	SYS	 Continues printing by switching sort setting Interrupts printing 	4
704-1			Printing / BOX print- ing	ALL	1 <0-1>	SYS	 Continues printing by switching sort setting Interrupts printing 	4
707	Mainte- nance	Remote-contro HTTP initially-ro server URL setting		ALL	https:// device. mfp- support. com:443/ device/ firstregist. ashx	SYS	Maximum 256 Bytes	11
710	Mainte- nance (Remote)	Short time inter of recovery fror gency Mode		ALL	24 <1-48>	SYS	Sets the time interval to recover from the Emer- gency Mode to the Nor- mal Mode. (Unit: Hour)	1
711	Mainte- nance (Remote)	Short time inter of Emergency I		ALL	60 <30-360>	SYS	Unit: Minute	1
715	Mainte- nance	Remote-contro periodical pollir (Hour/Hour/Min	ig timing	ALL	1230	SYS	0 (0:00) to 2359 (23:59)	1
716	Mainte- nance	Remote-contro Writing data of nostic code		ALL	0 <0-1>	SYS	0: Prohibited 1: Accepted	1
717	Mainte- nance	Remote-contro response waitir (Timeout)		ALL	3 <1-30>	SYS	Unit: Minute	1
718	Mainte- nance	Remote-contro initial registratio		ALL	0 <0-2>	SYS	0: OFF 1: Start 2: Only certification is scanned	1
719	Mainte- nance	Remote-contro tentative passw		ALL	-	SYS	Maximum 10 letters	11
720	Mainte- nance	Status of remot trolled service i tration (Display only)	nitial regis-	ALL	0 <0-1>	SYS	0: Not registered 1: Registered	2
721	Mainte- nance	Service center	call function	ALL	2 <0-2>	SYS	 OFF Notifies all service calls Notifies all but paper jams 	1
723	Mainte- nance	Service center HTTP server U		ALL	-	SYS	Maximum 256 letters	11
726	Mainte- nance	HTTP proxy se		ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1
727	Mainte- nance	HTTP proxy IP setting	address	ALL	-	SYS	000.000.000.000- 255.255.255.255 (Default value 000.000.000.000)	11

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
728	Mainte- nance	HTTP proxy port number setting	ALL	0 <0- 65535>	SYS		1
729	Mainte- nance	HTTP proxy ID setting	ALL	-	SYS	Maximum 30 letters	11
730	Mainte- nance	HTTP proxy password set- ting	ALL	-	SYS	Maximum 30 letters	11
731	Mainte- nance	HTTP proxy panel display	ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1
732	Mainte- nance (Remote)	Automatic ordering func- tion of supplies	ALL	3 <0-3>	SYS	0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF	1
733	Mainte- nance (Remote)	Automatic ordering func- tion of supplies FAX number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
734	Mainte- nance (Remote)	Automatic ordering func- tion of supplies E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
738	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's name	ALL	-	SYS	Maximum 50 letters	11
739	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's telephone number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
740	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
741	Mainte- nance (Remote)	Automatic ordering func- tion of supplies User's address	ALL	-	SYS	Maximum 100 letters	11
742	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service number	ALL	0 <5 digits>	SYS	Maximum 5 digits	11
743	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's name	ALL	-	SYS	Maximum 50 letters	11
744	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's tele- phone number	ALL	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11
745	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Service technician's E-mail address	ALL	-	SYS	Maximum 192 letters List: 256 digits	11
746	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Supplier's name	ALL	-	SYS	Maximum 50 letters	11
747	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Supplier's address	ALL	-	SYS	Maximum 100 letters	11
748	Mainte- nance (Remote)	Automatic ordering func- tion of supplies Notes	ALL	-	SYS	Maximum 128 letters	11

		Setting mode (0	ס) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
758	Mainte- nance (Remote)	Information about supplies Part number of toner car- tridge	ALL	-	SYS	Maximum 20 digits	11
759	Mainte- nance (Remote)	Information about supplies Order quantity of toner car- tridge	ALL	1 <1-99>	SYS		1
760	Mainte- nance (Remote)	Information about supplies Condition number of toner cartridge	ALL	1 <1-99>	SYS		1
764	Mainte- nance (Remote)	Automatic ordering sup- plies Result table printout	ALL	1 <0-2>	SYS	0: OFF 1: Always 2: ON Error	1
765	Mainte- nance (Remote)	Automatic ordering sup- plies Display	ALL	2 <0-2>	SYS	 Valid (FAX/Internet FAX) Valid (FAX/Internet FAX/HTTP) Invalid 	1
767	Mainte- nance (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	Mainte- nance (Remote)	Destination E-mail address	ALL	-	SYS	Maximum 192 letters	11
769	Mainte- nance (Remote)	Total counter information transmission setting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
770	Mainte- nance (Remote)	Total counter transmission date setting	ALL	1 <1-31>	SYS	1 to 31	1
771	Mainte- nance (Remote)	PM counter notification set- ting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
772	Mainte- nance	Dealer's name	ALL	-	SYS	Maximum 100 letters Needed at initial regis- tration	11
773	Mainte- nance	Login name	ALL	-	SYS	Maximum 20 letters Needed at initial regis- tration	11
774	Mainte- nance (Remote)	Display setting of [Service Notification] button	ALL	0 <0-1>	SYS	0: Not displayed 1: displayed	1
775	Mainte- nance (Remote)	Sending error contents of equipment	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
776	Mainte- nance (Remote)	Setting total counter trans- mission interval (Hour/Hour/Minute/Minute)	ALL	-	SYS		1
777	Mainte- nance (Remote)	Destination E-mail address 2	ALL	-	SYS	Maximum 192 letters	11
778	Mainte- nance (Remote)	Destination E-mail address 3	ALL	-	SYS	Maximum 192 letters	11

	1	Setting mode (0	o) ~e-31		ZJZ 282	-	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able</accept- 	RAM	Contents	Proce dure
				value>			
779	Mainte- nance (Remote)	Notification format selec- tion	ALL	0 <0-1>	SYS	0: Text 1: Text + XML data	1
780	Mainte- nance	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	Mainte- nance	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	Mainte- nance	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	Mainte- nance	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	Mainte- nance	Remote-controlled service polling day selection Sunday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
785	Mainte- nance	Remote-controlled service polling day selection Monday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
786	Mainte- nance	Remote-controlled service polling day selection Tuesday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
787	Mainte- nance	Remote-controlled service polling day selection Wednesday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
788	Mainte- nance	Remote-controlled service polling day selection Thursday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
789	Mainte- nance	Remote-controlled service polling day selection Friday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
790	Mainte- nance	Remote-controlled service polling day selection Saturday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
794	Mainte- nance	Information of supplies set- ting of toner cartridge	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
796	Mainte- nance	Remote-controlled service lengthened interval polling (End of month)	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
797	Mainte- nance	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

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Code	Classifi- cation	Iten	าร	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
799	General	Forcible end of	f trial period	PRT/ SCN	-	SYS	[CANCEL]: Cancel [EXECUTION]: Forc- ible end When the "Forcible end of trial period" is per- formed, "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>	М	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>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
801-0	Fuser	Temperature control lower limit (Thick paper	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
801-1		1)	Side themistor	ALL	6 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
802-0	Fuser	Temperature control lower limit (Thick paper	Center themistor	ALL	8 <0-12>	М	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
802-1		2)	Side themistor	ALL	9 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
803-0	Fuser	Temperature control lower limit (Thick paper	Center themistor	ALL	8 <0-12>	М	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
803-1		3)	Side themistor	ALL	10 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
804-0	Fuser	Temperature control lower limit (Envelope)	Center themistor	ALL	8 <0-12>	М	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
804-1			Side themistor	ALL	10 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4

	1	Setting mode (0	8) <e-st< th=""><th>1</th><th>232/282</th><th>></th><th>1</th></e-st<>	1	232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
805	Charger	Main charger bias correc- tion (Text/Photo/OHP film)	PRT	98 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
806	Charger	Main charger bias correc- tion (Toner Saving Mode/OHP film)	PRT	98 <0-255>	М		1
807	Charger	Main charger bias correc- tion (Text/Photo/OHP film)	PPC	98 <0-255>	М		1
808	Charger	Main charger bias correc- tion (Text/OHP film)	PPC	98 <0-255>	М		1
809	Charger	Main charger bias correc- tion (Photo/OHP film)	PPC	98 <0-255>	М		1
826	Charger	Main charger bias correc- tion (Toner saving mode)	PRT	128 <0-255>	М		1
830	Transfer	Transfer transformer DC correction (C)	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-221).	1
831	Separa- tion	Separation transformer DC correction (C)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-234).	1
833	Devel- oper	Developer bias DC correc- tion (Text/Photo/OHP film)	PRT	108 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
834	Devel- oper	Developer bias DC correc- tion (Toner Saving Mode/OHP film)	PRT	108 <0-255>	М		1
835	Devel- oper	Developer bias DC correc- tion (Text/Photo/OHP film)	PPC	108 <0-255>	М		1
836	Devel- oper	Developer bias DC correc- tion (Text/OHP film)	PPC	108 <0-255>	М		1
837	Devel- oper	Developer bias DC correc- tion (Photo/OHP film)	PPC	108 <0-255>	М		1
838	Image process- ing	Switching of recycled toner saving control	ALL	0 <0-1>	М	0: Switched 1: Not switched	1
839	Image process- ing	Correction by temperature/ humidity	ALL	0 <0-3>	М	 Sets the correction by temperature/humidity. 0: All valid 1: All invalid 2: Valid only in autotoner sensor 3: All valid except transfer and separation 	1

		Setting mode (0	ŏ) <e-st< th=""><th></th><th>232/282</th><th>></th><th>-</th></e-st<>		232/282	>	-
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
849	General	Power source setting for destination	ALL	SAD: 1 Others: 0 <0-1>	М	0: Other than SAD 1: SAD	1
859	Devel- oper	Developer bias DC correc- tion (Toner saving mode)	PRT	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
860	Devel- oper	Developer bias DC correc- tion (Normal)	PRT	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
861	Devel- oper	Developer bias DC correc- tion (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
862	Devel- oper	Developer bias DC correc- tion (Text)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
863	Devel- oper	Developer bias DC correc- tion (Photo)	PPC	128 <0-255>	М	Corrects the value of the developer bias adjustment (05-205).	1
864	Charger	Main charger bias correc- tion (Normal)	PRT	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
865	Charger	Main charger bias correc- tion (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
866	Charger	Main charger bias correc- tion (Text)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
867	Charger	Main charger bias correc- tion (Photo)	PPC	128 <0-255>	М	Corrects the value of the main charger bias adjustment (05-210).	1
868	Transfer	Transfer transformer DC correction (H)	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-220).	1
869	Transfer	Transfer transformer DC correction (L)	ALL	128 <0-255>	М	Corrects the value of the transfer trans- former DC output adjustment (05-222).	1
870	Separa- tion	Separation transformer DC correction (H)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-233).	1
871	Separa- tion	Separation transformer DC correction (L)	ALL	128 <0-255>	М	Corrects the value of the separation trans- former DC output adjustment (05-235).	1
872	Laser	Laser power correction (Normal)	PRT	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
873	Laser	Laser power correction (Text/Photo)	PPC	128 <0-255>	М	Corrects the value of the laser power adjustment (05-286).	1

	1	Sett	ing mode (0	o) <e-s i<="" th=""><th></th><th>232/282</th><th>2</th><th>1</th></e-s>		232/282	2	1
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
875	Laser	Laser power co (Toner saving n		PRT	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
876	Laser	Laser power co (Text)	prrection	PPC	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
877	Laser	Laser power co (Photo)	prrection	PPC	128 <0-255>	М	Corrects the value of the laser power adjust- ment (05-286).	1
886	Fuser	Temperature dr setting in ready (Temperature/T	status	ALL	2 <0-20>	M	0: None 1: Pattern 1 2: Pattern 2 3: Pattern 2 3: Pattern 3 4: Pattern 3 4: Pattern 4 5: Pattern 5 6: Pattern 5 6: Pattern 6 7: Pattern 7 8: Pattern 7 8: Pattern 7 9: Pattern 9 10: 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 18 19: Pattern 19 20: Manual adjustment	1
896-0	Fuser	Temperature control lower limit (Plain paper/	Center themistor	ALL	7 <0-12>	М	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
896-1		Low tempera- ture)	Side themistor	ALL	5 <0-12>	М	8: 170°C 9: 175°C 10: 180°C 11: 185°C 12: 120°C	4
900	Version	System firmwai sion	re ROM ver-	ALL	-	-	JPN: T377SY0JXXX UC: T377SY0UXXX EUR: T377SY0EXXX Others: T377SY0XXXX	2
903	Version	Engine ROM ve	ersion	ALL	-	-	377M-XXX	2
905	Version	Scanner ROM	version	ALL	-	-	377S-XXX	2
907	Version	RADF ROM ve	rsion	ALL	-	-	DF-XXXX	2
908	Version	Finisher ROM	/ersion	ALL	-	-	SDL-XX FIN-XX	2
915	Version	Fax board ROM	/ version	FAX	-	-	F562-XXX	2
920	Version	FROM basic se ware version	ection soft-	ALL	-	-	VX.XX/X.XX	2
921	Version	FROM internal		ALL	-	-	VXXX.XXX X	2
922	Version	UI data fixed se sion		ALL	-	-	VXXX.XXX X	2
923	Version	UI data commo version		ALL	-	-	VXXX.XXX X	2
924	Version	Version of UI da guage 1 in HDI		ALL	-	-	VXXX.XXX X	2

		Setting mode (0	.,	Default			
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce dure
925	Version	Version of UI data lan- guage 2 in HDD	ALL	-	-	VXXX.XXX X	2
926	Version	Version of UI data lan- guage 3 in HDD	ALL	-	-	VXXX.XXX X	2
927	Version	Version of UI data lan- guage 4 in HDD	ALL	-	-	VXXX.XXX X	2
928	Version	Version of UI data lan- guage 5 in HDD	ALL	-	-	VXXX.XXX X	2
929	Version	Version of UI data lan- guage 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 lan- guage 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	Elec- tronic Fil- ing	Start-up method of Elec- tronic Filing	ALL	0 <0-2>	SYS	Sets the start-up method of the Elec- tronic 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 automati- cally1: Enter every time	1

		Setting mode (0	,	Default			
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce dure
954	User interface	Clearing timing for files and Electronic Filing Agent	ALL	1 <0-1>	SYS	 Immediately after the completion of scanning 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 dis- play 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 print- ing 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	Elec- tronic Fil- ing	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

	T	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 mode1: Function priority mode	1

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 \rightarrow 13"LG 2: FOLIO \rightarrow 13"LG	1
995	Version	Equipment number (serial number) display	ALL	0 <10 dig- its>	SYS	This code can be also keyed in from the adjustment mode (05- 976). 10 digits	11
999	Mainte- nance	FSMS total counter	ALL	0 <8 digits>	SYS	Refers to values of total counter	1
1002	Network	Selection of NIC board sta- tus information	ALL	1 <1-2>	NIC	 Not printed out when the equipment is restarted Printed out when the equipment is restarted 	12
1003	Network	Communication speed and settings of Ethernet	ALL	1 <1-5>	NIC	 Auto 10MBPS Half Duplex 10MBPS Full Duplex 100MBPS Half Duplex 100MBPS Full Duplex 	12
1006	Network	Address Mode	ALL	2 <1-3>	NIC	 Fixed IP address Dynamic IP address (DHCP) 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 (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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

	1	Setting mode (0	-,			1	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 cli- ent	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 Com- munity	ALL	private	NIC	Maximum 31 letters	12
1067	Network	Authentication TRAP func- tion	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

	1	Setting mode (0	10) ~e-3 I	1	232/202		1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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		IPP printer "Make and Model"	ALL	-		Maximum 127 letters	12
1087	Network	IPP printer information (more) MFGR	ALL	-	NIC	Maximum 127 letters	12
1088	Network	IPP message from opera- tor	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

				Default			
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce- dure
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	 Disable Plain Login Cram-MD5 Digest MD5 Kerberos 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- STUDIO282: TOSHIBA e- STUDIO282_serial</default>	12
1112	Network	Host name	ALL	MFP_seri al	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 Inter- netFAX	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 (0	8) <e-st< th=""><th></th><th>232/282</th><th>?></th><th>1</th></e-st<>		232/282	?>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1118	General	Clearing of TAT partition	ALL	-	SYS		3
1119	Network	Initialization of NIC infor- mation	ALL	-	-	Initializes only the infor- mation 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 set- ting	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 copy- ing 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 per- formed. 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 direc- tion 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

				Default			
Code	Classifi- cation	Items	Func- tion	<accept- able value></accept- 	RAM	Contents	Proce dure
1136	Network	Number of lines simulta- neously 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 set- ting	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 set- ting	ALL	0 <0-1>	SYS	0: Not authenticated1: Authenticated	1
1140	User interface	Restriction of the template function with the adminis- trator 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 dis- played 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	Mainte- nance (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 Dis- play/0 clearing	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (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>	М	Counts the rotation number of the toner cartridge.	1

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1378	Counter	Counter for period of time fuser unit is at ready tem- perature	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (when the equip- ment 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 tem- perature	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (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 sav- ing temperature/Counter reset	ALL	0 <8 digits>	Μ	Counts up the heater control time accumu- lated (when the equip- ment 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 process- ing	Number of output pages (Thick paper 1)	ALL	0 <8 digits>	Μ	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 process- ing	Number of output pages (Thick paper 2)	ALL	0 <8 digits>	Μ	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 process- ing	Number of output pages (Thick paper 3)	ALL	0 <8 digits>	Μ	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 process- ing	Number of output pages (OHP film)	ALL	0 <8 digits>	Μ	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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
1390	Paper feeding	Feeding retry counter (upper drawer)	ALL	0 <8 digits>	М	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>	М	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>	М	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>	М	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>	М	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>	М	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>	М	When the number of feeding retry (08-1390 to 08-1395) exceeds	1
1397	Paper feeding	Feeding retry counter upper limit value (Lower drawer)	ALL	0 <8 digits>	М	the setting value, the feeding retry will not be performed subse-	1
1398	Paper feeding	Feeding retry counter upper limit value (PFP upper drawer)	ALL	0 <8 digits>	М	quently. In case "0" is set as a setting value, however, the feeding retry continues regard-	1
1399	Paper feeding	Feeding retry counter upper limit value (PFP lower drawer)	ALL	0 <8 digits>	М	less of the counter set- ting value.	1
1400	Paper feeding	Feeding retry counter upper limit value (Bypass feed)	ALL	0 <8 digits>	М		1
1401	Paper feeding	Feeding retry counter upper limit value (LCF)	ALL	0 <8 digits>	М		1
1410	Counter	Counter for period of toner cartridge rotation time	ALL	0 <8 digits>	М	Counts up the period of rotation time of the toner cartridge.	1
1411	Counter	Counter for envelope	ALL	0 <8 digits>	М	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

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>T</th></e-st<>		232/282	>	T
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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_CASETTE_CHANGE) for Printer/Box printing	ALL	1 <0-2>	SYS	 O: ACC prohibited Only in the same paper direction 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 (0	ŏ) <e-s⊺< th=""><th></th><th>232/282</th><th>2</th><th></th></e-s⊺<>		232/282	2	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce dure
1433	Network	"Disable e-Filing" function	ALL	0 <0-1>	SYS	 Function OFF (no restriction on data saving or other operations) Function ON (Data saving or other operations are restricted) 	1
1435	Network	"Disable private and proof print save" function	ALL	0 <0-1>	SYS	 Function OFF (no restriction on data saving or other operations) Function ON (Data saving or other operations are restricted) 	1
1436	Network	"Disable fax save" function	ALL	0 <0-1>	SYS	 Function OFF (no restriction on data saving or other operations) 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 con- trol all IPP jobs.	12
1448	Network	IPP administrator pass- word	ALL	-	-	This should be the password of an account which can control all IPP jobs.	12

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>i</th></e-st<>		232/282	>	i
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1449	Network	IPP authentication method	ALL	1 <1-4>	-	 Disabled Basic Digest Basic Digest 	12
1450	Network	User name for IPP authen- tication	ALL	-	-	This should be the account at the time IPP authentication was per- formed.	12
1451	Network	Password for IPP authenti- cation	ALL	-	-	This should be the password of the account at the time IPP authentication was per- formed.	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 func- tion 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 func- tion 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 adminis- trator	ALL	0 <0-1>	SYS	Some restrictions can be given on the admin- istrator 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 set- ting by installation opera- tion of drawers	ALL	JPN: 0 UC: 1 EUR: 0 <0-1>	SYS	0: Not displayed 1: Displayed	1

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	T	Setting mode (0	8) <e-s1< th=""><th></th><th>232/282</th><th>></th><th></th></e-s1<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1479	User interface	Default setting of sharp- ness	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 man- agement setting (08-629) should be "1" (Valid).	1
1483	General	User data recovery	ALL	-	-	The data in the data- base is overwritten with the data in the backup file.	3
1484	Network	Authentication method of "Scan to Email"	ALL	0 <0-2>	SYS	 Disable SMTP authentication 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 assign- ment method when it is given an authentication	ALL	0 <0-2>	SYS	 "User name" + @ + "Domain name" LDAP search Use the address registered in "From" field of E-mail set- ting 	1
1488	Network	ID setting of LDAP server for "From" address assign- ment	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) charac- ter ASCII sequence only	11
1492	Paper feeding	Detection method of 13" LG for single-size docu- ment	ALL	0 <0-1>	SYS	0: Disabled 1: Enabled	1
1494	General	Limitation check method	ALL	0 <0-1>	SYS	 Checked at every page printed Checked at every job printed 	2

		Sett	ting mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	lterr	IS	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1495	Mainte- nance	Service call che period setting	ecking	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 setti authentication/		ALL	1 <0-1>	SYS	 0 : Disables operation setting for User authentication/regis- tration 1 : Enables operation setting for User authentication/regis- tration 	1
1497	Network	e-Filing Access Client)	Mode (for	ALL	0 <0-2>	SYS	0: Mode 1 1: Mode 2 2: Mode 3	1
1498	FAX	Inbound FAX fu (Forwarding by			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

	1	Sett	ing mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1533-0	Counter	Number of output pages of the printer	1-UP / Duplex printing	PRT	0 <8 digits>	SYS	Counts the number of output pages.	of 4
1533-1		or BOX	2-UP / Duplex printing	PRT	0 <8 digits>	SYS	Counts the number of output pages using [2IN1] or [MAGAZIN SORT]. * When printing is performed using Windows driver, f 1-UP image will b output.	E a the be
1535	Counter	Number of outp the FAX printing (1-UP / Duplex	g	FAX	0 <8 digits>	SYS	Counts the number of output pages in the default settings.	
1660	Wireless LAN	Wireless LAN o Radio ON/OFF	setting	ALL	1 <1-2>	-	1: OFF 2: ON	12
1661	Wireless LAN	Wireless LAN of SSID		ALL	-	-	Maximum 32 letters	12
1662	Wireless LAN	Wireless LAN of Network type		ALL	1 <1-2>	-	1: Infrared wireless L 2: Ad-hoc network	
1663	Wireless LAN	Wireless LAN c Security	lriver	ALL	4 <1-7>	-	1: 802.1x 2: WPA-P 3: WEP 4: NONE 5: WPA 6: WPA2 7: WPA2PSK	SK 12
1664	Wireless LAN	Wireless LAN c Encryption syst		ALL	1 <1-3>	-	1: TKIP 2: AES 3: Dynamic WEP	12
1665	Wireless LAN	Wireless LAN of Transmission of		ALL	1 <1-5>	-	1: 100% 2: 50% 3: 25% 4: 12.5% 5: min	12
1666	Wireless LAN	Wireless LAN of Transmission ra		ALL	1 <1-2>	-	1: Auto 2: Manual	12
1667	Wireless LAN	Wireless LAN o Transmission ra		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 c Operation char		ALL	1 <1-2>	-	1: Auto 2: Manua	12
1669	Wireless LAN	Wireless LAN of Operation char		ALL	1 <1-11>	-		12
1670	Wireless LAN	Wireless LAN o WEP bit numbe	er	ALL	1 <1-3>	-	1: 64 2: 128 3: 152	12
1671	Wireless LAN	Wireless LAN o WEP key entry	system	ALL	2 <1-2>	-	1: Hex 2: ASCII	12
1672	Wireless LAN	Wireless LAN o WEP key value		ALL	-	-	Maximum 32 letters	12
1673	Wireless LAN	Wireless LAN o WPA-PSK pass	phrase	ALL	-	-	Maximum 64 letters	12
1674	Wireless LAN	Wireless LAN of Sleep mode se	tting	ALL	1 <1-3>	-	1: Off 2: Max 3: Normal	12
1675	Wireless LAN	Wireless LAN of Slot-time limitat		ALL	1 <1-2>	-	1: Long 2: Short	12

		Setting mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1676	Wireless LAN	Wireless LAN driver Number of times of soft- ware 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 con- nection is enabled or disabled. 1: Unset 2: Enabled 3: Disabled	12
1680	Wireless LAN	Wireless LAN supplicant Path name for configura- tion file	ALL	-	-	Maximum 255 letters	12
1681	Wireless LAN	Wireless LAN supplicant Path name for client certifi- cate	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-cer- tificate	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 time- out interval between EAP responses. 30: 30 seconds	12
1690	Wireless LAN	Wireless LAN supplicant Holding interval	ALL	60 <60- 65535>	-	The EAP authentica- tion will start after hav- ing been waited in this period when an EAP failure was received. 60: 60 seconds	12

06/01

	1	Setting mode (0	5, -5-01	Default	-04/202	·-	
Code	Classifi- cation	Items	Func- tion	Accept- able value>	RAM	Contents	Proce dure
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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 hand- shake is started. 1: Priority not changed 2: Priority changed	12
1707	Wireless LAN	Wireless LAN supplicant Security level	ALL	1 <1-3>	-	The encryption capabil- ity output in TLS clien- tHello 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 manda- tory for PEAP) 1: LOW + MIDDLE + HIGH 2: MIDDLE + HIGH 3: HIGH	12
1709	Blue- tooth	Bluetooth Installation status of option	ALL	0 <0-1>	SYS	0: Not installed 1: Installed	1
1710	Blue- tooth	Bluetooth ON/OFF setting	ALL	1 <0-1>	SYS	0: OFF 1: ON	1
1711	Blue- tooth	Bluetooth Device name	ALL	MFP	SYS	Maximum 32 letters	11
1712	Blue- tooth	Bluetooth Discovery	ALL	1 <0-1>	SYS	0: Not allowed 1: Allowed	1
1713	Blue- tooth	Bluetooth Security	ALL	1 <0-1>	SYS	0: Security function OFF1: Security function ON	1
1714	Blue- tooth	Bluetooth PIN	ALL	0000	SYS	Maximum 8 digits (8-digit sequence) This setting is valid only when the bluetooth security function is ON.	11

2

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1715	Blue- tooth	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	Blue- tooth	Bluetooth HCRP reception time-out period	ALL	6 <1-50>	SYS	Setting value ~ 0.5 sec.	1
1717	Blue- tooth	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

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>Γ</th></e-st<>		232/282	>	Γ
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1728	Network	IP address range for IP fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (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 fil- ter (Maximum area 9)	ALL	-	-	IP filter maximum area 9 000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000)	12

	1	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1738	Network	IP address range for IP fil- ter (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 fil- ter (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 set- ting	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>	-	 Invalid SMTP with TLS (STARTTLS) 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 (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th></th></e-st<>		232/282	>	
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1756	Network	Enabling server's IP address acquired by DHCP	ALL	2 <1-2>	-	NetBIOS over TCP/IP Name Server option (44) = Primary and Sec- ondary 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 Ven- dor 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 certifi- cate	ALL	-	-	Maximum 63 letters	12
1766	Wireless LAN	Wireless LAN supplicant Path name entered for CA self-certificate	ALL	-	-	Maximum 63 letters	12

		Sett	ing mode (0	8) <e-st< th=""><th>UDIO202L/</th><th>232/282</th><th>></th><th></th></e-st<>	UDIO202L/	232/282	>	
Code	Classifi- cation	ltem	S	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1767	Network	Enabling serve address acquire		ALL	2 <1-2>	SYS	DNS domain name Option (15) DNS domain name of the cli- ent 1: Enabled 2: Disabled * This value is used only when DHCP is enabled.	12
1768	Network	Previous IP add	dress	ALL	-	-	000.000.000.000- 255.255.255.255 (Default value: 000.000.000.000)	12
1778	General	Hang-up perioc panel at the 3rd administrator's	misentry of	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 sa tory of "Scan to		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	4
1781-1			On error	ALL	0 <0-1>	SYS	completion. 0: Invalid 1: Valid	4
1782	Network	File name form as file" and Em sion		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]-[File- Name] 4: [Page]-[FileName]- [Data] 5: [Page]-[Data]-[File- Name]	1

		Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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]	1
						The order of [YY], [MM] and [DD] varies depending on the set- ting of the code 08-640 (Data display format).	
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 sub- folder 1: Save it without cre- ating a subfolder	1
1785	Network	Page number display for- mat of the file of "Save as file" and Email transmis- sion	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 dig- its 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 con- nections(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 con- nections(LPD).	12
1854	Network	AppleTalk MaxConnection	ALL	10 <1-16>	NIC	Number of maximum connections(Apple- Talk).	12
1855	Network	AppleTalk ActiveConnection	ALL	10 <1-16>	NIC	Number of active con- nections(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 con- nections(RawPrint).	12
1915	Network	Filing size for Network scanning function	ALL	0 <0-1>	SYS	 Eliminates 2 mm from circumference (Void: 2 mm) No space eliminated (Void: 0 mm) 	1

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

Code	Classifi- cation	Setting mode (0 Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 authenti- cation when the user ID is not entered	ALL	2 <0-2>	SYS	 Forcible execution Execution impossible (pooled in the invalid queue) 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 spe- cial 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- 4294967 295>	SYS		5
1929	User interface	Keyboard layout for Lan- guage 1	ALL	0 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1
1930	User interface	Keyboard layout for Lan- guage 2	ALL	1 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1
1931	User interface	Keyboard layout for Lan- guage 3	ALL	EUR:2 Other:0 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1
1932	User interface	Keyboard layout for Lan- guage 4	ALL	0 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1
1933	User interface	Keyboard layout for Lan- guage 5	ALL	0 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1
1934	User interface	Keyboard layout for Lan- guage 6	ALL	0 <0-2>	SYS	1: QWERTY layout (for Europe) 2: QWERTZ layout 3: AZERTY layout	1
1935	User interface	Keyboard layout for Lan- guage 7	ALL	0 <0-2>	SYS	 QWERTY layout (for Europe) QWERTZ layout AZERTY layout 	1

	T	Setting mode (0	o) <e-si< th=""><th></th><th>232/282</th><th>></th><th></th></e-si<>		232/282	>	
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
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 registration 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

Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1958	Network	PDC of device authentica- tion	ALL	-	UTY	Maximum 128 letters	12
1959	Network	BDC of device authentica- tion	ALL	-	UTY	Maximum 128 letters	12

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

		Setting mode (0	,	Default			1
Code	Classifi- cation	Items	Func- tion	<pre>Accept- able value></pre>	RAM	Contents	Proce dure
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 refer- ence 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 car- tridge reference pixel counter.	3
1504	Pixel counter	Pixel counter display set- ting	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 set- ting	ALL	0 <0-1>	SYS	Selects the reference when displaying the pixel counter on the LCD screen. 0: Service technician reference 1: Toner cartridge ref- erence	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 out- put pages to determine toner empty. This set- ting 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 refer- ence	ALL	0 <0-1>	SYS	Becomes "1" when 08- 1502 is performed.	2
1510	Pixel counter	Service technician refer- ence cleared date	ALL	-	SYS	Displays the date on which 08-1502 was per- formed.	2
1514	Pixel counter	Toner cartridge reference cleared date	ALL	-	SYS	Displays the date on which 08-1503 was per- formed.	2
1518	Pixel counter	Toner cartridge reference count started date	ALL	-	SYS	Displays the date on which 08-1503 was per- formed.	2

	1	Setting mode (0	8) <e-st< th=""><th>i</th><th>232/282</th><th>></th><th>1</th></e-st<>	i	232/282	>	1
Code	Classifi- cation	ltems	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1548	Pixel counter	Number of output pages (Service technician refer- ence)	PPC	<8 digits>	SYS	Counts the number of output pages con- verted 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 refer- ence)	PRT	<8 digits>	SYS	Counts the number of output pages con- verted 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 refer- ence)	FAX	<8 digits>	SYS	Counts the number of output pages con- verted 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 con- verted to the standard paper size in the copy function and toner car- tridge reference. [Unit. page]	2
1555	Pixel counter	Number of output pages (Toner cartridge reference)	PRT	<8 digits>	SYS	Counts the number of output pages con- verted to the standard paper size in the printer function and toner car- tridge reference. [Unit. page]	2
1556	Pixel counter	Number of output pages (Toner cartridge reference)	FAX	<8 digits>	SYS	Counts the number of output pages con- verted to the standard paper size in the FAX function and toner car- tridge reference. [Unit. page]	2
1566	Pixel counter	Toner cartridge replace- ment counter	ALL	<3 digits>	SYS	Counts the number of time of the toner car- tridge replacement.	2
1592	Pixel counter	Average pixel count (Service technician refer- ence)	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 refer- ence)	PRT	0 <0- 10000>	SYS	Displays the average pixel count in the printer function and service technician reference. [Unit: 0.01%]	2

	-i	Setting mode (0	8) <e-st< th=""><th></th><th>232/282</th><th>></th><th>1</th></e-st<>		232/282	>	1
Code	Classifi- cation	Items	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1594	Pixel counter	Average pixel count (Service technician refer- ence)	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 refer- ence)	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 refer- ence)	PPC	0 <0- 10000>	SYS	Displays the latest pixel count in the copy func- tion and service techni- cian reference. [Unit: 0.01%]	2
1607	Pixel counter	Latest pixel count (Service technician refer- ence)	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 refer- ence)	FAX	0 <0- 10000>	SYS	Displays the latest pixel count in the FAX func- tion and service techni- cian 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 car- tridge 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 car- tridge 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 ref- erence. [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 car- tridge 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 func- tion 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 func- tion and toner cartridge reference. [Unit: 0.01%]	2

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	Setting mode (08) <e-studio202l 232="" 282=""></e-studio202l>							
Code	Classifi- cation	lter	ns	Func- tion	Default <accept- able value></accept- 	RAM	Contents	Proce- dure
1640	Pixel counter	Latest pixel co (Toner cartrido	ge reference)	PRT	0 <0- 10000>	SYS	Displays the latest pixel count in the printer function and toner car- tridge reference. [Unit: 0.01%]	2
1649-0	Pixel	Pixel count	0-5%	PPC	<8 digits>	SYS	The pixel count data	14
1649-1	counter	distribution	5.1-10%	PPC	<8 digits>	SYS	are divided into 10 ranges. The number of	14
1649-2			10.1-15%	PPC	<8 digits>	SYS	output pages in each	14
1649-3			15.1-20%	PPC	<8 digits>	SYS	range is displayed. In	14
1649-4			20.1-25%	PPC	<8 digits>	SYS	this code, the distribu-	14
1649-5			25.1-30%	PPC	<8 digits>	SYS	tions in the copy func-	14
1649-6			30.1-40%	PPC	<8 digits>	SYS	tion are displayed. [Unit: page]	14
1649-7			40.1-60%	PPC	<8 digits>	SYS	[Unit. page]	14
1649-8			60.1-80%	PPC	<8 digits>	SYS	_	14
1649-9			80.1- 100%	PPC	<8 digits>	SYS		14
1650-0	Pixel	Pixel count	0-5%	PRT	<8 digits>	SYS	The pixel count data	14
1650-1	counter	distribution	5.1-10%	PRT	<8 digits>	SYS	are divided into 10	14
1650-2			10.1-15%	PRT	<8 digits>	SYS	ranges. The number of output pages in each	14
1650-3			15.1-20%	PRT	<8 digits>	SYS	range is displayed. In	14
1650-4			20.1-25%	PRT	<8 digits>	SYS	this code, the distribu-	14
1650-5			25.1-30%	PRT	<8 digits>	SYS	tions in the printer func-	14
1650-6			30.1-40%	PRT	<8 digits>	SYS	tion are displayed.	14
1650-7			40.1-60%	PRT	<8 digits>	SYS	[Unit: page]	14
1650-8			60.1-80%	PRT	<8 digits>	SYS		14
1650-9			80.1- 100%	PRT	<8 digits>	SYS		14
1651-0	Pixel	Pixel count	0-5%	FAX	<8 digits>	SYS	The pixel count data	14
1651-1	counter	distribution	5.1-10%	FAX	<8 digits>	SYS	are divided into 10	14
1651-2			10.1-15%	FAX	<8 digits>	SYS	ranges. The number of	14
1651-3			15.1-20%	FAX	<8 digits>	SYS	output pages in each range is displayed. In	14
1651-4			20.1-25%	FAX	<8 digits>	SYS	this code, the distribu-	14
1651-5			25.1-30%	FAX	<8 digits>	SYS	tions in the FAX func-	14
1651-6			30.1-40%	FAX	<8 digits>	SYS	tion are displayed.	14
1651-7			40.1-60%	FAX	<8 digits>	SYS	[Unit: page]	14
1651-8			60.1-80%	FAX	<8 digits>	SYS	-	14
1651-9			80.1- 100%	FAX	<8 digits>	SYS		14

2

<<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 set- ting <procedure 4=""> *Indicated in 8 digits</procedure>	Date of previous replacement <procedure 2=""></procedure>	Remarks
Photoconductive drum	1150-0 to 8	1151	<default 1150<br="" code="" of="" values="">(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</default>
Drum cleaning blade	1158-0 to 8	1159	<default 1158<br="" code="" of="" values="">(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</default>
Drum separation finger	1172-0 to 8	1173	<default 1172<br="" code="" of="" values="">(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</default>
Main charger grid	1174-0 to 8	1175	<default 1174<br="" code="" of="" values="">(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</default>
Needle electrode	1182-0 to 8	1183	<default 1182<br="" code="" of="" values="">(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</default>
Ozone filter	1198-0 to 8	1199	<default 1198<br="" code="" of="" values="">(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</default>
Developer material	1200-0 to 8	1201	<default 1200<br="" code="" of="" values="">(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</default>
Transfer charger wire	1214-0 to 8	1215	<default 1214<br="" code="" of="" values="">(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</default>
Separation charger wire	1224-0 to 8	1225	<default 1224<br="" code="" of="" values="">(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</default>
Fuser roller	1246-0 to 8	1247	<default 1246<br="" code="" of="" values="">(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</default>
Pressure roller	1250-0 to 8	1251	<default 1250<br="" code="" of="" values="">(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</default>

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

ltems	PM management set- ting <procedure 4=""> *Indicated in 8 digits</procedure>	Date of previous replacement <procedure 2=""></procedure>	Remarks
Separation roller (LCF)	1310-0,1,2,8	1311	<default 1310<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 160,000/160,000/160,000</default>
Separation roller (PFP upper drawer)	1312-0,1,2,8	1313	<default 1312<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Separation roller (PFP lower drawer)	1314-0,1,2,8	1315	<default 1314<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Separation roller (Bypass unit)	1316-0,1,2,8	1317	<default 1316<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (PFP upper drawer)	1320-0,1,2,8	1321	<default 1320<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (PFP lower drawer)	1322-0,1,2,8	1323	<default 1322<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Feed roller (Bypass unit)	1324-0,1,2,8	1325	<default 1324<br="" code="" of="" values="">(e-STUDIO202L/232/282> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (PFP upper drawer)	1328-0,1,2,8	1329	<default 1328<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (PFP lower drawer)	1330-0,1,2,8	1331	<default 1330<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Pickup roller (Bypass unit)	1332-0,1,2,8	1333	<default 1332<br="" code="" of="" values="">(e-STUDIO202L/232/282)> Sub-codes 0, 2, 8: 0/0/0 Sub-code 1: 80,000/80,000/80,000</default>
Recovery blade	1336-0 to 8	1337	<default 1336<br="" code="" of="" values="">(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</default>

<< 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.

0% 257	
SYSTEM MODE	
99999999 99999999	
CANCEL	

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).

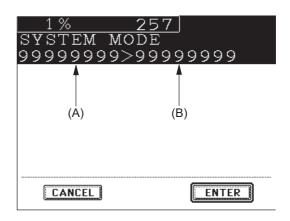


Fig. 2-8

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

2%	2571
SYSTEM MO	
999999999	999999999
(A)	(B)
	ENTER



(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:

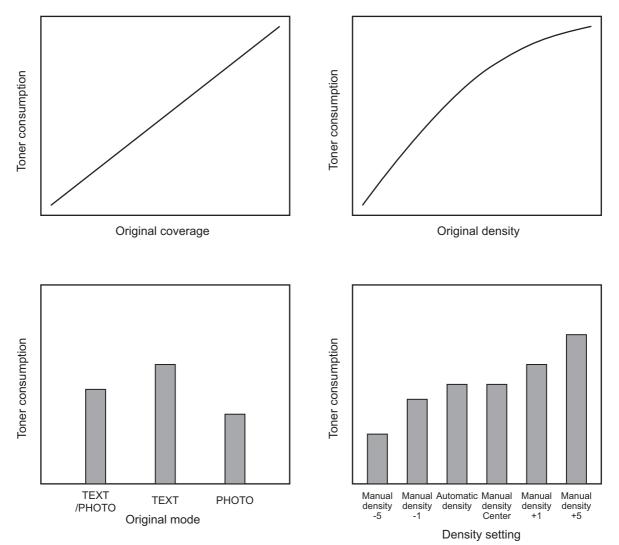


Fig. 2-10 Factors affecting toner consumption and the tendency

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

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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).

The pixel counter function in this equipment has 2 references, toner cartridge reference and ser-

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

The installation of new toner cartridge is judged when the total number of pixel count or output

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

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.)

3) Details of pixel counter

installation.

vice technician reference.

Toner cartridge reference

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

Toner cartridge reference and service technician reference

pages after the detection of toner empty has exceeded the threshold.

cartridge reference is performed in the setting mode (08-1503).

"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.) \rightarrow Pixel count: 100%, Print count: 5

Printing 5 pages on A4/LT size with blank copy (Laser never emits.) \rightarrow 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.) \rightarrow 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 \rightarrow Pixel count: 5%, Print count: 4

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

Printing 2 pages on A3/LD size with 6% of laser emission \rightarrow 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.

		O: With data —: Without data
	Toner cartridge reference	Service technician reference
Copier function	0	0
Printer function	0	0
FAX function	0	0
Total	0	0

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:

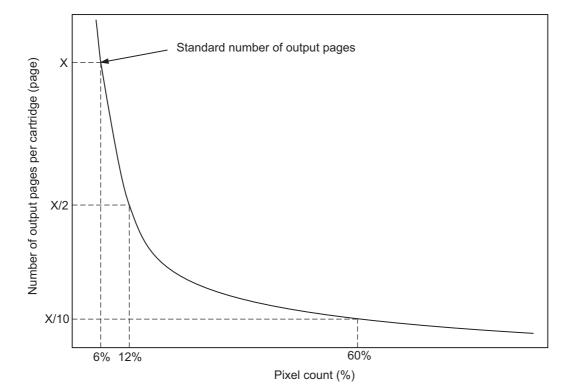


Fig. 2-11 Pixel count and number of output pages per cartridge

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).

ADDRESS	USER	ADMIN		
NER CARTRIDGE				
	Сору	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

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).

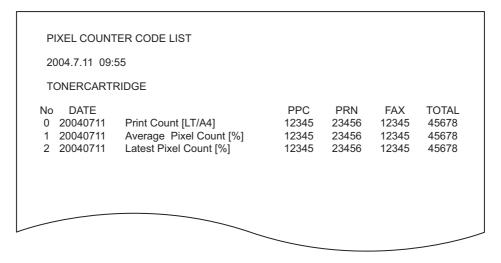
	USER	ADMIN		
WICE				
	Сору	Printer	Fax	Total
Print Count [LT/A4]	180	61	0	24
Average Pixel Count [%]	2.76	2.80	0.00	2.7
Latest Pixel Count [%]	3.08	1.10	0.00	1.1

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.





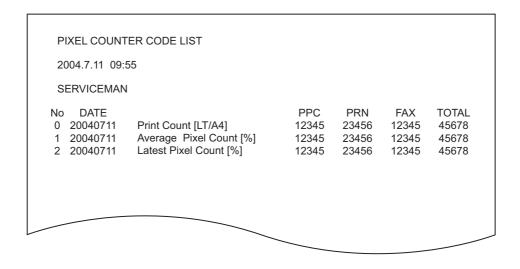


Fig. 2-15 Data list of service technician reference

- 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)".

		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

Print count, pixel count

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%

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		
Giassingation	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		
Classification	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 	
Version		[Media type] 1385, 1386, 1387, 1388, 1411 [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	

Classification	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-ST	e-STUDIO202L/232/282	
Classification -	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		
Classification	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		
Classification	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] 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 	

e-STUDIO200L/202L/230/232/280/282 ERROR CODE AND SELF-DIAGNOSTIC MODE

Classification	e-STUDIO202L/232/282	
Classification –	Adjustment Mode (05) Setting Mode (08)	
Network		[MAC address] 1141 [ACC] 1431 [Disable print save] 1435 [Disable fax save] 1436 [IP Confilct] 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		
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 [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	

05/11

3. ADJUSTMENT

3.1 Adjustment of Auto-Toner Sensor

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

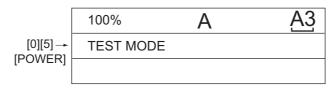
<Procedure> (Adjustment Mode (05-200))

(1) Install the process unit into the equipment.

Note:

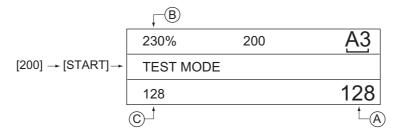
Do not install the toner cartridge.

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





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





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.

3

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

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



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

, ─B		
240%	200	<u>A3</u>
ADJUSTM	ENT MODE	
128		150
κ		t_A



- (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%	А	A3
or →	TEST MODE		
[INTERRUPT]			

Fig.3-5

- (9) Turn the power OFF.
- (10) Install the toner cartridge.

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

3.2 Image Dimensional Adjustment

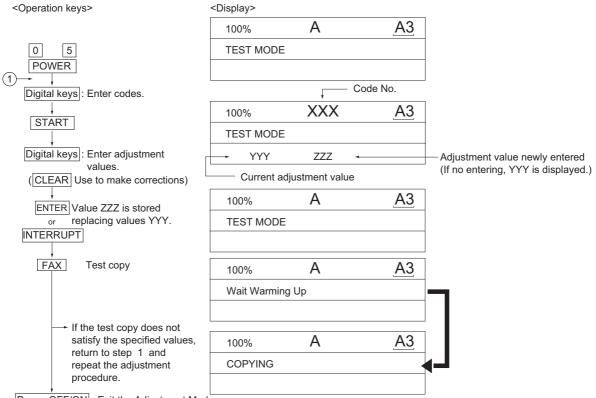
3.2.1 General description

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	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 posi- tion	441, 440, 444, 443, 442, 445
		(e) Primary scanning data laser writing start position at duplexing	498
	Scanner related	(a) Image distortion	-
	adjustment	(b) Reproduction ratio of primary scanning direction	405
		(c) Image location of primary scanning direction	306
		(d) Reproduction ratio of secondary scanning direc- tion	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).



Power OFF/ON : Exit the Adjustment Mode.



3.2.2 Paper alignment at the registration roller

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)

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

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

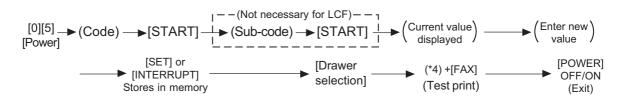
(*3) 0: Long size of OHP film 1: Middle size of OHP film 2: Short size of OHP film

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>

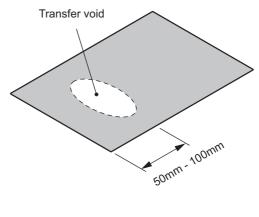
(1) Perform the test print according to the following procedure.



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

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(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.





(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. \rightarrow (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. \rightarrow (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. \rightarrow (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) \rightarrow (Key in code [421]) \rightarrow [START]

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

- → [ENTER] or [INTERRUPT] (Stored in memory)
- → "100% A" is displayed
- \rightarrow Press [1] \rightarrow [FAX] \rightarrow (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.

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 0.

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. \rightarrow (Adjustment Mode)
- (2) Press [1] ([3] for duplexing) \rightarrow [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. \rightarrow (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. \rightarrow (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).

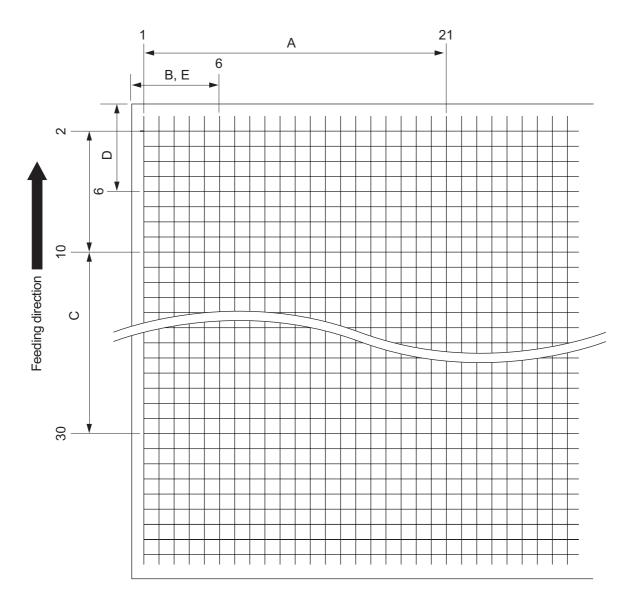


Fig.3-8 Grid pattern

<Procedure> Perform 08-477 and check the value.

When the value is 0.

C:

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

- A:05-401 (Lower drawer, A3/LD) \rightarrow 200±0.5 mm (0.125 mm/step)B:05-411 (Lower drawer, A3/LD) \rightarrow 52±0.5 mm (0.05 mm/step)
 - \rightarrow Key in the same value for 05-410.
 - 05-421 (Lower drawer, A3/LD) \rightarrow 200±0.
 - → 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)
 - \rightarrow 52±0.5 mm(0.4 mm/step)
- E: 05-498-0 (Lower drawer, A3/LD), → 52±0.5 mm (0.05 mm/step) 498-1 (Upper drawer, A4/LT)

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When the value is 1.

[0] [5] [Power ON] → [1] ([3](05-445, 498) f	for duplexing) \rightarrow [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)
		\rightarrow 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), 44 443 (LCF, A4/LT), 442 (Bypass fee	1 (Lower drawer, A4/LT), 444 (PFP, A4/LT), ed, A4/LT), 445 (Duplexing, A3/LD)
		→ 52±0.5 mm(0.4 mm/step)
E:	05-498-0 (Upper drawer, A3/LD), 498-1 (Upper drawer, A4/LT))	→ 52±0.5 mm (0.05 mm/step)

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

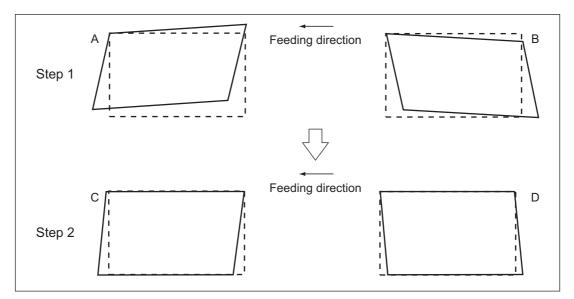
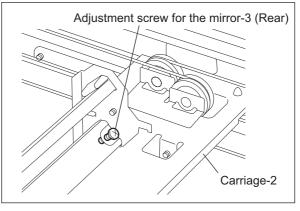


Fig.3-9

<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





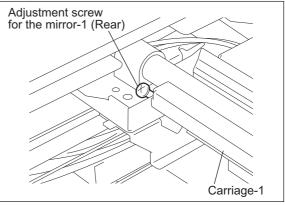
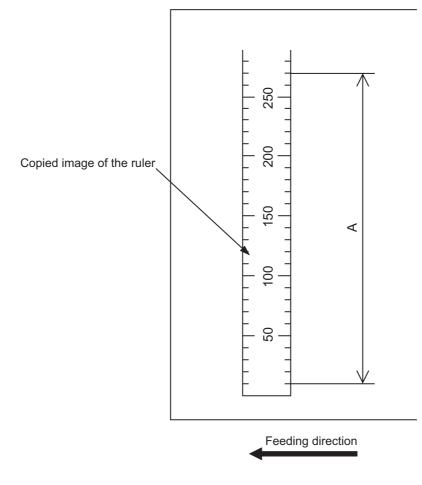


Fig.3-11

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

- (1) While pressing [0] and [5] simultaneously, turn the power $ON \rightarrow (Adjustment Mode)$
- (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]
 - \rightarrow (Key in a value (acceptable values: 0 to 255))
 - \rightarrow Press the [ENTER] or the [INTERRUPT] button (stored in memory).
 - \rightarrow ("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).

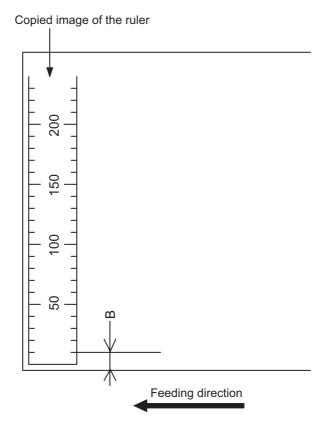


[C] Image position adjustment of the primary scanning direction <Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [306]) \rightarrow [START]

- \rightarrow (Key in a value (acceptable values: 0 to 255))
- → Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("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).





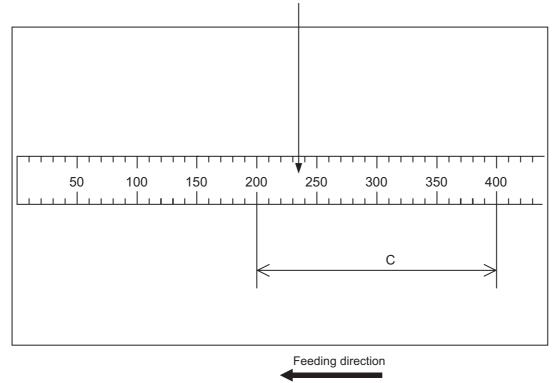
[D] Reproduction ratio adjustment of the secondary scanning direction <Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [340]) \rightarrow [START]

- \rightarrow (Key in a value (acceptable values: 0 to 255))
- → Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("100% A" is displayed.)

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



Copied image of the ruler

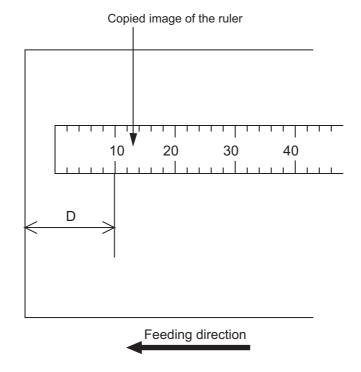


[E] Image position adjustment of the secondary scanning direction <Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [305]) \rightarrow [START]

- \rightarrow (Key in a value (acceptable values: 0 to 255))
- \rightarrow Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("100% A" is displayed.)
- *The larger the adjustment value is, the more the image is shifted to the trailing edge (0.14 mm/ step).





[F] Top margin

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [430]) \rightarrow [START]

- \rightarrow (Key in a value (acceptable values: 0 to 255))
- \rightarrow Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("100% A" is displayed.)

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

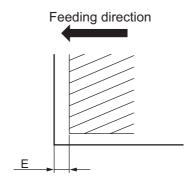


Fig.3-16

[G] Right margin

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [432]) \rightarrow [START]

- \rightarrow (Key in a value (acceptable values: 0 to 255))
- \rightarrow Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("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).

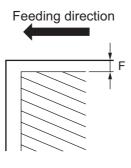


Fig.3-17

[H] Bottom margin

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. \rightarrow (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) \rightarrow (Key in the code [433]) \rightarrow [START]

- \rightarrow (Key in value (acceptable values: 0 to 255))
- \rightarrow Press the [ENTER] or the [INTERRUPT] button (stored in memory).
- \rightarrow ("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).

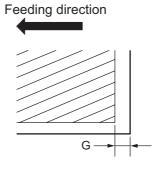


Fig.3-18

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) >

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

- (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.

Original mode Item to be adjusted Remarks Text/Photo Photo Text 594 595 593 Gamma slope adjustment One's place: 0: equivalent to the set value 5 (943) (945) (944) 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 D P.3-21 "3.3.1 Density adjustment".

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

< Adjustment Mode (05) >

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				
Text/Photo	Photo	Text	ltem to be adjusted	Remarks
620 (922)	621 (924)	622 (923)	Sharpness adjustment	Key in the following values depending on the original mode. 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.) • Example of value entry in case the mode is "Text/Photo". 2 1 Fixed value for Text/ Photo mode Key in a value 0 to 9 Note: When the value "0" is keyed in at the ten's digit, the value is not displayed on LCD screen.

* 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 D 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		Maria da las adlassidad	Demerika		
Text/Photo	Photo	Text	Item to be adjusted	Remarks	
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	
693 (916)	694 (918)	695 (917)	Range correction for original set on the RADF	Each digit stands for: One's place: Automatic density mod Ten's place: Manual density mode The setting conditions possible are as follows:	
				Background peakText peak1:fixedfixed2:variedfixed3:fixedvaried4:variedvaried	

* 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 D 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) >

C	Original mode Text/Photo Photo Text		léana éa lea adimatad	Demerke
Text/Photo			ltem to be adjusted	Remarks
532 (919)	533 (921)	534 (920)	Background peak for range correction	When the value increases, the back- ground (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 I 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) >

Original mode		
Text/Photo	Item to be adjusted	Remarks
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 >

< e-STUDIO 200L/230/280 >

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

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 num ber of the setting value corresponding to th sub code. Ex.) When substituting the setting value for 667-0 with A0, •••, 667-4 with A4: A0 A1 A A3 A4 2. Remember that the image specifications and life span of the replacing parts may no meet the standard when the setting value i changed from the default value.

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

- (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).

Adjustment of image density 3.4.2

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

Toner	[.] mode	ltem 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: 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. 	

< Adjustment Mode (05) >

- (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				5 .	
Text/Photo	Photo	Text	Item to be adjusted	Remarks	
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 valueThe larger the value is, the light light side becomes. Acceptable values: 0 to 255		
855	857	856	Manual density mode dark step value The larger the value is, the dark 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).

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3.5.2 Sharpness adjustment

c	Driginal mode			Remarks	
Text/Photo	Photo	Text	Item to be adjusted		
865-0	867-0	866-0	Reproduction ratio: 25% to 40%	Key in the following values depend- ing on the original mode.	
865-1	867-1	866-1	Reproduction ratio: 41% to 80%	 One's place 1: Text/Photo 5: Photo 2: Text Ten's place 	
865-2	867-2	866-2	Reproduction ratio: 81% to 400%	 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". 2 1 Fixed value for Text/ Photo mode Key in a value 0 to 9 	
				Note: When the value "0" is keyed in at the ten's digit, the value is not displayed on LCD screen.	

If you want to make scan images look softer or sharper, perform the following adjustment. < Adjustment Mode (05) >

<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				Demonto		
Text/Photo	Photo	Text	Item to be adjusted	Remarks		
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		
830	832	831	Range correction for original set on the RADF	 Each digit stands for: One's place: Automatic density mode Ten's place: Manual density mode The setting conditions possible are as follows: Background peak Text peak fixed fixed fixed fixed fixed as fixed varied varied 		

<Procedure>

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

3.5.4 Setting range correction (Adjustment of background peak)

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

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

<Procedure>

Procedure is same as that of D 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			Itom to be adjusted	Bemerke	
Text/Photo	Photo	Text	Item to be adjusted	Remarks	
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 D 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	Tak	e 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-volt- age transformer jig".					
Digital (+) terminal Tester		Connect with the black cable of the high-volt- age transformer jig.	Connect with the red cable (thick line) of the high-voltage trans- former 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)	100	2 V				
	Remarks	Use a digital tester with an input resistance of 10 M Ω (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		Connection for devel- Connection for main nection		Refer to 🛄 P.3 nection for tran charger adjustr	sfer/separation		

- [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.

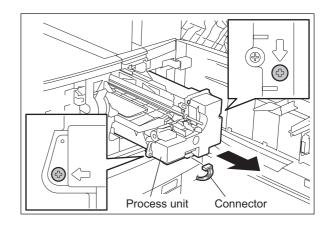
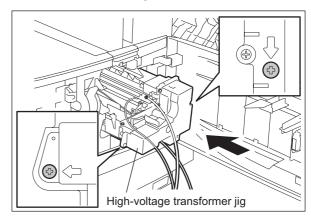


Fig.3-19

(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.



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



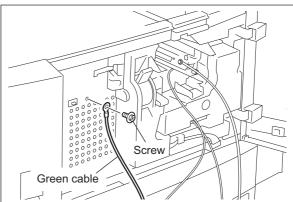


Fig.3-21

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

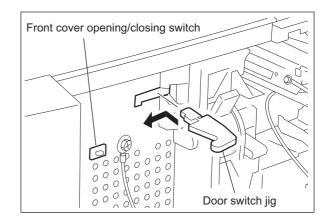


Fig.3-22

[B] Connection for developer bias adjustment

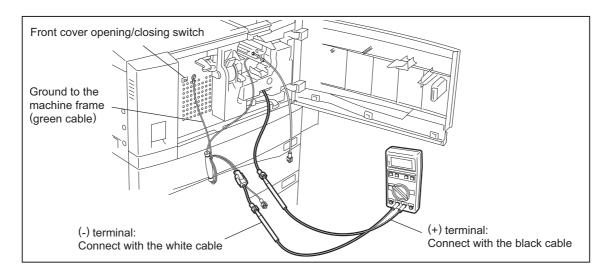


Fig.3-23

[C] Connection for main charger adjustment

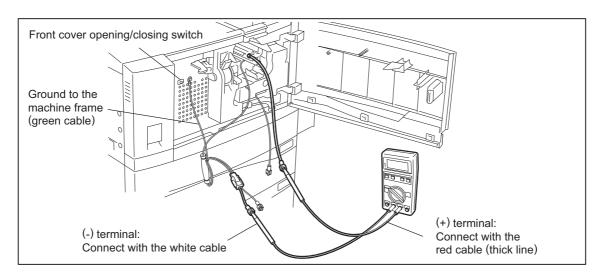


Fig.3-24

[D] Connection for transfer/separation charger adjustment

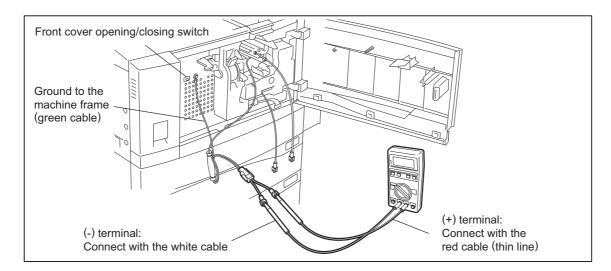


Fig.3-25

[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.

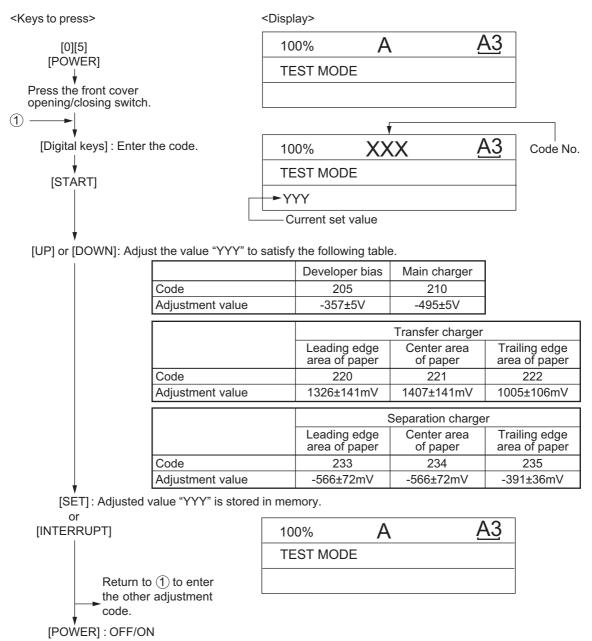


Fig.3-26

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:

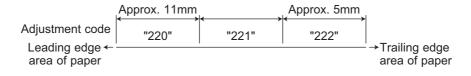
• If blotched image appear in halftone areas, lower the transfer output value. Remember that transfer performance becomes low if the transfer output value is lowered too much.

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.





[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:

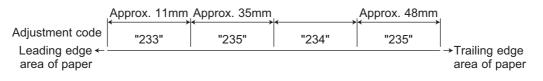
Increase the separation output value under the following conditions. Remember that if the separation output value is increased too much, blotched image occurs and separation performance becomes low.

- 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.





* Adjustment code 235 performs the adjustment for 2 areas.

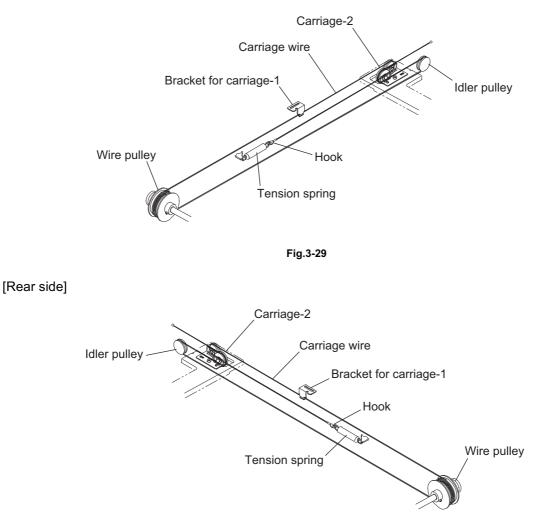
3.7 Adjustment of the Scanner Section

3.7.1 Carriages

[A] Installing carriage wires

When replacing the carriage wires, refer illustrations below:

[Front side]





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.

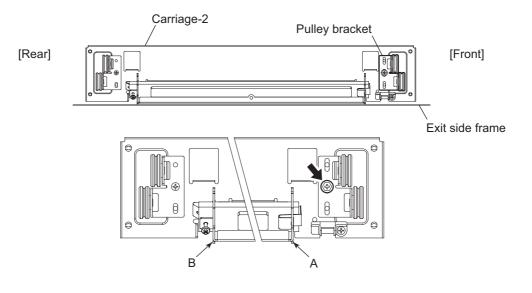


Fig.3-31

(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.

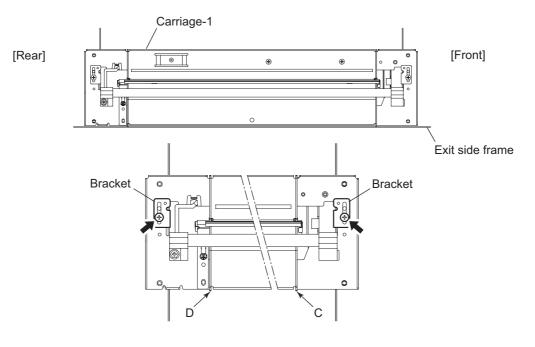


Fig.3-32

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

- (1) Pull the Ø3 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.

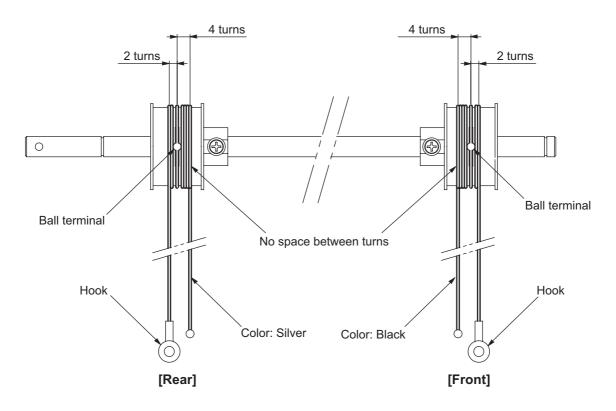


Fig.3-33

(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.

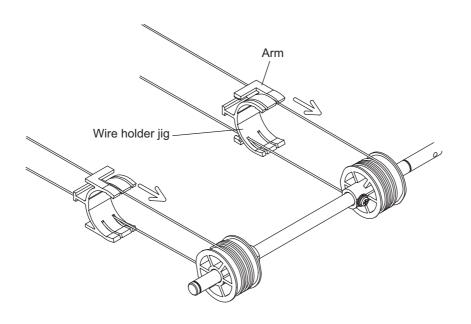
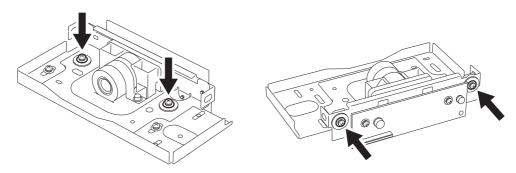


Fig.3-34

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.





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

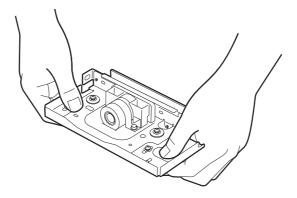


Fig.3-36

[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/LTsized paper at 100% reproduction ratio.
- (2) Compare the copied ruler with the actual ruler.

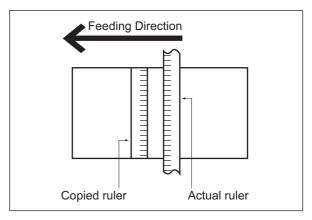


Fig.3-37

(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.

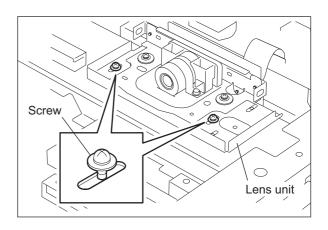


Fig.3-38

(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

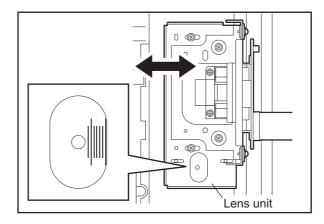


Fig.3-39

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. \rightarrow 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. \rightarrow Move the guide to the rear side (Arrow (B) direction in the lower figure).

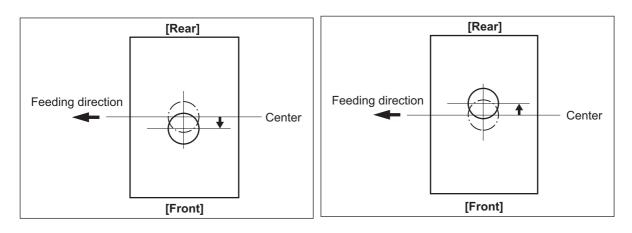


Fig.3-40

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.

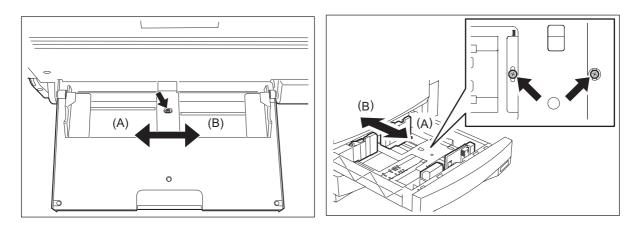


Fig.3-42

Fig.3-43

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

3.9 Adjustment of Developer Unit

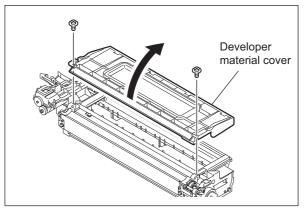
3.9.1 Doctor-to-sleeve gap

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.





(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)

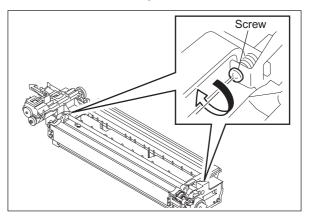
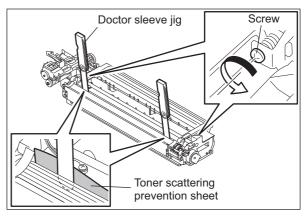


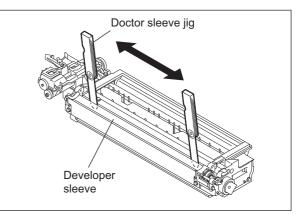
Fig.3-45

(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.

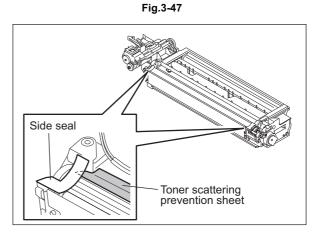
Adjust the screws with the doctor blade to push the doctor sleeve jig lightly.



(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.3-46



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





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

Note:

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

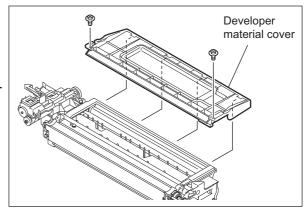


Fig.3-49

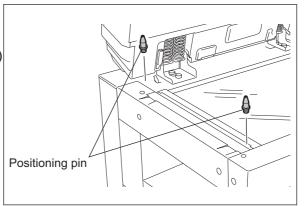
3.10 Adjustment of the RADF (MR-3016)

3.10.1 Adjustment of RADF position

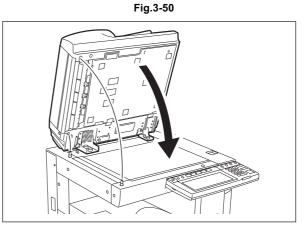
It is mainly performed at the installation. It is also required when the RADF is dislocated for some reason such as moving the equipment.

Remove the platen sheet during adjustment. <Procedure>

 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.)



(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.



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

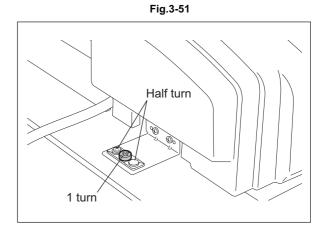
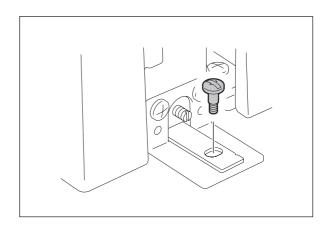


Fig.3-52

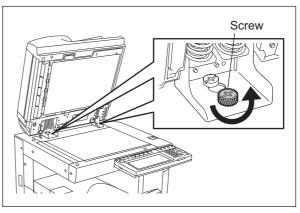
e-STUDIO200L/202L/230/232/280/282 ADJUSTMENT

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



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





(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.



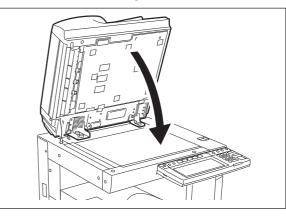
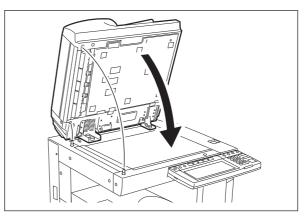


Fig.3-55

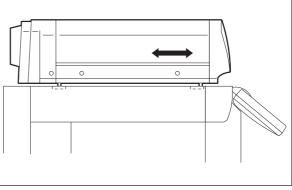
e-STUDIO200L/202L/230/232/280/282 ADJUSTMENT

(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.)

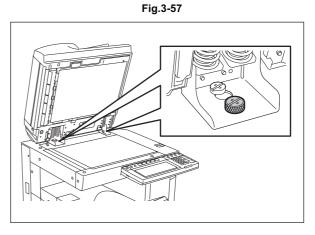


(8) While peering inside from the left side, close the RADF. Check the positions of the holes of the RADF and pins and then fit their positions by moving the RADF back and forth. (For the front side, also adjust the RADF position right and left.) Make sure not to dislocate the positions of the pin and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

Fig.3-56



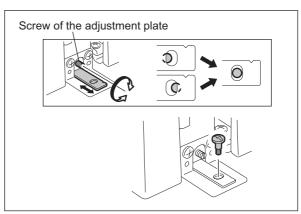
(9) Open the RADF to tighten 2 hand screws. Close the RADF and then check again that the positioning pins fit smoothly into the holes on the RADF.





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

(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.

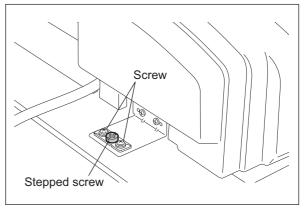


(11) Tighten the stepped screw and 2 screws on the adjustment plate.Open and close the RADF to check again

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.)





(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.



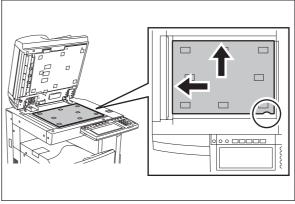


Fig.3-61

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

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.

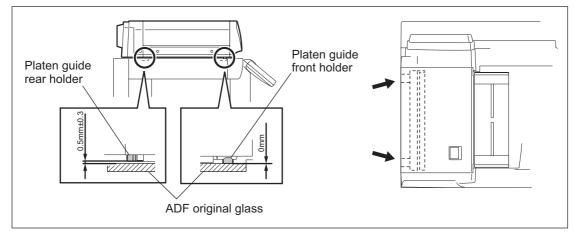
Note:

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 $0.5 \text{ mm} \pm 0.3$.





 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.

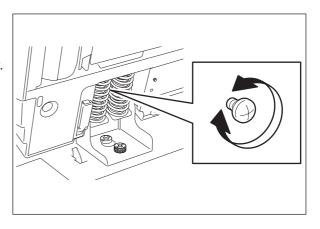


Fig.3-63

 (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.

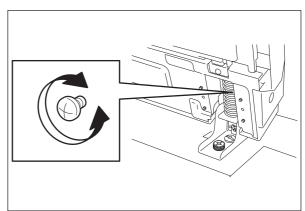


Fig.3-64

3.10.3 Adjustment of skew

When an image skew occurs, adjust it according to the following steps, Step 1 \rightarrow Step 2 \rightarrow 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 (\square P.3-62 "3.10.5 Adjustment of aligning").

Case B:

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

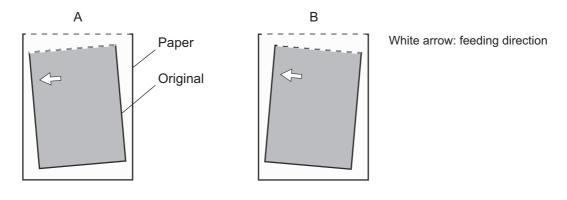


Fig.3-65

(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.

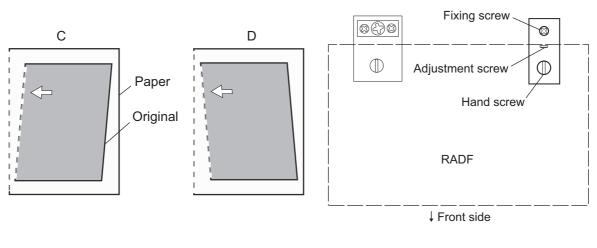


Fig.3-66



(3) Step 3

Case E:

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

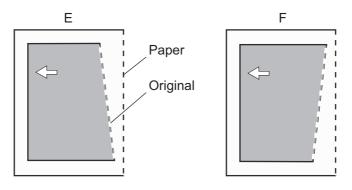


Fig.3-68

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.

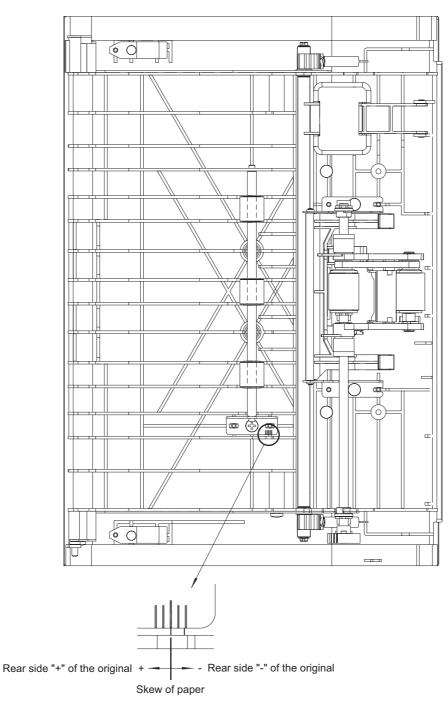


Fig.3-69

3.10.6 Adjustment of aligning at reversing

Adjust the aligning according to Step 3 of 3.10.3.

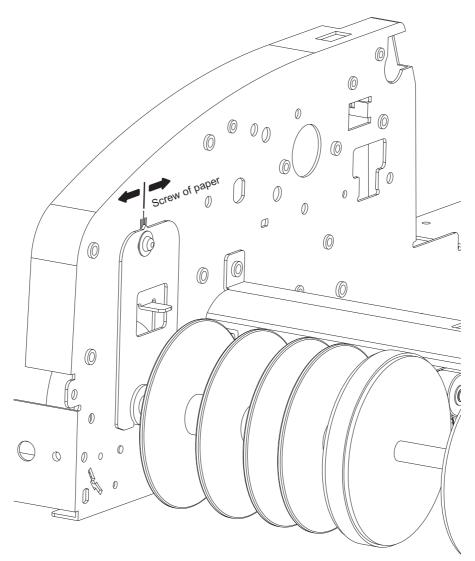


Fig.3-70

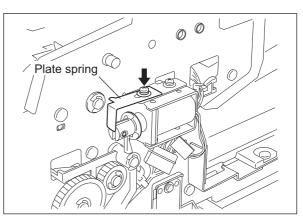
3.10.7 Adjustment of reverse solenoid

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

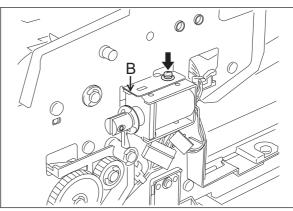
<Procedure>

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



(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.





(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.3-72

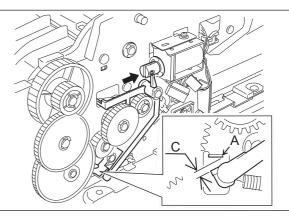


Fig.3-73

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

(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.

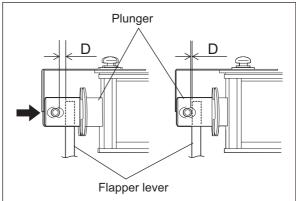


Fig.3-74

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).

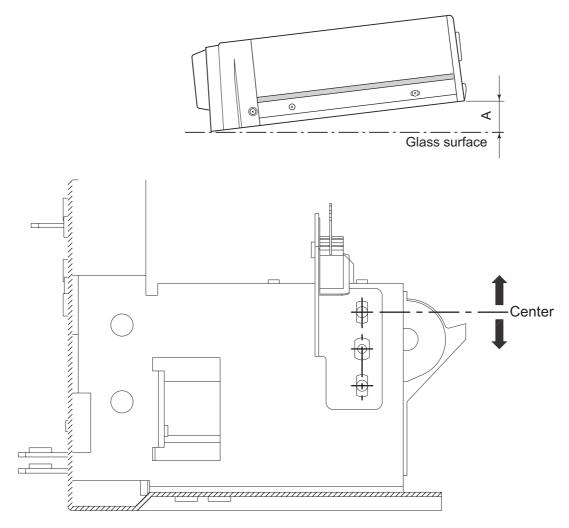
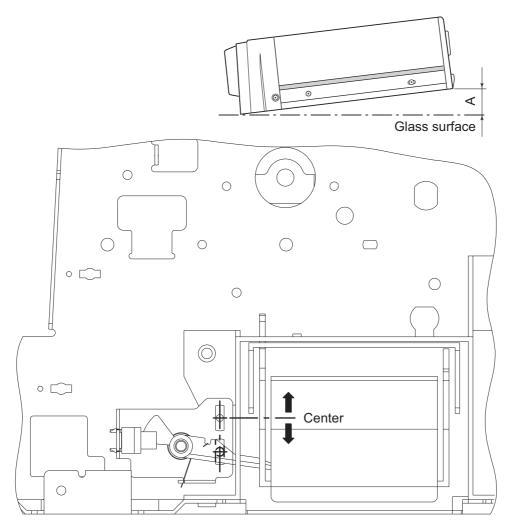


Fig.3-75

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).



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.

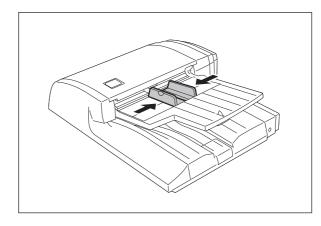
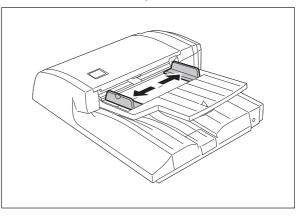


Fig.3-77

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



3.11 Adjustment of the RADF (MR-3020)

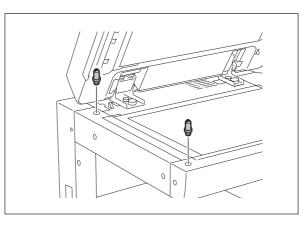
3.11.1 Adjustment of RADF Position

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

Note:

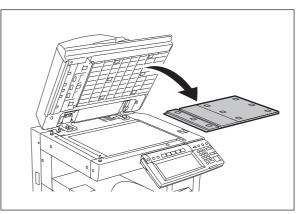
Check if the image adjustment for the equipment is performed properly before this adjustment of the RADF.

- [A] Checking
 - 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).



(2) Remove the platen sheet.

Fig.3-79



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

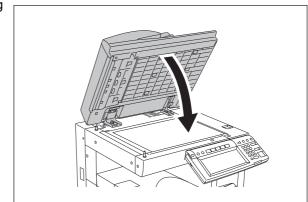
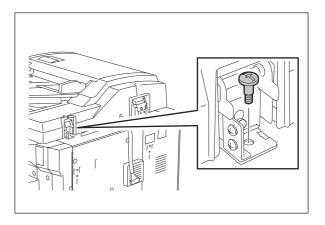


Fig.3-81

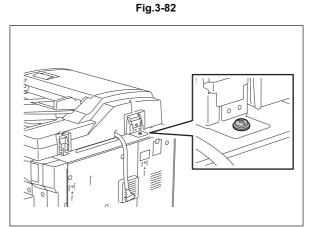
[B] Adjustment

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.



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





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

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

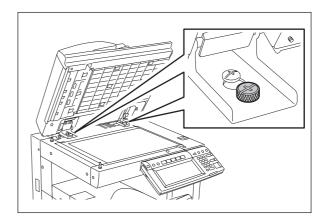
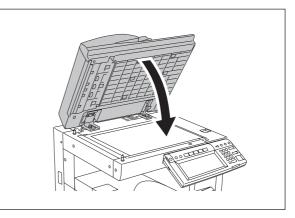


Fig.3-84

(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.



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

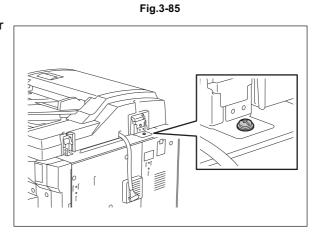
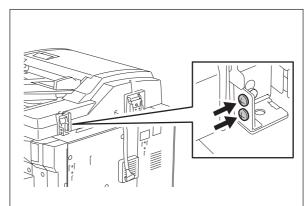


Fig.3-86

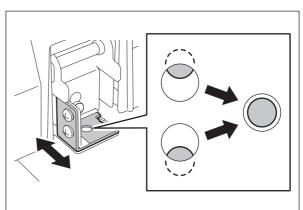
3

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





(7) Match the screw hole positions.



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



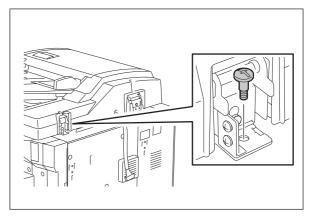
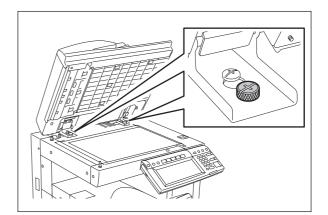


Fig.3-89

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



(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.

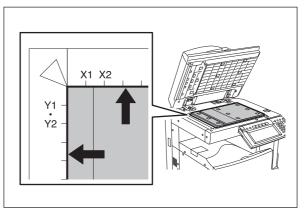


Fig.3-91

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

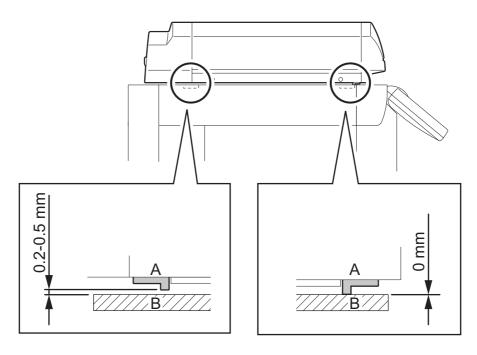
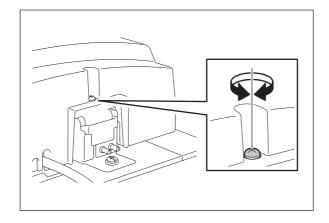


Fig.3-92

[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





• 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

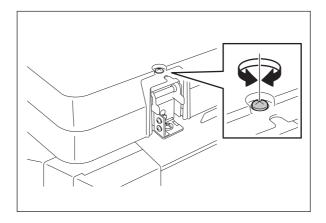


Fig.3-94

3

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.

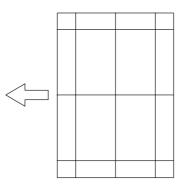


Fig.3-95 Chart (Original)

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.

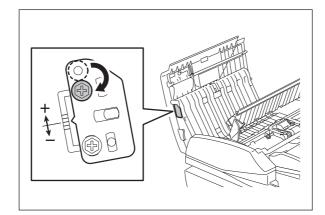
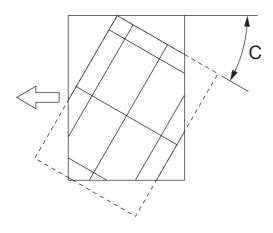


Fig.3-96

(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 "-".





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

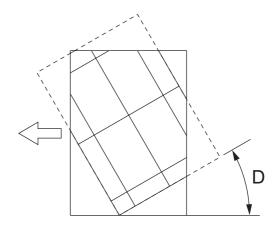
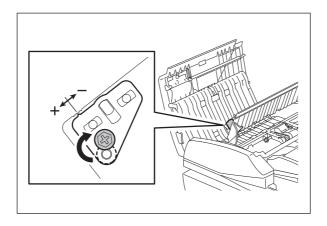


Fig.3-98 Shift the aligning plate in the direction of "-".

3

Duplex copying:

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





(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 "+".

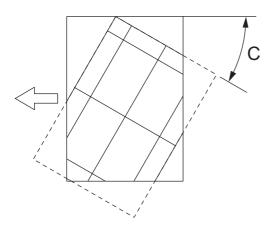


Fig.3-100

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

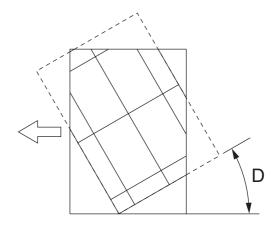


Fig.3-101 Shift the aligning plate in the direction of "+".

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

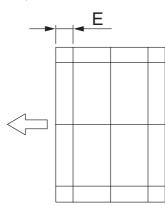
Check the image using the chart (original) with vertical and horizontal lines in the following procedure.

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.



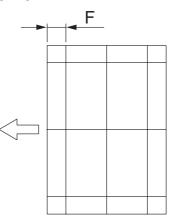


Fig.3-102 Chart (Original)



[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.

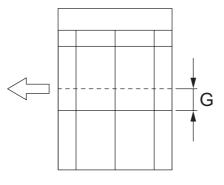
[A] Checking

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.





• 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.

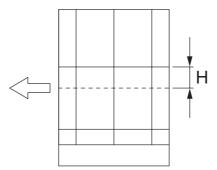


Fig.3-105

(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.

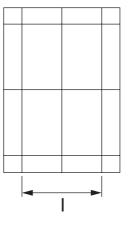
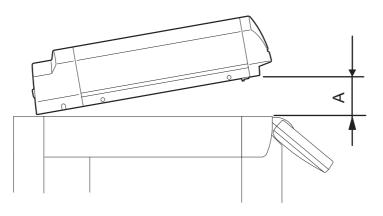


Fig.3-106

(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).



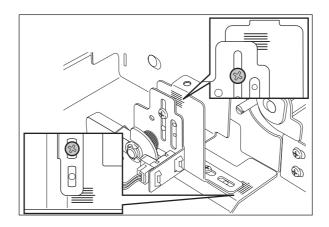


Fig.3-108

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.
- (3) Adjust the rear jogging plate to the home position.
 - Set SW1 on the finisher controller PC board as shown in D P.3-84 "Fig.3-110 ".
 - Press SW2 twice on the finisher controller PC board.
 - The rear jogging plate moves to the home position.

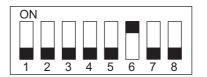
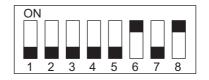
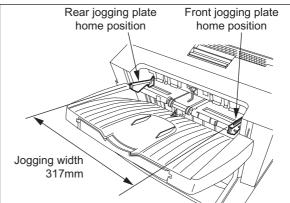


Fig.3-109

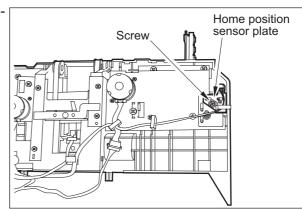






(4) Measure the jogging width (standard at 317 mm).

- (5) Remove the processing tray.
- (6) Loosen the screw on the home position sensor plate at the front.



- (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.



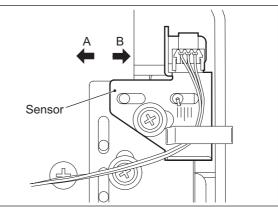
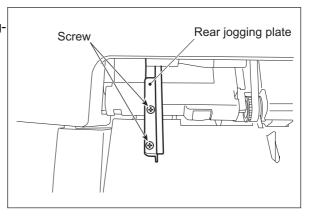


Fig.3-113

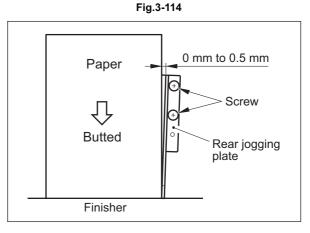
3.12.2 Adjusting the angle of the jogging plate

<Procedure>

 Without removing the processing tray unit, loosen the 2 mounting screws of the rear jogging plate.



(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 jog-ging plate so that it is 0 mm to 0.5 mm.)



(3) With reference to the rear jogging plate adjusted in step (2), adjust the front jogging plate in the same manner.



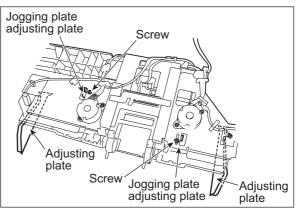
3

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.



(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.

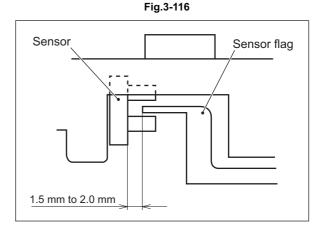
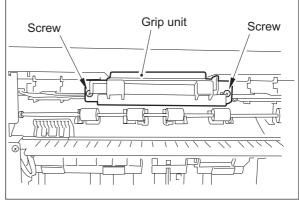


Fig.3-117

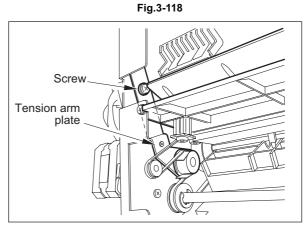
3.12.4 Adjusting the tension of the stack processing motor belt

<Procedure>

- (1) Remove the right inner cover and the rear cover.
- (2) Remove the 2 mounting screws, and detach the grip unit.



(3) Loosen the screw on the tension arm plate.(The tension arm plate will be pulled under tension by the tension spring.)



(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.

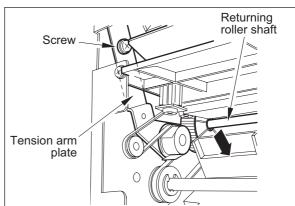


Fig.3-119

Fig.3-120

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

(5) Check to make sure that the returning roller shaft moves smoothly.

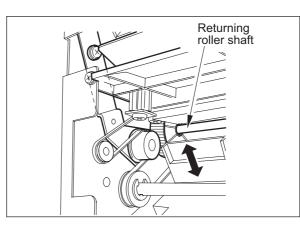


Fig.3-121

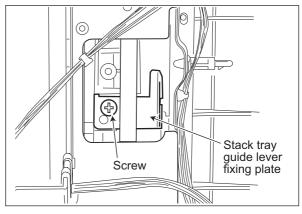
3.12.5 Releasing the stack tray guide lever fixing plate

<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.)

Note:

When removing the mounting screw, be sure to hold the stack tray guide lever up from below.



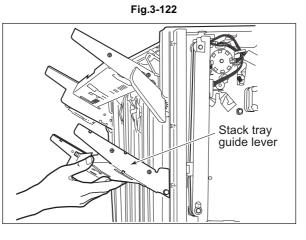
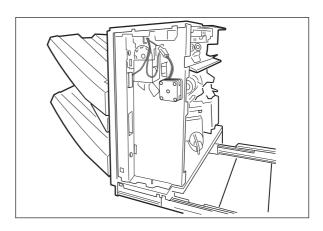


Fig.3-123

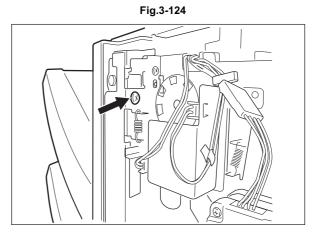
3.12.6 Adjustment of the upper tray angle

<Procedure>

(1) Remove the front cover.



(2) Loosen the screw denoted with the arrow.



(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.3-125

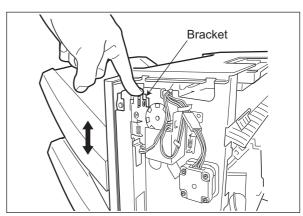


Fig.3-126

3

(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.

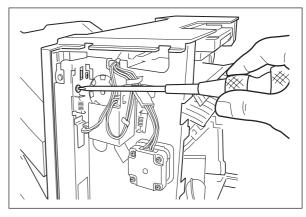


Fig.3-127

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
ON 1 2 3 4 5 6 7 8	Delivery motor	The delivery roller rotates in a spe- cific speed.		 Press SW2 again. Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Stack processing motor (stack deliv- ery lever)	The stack delivery lever moves to its home position and stops.		Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Stack processing motor (returning roller)	The returning roller moves to the home position and stops.		Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Front jogging plate motor	When not at the home position	The front jogging plate moves to its home position and stops.	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.	 Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Rear jogging plate motor	When not at the home position	The rear jogging plate moves to the home position and stops.	Turn OFF the joint sensor (S4).
		When at the home position	The rear jogging plate moves over a specific distance and stops.	Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Upper stack tray motor (up)	The upper stack tray moves up and stops when the upper stack tray upper limit sensor turns ON.		 Press SW2 again. Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Upper stack tray motor (down)	The upper stack tray moves down and stops when the lower stack tray lower limit sensor turns ON.		 Press SW2 again. Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Lower stack tray motor (up)	The lower stack tray moves up and stops when the lower stack tray upper limit sensor is turned ON.		 Press SW2 again. Turn OFF the joint sensor (S4).

Setting	ltem	Operation	To stop
ON 1 2 3 4 5 6 7 8	Lower stack tray motor (down)	The lower stack tray moves down and stops when the lower stack tray lower limit sensor is turned ON.	 Press SW2 again. Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Stapler motor	The stapler motor stops after the sta- pling operation.	 Press the stapler safety switch (S14). Turn OFF the joint sensor (S4).
ON 1 2 3 4 5 6 7 8	Shipping position operation	The upper and lower stack trays move to the shipping position and stop.	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:

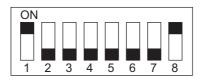
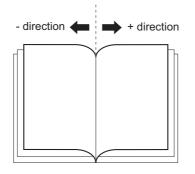


Fig.3-128

- (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.





- (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.

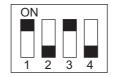
3

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:



- (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:

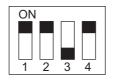


Fig.3-131

(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).

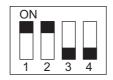
Number of punch holes	LED1001	LED1002	LED1003
2 holes (E)	ON	OFF	OFF
2/3 holes (N)	ON	ON	OFF
4 holes (F)	OFF	OFF	OFF
4 holes (S)	OFF	OFF	ON

- (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:

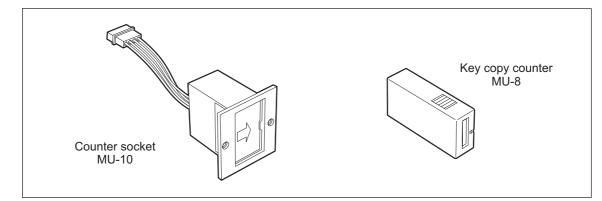




- (3) Press SW1002 and SW1003 on the punch controller PCB at the same time.
 The presses will initialize the EEP-ROM. At the end, all LEDs (LED1001, LED1002, LED1003) will go ON.
- (4) Adjust the sensor output, and store the number of punch holes.

3.14 Key Copy Counter (MU-8, MU-10)

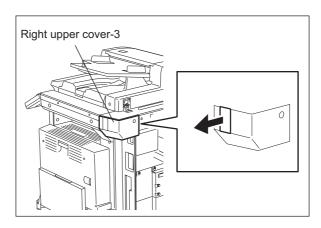
To make a key copy counter available, the following 2 components must be installed to the equipment.





<Installation procedure>

- (1) Remove the rear cover.
- (2) Remove the right upper cover-3, and cut open the window for the key copy counter.



(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.

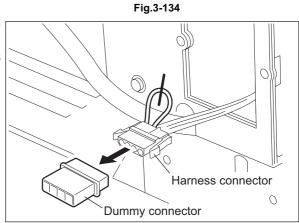
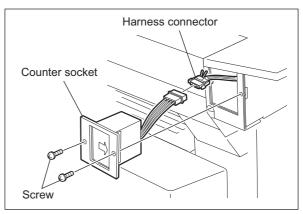


Fig.3-135

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- (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.



(7) Insert the key copy counter with its arrow mark pointing the rear side of the equipment.

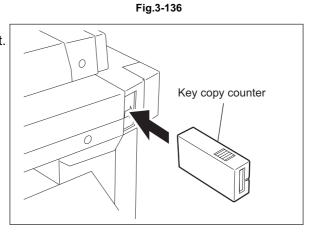


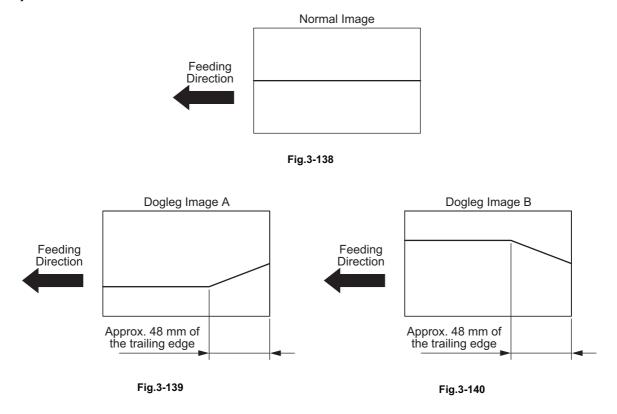
Fig.3-137

(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.



<Adjustment procedure>

(1) Check the position of the adjustment screws.

(2) Remove the 2 adjustment screws.

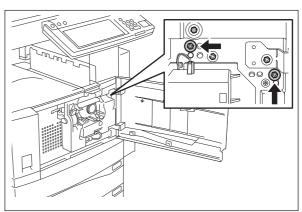
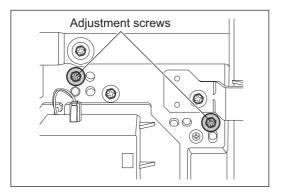


Fig.3-141

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

- (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.



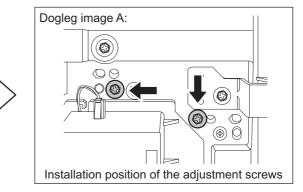
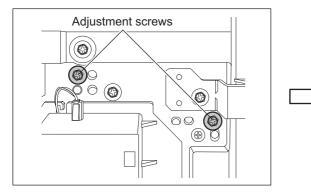
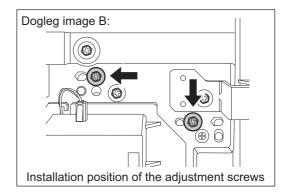


Fig.3-142

 Dogleg image B Install the adjustment screws as shown in the figure below so that the stay of the fuser unit can move downward.







(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.

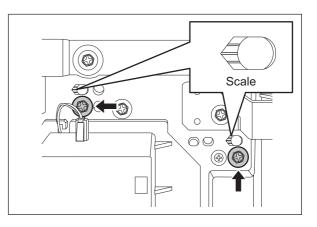


Fig.3-144

4. PREVENTIVE MAINTENANCE (PM)

4.1 PM Support Mode

4.1.1 General description

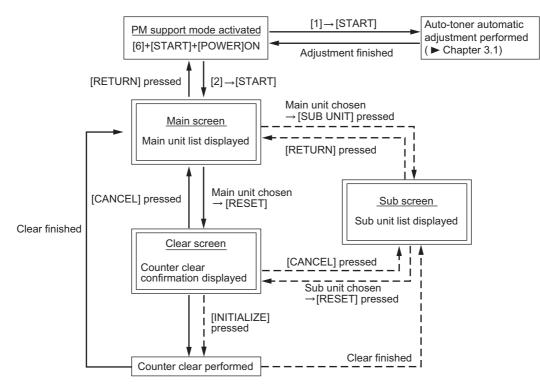
The timing for the parts replacement usually depends on the number of output pages ever printed after they were replaced before. However, the life span of them changes depending on the general use of users and the environment in which the equipment is placed. Therefore, it is necessary to consider not 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



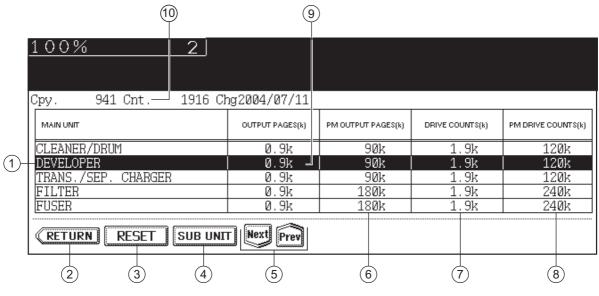


* The screen goes back to the main screen when the counter clear is executed or the [CANCEL] button is pressed after moving from the main screen, while it goes back to the sub screen after moving from the sub screen.

4

[2] Operational screen

1) Main screen



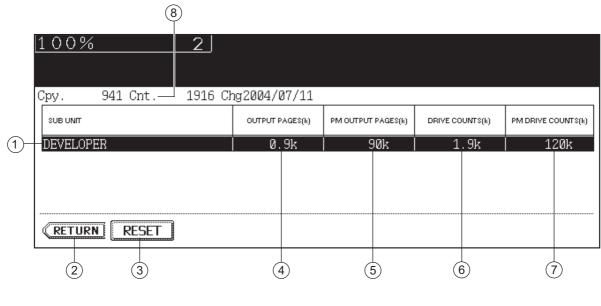


- ① Displaying of the main unit name
- 2 Back to the PM support mode activation screen
- Clearing of the chosen unit counters (all the sub unit (parts) counters belonging to that unit) All counters are cleared when the unit is not selected
- (4) Moving to the sub screen
- 5 Moving to the next/previous page
- 6 Displaying of the standard number of output pages counts (x 1,000) to replace the unit parts
- 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
- 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.
- 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 OUT-PUT PAGES (k)" even for the installed paper source.

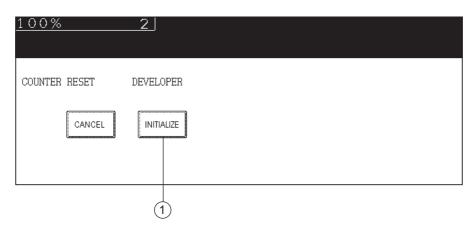
2) Sub screen





- 1 Displaying of the sub unit (parts) name
- 2 Back to the main screen
- ③ Clearing of the chosen sub unit (parts) counters
- 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)
- 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)
- B Displaying of the number of output pages counts, drive counts and previous replacement date for a chosen sub unit

3) Clear screen





() 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.

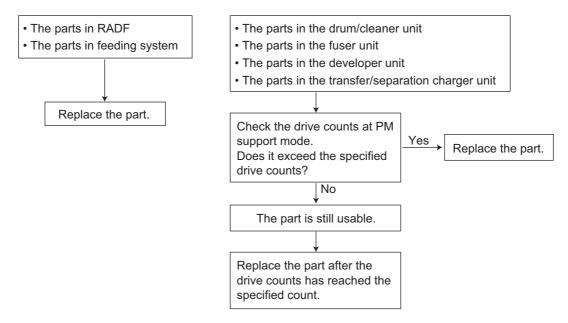
Main screen	Sub-screen
Drum/cleaner unit [CLEANER/DRUM]	Drum [DRUM] Drum cleaning blade [DRUM BLADE] Main charger grid [GRID] Needle electrode [NEEDLE ELECTRODE] Separation finger for drum [SEPARATION FINGER (DRUM)] Recovery blade [RECOVERY BLADE]
Developer unit [DEVELOPER]	Developer [DEVELOPER]
Transfer/separation 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.

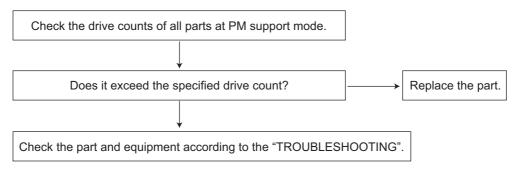
The following work flow diagram shows how to judge the timing of replacement with the number of output pages and the drive counts.





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 \rightarrow [2] \rightarrow [START] 9S-103 : [9] + [START] + [POWER] ON \rightarrow [103] \rightarrow [START]

MM-DD-YY 09:30	Т			
UNIT O	UTPUT 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

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

	Cleaning		Lubrication	Replacement	Operation check	Date
А	Clean with alcohol	L	Launa 40	The number of	O After cleaning or	User name
0	Clean with soft pad, cloth or vacuum		Coating	ting sheets consumed replacement, confirm there is	Serial No.	
	cleaner	SI W1 W2 AV FL CG	Silicon oil White grease (Molykote X5-6020) White grease (Molykote HP-300) Alvania No.2 Floil (GE-334C) Conductive grease (KS-660)	(Value x 1,000) ∆ Replace if deformed or damaged	no problem.	Inspector's name Remarks

Symbols used in the checklist

[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-l></p-l>	Remarks
A1	Original glass	O or A				<p22-i1></p22-i1>	*a1
A2	ADF original glass	0				<p22-12></p22-12>	*a1
A3	Mirror-1	0					
A4	Mirror-2	0					
A5	Mirror-3	0					
A6	Reflector	0				<p23-i4></p23-i4>	
A7	Lens	0				<p11-i16></p11-i16>	
A8	Exposure lamp			Δ	0	<p23-i6></p23-i6>	
A9	Automatic original detection sensor	0			0	<p11-i17></p11-i17>	
A10	Slide sheet (front and rear)	O or A		Δ			

B. Laser unit

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
B1	Slit glass	0					

C. Feed unit

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
C1	Pickup roller			80/80		<p15-i19></p15-i19>	
C2	Feed roller			80/80		<p15-i39></p15-i39>	
C3	Separation roller		AV, W2	80/80		<p15-i29></p15-i29>	*c1
C4	Transport roller (1st/2nd)	A		Δ			
C5	Paper guide	0					
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-l></p-l>	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	0				<p32-14></p32-14>	

E. Bypass feed unit

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
E1	Pickup roller			80/80		<p20-i4></p20-i4>	
E2	Feed roller			80/80		<p20-14></p20-14>	
E3	Separation roller		AV, W2	80/80		<p19-i4></p19-i4>	*e1
E4	Bypass tray	0					
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-l></p-l>	Remarks
F1	Main charger case	0				<p25-i1></p25-i1>	*f1
F2	Needle electrode			64/74/90			*f1
F3	Contact point of termi- nals	0					
F4	Main charger wire cleaner			Δ	0	<p25-i7></p25-i7>	
F5	Main charger grid			64/74/90		<p25-i3></p25-i3>	

G. Transfer / Separation charger

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
G1	Charger case	0				<p26-12></p26-12>	*g1
G2	Transfer charger wire			64/74/90	0	<p26-i18></p26-i18>	*g1
G3	Separation charger wire			64/74/90	0	<p26-i18></p26-i18>	*g1
G4	Pre-transfer guide	O or A					
G5	Post-transfer guide	O or A					
G6	Separation supporter	0		Δ		<p26-i17></p26-i17>	
G7	Terminal cover	0					
G8	Contact point of termi- nals	0					
G9	Transfer guide roller	0		Δ		<p26-i14></p26-i14>	

H. Drum/Cleaner related section

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
H1	Photoconductive drum			64/74/90			Chap. 4.8.2
H2	Discharge LED	0					
H3	Whole cleaner unit	0					
H4	Drum cleaning blade			64/74/90		<p27-i5></p27-i5>	*h1
H5	Separation finger for drum			64/74/90 Δ			*h2
H6	Recovery blade	0		64/74/90		<p27-i6></p27-i6>	*h3
H7	Ozone filter			128/148/180		<p12-18></p12-18>	

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
11	Whole developer unit	0					
12	Developer material			64/74/90			*i1
13	Front shield	0		Δ			
14	Oil seal (6 pcs.)		AV	320/370/450		<p28-i11></p28-i11>	*i2
15	Guide roller	O or A					
16	Side shield	0					
17	Developer unit lower stay	0					
18	Toner cartridge drive gear shaft		W1				

I. Developer unit / Toner cartridge related section

J. Fuser unit

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
J1	Fuser roller			128/148/180		<p30-i23></p30-i23>	
J2	Pressure roller			128/148/180		<p30-i21></p30-i21>	
J3	Separation finger for fuser roller			128/148/180		<p30-128></p30-128>	*j1
J4	Cleaning roller			128/148/180		<p30-i14></p30-i14>	
J5	Fuser unit entrance guide	A				<p30-i39></p30-i39>	
J6	Thermistor (3 pcs.)	Α		Δ		<p30-i10></p30-i10>	*j2
J7	Drive gear (tooth face and shaft)		W2	Δ		<p30-i19></p30-i19>	
J8	Fuser roller gear			Δ		<p30-i24></p30-i24>	

K. Exit unit

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
K1	Exit/reverse guide	А				<p31-l21></p31-l21>	
K2	Exit roller	А		Δ		<p31-l3></p31-l3>	
К3	Drive gear		SI				

L. RADF (MR-3016)

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
L1	Pickup roller	0		120		<p8-126></p8-126>	
L2	Feed roller	0		120		<p8-125></p8-125>	
L3	Separation roller	0		120		<p6-i6></p6-i6>	
L4	Original length sensor	0					
L5	Registration roller	Α					
L6	1st small roller	Α					
L7	2nd small roller	А					
L8	Read sensor	0					
L9	Read sensor	0					
L10	Read roller	Α					
L11	3rd small roller	Α					
L12	4th small roller	А					
L13	Reverse sensor	0					
L14	Exit roller	Α					
L15	Reverse roller	Α					
L16	Platen sheet	O or A					

M. PFP (KD-1011)

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
M1	Pickup roller (upper/lower)			80		<p5-129></p5-129>	
M2	Feed roller (upper/lower)			80		<p5-126></p5-126>	
M3	Separation roller (upper/lower)		AV, W2	80		<p5-i12></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-l></p-l>	Remarks
N1	Pickup roller	А		160		<p4-i30></p4-i30>	
N2	Feed roller	А		160		<p4-128></p4-128>	
N3	Separation roller	А		160		<p5-i12></p5-i12>	
N4	Drive gear		W1				

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O. Job Separator (MJ-5004)

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
01	Idling roller	O or A	W1				*o1
02	Other rollers	O or A					
O3	Paper guide	O or A					
04	JSP upper stuck sensor	0			0	<p1-l51></p1-l51>	
05	JSP lower stuck sensor	0			0	<p1-i12></p1-i12>	
O6	JSP paper jam sensor	0			0		

P. Offset Tray (MJ-5005)

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
P1	OCT separator roller	O or A	W1, FL			<p2-122></p2-122>	*p1
P2	Other rollers	O or A				<p2-139></p2-139>	
P3	Paper guide	O or A					
P4	OCT stuck sensor	0			0	<p1-i13></p1-i13>	
P5	OCT home position sensor	0			0		
P6	OCT feed sensor	0			0		

Q. Finisher (MJ-1025)

	Items to check	Cleaning	Lubrication	Replacement (x 1,000 sheets)	Operation check	Parts list <p-l></p-l>	Remarks
Q1	Feed roller	O or A					
Q2	Delivery roller	O or A					
Q3	Stack delivery roller	O or A					
Q4	Stack feed roller	O or A					
Q5	Paper fold roller	O or A					
Q6	Bind delivery roller	O or A					
Q7	Waste full detection sensor	0					
Q8	Feeding assembly member	O or A					
Q9	Paper guide	O or A					

4

R. RADF (MR-3020)

	Items to check	Cleaning	Lubrication/ Coating	Replacement (KS)	Operation check	Parts list <p-l></p-l>	Remarks
R1	Pickup roller	А		120		5-1	
R2	Separation roller	А		120		4-10	
R3	Feed roller	А		120		5-1	
R4	Registration roller	А					
R5	Intermediate transfer roller	А					
R6	Front read roller	А					
R7	Platen roller	А					
R8	Rear read roller	А					
R9	Reverse registration roller	A					
R10	Exit/reverse roller	А					
R11	Platen sheet	O or A					

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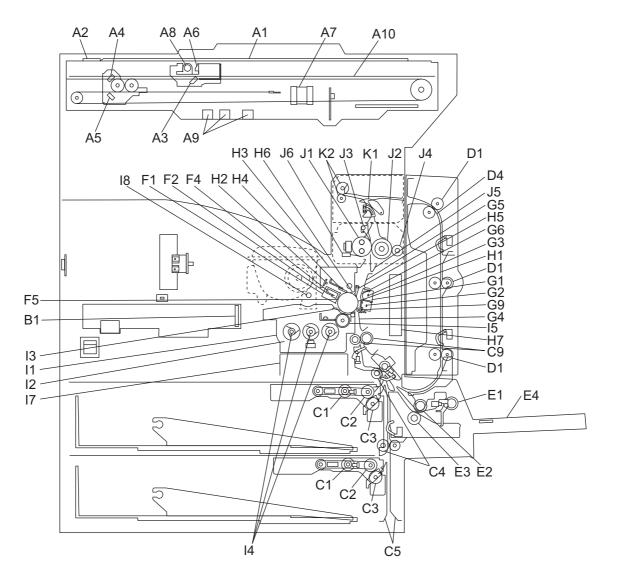


Fig. 4-6 Front side

e-STUDIO200L/202L/230/232/280/282 PREVENTIVE MAINTENANCE (PM)

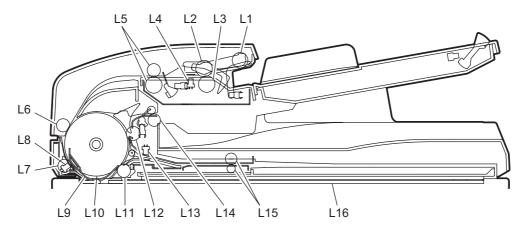


Fig. 4-7 Reversing Automatic Document Feeder (RADF: MR-3016)

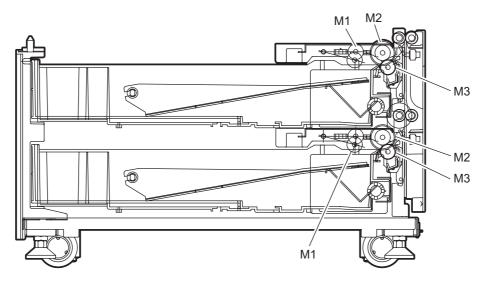


Fig. 4-8 Paper Feed Pedestal (PFP)

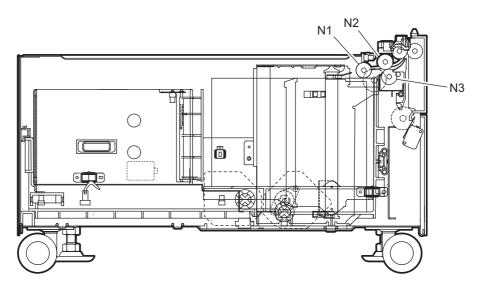


Fig. 4-9 Large Capacity Feeder (LCF)

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e-STUDIO200L/202L/230/232/280/282 PREVENTIVE MAINTENANCE (PM)

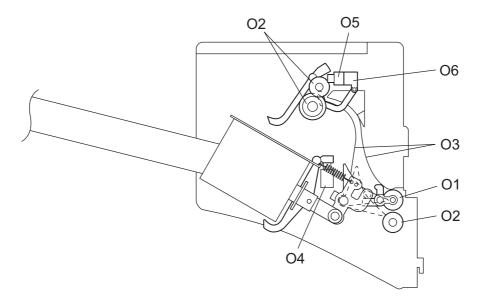


Fig. 4-10 Job Separator (JSP)

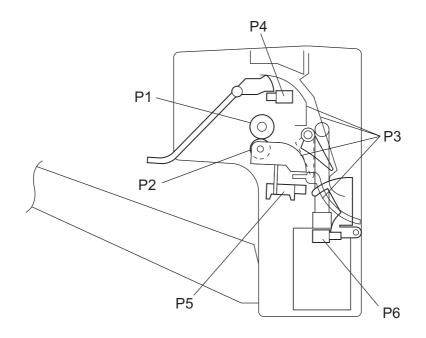


Fig. 4-11 Offset Tray (OCT)

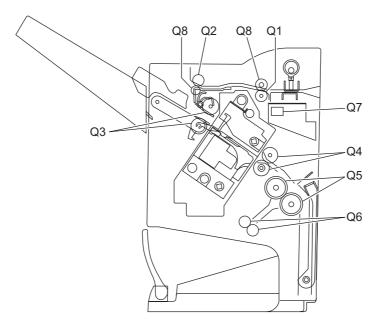


Fig. 4-12 Finisher (MJ-1025)

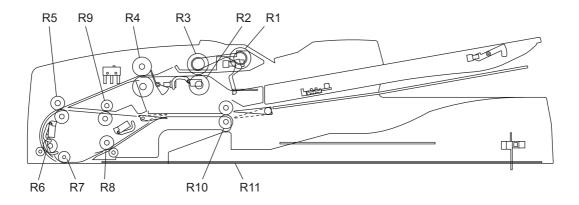


Fig. 4-13 Reversing Automatic Document Feeder (RADF: MR-3020)

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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:

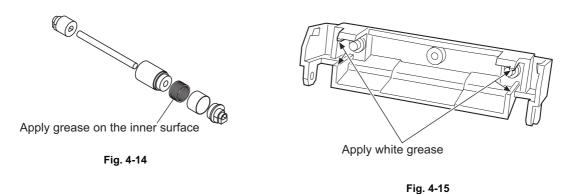
Make sure that there is no fingerprints or oil staining on part of the original glass on where the original scale is mounted since the shading correction plate is located below the scale to be scanned.

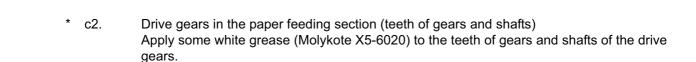
* c1, m1. Separation roller (Feed unit, PFP)

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.





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.

4

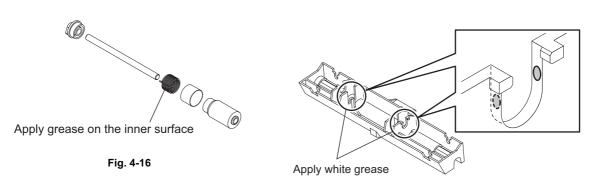
* e1.

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.





* 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 mode.

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 mode.

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.
 (III) 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.

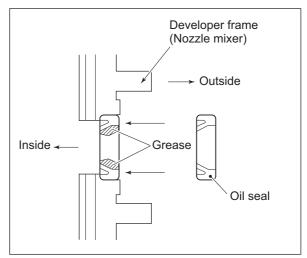


Fig. 4-18

* 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.

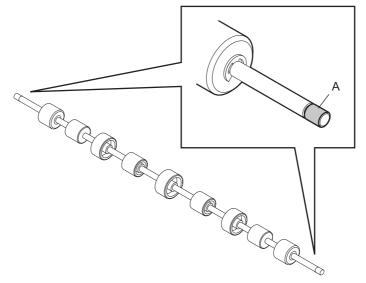
* j2. Thermistor

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.





* 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.

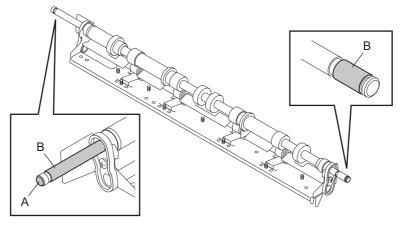


Fig. 4-20

4.5 PM KIT

ltem	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

ltem	Part	s list
nem	Page	ltem
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

	Crosse nome	Don't nome	Volume	Container	Parts list	
	Grease name	Part name	volume	Container	Page	ltem
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 dint 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.

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 white 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 D 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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the exit sensor working? (Perform the input check in the test mode: 03-[FAX]ON/[2]/[B])

Is the exit sensor working? (Perform the input check in the test mode: 03-[FAX]ON/[2]/[B])					
NO → 	 Check if the connector of the exit sensor is disconnected. Check if the connector CN308 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the exit sensor. Replace the LGC board. 				
YES					
<u>Is the registration roller clutch working?</u> (Perform the output check in the test mode: 03-108/158)					
I NO → I I I I I I I I I I I I I I I I I I I	 Check if the connector of the registration roller clutch is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the registration roller clutch. 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.)

 \downarrow YES \rightarrow 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 →	 Check if the connector of the sensor is disconnected. Check if any of the connectors on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the sensor. 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]
ОСТ	OCT cover	OCT feed sensor	03-[FAX]ON/[3]/[H]

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[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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the registration sensor working?
(Perform the input check in the test mode: 03-[FAX]ON/[2]/[A]

	NO →	 Check if the connector of the registration sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the registration sensor. Replace the LGC board
\downarrow		6) Replace the LGC board.

YES

<u>Are the (lower/middle) transport clutches working?</u> (Perform the output check in the test mode: 03-203, 205)

 	NO →	 Check if the connectors of the (lower/middle) transport clutches are disconnected.
I		2) Check if the connector CN305 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 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.

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- [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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

	NO →	 Check if the connector of the 1st transport sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected.
l		 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.
\checkmark		6) Replace the LGC board.

YES

<u>Are the (lower/middle) transport clutches working?</u> (Perform the output check in the test mode: 03-203, 205)

	NO →	 Check if the connectors of the (lower/middle) transport clutches are disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited.
 ↓		 Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the (lower/middle) transport clutches. 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?

- \downarrow YES \rightarrow Remove the paper.
- NO

<u>Is the registration sensor working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[2]/[A]			
2) 3) 4) 5)	Check if the connector of the registration sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the registration sensor. Replace the LGC board.		
YES			
<u>Is the registration clutch working?</u> (Perform the output check in the test mode: 03-108/158)			
2) 3) 4) 5)	Check if the connector of the registration clutch is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the registration roller clutch. 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?

- \downarrow YES \rightarrow Remove the paper.
- NO

Is the 2nd transport sensor working?

|--|

A		<u> </u>	
	NO →	 Check if the connector of the 2nd transport sensor is disconnected. Check if the connector CN304 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the 2nd transport sensor. Replace the LGC board. 	
YES			
		<u>ldle) transport clutches working?</u> ut check in the test mode: 03-203, 205)	
	NO →	 Check if the connectors of the (lower/middle) transport clutches are disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the (lower/middle) transport clutches. Replace the LGC board. 	
YES			
<u>Is the Pl</u>	Is the PFP transport clutch working? (Perform the output check in the test mode: 03-225)		
	NO →	 Check if the connector of the PFP transport clutch is disconnected. Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected. Check if the connector CN310 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. 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.
- Replace the LGC board.

YES

I

I

I

 $\mathbf{1}$

- 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.

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[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?

 \downarrow YES \rightarrow 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])

l	NO →	 Check if the connector of the PFP upper drawer feed sensor is dis- connected.
l		2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
I		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.
		Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
i		6) Replace the PFP upper drawer feed sensor.
Ì		7) Replace the PFP board.
\checkmark		8) Replace the LGC board.
YES		

Is the PFP transport clutch working? (Perform the output check in the test mode: 03-225)

	NO →	 Check if the connector of the PFP transport clutch is disconnected. Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected. Check if the connector CN310 on the LGC board is disconnected. 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.

5

[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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the ADU exit sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[1]/[G])

 	NO →	 Check if the connector of the ADU exit sensor is disconnected. 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)

l I	NO \rightarrow	 Check if the connector of the ADU clutch is disconnected. Check if the connector CN304 on the LGC board is disconnected.
		 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.
1		5) Replace the ADU clutch.
⊥ ↓		6) Replace the LGC board.

YES

Check the rollers in the ADU. Replace them if they are worn out.

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[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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the ADU entrance sensor working?
(Perform the input check in the test mode: 03-[FAX]OFF/[1]/[H])

I	NO →	1) Check if the connector of the ADU entrance sensor is disconnected.
I		2) Check if either of the connectors CN562 or CN214 on the ADU board
Ι		is disconnected.
I		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.
		Check if the conductor patterns on the ADU board and LGC board are short circuited or open circuited.
1		6) Replace the ADU entrance sensor.
i		7) Replace the ADU board.
\checkmark		8) Replace the LGC board.
YES		
1. 0		

<u>Is the exit motor (rotating in reverse) working?</u> (Perform the output check in the test mode: 03-121/171)

I NO → I I	 Check if the connector of the exit motor is disconnected. Check if the connector CN306 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited.
 	 Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the exit motor. Replace the LGC board.

YES

Is the ADU motor working? (Perform the output check in the test mode: 03-110/160)

l I	NO →	 Check if the connector of the ADU motor is disconnected. Check if any of the connectors CN562, CN563 and CN215 on the
I		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.
i		6) Replace the ADU motor.
I		7) Replace the ADU board.
\checkmark		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?

- \downarrow YES \rightarrow 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→	 Check if the connector of the sensor is disconnected. Check if any of the connectors on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the sensor. 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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the JSP feed sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[H])

I	NO →	1) Check if the connector of the JSP feed sensor is disconnected.
Ι		2) Check if either of the connectors CN260 or CN262 on the JSP board
Ι		is disconnected.
1		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.
I I		5) Check if the conductor patterns on the JSP board and LGC board are short circuited or open circuited.
Ì		6) Replace the JSP feed sensor.
Ì		7) Replace the JSP board.
\checkmark		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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the OCT feed sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[3]/[H])

	NO →	 Check if the connector of the OCT feed sensor is disconnected. Check if either of the connectors CN260 or CN262 on the OCT board is disconnected. Check if the connector CN306 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor patterns on the OCT board and LGC board are short circuited or open circuited. Replace the OCT feed sensor. Replace the OCT board. 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?

 \downarrow YES \rightarrow 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])		
I NO →	1) Check if the connector of the 1st transport sensor is disconnected.	
I	2) Check if the connector CN305 on the LGC board is disconnected.	
l	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	
I	open circuited.	
	Replace the 1st transport sensor.	
I	6) Depleas the LCC heard	

6) Replace the LGC board.

YES

 \mathbf{V}

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 →	 Check if the connector of the bypass paper sensor is disconnected. Check if the connector CN304 on the LGC board is disconnected. 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 →	 Check if the connector of the ADU exit sensor is disconnected. Check if either of the connectors CN562 or CN213 on the ADU board is disconnected. Check if the connector CN304 on the LGC board is disconnected. Check if the connector pins are disconnected or the harnesses are open circuited. Check if the conductor patterns on the ADU board and LGC board are short circuited or open circuited. Replace the ADU exit sensor. Replace the ADU board. Replace the LGC board.
I I		
\checkmark		

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YES

Is the registration sensor working?
(Perform the input check in the test mode: 03-[FAX]ON/[2]/[A])

	NO →	 Check if the connector of the registration sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the registration sensor. Replace the LGC board.
VEO		

YES

Check the rollers. Replace them if they are worn out.

In case the paper is fed from the lower drawer, PFP or LCF:

Open the transfer cover. Is there any paper in front of the 1st transport sensor?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Are the 1st/2nd transport sensor working?</u> (Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E], /[7]/[E])

	NO →	 Check if the connector of the 1st/2nd transport sensor is disconnected. Check if the connector CN305/CN304 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
i		Replace the 1st/2nd transport sensor.
\downarrow		6) Replace the LGC board.
VEC		

YES

Check the rollers. Replace them if they are worn out.

5

[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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the registration sensor working?
(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

	NO →	 Check if the connector of the registration sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. 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.
1		5) Replace the registration sensor.
\mathbf{V}		6) Replace the LGC board.

YES

Check the rollers. Replace them if they are worn out.

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5.1.2 Paper misfeeding

[E110] ADU misfeeding

Open the transfer cover. Is there any paper in front of the 1st transport sensor?

 \mathbf{V} YES \rightarrow Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])			
I NO → I I I I I I I I I I I I I I I I I I I	 Check if the connector of the 1st transport sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the 1st transport sensor. Replace the LGC board. 		
YES			
Is the ADU clutch	n working? (Perform the output check in the test mode: 03-222)		
NO →	 Check if the connector of the ADU clutch is disconnected. Check if the connector CN304 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the ADU clutch. Replace the LGC board 		

6) Replace the LGC board.

YES

 \mathbf{V}

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?

 \downarrow YES \rightarrow Remove the paper.

NO

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]ON/[6]/[E])

 	NO →	 Check if the connector of the 1st transport sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the 1st transport sensor. Replace the LGC board.
YES		

<u>Is the bypass feed clutch working? (Perform the output check in the test mode: 03-204)</u> <u>Is the bypass paper sensor working? (Perform the input check in the test mode: 03-[FAX]OFF/[1]/[D])</u>

	NO →	 Check if the connector of the bypass feed clutch and bypass paper sensor are disconnected.
I		2) Check if the connector CN304 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 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?

 \downarrow YES \rightarrow Remove the paper.

Ν	C	J

Is the 1st transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[E])

l I	NO →	 Check if the connector of the 1st transport sensor is disconnected. Check if the connector CN305 on the LGC board is disconnected.
i		3) Check if the connector pins are disconnected and the harnesses are
Ì		open circuited.
I		4) Check if the conductor pattern on the LGC board is short circuited or
1		open circuited.
1		5) Replace the 1st transport sensor.
		6) Replace the LGC board.
\mathbf{V}		

YES

Is the upper drawer feed clutch working?
(Perform the output check in the test mode: 03-201)

	NO →	 Check if the connector of the upper drawer feed clutch is discon- nected.
		 Check if the connector CN307 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited.
i ↓		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?

\downarrow YES \rightarrow Remove the paper.

NO

Is the 2nd transport sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[7]/[E])

	NO →	 Check if the connector of the 2nd transport sensor is disconnected.
1		2) Check if the connector CN304 on the LGC board is disconnected.
i		,
I		3) Check if the connector pins are disconnected and the harnesses are
ļ		open circuited.
		4) Check if the conductor pattern on the LGC board is short circuited or
		open circuited.
		5) Replace the 2nd transport sensor.
. 1.		6) Replace the LGC board.
\mathbf{V}		
YES		

YES

<u>Is the lower drawer feed clutch working?</u> (Perform the output check in the test mode: 03-202)

011011	n the outp	
l I	NO →	 Check if the connector of the lower drawer feed clutch is discon- nected.
I		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.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
Ì		5) Replace the lower drawer feed clutch.
\downarrow		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?

 \downarrow YES \rightarrow 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])

l	NO →	 Check if the connector of the PFP upper drawer feed sensor is dis- connected.
l		2) Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
I		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.
		Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
i		6) Replace the PFP upper drawer feed sensor.
Ì		7) Replace the PFP board.
\checkmark		8) Replace the LGC board.
YES		

<u>Is the PFP upper drawer feed clutch working?</u> (Perform the output check in the test mode: 03-226)

 	NO →	 Check if the connector of the PFP upper drawer feed clutch is dis- connected.
		 Check if any of the connectors CN241, CN242 and CN247 on the PFP board is disconnected.
1		3) Check if the connector CN310 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
i		6) Replace the PFP upper drawer feed clutch.
I		7) Replace the PFP board.
\checkmark		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?

 \downarrow YES \rightarrow 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])

l I	NO →	 Check if the connector of the PFP lower drawer feed sensor is dis- connected.
 		 Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
		 Check if the connector CN310 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited. Replace the PFP lower drawer feed sensor. Replace the PFP board.
↓ - 0		8) Replace the LGC board.

YES

<u>Is the PFP lower drawer feed clutch working?</u> (Perform the output check in the test mode: 03-228)

 	NO →	 Check if the connector of the PFP lower drawer feed clutch is discon- nected.
		 Check if any of the connectors CN241, CN242 and CN248 on the PFP board is disconnected.
I		3) Check if the connector CN310 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
 		Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
i		6) Replace the PFP lower drawer feed clutch.
I		7) Replace the PFP board.
\checkmark		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?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the LCF feed sensor working?</u> (Perform the input check in the test mode: 03-[FAX]OFF/[5]/[G])

	NO →	 Check if the connector of the LCF feed sensor is disconnected. Check if either of the connectors CN100 or CN104 on the LCF board is disconnected. Check if the connector CN310 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
I		6) Replace the LCF feed sensor.7) Replace the LCF board.
		8) Replace the LGC board.
\mathbf{V}		o) Replace the LOO board.
YES		
Is the L	CF feed cl	utch working? (Perform the output check in the test mode: 03-209)
I	NO →	1) Check if the connector of the LCF feed clutch is disconnected.

Ι	2) Check if any of the connectors CN100, CN101 and CN103 on the
I	LCF board is disconnected.
I	3) Check if the connector CN310 on the LGC board is disconnected.
	 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.
i	6) Replace the LCF feed clutch.
Ì	7) Replace the LCF board.
\checkmark	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?

```
\downarrow YES \rightarrow Remove paper if there is any, then close the cover.
```

NO

<u>Is the transfer cover opening/closing switch working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[2]/[G])

l	NO →	 Check if the connector of the transfer cover opening/closing switch is disconnected.
		 Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited.
		 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.

<u>Is the voltage of 24V being supplied from the power supply unit?</u> (Perform the input check in the test mode: 03-[FAX] ON/[1]/[C])

	NO →	 Check if the connector for 24 V power supply is disconnected. Check if the connector CN305 on the LGC board is disconnected. 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?

 \downarrow YES \rightarrow Close the cover.

NO

<u>Is the front cover opening/closing switch working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[2]/[D])

 	NO →	 Check if the connector of the front cover opening/closing switch is disconnected.
Ι		2) Check if the connector CN303 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 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])	

1	NO →	 Check if the connector for 24 V power supply is disconnected. Check if the connector CN303 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
\downarrow		5) Replace the LGC board.

YES

Replace the LGC board.

5

[E420] PFP side cover opened during printing

Is the PFP side cover open?

 \downarrow YES \rightarrow 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])

l I	NO →	 Check if the connector of the PFP side cover opening/closing switch is disconnected.
I I		 Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
 		 Check if the connector CN310 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited.
		 Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
I		Replace the PFP side cover opening/closing switch.
I		7) Replace the PFP board.
\checkmark		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?

 \downarrow YES \rightarrow 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])

l I	NO →	 Check if the connector of the ADU opening/closing switch is discon- nected.
		 Check if either of the connectors CN562 or CN217 on the ADU board is disconnected.
I		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.
		 Check if the conductor patterns on the ADU board and LGC board are short circuited or open circuited.
i		6) Replace the ADU opening/closing switch.
i		7) Replace the ADU board.
\mathbf{V}		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?

 \downarrow YES \rightarrow Remove the paper if there is any, then close the cover.

NO

<u>Is the side door switch working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[2]/[F])

I	NO →	1) Check if the connector of the side door switch is disconnected.
		Check if the connector CN304 on the LGC board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
1		5) Replace the side door switch.
\downarrow		6) Replace the LGC board.

YES

Replace the LGC board.

5

[E450] LCF side cover opened during printing

Is the LCF side cover open?

 \downarrow YES \rightarrow 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])

Ι	NO →	1) Check if the connector of the LCF side cover opening/closing switch
I		is disconnected.
		 Check if either of the connectors CN100 or CN106 on the LCF board is disconnected.
1		3) Check if the connector CN310 on the LGC board is disconnected.
 		 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.
Ì		6) Replace the LCF side cover opening/closing switch.
i		7) Replace the LCF board.
\checkmark		8) Replace the LGC board.
-0		

YES

1) Replace the LCF board.

2) Replace the LGC board.

[E480] Bridge unit opened during printing

Is the bridge unit open?

 \downarrow YES \rightarrow Remove the paper if there is any, then close the unit.

NO

<u>Is the bridge unit opening/closing switch working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[3]/[F])

 	NO →	 Check if the connector of the bridge unit opening/closing switch is disconnected.
I		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.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
1		5) Replace the bridge unit opening/closing switch.
\downarrow		6) Replace the LGC board.

YES

Replace the LGC board.

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[E490] JSP cover opened during printing

Is the JSP cover open?

 \downarrow YES \rightarrow 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])

Ι	NO →	 Check if the connector of the JSP cover switch is disconnected.
Ι		2) Check if either of the connectors CN260 or CN261 on the JSP board
Ι		is disconnected.
I		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.
I I		5) Check if the conductor patterns on the JSP board and LGC board are short circuited or open circuited.
i		6) Replace the JSP cover switch.
i		7) Replace the JSP board.
\mathbf{V}		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?

 \downarrow YES \rightarrow Remove the paper if there is any, then close the cover.

NO

<u>Is the OCT cover switch working?</u> (Perform the input check in the test mode: 03-[FAX]ON/[3]/[F])

Ι	NO →	1) Check if the connector of the OCT cover switch is disconnected?
I		2) Check if either of the connectors CN260 or CN261 on the OCT board
I		is disconnected.
1		Check if the connector CN306 on the OCT board is disconnected.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		Check if the conductor patterns on the OCT board and LGC board are short circuited or open circuited.
i		6) Replace the OCT cover switch.
Ì		7) Replace the OCT board.
\checkmark		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?

 \downarrow YES \rightarrow Clean the rollers or replace them.

NO

Is the original excessively curled or folded?

 \downarrow YES \rightarrow 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 →	 Check if the connectors of the original length sensor and registration sensor are disconnected. Check if the connector CN3 on the RADF board is disconnected. Check if the connector pins are disconnected or the harnesses are open circuited. Check if the conductor pattern on the RADF board is short circuited or open circuited. Replace the original length sensor and registration sensor.
Ì		5) Replace the original length sensor and registration sensor.
\checkmark		6) Replace the RADF board.

YES

Replace the RADF board.

[E714] Feed signal reception jam

Is the empty sensor working? (Perform the input check: 03-[FAX]ON/[7]/[B])

1	NO →	 Check if the lever of empty sensor is working normally. Check if the connector of the empty sensor is disconnected.
!		Check if the connector CN5 on the RADF board is disconnected.
		 Check if the connector pins are disconnected or the harnesses are open circuited.
		Check if the conductor pattern on the RADF board is short circuited or open circuited.
i		6) Replace the empty sensor.
\downarrow		7) Replace the RADF board.

YES

Replace the RADF board.

[E721] Jam not reaching the read sensor

Are the registration roller and read roller stained?

 \downarrow YES \rightarrow Clean the rollers.

NO

Is the read sensor working? (Perform the input check: 03-[FAX]ON/[7]/[G])

	NO →	 Check if the connector of the read sensor are disconnected. Check if the connector CN6 on the RADF board is disconnected. Check if the connector pins are disconnected or the harnesses are open circuited. Check if the conductor pattern on the RADF board is short circuited or open circuited. Replace the read sensor. Replace the RADE board
I		
\checkmark		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?

 \downarrow YES \rightarrow Clean the roller.

NO

ŀ	Are the exit sensor and reverse sensor workin	g?	
(Perform the input check: 03-[FAX]ON/[7]/[E],	/[7]/[F1)

		1) Check if the connectors of the suit concer and reverse concer are
1	NO →	1) Check if the connectors of the exit sensor and reverse sensor are
I		disconnected.
I		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.
1		5) Replace the exit sensor and reverse sensor.
\downarrow		6) Replace the RADF board.

YES

Replace the RADF board.

[E724] Stop jam at the registration sensor

Is the registration roller stained?

 \downarrow YES \rightarrow Clean the roller.

NO

Is the registration sensor working? (Perform the input check: 03-[FAX]ON/[7]/[H])

 	NO →	 Check if the connector of the registration sensor is disconnected. 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.
1		5) Replace the registration sensor.
\downarrow		6) Replace the RADF board.

YES

Replace the RADF board.

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[E725] Stop jam at the read sensor

Is the read roller stained?

 \downarrow YES \rightarrow Clean the roller.

NO

Is the read sensor working? (Perform the input check: 03-[FAX]ON/[7]/[G])

→	NO →	 Check if the connector of the read sensor is disconnected. Check if the connector CN6 on the RADF board is disconnected. Check if the connector pins are disconnected or the harnesses are open circuited. Check if the conductor pattern on the RADF board is short circuited or open circuited. Replace the read sensor. 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.

5

[E731] Stop jam at the exit sensor

Is the exit roller stained?

 \downarrow YES \rightarrow Clean the roller.

NO

Is the exit sensor working? (Perform the input check: 03-[FAX]ON/[7]/[E])

I NO →	1) Check if the connector of the exit sensor is disconnected.
I	2) Check if the connector CN4 on the RADF board is disconnected.
	 Check if the connector pins are disconnected or the harnesses are open circuited.
	 Check if the conductor pattern on the RADF board is short circuited or open circuited.
1	5) Replace the exit sensor.
\checkmark	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?

 \downarrow YES \rightarrow Clean the rollers.

NO

Is the reverse sensor working? (Perform the input check: 03-[FAX]ON/[7]/[F])

	NO →	 Check if the connector of the reverse sensor is disconnected. Check if the connector CN4 on the RADF board is disconnected.
		 Check if the connector pins are disconnected or the harnesses are open circuited.
		 Check if the conductor pattern on the RADF board is short circuited or open circuited.
1		5) Replace the reverse sensor.
\downarrow		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?

 \downarrow YES \rightarrow Clean the roller.

NO

Is the reverse sensor working? (Perform the input check: 03-[FAX]ON/[7]/[F])

I	NO →	1) Check if the connector of the reverse sensor is disconnected.
I		2) Check if the connector CN4 on the RADF board is disconnected.
l		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.
1		5) Replace the reverse sensor.
\downarrow		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?

 \downarrow YES \rightarrow Clean the rollers.

NO

Is the exit sensor working? (Perform the input check: 03-[FAX]ON/[7]/[E])

Ι	NO →	1) Check if the connector of the exit sensor is disconnected.
Ι		2) Check if the connector CN4 on the RADF board is disconnected.
Ι		3) Check if the connector pins are disconnected or the harnesses are
I		open circuited.
		4) Check if the conductor pattern on the RADF board is short circuited
1		or open circuited.
1		5) Replace the exit sensor.
ч Т		6) Replace the RADF board.
*		

YES

Replace the RADF board.

5

[E860] RADF jam access cover open

Is the RADF jam access cover opened?

 \downarrow YES \rightarrow 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])

I NO → I I I I I I I I I I I I I I I I I I I	 Check if the connector of the RADF jam access cover switch is disconnected. Check if the connector CN8 on the RADF board is disconnected. Check if the connector pins are disconnected or the harnesses are open circuited. Check if the conductor pattern on the RADF board is short circuited or open circuited. Replace the RADF jam access cover switch.
 	•
₩ /ES	

YES

Replace the RADF board.

[E870] RADF open jam

Is the RADF opened?

 \downarrow YES \rightarrow Remove the original, if any, and close the RADF.

NO

Is the RADF opening/closing sensor adjusted within the specified range?

 \downarrow NO \rightarrow Adjust the RADF opening/closing sensor.

YES

```
<u>Is the RADF opening/closing sensor working?</u>
(Perform the input check: 03-[FAX]ON/[7]/[D])
```

 	NO →	 Check if the connector of the RADF opening/closing sensor is dis- connected.
I		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.
1		5) Replace the RADF opening/closing sensor.
\downarrow		6) Replace the RADF board.

YES

Replace the RADF board.

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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?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Are the bridge unit transport sensors-1 and -2 working?</u> (Perform the input check: 03-[FAX]ON/[3]/[H], /[3]/[E])

l	NO →	1) Check if the connectors of the bridge unit transport sensors-1 and -2 are disconnected.
Ι		2) Check if the connector J512 of the bridge unit is disconnected.
I		3) Check if the connector CN306 on the LGC board is disconnected.
		 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.
1		6) Replace the bridge unit transport sensors-1 and -2.
Ý		7) Replace the LGC board.
YES		
<u>Is the bri</u>	dge unit ga	ate solenoid working? (Perform the output check: 03-232)
l		1) Check if the connector J512 of the bridge unit is disconnected.
I		2) Check if the connector CN306 on the LGC board is disconnected.
		3) Check if the connector pins are disconnected or the harnesses are

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

 \downarrow

Does the transport roller of the bridge unit work when the main motor is rotated? (Perform the output check: 03-101/151)

 \downarrow NO \rightarrow 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

<u>MJ-1025</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector J1006 on the punch controller PC board disconnected?</u> <u>Is the harness connecting the punch controller PC board and punch home position sensor</u> (PI1P) open circuited?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the punch home position sensor working properly?

I	NO →	1) Connect the connector of the punch home position sensor securely.
\checkmark		Replace the punch home position sensor.

YES

Replace the punch controller PC board.

[3] Paper jam in finisher section

[EA10] Paper transport delay jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow 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?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

I.	NO \rightarrow	1) Connect the connector of the inlet sensor securely.
I		2) Attach the actuator securely if its shaft is out of place.
$\mathbf{\Lambda}$		3) Replace the inlet sensor.

YES

Replace the finisher controller PC board.

<u>MJ-1025</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector CN16 (inlet sensor) on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and inlet sensor open-circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

I	NO \rightarrow	1) Attach the actuator securely if its shaft is out of place.
\checkmark		2) Replace the sensor.

YES

Replace the finisher controller PC board.

5

[EA20] Paper transport stop jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector J10 on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

I	NO →	1) Connect the connector of the inlet sensor securely.
Ι		2) Attach the actuator securely if its shaft is out of place.
\checkmark		Replace the inlet sensor.

YES

Replace the finisher controller PC board.

<u>MJ-1025</u>

Is there any paper remaining on the transport path in the finisher?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector CN16 (inlet sensor) on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and inlet sensor open-circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working normally? (Check the movement of the actuator.)

I 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

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher?

 \downarrow YES \rightarrow 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?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

I	NO →	1) Connect the connector of the inlet sensor securely.
I		2) Attach the actuator securely if its shaft is out of place.
1		Replace the inlet sensor.

YES

Replace the finisher controller PC board.

<u>MJ-1025</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow 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 opencircuited?

 \downarrow YES \rightarrow 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?

I	NO \rightarrow	1) Attach the actuator securely if its shaft is out of place.
\checkmark		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 \rightarrow Remove the paper. $\mathbf{1}$

NO

Is the finisher connected with the equipment?

NO \rightarrow Connect the finisher with the equipment. $\mathbf{1}$

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?

 $\mathbf{1}$ YES \rightarrow 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.
\checkmark		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 \rightarrow 1) Connect the finisher with the equipment. $\mathbf{1}$
 - 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?

 $\mathbf{1}$ YES \rightarrow 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. $\mathbf{1}$ 2) Replace the switch or sensor.

YES

[EA50] Stapling jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment or on the stapling tray?

 \downarrow YES \rightarrow 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?

 \downarrow YES \rightarrow End.

NO

<u>Is the connector J8 on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and stapling home position sensor (S17) open circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the stapling home position sensor working properly?

Ι	NO →	1) Connect the connector of the stapling home position sensor securely.
\mathbf{V}		2) Replace the stapling home position sensor.

YES

Replace the finisher controller PC board.

<u>MJ-1025</u>

Is there any paper remaining on the stapling tray?

 \downarrow YES \rightarrow Remove the paper.

NO

Open the front door. Is the stapler home position mark blue?

 \downarrow YES \rightarrow 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 opencircuited?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Are the slide home position sensor and stapler safety switch working properly?

I NO \rightarrow 1) Replace the stapler unit.

↓ 2) Replace the stapler safety switch.

YES

Replace the finisher controller PC board.

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[EA60] Early arrival jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector J10 on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and inlet sensor (S2) open circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the inlet sensor working properly? (Check the movement of the actuator.)

I	NO →	1) Connect the connector of the inlet sensor securely.
I		2) Attach the actuator securely if its shaft is out of place.
\checkmark		3) Replace the inlet sensor.

YES

[EA70] Stack delivery jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector J9 on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and stack delivery lever home</u> <u>position sensor (S8) open circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the stack delivery lever home position sensor working properly?

I	NO →	1) Connect the connector of the stack delivery lever home position sen-
Ι		sor securely.

 \downarrow 2) Replace the stack delivery lever home position sensor.

YES

Replace the finisher controller PC board.

<u>MJ-1025</u>

Is there any paper remaining on the stapling tray?

 \downarrow YES \rightarrow Remove the paper.

NO

Are the paper on the stack tray and the latches of the stack delivery belt contacting each other?

 \downarrow YES \rightarrow 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?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the delivery belt home position sensor working properly?

 \downarrow NO \rightarrow 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?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Replace the finisher controller PC board.

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[EAF0] Stack return jam

<u>MJ-1022</u>

Is there any paper remaining on the transport path in the finisher or equipment?

 \downarrow YES \rightarrow Remove the paper.

NO

<u>Is the connector J10 on the finisher controller PC board disconnected?</u> <u>Is the harness connecting the finisher controller PC board and returning roller home position</u> <u>sensor (S3) open circuited?</u>

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the returning roller home position sensor working properly?

I	NO \rightarrow	1) Connect the connector of the returning roller home position sensor
I		securely.
\checkmark		Replace the returning roller home position sensor.

YES

[4] Paper jam in saddle stitcher section

[EAB0] Saddle paper transport stop jam

<u>MJ-1025</u>

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 opencircuited?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the folding position sensor working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Replace the finisher controller PC board.

[EAC0] Saddle transport delay jam

<u>MJ-1025</u>

Is there any paper remaining on the paper transport path in the saddle stitcher section in the finisher?

 \downarrow YES \rightarrow 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 opencircuited?

 \downarrow YES \rightarrow Connect the connector securely. Replace the harness.

NO

Is the folding position sensor working properly?

 \downarrow NO \rightarrow 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?

 \downarrow

NO

- 1) Replace the SYS board.
- 2) Replace the LGC board.

[EAE0] Receiving time time-out jam

Is the finisher working?

 \downarrow YES \rightarrow 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.
- 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?

 \downarrow NO \rightarrow Replace the LGC board.

YES

Are the IPC board and LGC board properly connected to each other?

 \downarrow NO \rightarrow Connect them properly.

YES

Is the harness securely connected to the IPC board?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow 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.

5.1.6 Drive system related service call

[C010] Main motor is abnormal

Is the main motor working? (Perform the output check in the test mode: 03-101/151)

	NO →	 Check if the connector CN1 of the main motor is disconnected. Check if the connector CN305 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor patterns on the main motor board and LGC
İ		board are short circuited or open circuited.
I		5) Replace the main motor.
\downarrow		6) Replace the LGC board.

YES

Is the LED on the main motor board lit without flickering?

I	NO →	1) Check if the connector pins are disconnected and the harnesses are
I		open circuited.
I		2) Check if the conductor patterns on the main motor board and LGC
I		board are short circuited or open circuited.
1		3) Replace the main motor.
1		4) Replace the LGC board.
\mathbf{V}		

YES

- 1) Check if the PLL lock signal CN305-B8 output from the LGC board is always level "L"?
- 2) Check if the voltage supplied to the CPU input terminal IC24-12 is always "L"?

3) Replace the LGC board.

5.1.7 Paper feeding system related service call

[C040] PFP motor is abnormal

Is the PFP motor working? (Perform the output check in the test mode: 03-109/159)

 	NO →	 Check if the signal line connector CN503 of the PFP motor is discon- nected.
 		 Check if the power line connector CN502 of the PFP motor is discon- nected.
ļ		3) Check if the connector CN246 on the PFP board is disconnected.
		4) Check if the signal line connector CN241 on the PFP board is disconnected.
1 		Check if the power line connector CN242 on the PFP board is dis- connected.
i		6) Check if the connector CN310 on the LGC board is disconnected.
I I		 7) Check if the connector pins are disconnected and the harnesses are open circuited.
 		 Check if the conductor patterns on the PFP motor board, PFP board and LGC board are short circuited or open circuited.
 ↓		9) Replace the PFP motor.10)Replace the PFP board.
-		11)Replace the LGC board.

YES

Is the LED on the PFP motor board lit without flickering?

		-
I	NO →	1) Check if the connector pins are disconnected and the harnesses are
I		open circuited.
I		2) Check if the conductor patterns on the PFP motor board, PFP board
I		and LGC board are short circuited or open circuited.
		3) Replace the PFP motor.
		4) Replace the PFP board.
		5) Replace the LGC board.
$\mathbf{\Lambda}$		/ ·

YES

- 1) Check if the PLL lock signal CN246-8 output from the PFP board is always "L" level.
- 2) Check if the voltage supplied to the microcomputer input terminal IC5-17 is always "L" level.
- 3) Replace the PFP board.
- 4) Replace the LGC board.

[C130] Upper drawer tray is abnormal

[C140] Lower drawer tray is abnormal

Does the tray go up? (Perform the output check in the test mode: 03-242/243)

→	NO →	 Check if the connector of the tray-up motor is disconnected. Check if the connector CN307 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor pattern on the LGC board is short circuited or open circuited. Replace the LGC board.

YES

Is the tray-up sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[H], /[7]/[H])

Ι	NO →	 Check if the connector of the sensor is disconnected.
I		2) Check if the connector CN307 on the LGC board is disconnected.
I		Check if the slit reaches the sensor.
		 Check if the connector pins are disconnected and the harnesses are open circuited.
		Check if the conductor pattern on the LGC board is short circuited or open circuited.
\downarrow		6) 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.

5

[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)

Ι	NO →	1) Check if the connector of the tray-up motor is disconnected.
I		2) Check if any of the connectors CN241, CN242 and CN244 on the
1		PFP board is disconnected.
		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.
 		Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited.
i		6) Replace the PFP board.
\downarrow		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 →	 Check if the connector of the sensor is disconnected. Check if any of the connectors CN241, CN247 and CN248 on the DED based is disconnected.
i		PFP board is disconnected.
i		3) Check if the connector CN310 on the LGC board is disconnected.
i		4) Check if the slit reaches the sensor.
i I		Check if the connector pins are disconnected and the harnesses are open circuited.
i		6) Check if the conductor patterns on the PFP board and LGC board
1		are short circuited or open circuited.
i		7) Replace the PFP board.
I		8) Replace the LGC board.
\checkmark		

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 →	 Check if the connector of the LCF tray-up motor is disconnected. Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected.
I		3) Check if the connector CN310 on the LGC board is disconnected.
i		 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.
i		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 →	 Check if the connectors of the sensors are disconnected. Check if any of the connectors CN100, CN104 and CN105 on the LCE 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.
		 Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
İ		7) Replace the LCF board.
I		8) Replace the LGC board.
\checkmark		

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 →	 Check if the connector of the LCF end fence motor is disconnected. Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected. Check if the connector CN310 on the LGC board is disconnected. Check if the connector pins are disconnected and the harnesses are open circuited. Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited. Replace the LCF board.
۱ ا		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])

I NO → I	 Check if the connectors of the sensors are disconnected. 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.
	 Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited.
i ↓	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)

l I	NO \rightarrow	 Check if the connector CN1 of the LCF transport motor is discon- nected.
I		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.
		 Check if the power line connector CN101 on the LCF board is dis- connected.
ł		5) Check if the connector CN310 on the LGC board is disconnected.
i		Check if the connector pins are disconnected and the harnesses are open circuited.
i		7) Check if the conductor patterns on the LCF transport motor board,
Ì		LCF board and LGC board are short circuited or open circuited.
I		8) Replace the LCF transport motor.
I		9) Replace the LCF board.
I		10)Replace the LGC board.
\downarrow		

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

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 →	 Check if the connectors on the CCD and SLG boards are discon- nected.
I		Check if the shading correction plate is dirty.
		3) Check if the conductor pattern on the CCD board is short circuited or open circuited.
		 Check if the conductor pattern on the SLG board is short circuited or open circuited.
1		5) Replace the lens unit.
\mathbf{V}		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] <u>Are the carriages slightly moved to the feeding direction? Are the carriages staying at a position other than home position?</u>

Ι	YES \rightarrow	1) Check if the connector of the scan motor is disconnected.
Ι		2) Check if the connector pin is disconnected and the harness is short
I		circuited or open circuited.
$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$		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?

I	YES \rightarrow	The carriage home position sensor is not turned ON.
I		1) Check if the connector of the sensor is disconnected.
I		2) Replace the carriage home position sensor.
\checkmark		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

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 →	 Check if the connector of the harness is disconnected between LGC board (CN312) and the laser optical unit.
 		 Check if the harness is open circuited and the connector pin is dis- connected.
		 Check if the conductor pattern on the LGC board is short circuited or open circuited.
1		4) Replace the laser optical unit.
\downarrow		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?

 \downarrow YES \rightarrow 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

<u>MJ-1025</u>

Is the stack feed roller (upper) home position sensor (PI12) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and feed motor (M1) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

<u>Try turning the stack feed roller (upper) shaft by hand. Does the stack feed roller (upper)</u> <u>move up/down normally?</u>

 \downarrow NO \rightarrow Fix the mechanism.

YES

Try replacing the feed motor (M1). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

[CB20] Delivery motor abnormality

<u>MJ-1022</u>

Rotate the delivery roller by hand. Does it rotate smoothly?

 \downarrow NO \rightarrow Fix the mechanism.

YES

Is the wiring between the finisher controller PC board and delivery motor (M1) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is the delivery motor clock sensor (S1) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

1) Replace the delivery motor (M1).

2) Replace the finisher controller PC board.

<u>MJ-1025</u>

Is the delivery belt home position sensor (PI7) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and delivery motor (M3) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Rotate the stack delivery roller by hand. Does it rotate smoothly?

 \downarrow NO \rightarrow Fix the mechanism.

YES

Try replacing the delivery motor (M3). Is the problem corrected?

 \downarrow YES \rightarrow END.

NO

[CB30] Tray lift motor abnormality

<u>MJ-1025</u>

[Procedure 1]

Is the paper surface sensor (PI9) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the tray up/down mechanism working properly?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow Replace the finisher controller PC board.

YES

Is the wiring between the finisher controller PC board and shift motor (M6) correct?

 \downarrow YES \rightarrow Replace the shift motor.

NO

Correct the wiring.

[Procedure 2]

Is the tray as far as the shift upper limit sensor?

 \downarrow YES \rightarrow Lower the position of the tray.

NO

Is the shift upper limit sensor (PI15) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and shift upper limit sensor (PI15) correct?

 \downarrow YES \rightarrow 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?		
		\checkmark NO \rightarrow Replace the finisher controller PC board.		
I		YES		
		Is there any problem with the tray up/down mechanism?		
		\checkmark YES \rightarrow Fix the lift mechanism.		
		NO		
\downarrow		Replace the shift motor.		
YES				
Is the shift motor clock sensor (PI7) working properly?				

$$\downarrow$$
 YES \rightarrow Replace the finisher controller PC boar

NO

Replace the sensor.

[CB50] Staple motor abnormality

<u>MJ-1025</u>

[Procedure 1]

Is the wiring between the finisher controller PC board and the staple/fold motor normal?

 \downarrow NO \rightarrow Correct the wiring.

YES

Try to rotate the staple jam releasing dial. Is there mechanical trapping?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Try replacing the staple/fold motor (M7). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

[Procedure 2]

Is the staple/fold motor clock sensor (PI14) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Does the staple/fold motor operate at the appropriate timing?

 \downarrow YES \rightarrow Replace the finisher controller PC board.

NO

Is the stapler unit drive mechanism working properly?

 \downarrow NO \rightarrow Fix the mechanism.

YES

Try replacing the staple/fold motor (M7). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

Replace the finisher controller PC board.

[Procedure 3]

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Is the folding home position sensor (PI11) working properly?
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 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and the staple/fold motor normal?

 \downarrow NO \rightarrow Correct the wiring.

YES

Try to rotate the fold jam releasing dial. Is there mechanical trapping?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Try replacing the staple/fold motor (M7). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

[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?

 \downarrow YES \rightarrow Replace the finisher controller PC board.

NO

Is the saddle stitch unit drive mechanism working properly?

 \downarrow NO \rightarrow Fix the mechanism.

YES

Try replacing the staple/fold motor (M7). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

Replace the finisher controller PC board.

[CB60] Stapler unit shift motor abnormality

<u>MJ-1025</u>

Is the slide home position sensor (PI18) working properly?

 \downarrow NO \rightarrow Replace the sensor controller PC board.

YES

Is the wiring between the finisher controller PC board and slide motor correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any mechanical problem with the stapler stand motion path?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Try replacing the slide motor (M8). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

Replace the finisher controller PC board.

[CB80] Backup RAM data abnormality

<u>MJ-1025</u>

Is the problem solved by turning the power of the equipment OFF and ON?

 \downarrow YES \rightarrow 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?

 \downarrow NO \rightarrow Loosen the adjustment screw to adjust its tension.

YES

Does the bushing attached to the returning roller shaft smoothly move up and down?

 \downarrow NO \rightarrow 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?

 \downarrow YES \rightarrow Attach the spring.

NO

Is the wiring between the finisher controller PC board and stack delivery motor (M2) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is the stack delivery lever home position sensor (S8) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

1) Replacing the stack processing motor.

2) Replace the finisher controller PC board.

5

[Procedure 2] Does the bushing attached to the returning roller shaft smoothly move up and down? T NO \rightarrow Apply grease on the cut-out part of the front side frame where the bush- $\mathbf{1}$ ing contacts. YES Is the spring of the returning roller detached? YES \rightarrow Attach the spring. \mathbf{r} NO Is the tension of the stack processing motor drive belt normal? $\mathbf{1}$ NO \rightarrow Loosen the adjustment screw to adjust its tension. YES Is the returning roller home position sensor (S3) working properly? NO → Replace the sensor. $\mathbf{\Lambda}$ 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? $\mathbf{\Lambda}$ NO \rightarrow Replace the sensor. YES Is the swing guide home position sensor (PI3) working properly? $\mathbf{1}$ NO → Replace the sensor. YES Is the wiring between the finisher controller PC board and paddle motor (M2) correct? NO \rightarrow Correct the wiring. $\mathbf{1}$ YES Try turning the paddle motor counterclockwise by hand. Is there mechanical trapping in the up/down movement of the swing guide? YES \rightarrow Fix the mechanism. $\mathbf{1}$ NO Try replacing the paddle motor. Is the problem corrected? $YES \rightarrow End.$ $\mathbf{1}$ NO Replace the finisher controller PC board.

[CC50] Horizontal registration motor abnormality

<u>MJ-1025</u>

Is the horizontal registration home position sensor (PI2P) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and the horizontal registration home position sensor (PI2P) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any problem with the horizontal registration mechanism?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Replace the horizontal registration motor (M2P).

Try replacing the punch controller PC board. Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

Replace the finisher controller PC board.

[CC60] Punch motor abnormality

<u>MJ-1025</u>

Is the punch home position sensor (PI1P) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the punch motor clock sensor (PI3P) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and sensor correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any problem with the punching mechanism?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Replace Punch motor (M1P)

Try replacing the punch controller PC board. Is the problem corrected?

 \downarrow YES \rightarrow 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?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and front jogging motor (M3) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Has the rack run over the stopper of the roll?

 \downarrow YES \rightarrow 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?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and alignment motor (front) (M4) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any mechanical problem with the path of aligning plate?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Try replacing the alignment motor (front) (M4). Is the problem corrected?

 \downarrow YES \rightarrow End.

NO

[CC90] Upper stack tray lift motor abnormality

<u>MJ-1022</u>

<u>Is the wiring between the finisher controller PC board and upper stack tray lift motor (M5)</u> <u>correct?</u>

 \downarrow NO \rightarrow Correct the wiring.

YES

Are the front and rear sides of the upper stack tray leveled?

 \downarrow NO \rightarrow Level them.

YES

Is the upper stack tray lift motor clock sensor (S19) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the stack tray paper height sensor (S10) working properly?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow 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

<u>MJ-1022</u>

Is the wiring between the finisher controller PC board and lower stack tray lift motor (M7) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Are the front and rear sides of the lower stack tray leveled?

 \downarrow NO \rightarrow Level them.

YES

Is the lower stack tray lift motor clock sensor (S9) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the stack tray paper height sensor (S10) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Are the lower stack tray upper limit sensor (S13) and lower stack tray full sensor (S23) working properly?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow 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?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and rear jogging motor (M4) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Has the rack run over the stopper of the roll?

 \downarrow YES \rightarrow 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?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and aligning plate home position sensor (rear) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any mechanical problem with the path of aligning plate?

 \downarrow YES \rightarrow Fix the mechanism.

NO

Try replacing the alignment motor (rear) (M5). Is the problem corrected?

 \checkmark YES \rightarrow End.

NO

[CDC0] Punch power failure occurred abnormality

<u>MJ-1025</u>

Is the problem solved by turning the power of the equipment OFF and ON?

 \downarrow YES \rightarrow End

NO

Is the wiring between the finisher controller PC board and punch controller PC board correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Does the voltage between the CN14-5 (+) and CN14-3 (-) on the finisher controller PC board become 24 V?

 \downarrow YES \rightarrow Replace the punch controller PC board.

NO

Replace the finisher controller PC board.

[CDD0] Folding sensor abnormality

<u>MJ-1025</u>

Is the folding position sensor (PI10) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and folding position sensor (PI10) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Is there any mechanical problem with the fold jam releasing dial?

 \downarrow YES \rightarrow Fix the mechanism.

NO

1) Replace the staple/fold motor (M7).

[CDE0] Paddle motor abnormality

MJ-1025

Is the paddle home position sensor (PI2) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the Swing guide home position sensor (PI3) working properly?

 \downarrow NO \rightarrow Replace the sensor.

YES

Is the wiring between the finisher controller PC board and Paddle motor (M2) correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

<u>Try to rotate the paddle motor (M2) clockwise and counterclockwise by hand. Is there</u> mechanical trapping in the rotation of the paddle or the up/down movement of the swing guide?

 \downarrow YES \rightarrow Fix the mechanism.

NO

1) Replace the paddle motor (M2)

2) Replace the finisher controller PC board.

[CE00] Communication error between finisher and puncher unit

<u>MJ-1025</u>

Is the problem solved by turning the power of the equipment OFF and ON?

 \downarrow YES \rightarrow End.

NO

Is the wiring between the finisher controller PC board and the punch controller PC board correct?

 \downarrow NO \rightarrow Correct the wiring.

YES

Measure the voltage between CN14-5 (+) and CN14-3 (-) on the finisher controller PC board 24 V?

 \downarrow NO \rightarrow Replace the finisher controller PC board.

YES

Replace the punch controller PC board.

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

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?

 \downarrow NO \rightarrow 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 [INI-TIALIZE]. (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.

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

[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

[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.

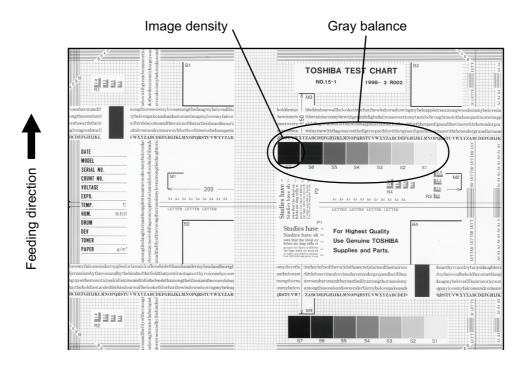
[A290] Limit over error [A291] Limit over error [A292] Limit over error Clear the limit counter.

5

05/11

5.2 Troubleshooting for the Image

1) Abnormality of image density / Gray balance

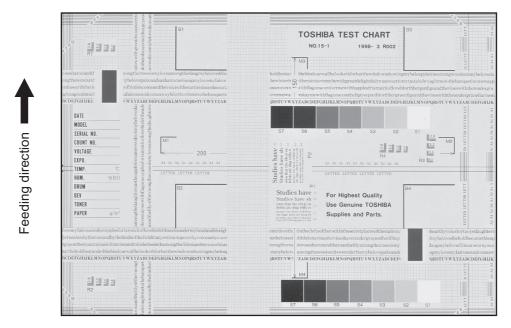




Defective area	Step	Check items	Prescription
Density/Gray balance	1	Check the density/gray balance.	Adjust the density.
Printer section	2	Check test print image (04-113).	Go to step 4 if there is any problem on image.
Scanner	3	Are the original glass, mirrors and lens dirty?	Clean them.
Printed image	4	Is the image faded?	Perform troubleshooting for faded image.
	5	Is background fogging occurring?	Perform troubleshooting for back- ground fogging.
	6	Is there a blotch on the image?	Perform troubleshooting for blotched image.
	7	Is the image transferred normally?	Perform troubleshooting for abnor- mal transfer.

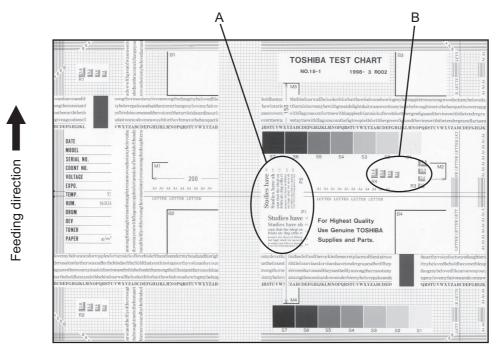
e-STUDIO200L/202L/230/232/280/282 TROUBLESHOOTING

2) Background fogging



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 out- put 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 mate- rial, 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





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 cor- responding troubleshooting proce- dure.

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 cor- responding troubleshooting proce- dure.
	4	Check the image processing parameters.	Check the encircled areas A and B in the image, and change the sharp- ness intensity in the sharpness adjustment mode.

4) Toner offset

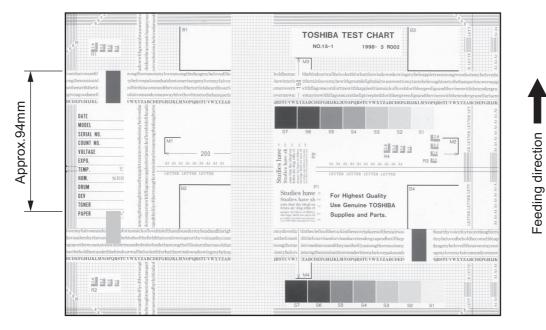


Fig. 5-4

Toner offset	(Shadow image appears approx	x. 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 nor- mal?	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?	Select a 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.
Developer material	10	Using the specified developer mate- rial?	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

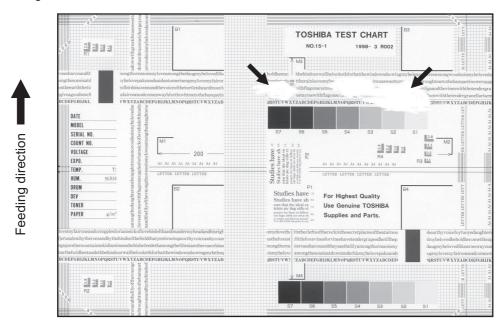


Fig.	5-5
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Defective area	Step	Check items	Prescription
Paper	1	Is the paper in the drawer or LCF damp?	Change paper. Avoid storing paper in damp place.
Bedewed scanner	2	Is the scanner bedewed?	Clean the scanner.
Drum	3	Is the drum surface wet or dirty?	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 prop- erly?	Check the connection of connector. Replace the ozone exhaust fan.
	5	Is the ozone filter stained or dam- aged?	Replace the ozone filter.

6) Poor fusing

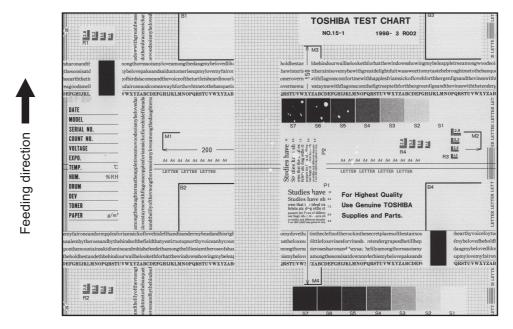


Fig. 5-6

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 mate- rial 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, Devel- oper bias)	2	Is the high-voltage transformer out- put defective?	Adjust the output, or replace the transformer.
	3	Are the connectors of the high-volt- age 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 prop- erly?	Check and correct the engaging con- dition 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 prop- erly?	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 con- nected? Check if the harnesses connecting the boards are open circuited.	Connect the connectors securely. Replace the harness.

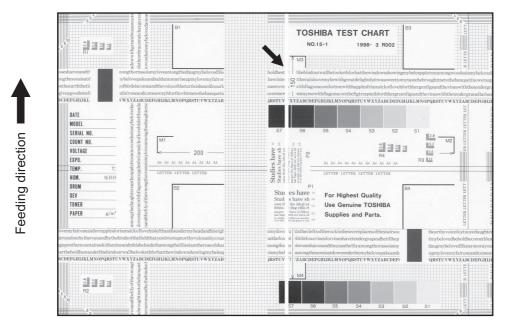
8) Solid copy



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 out- put defective?	Adjust the output, or replace the transformer.
	7	Are the connectors of the high-volt- age 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 con- nected? Check if the harnesses connecting the boards are open circuited.	Connect the connectors securely. Replace the harness.

9) White banding (in the feeding direction)



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 devel- oper 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)

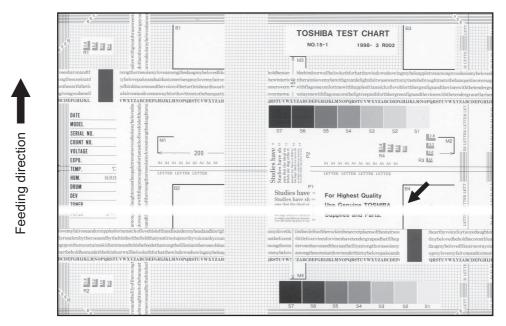


Fig. 5-10

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 nor- mally?	Replace the discharge LED or check the harness and the circuit.
Developer unit	5	Is the developer sleeve rotating nor- mally? Is there any abnormality on the sleeve surface?	Check the drive system of the devel- oper unit, or clean the sleeve sur- face.
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 out- put 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)

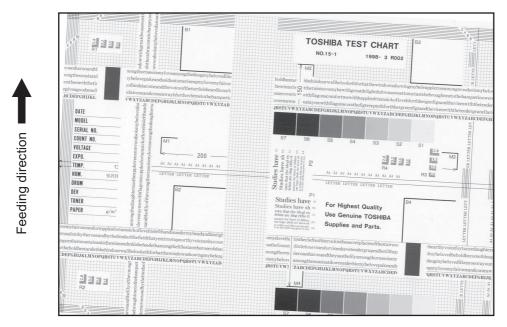


Fig. 5-11

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 regis- tration 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)

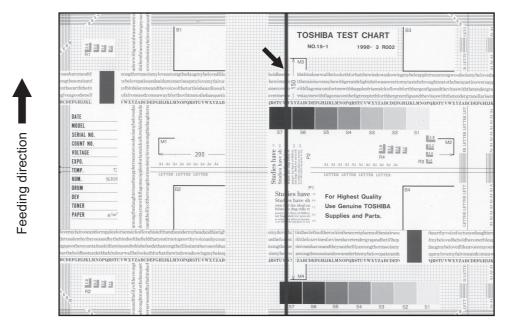


Fig.	5-12
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Defective area	Step	Check items	Prescription
Scanner	1	Is there a foreign matter on the light path?	Clean the slit, lens and mirrors.
Shading correction plate	2	Is there dust or stains on part of the original glass where the shading correction 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 elec- trode.
	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 sur- face?	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)

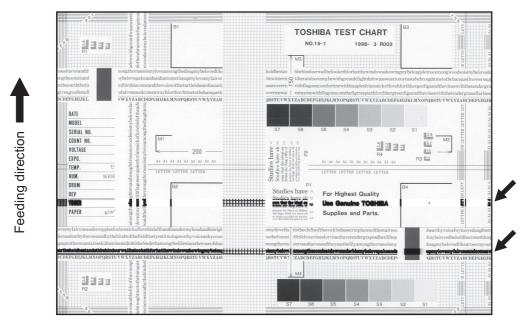


Fig.	5-13

Defective area	Step	Check items	Prescription
Main charger	1	Is the needle electrode dirty or deformed?	Clean or replace the needle elec- trode.
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 fin- ger for fuser roller reached their PM life?	Replace them.
High-voltage transformer (Main charger / Developer bias / Transfer charger)	4	Is the high-voltage transformer out- put 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 condi- tion of the cleaning blade and recov- ery blade.
Scanner	7	Is there a foreign matter on the car- riage 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 mate- rial, 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 sur- face?	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 elec- trode.
High-voltage transformer (Main charger / Developer bias / Transfer charger)	10	Is the high-voltage transformer out- put 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

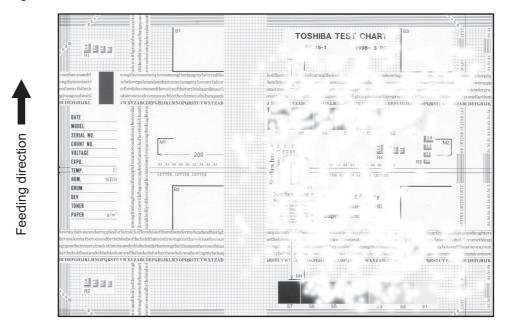


Fig. 5-15

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 out- put defective?	Adjust the output, or replace the transformer.

16)Uneven image density

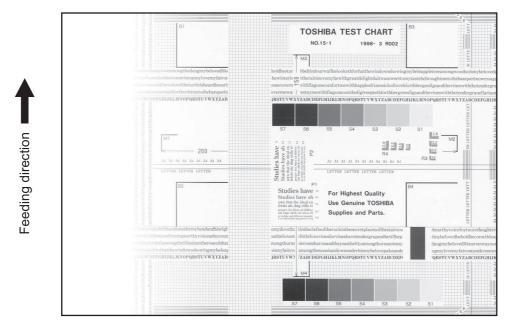
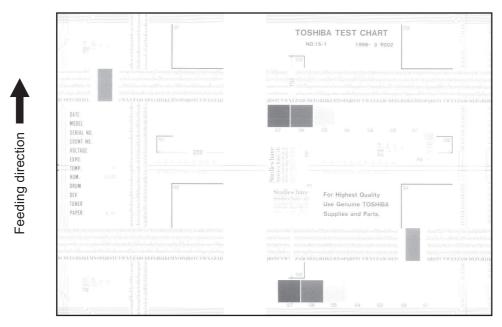


Fig. 5-16

Defective area	Step	Check items	Prescription
Main charger	1	Is the main charger dirty?	Clean or replace the needle elec- trode 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 con- tact with the drum?	Adjust the doctor-sleeve gap.
	9	Is the developer sleeve pressuriza- tion 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)



Fia.	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 car- tridge?	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 con- tact with the drum?	Check the installation of the devel- oper unit. Adjust the doctor-sleeve gap and polarity.
	8	Is the developer sleeve pressuriza- tion mechanism working?	Check the mechanism.
Main charger	9	Is the main charger dirty?	Clean it or replace the needle elec- trode 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-volt- age transformer.
	14	Are the connectors of the high-volt- age 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

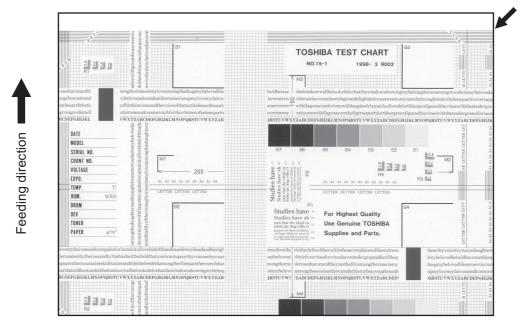


Fig. 5-18

Defective area	Step	Check items	Prescription
Scanner/Printer adjust- ment	1	Have the printed images been dislo- cated 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 alco- hol. Securely attach the springs.	
	3	Is the registration roller working prop- erly?	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

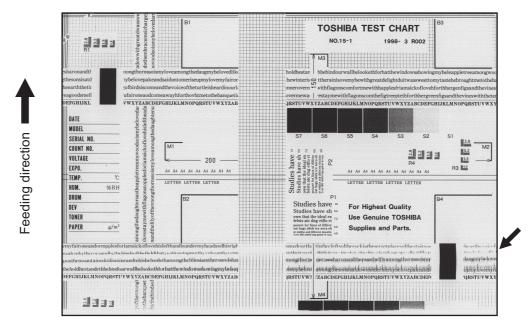


Fig. 5-19

Defective area	Step	Check items	Prescription
_	1	Is the toner image on the drum nor- mal?	If normal, perform steps 2 to 4. Per- form step 5 and followings in case the image is abnormal.
Registration roller	2	Is the registration roller rotating nor- mally?	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 car- riage foot?	Replace the carriage foot.
	7	Is the tension of the timing belt nor- mal?	Adjust the tension.
	8	Is there any problem with the drive system of the carriage?	Check the drive system of the car- riage.
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.

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

20)Poor cleaning

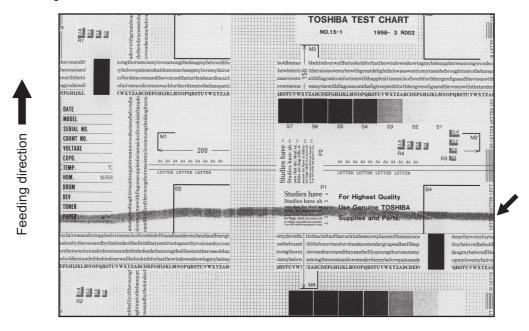


Fig. 5-20

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 con- tact with the drum?	Check the cleaning blade.
	3	Has the cleaning blade been turned up?	Replace the cleaning blade. Check and replace drum if neces- sary.
Toner recovery auger	4	Is the toner recovered normally? Clean the toner recovery a Check the pressure of the 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 nor- mal?	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, mir- rors, lens, and original glass (espe- cially the position of shading correction plate) dirty?		
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

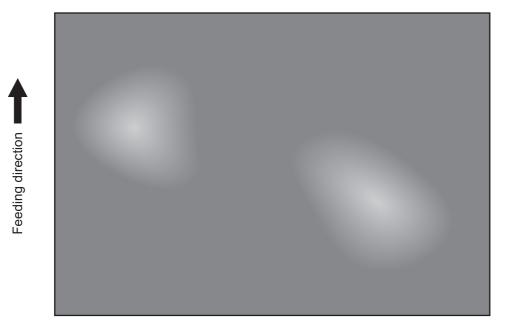


Fig. 5-22

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 separa- tion 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 trans- former if necessary.

5.3 Replacement of PC Boards and HDD

When the HDD requires replacement, refer to \square P. 5-116 "5.3.1 Replacing HDD". When the SYS board requires replacement, refer to \square 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. <u>To maintain the security, ask users to perform the backup/restore for users' data/information</u> 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. \rightarrow 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. \rightarrow The list is outputted.
- [D] Replace the HDD.
- [E] Update of HDD program data and UI data.
- 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).

5

- (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] \rightarrow [ADMIN] \rightarrow [FAX] \rightarrow [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.

HDD manufacturer	Model name	e HDD seria	ıl numb	er	
100% 670 TEST MODE					
WDCXWD800BB-22JHC0> (WD-	WMAM9204944	(3)			
ID NAME		VALUE	NAV	Worst	
01 Read Error Rate		0	200	200	
02 Throughput Performan	се				
03 Spin Up Time		2691	166	165	
04 Spin Start/Stop Coun	t	216	100	100	
05 Re-allocated Sector	Count	0	200	200	
					1/6
Prev	ENTER				

- 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	Description	Diagnosis
05	0	Low possibility of physical failure	HDD replacement
c5	0		is not required.
05	From 1 to 999	Defective sector has been reassigned and HDD is recovered.	HDD replacement
c5	0		is not required.
05	Any value	High possibility of defective sector existence. (There will be a	HDD replacement
c5	1 or more	possibility of physical failure depending on the use of HDD.)	is recommended.
05	Either one is at	High possibility of physical failure	HDD replacement
c5	least 1000.		is recommended.
05	All values are dis-	High possibility of physical failure (A HDD connector, harness	HDD replacement
c5	played as "".	or SYS board may be one of the causes.)	is recommended.

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 dur- ing 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 reallo- cation 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 uncorrect- able 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

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).

Firmana	Otorrod	Downl	oad jig
Firmware	Stored	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)	
Engine ROM	Logic PC board (LGC board)	K-PWA-DLM-320 or PWA-DWNLD-350-JIG1 (16 MB)	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"

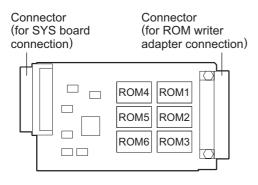


Fig.6-1 Jig board: PWA-DWNLD-350-JIG2 (48 MB)

Fig.6-2 Jig board: PWA-DWNLD-350-JIG1 (16 MB)

Connector

ROM1

ROM2

(for ROM writer

adapter connection)

Important:

 The download jig (PWA-DWNLD-350-JIG) has two types having different ROM capacity. ROM capacity for each jig is as follows.

Connector

connection)

(for SYS board

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)"

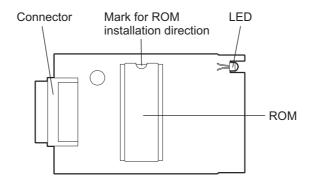


Fig.6-3 Jig board: K-PWA-DLM-320

Important:

Pay attention to the direction of the ROM.

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

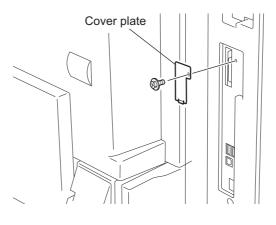
6.1.1 PWA-DWNLD-350-JIG2 (48 MB)

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.

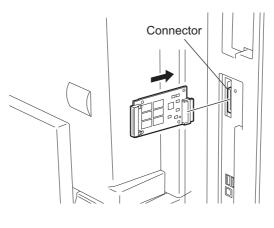
- HDD program data (RIP data, list data, Web data, filing box control data)
- UI data (fixed section data, common section data, the language 1 to 7 data, the language 1 to 6 data for Web)
- [A] Update procedure

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.
- 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.



(4) Connect the download jig with the jig connector (CN100) on the SYS board.





(5) Turn ON the power.

Downloading starts automatically and the processing status is displayed on LCD screen.

Download Board Firmware Update Mode Download Board -> HDD Update Start. Check Devices - Checking Update Status -

(6) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

Download Board Firmware Update Mode Download Board -> HDD Update Start. Check Devices - Completed Update Status - Completed Update Completed!!

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?

Download Board Firmware Update Mode Download Board -> HDD Update Start. Check Devices - Checking Update Status -Update Failed.

- (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>

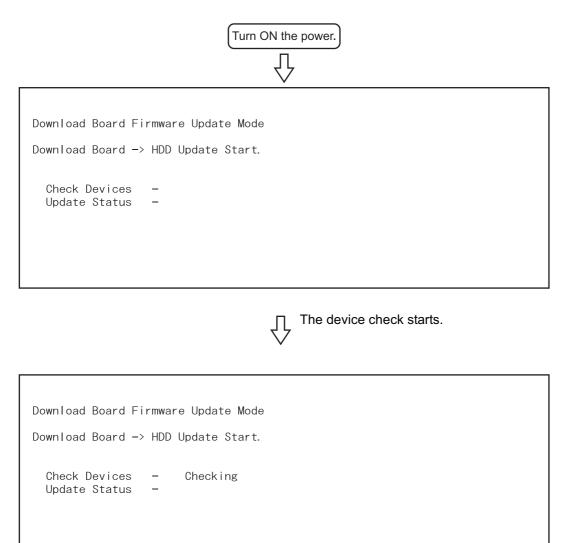
[B] Confirmation of the updated data

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

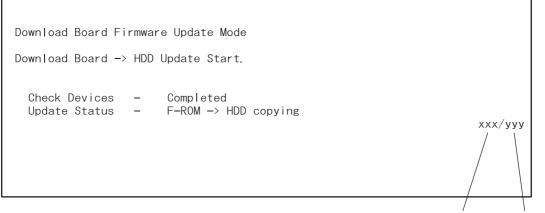
The processing status is displayed as follows on the LCD screen during the update.





When the device check completes, copying the data to HDD starts.

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



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 Backup file /PRF -> /PR2 Update Status –

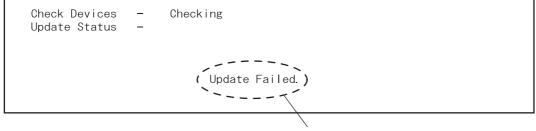
ххх/ууу

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	ххх/ууу
Update Completed!!	

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

* If an error occurs, the following error message is displayed and the update is interrupted.



Error message

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.
- 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.

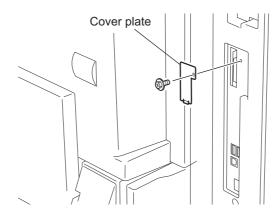


Fig.6-9

(4) Connect the download jig with the jig connector (CN100) on the SYS board.

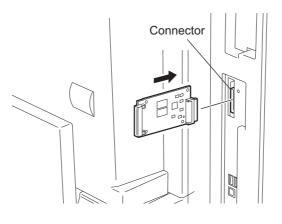


Fig.6-10

(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	Version in update media
•	
Select Update Item	OS Version Vx.xx/x.xx
	UIF Version Vxxx.xxx.x
*1. OS Update	UIO Version Vxxx.xxx.x
*2 UI Update	UI1 Version Vxxx.xxx.x
*3. System Firmware Update	SYS Version Vxxx.xxx.x
*4. NIC Firmware Update	NIC Version xxxxxxxxx xxx
*5. Scanner Firmware Update	SCN Version xxxxx-xxx
*6. Machine Firmware Update	MCN Version xxxxx-xxx

(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
	UIF Version Vxxx.xxx.x
*1. OS Update	UIO Version Vxxx.xxx.x
*2. UI Update	UI1 Version Vxxx.xxx.x
*3. System Firmware Update	SYS Version Vxxx.xxx.x
4. NIC Firmware Update	NIC Version xxxxxxxxx.xxx
5. Scanner Firmware Update	SCN Version xxxxx-xxx
6. Machine Firmware Update	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

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(8) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

Download Board Firmware Update Mode Download Board -> FROM Update Start. Check Devices - Completed Update Status - Completed Data Check - Completed Update Completed Update Completed!!

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?

```
Download Board Firmware Update Mode
Download Board -> FROM Update Start.
Check Devices - Checking
Update Status -
Data Check -
Update Failed.
```

*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.

Download Board Firmware Update Mode		
	OS Update	Completed
Download Board -> FROM Update Start.	UI Data Update	Completed
	SysFirm Update	Completed
	NICFirm Update	Flash Update
Check Devices - Completed		
Update Status - Completed		
Data-Cheek Completed		
(NIC UPDATE FAILED 1)		
Update Fa	ailed.	

NIC error message

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. 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. 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:

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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.

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- (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>

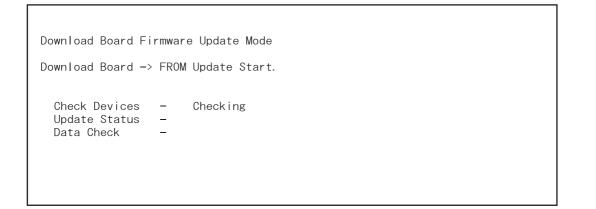
- 08-900: System ROM version
- 08-920: FROM basic section software version
- 08-921: FROM internal program version
- 08-922: UI data fixed section version
- 08-923: UI data common section version
- 08-930: Version of UI data in FROM displayed at power ON
- <Updating Engine ROM> 08-903: Engine ROM version
- <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	d [9] button are pressed simultaneously.
Download Board Firmware Update Mode	• Version in update media
Select Update Item	OS Version Vx.xx/x.xx
	UIF Version Vxxx.xxx.x
*1. OS Update	UIO Version Vxxx.xxx.x
*2. UI 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

Press [START] button after selecting the item to be updated. The device check starts.



When the device check completes, erasing the 7 data in the ROM of the equipment starts.

	irmware Update Mode > FROM Update Start.	OS Update	
Check Devices Update Status Data Check	•		

When erasing the data completes, copying the data to the ROM of the equipment starts.

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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.

irmware Update Mode > FROM Update Start.	OS Update	
 Completed Completed Verifying 		

When verifying the data completes, copying Л and verifying the other data are implemented repeatedly.

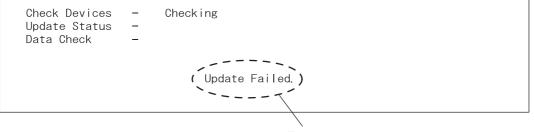
Download Board Firmware Update Mode Download Board -> FROM Update Start.	OS Update UI Data Update	Completed
Check Devices - Completed Update Status - Installing Data Check -		

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When copying and verifying all the data complete, the update completes with the following screen.

Download Board Firm		OS Update	Completed
Download Board -> F	ROM Update Start.	Ul Data Update SysFirm Update	Completed Completed
Check Devices - Update Status - Data Check -	Completed		
Update Completed!!			

* If an error occurs, the following error message is displayed and the update is interrupted.

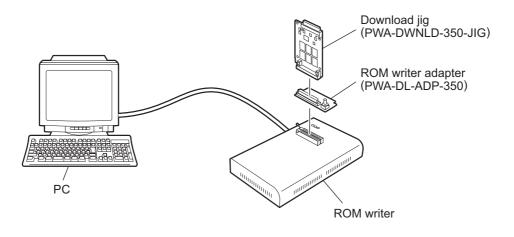


Error message

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.

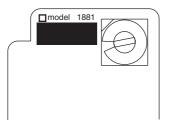




Note:

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	PWA-DL-ADP-350-1881
(or equivalent)	(model 1881)
Minato Electronics MODEL 1893/1895/1931/1940	PWA-DL-ADP-350-1931
(or equivalent)	(model 1931)



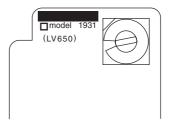


Fig.6-18 PWA-DL-ADP-350-1881

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 3FFFFF. 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.

	File Name		
Rotary Switch	Master Data (PWA-DWNLD-350-JIG2)	System, Engine, Scanner and NIC data (PWA-DWNLD-350-JIG1)	Flash ROM
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>

- 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.

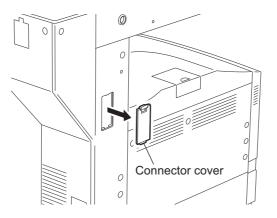
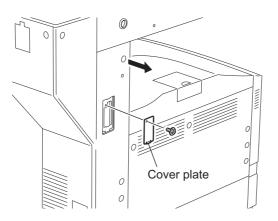


Fig.6-20

(4) Remove the cover plate.



(5) Connect the download jig with the jig connector (CN316) on the logic PC board (LGC board).

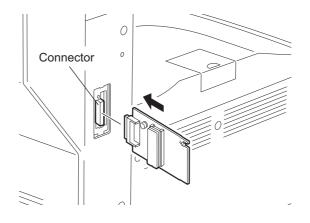
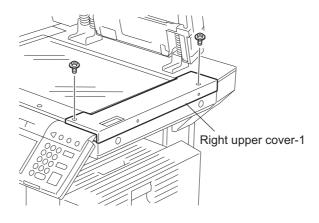


Fig.6-22

- (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>

- 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.





(4) Take off the right upper cover-2.

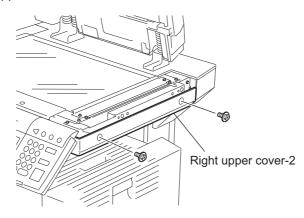
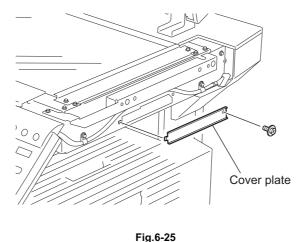
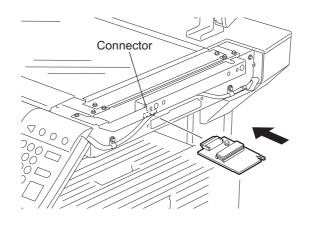


Fig.6-24

(5) Remove the cover plate.



(6) Connect the download jig with the jig connector (CN22) on the scanning section control PC board (SLG board).



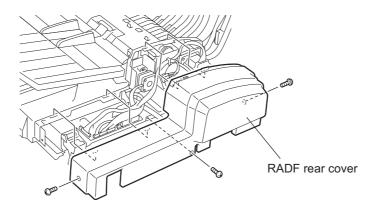


- (7) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (8) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. 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.

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<Updating RADF ROM (MR-3016)>

- 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.





(4) Connect the download jig with the jig connector (CN14) on the RADF control PC board.

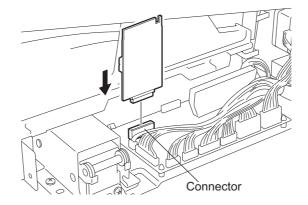


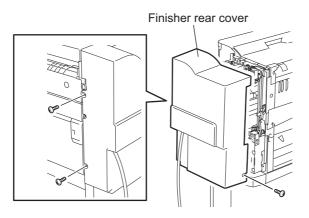
Fig.6-28

- (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.

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<Updating Finisher ROM>

- 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.





*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.

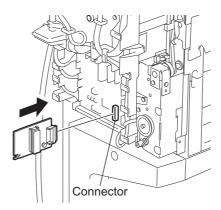
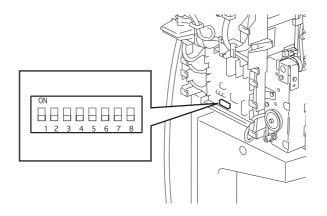


Fig.6-30

(5) Change the setting of he 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.



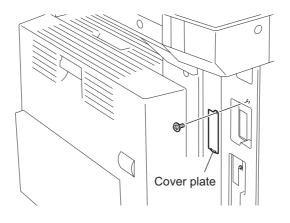


- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (7) After the update is completed properly, the LED on the download jig blinks slowly. The LED starts blinking in approx. 20 sec. since the update 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.
- 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.





(4) Connect the download jig with the jig connector (CN602) on the FAX board.

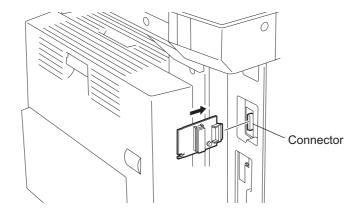


Fig.6-33

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

- (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	
Firmware	Stored	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 stitcher 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)"

05/11

PWA-DWNLD-350-JIG2 (48MB)

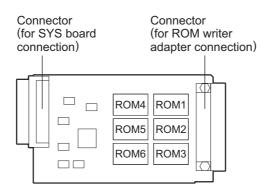


Fig.6-34 Jig board: PWA-DWNLD-350-JIG2 (48 MB)

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

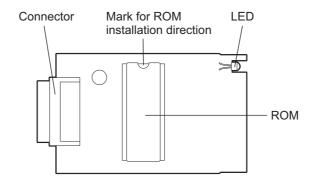


Fig.6-35 Jig board: K-PWA-DLM-320

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.
- 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.

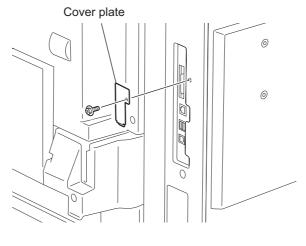
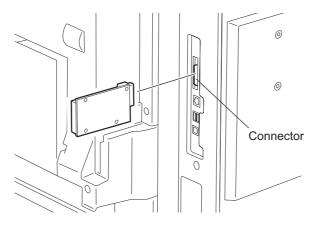


Fig.6-36

(4) Connect the download jig with the jig connector (CN100) on the SYS board.





(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 OS Version Vx.xx/x.xx x UIF Version Vxxx.xxx x
*0. OS Update	UIO Version Vxxx.xxx x
*1. UI Data Update	UI1 Version Vxxx.xxx x
*2. System Firmware Update	SYS Version Vxxx.xxx x
*3. Engine Firmware Update	ENG Version xxxxx-xx
*4. Scanner Firmware Update	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 ItemVersion in update media
OS Version... Vx. xx/x. xx x
UIF Version... Vx. xx/x. xx x
UIF Version... Vxxx. xxx x
UIO Version... Vxxx. xxx x
UIO Version... Vxxx. xxx x
UI1 Version... Vxxx. xxx x
XXX xx x
System Firmware Update
A. Scanner Firmware UpdateVersion in update media
OS Version... Vx. xx/x. xx x
UIF Version... Vx. xx/x. xx x
UIF Version... Vxx. xxx x
UIO Version... Vxxx. xxx x
SYS Version... Vxxx. xxx x
ENG Version... Xxxx-xx

(Updating all the items is taken as an example and explained in the following procedures.)

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(7) Press the [START] button.

Updating starts and the processing status is displayed on the LCD screen.

Download Board Firmware Update Mode			
Download Board Check Devices Update Status	-> FROM Update Start. - Completed - Installing	OS Update	
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 Completed	
SysFirm Update	SysFirm Update Completed	
Engine MAIN Update Flash Update	Engine MAIN Update Completed	
Scanner Firm UpdateFlash 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 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 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?

Download Board Firmware Update Mode		
	OS Update UI Data Update SysFirm Update Engine MAIN Update Scanner Firm Update	Completed Completed Failed
	Update Failed.	

- (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.

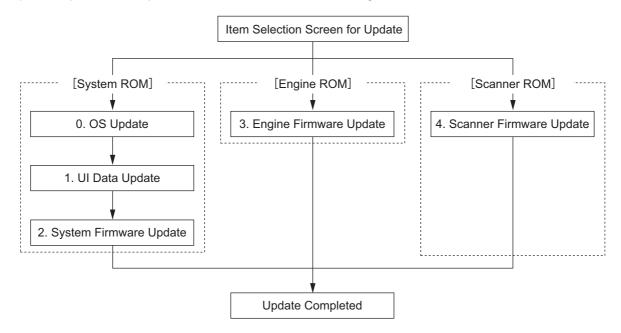
<Updating System ROM>
08-900: System ROM version
08-920: FROM basic section software version
08-921: FROM internal program version
08-922: UI data fixed section version
08-923: UI data common section version
08-930: Version of UI data in FROM displayed at power ON

<Updating Engine ROM> 08-903: Engine ROM version

<Updating Scanner ROM> 08-905: Scanner ROM version

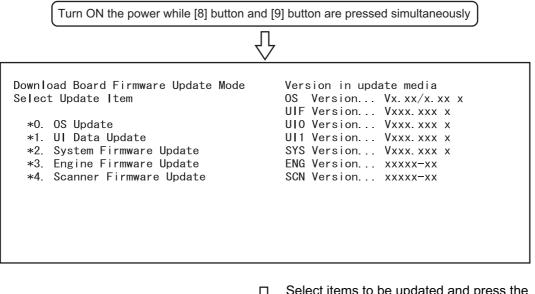
[C] Display during the update

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.



 \mathcal{V}

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 UI Data Update _ 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

JЦ

When the [System ROM]-[UI Update] has been updated, "UI Data Update...Completed" is displayed and the [System Firmware Update] update will start.

٦

Download Board Firm	nware Update Mode		
Check Devices –	-> FROM Update Start. - Completed - Installing -	OS Update UI Data Update SysFirm Update Engine MAIN Update Scanner Firm Update	Completed) Flash Update
Engine Update Statu xxxx/nnnnn Scanner Update Stat xxxx/nnnnn			

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Ŷ

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. Check Devices - Completed Update Status - Installing Data Check -	OS Update Completed UI Data Update Completed SysFirm Update Engine MAIN Update Completed Scanner Firm Update Flash Update
Scanner Update Status xxxx/nnnnn	
Ŷ	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

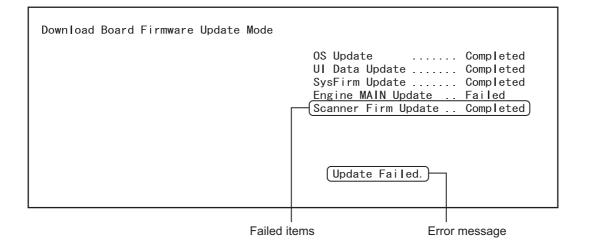


When the [Scanner ROM] has been updated, "Scanner Firm Update..Flash Update" is changed to "Scanner Firm Update..Completed".

When all data has been updated, "Update Completed" is displayed.

Download Board Firmware Update Mode
OS Update Completed UI Data Update Completed SysFirm Update Completed Engine MAIN Update Completed Scanner Firm Update Completed
(Update Completed.)

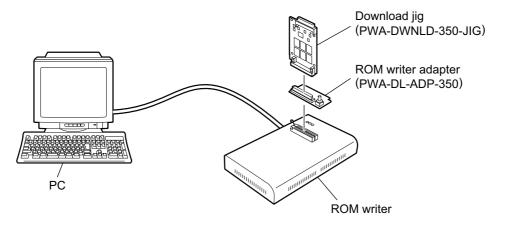
* "Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. "Failed" appears next to the failed item on the status display.



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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.

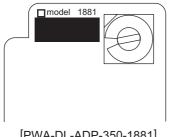




Note:

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)



[PWA-DL-ADP-350-1881]

Fig.6-39 PWA-DL-ADP-350-1881

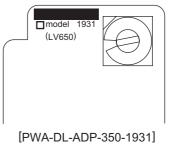


Fig.6-40 PWA-DL-ADP-350-1931

- Precaution when writing the data
 - Set the writing voltage (VID) to 3.3 V.
 - When writing the data, set the address from 0 to 3FFFF. 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.

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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.

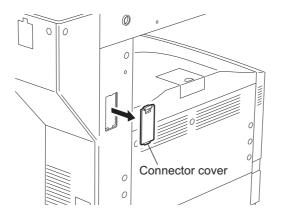


Fig.6-41

(4) Remove the cover plate.

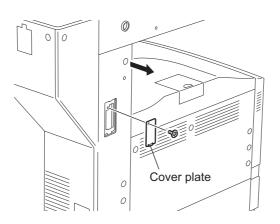


Fig.6-42

6

(5) Connect the download jig with the jig connector (CN316) on the logic PC board (LGC board).

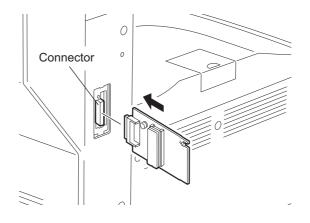
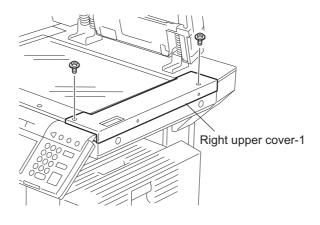


Fig.6-43

- (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>

- 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.





(4) Take off the right upper cover-2.

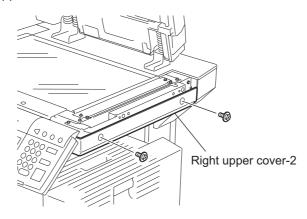
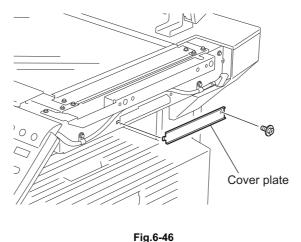


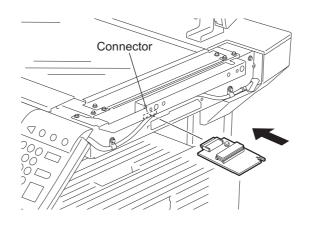
Fig.6-45

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(5) Remove the cover plate.



(6) Connect the download jig with the jig connector (CN22) on the scanning section control PC board (SLG board).

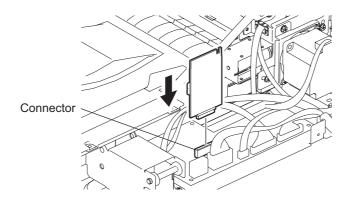




- (7) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (8) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking in approx. 20 sec. since the update starts. 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)>

- 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.



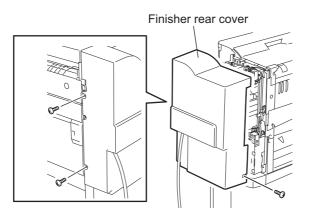


- (5) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (6) When the data rewriting is completed, the LED blinks slowly (at an interval of 0.8 sec.). If the LED blinks fast (at an interval of 0.1 sec.), 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.

6

<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.





*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.

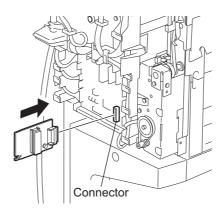
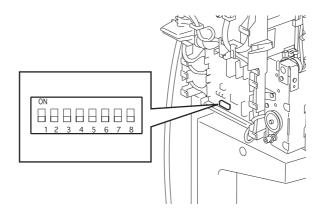


Fig.6-50

(5) Change the setting of he 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.





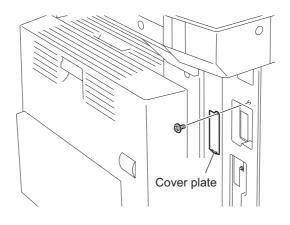
- (6) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts automatically and the LED on the download jig lights.
- (7) After the update is completed properly, the LED on the download jig blinks slowly. The LED starts blinking in approx. 20 sec. since the update 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.

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<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.
- 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.





(4) Connect the download jig with the jig connector (CN602) on the FAX board.

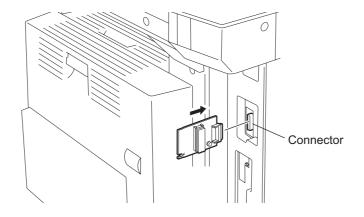


Fig.6-53

- (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.

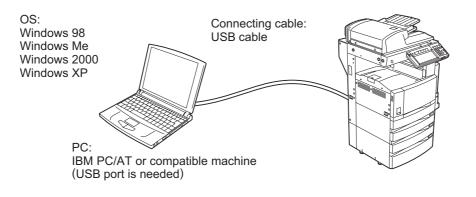


Fig.6-54

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.

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

The types of firmware which can be	undated with this mathed are	as follows in the table below
The lypes of innivare which can be	uooaleo wiin mis memoo are	as ionows in the lable below

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[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.

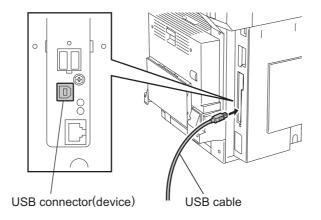


Fig.6-55 USB connection

- * 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.

🚊 Enter your password	
Password	ОК
******	Cancel

Fig.6-56

*Set the login password at the installation of FSMS.

(6) Click the [F/W Download] button.

TOSHIBA FIELD SERVICE MANAGER		
TOSHIBA	Version 3.9.6	
FIELD SERVIC		
Diagnosis	Options	
Diagnosis	Data Sharing	
	FAW Download	
Information Databases	Pattern Setting	
Customer	Optimize	
Machine	MAPfile Update	
	COM Port	
Maintenance	Database Security	
	Exit	



(7) Select the model name of the equipment to be updated from the drop-down menu and click the [OK] button.

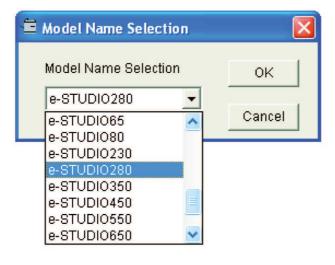


Fig.6-58

(8) Click the [OFFLINE] button.

Firmware Selection	X	
Firmware Update		
F Program	🗖 UI Data	
I NIC ROM	🗖 Scan ROM	
E MROM	🗖 Common UI Data	
🗖 1st Language UI Data		
Generic Update		
C Comm Port	OFFLINE	
Download File from Folder	OK Cancel	



(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.

Toshiba MFP's	Status	
FOSHIBA e-STUDIO350-450 PSL3	Connected	Activate FSMS
		<u>R</u> efresh
		Cancel

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.

Firmware Selection		
 Firmware Update ✓ Program ✓ NIC ROM 	🔽 UI Data 🔽 Scan ROM	
I MROM I MROM I 1st Language UI Data	Common U	I Data
Generic Update I✓ Generic		
C Comm Port		ON LINE
Download File from Folder	OK	Cancel

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.

ltem	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.

wnload File Folder	в	rowse	
Name Conversion		Exit	
	Firmwai	e Seléction	
File Name for Program (sysfirm.tz)		File Name for UI Data (uidataf.tz)	
	Browse		Browse
File Name for MROM (mfirm.tz)		File Name for NIC ROM (nicfirm.tz)	
	Browse		Browse
File Name for SROM (scnfirm.tz)		Generic Driver (*.*)	
	Browse		Browse
File Name for Common Data (uidata	0.12)	-	
	Browse		
Cite Manual for data income and 10 Data			
File Name for 1st Language UI Data	(uldata1.tz) Browse		
1	DIOWSE		

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.

nload File Folder	В	rowse Exit	
Name Conversion			
	Firmwar	e Selection	
File Name for Program (sysfirm.tz)		File Name for UI Data (uidataf.tz)	
G:\Firmware\sysfirm.tz	Browse	G \Firmware\uidataf.tz	Browse
File Name for MROM (mfirm.tz)		File Name for NIC ROM (nicfirm.tz)	
G:\Firmware\mfirm.tz	Browse	G:\Firmware\nicfirm.tz	Browse
File Name for SROM (scnfirm.tz)		Generic Driver (*.*)	
G:\Firmware\scnfirm.tz	Browse	vidata2.tz	Browse
File Name for Common Data (uidata	10.tz)	<mark>⊠</mark> uidata3.tz	
G:\Firmware\uidata0.tz	Browse		
File Name for 1st Language UI Data	(uidata1.tz)		
G:\Firmware\uidata1.tz	Browse		

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.

Field Service Manager 🛛 🔀
Following files are not present in selected directory
sysfirm.tz uidataf.tz nicfirm.tz mfirm.tz scnfirm.tz uidata0.tz



(12) The selected data is transmitted to the equipment. The data file name being transmitted and transmission condition are displayed at the bottom.

	File Name for Common Data (uidata0.tz) Browse File Name for 1st Language UI Data (uidata1.tz) Browse		
C:\Firmv	ware\mfirm.tz	66.67 % completed	



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.

Remote Firmware Update Mode 0. Os Update(vxworks.bin) *1. System Firmware Update(sysfirm.tz) *2. Fixed UI Data Update(uidataF.tz) *3. Common UI Data Update(uidata0.tz) *4. 1st UI Data Update(uidata1.tz) *5. Machine Firmware Update(mfirm.tz) *6. NIC Firmware Update(nicfirm.tz) *7. Scanner Firmware Update(scnfirm.tz) *8. HDD Update(hdd.tz*XX)	Completed Completed Completed
ا Number of master data to be updated – Items ("*" is displayed next to the items to be updated.)	Processing status of each item Completed : Update completed : Updating

Fig.6-67

(15) "Update Completed!!" is displayed at the bottom of the LCD screen after the updating is completed properly.

	e Firmware Update Mode Os Update(vxworks.bin)		
	System Firmware Update(sysfirm.tz)	Completed	
*2.	Fixed UI Data Update(uidataF.tz)	Completed	
*3.	Common UI Data Update(uidata0.tz)	Completed	
*4.	1st UI Data Update(uidata1.tz)	Completed	
*5.	Machine Firmware Update(mfirm.tz)	Completed	
*6.	NIC Firmware Update(nicfirm.tz)	Completed	
*7.	Scanner Firmware Update(scnfirm.tz)	Completed	
*8.	HDD Update(hdd.tz*XX)	Completed	
	Update Completed!!		

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?

Remote Firmware Update Mode 0. Os Update(vxworks.bin)

- *1. System Firmware Update(sysfirm.tz)
- *2. Fixed UI Data Update (uidataF.tz)
- *3. Common UI Data Update(uidata0.tz)
- *4 1st UI Data Update(uidata1 tz)
- *5. Machine Firmware Update(mfirm.tz)
- *6. NIC Firmware Update(nicfirm.tz)
- *7. Scanner Firmware Update(scnfirm.tz)
- *8. HDD Update (hdd. tz*XX)

Update Failed!!

Fig.6-69

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

Completed

Completed

Completed

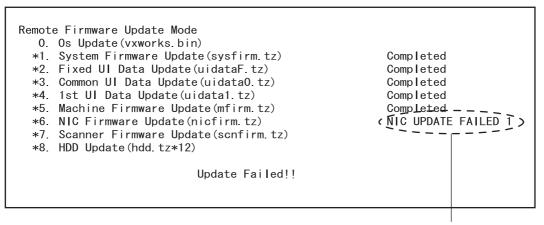
Completed

Completed

Completed Failed

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*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.



NIC error message

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. 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. 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 08-938: 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.
 - ClipDrive (RUF-C128M) - MELCO
 - Lexar Media JumpDrive (RD128-231)
 - Mini USB Drive (Mini 128 MB USB Drive) - lomega
- Only the USB storage device which meets the following conditions should be used for updat-٠ ing. 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) 8 (=0 Class number:

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.

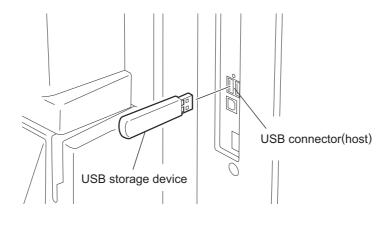


Fig.6-71

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.)

Download Storage Firmware Update Mode	Version in update media
Select Update Item	
0. OS Update	UIF Version Vxxx.xxx.x
*1 HDD Update	UIO 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 xxxxxxxxx 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

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

(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.)

Download Storage Firmware Update Mode Select Update Item	Version in update media
0. OS Update	UIF Version Vxxx.xxx.x
*1. HDD Update	UIO 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 xxxxxxxxx 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.

Download Storage Firmware Update Mode Download Storage -> HDD Update Start. Check Devices - HDD Checking Update Status -



(7) "Update Completed." is displayed at the bottom of the LCD screen after the updating is completed properly.

Download Storage Firmware Update Mode Download Storage -> FROM Update Start. Check Devices - Completed Update Status - Completed Data Check - Completed Update Completed. Update Completed. Please Connect Next Storage Key, Push 'START' Button!!

Fig.6-76

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

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?

```
Download Storage Firmware Update Mode
Download Storage -> HDD Update Start.
Check Devices - HDD Checking
Update Status -
Update Failed.
```

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.

Download Storage Firmware Update Mode		
Download Storage -> FROM Update Start.	OS Update HD Data Update UI Data Update SysFirm Update	Completed Completed Completed Completed
Check Devices - Completed Update Status - Completed Data_Check	NICFirm Update	Flash Update
Update Fai	led.	

NIC error message

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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. 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. 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.

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- (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 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

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[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.)

	\mathcal{V}	The initial screen is displayed and the recogniti of the USB storage device connected to the equipment is started.
ownload Storage Update Mode lease wait now Initialization		
	₽	When the device is recognized properly aft minutes, the screen for selecting items is d
	·	played.



Press the [START] button after selecting the item to be updated. The device check starts.

```
Download Storage Firmware Update Mode

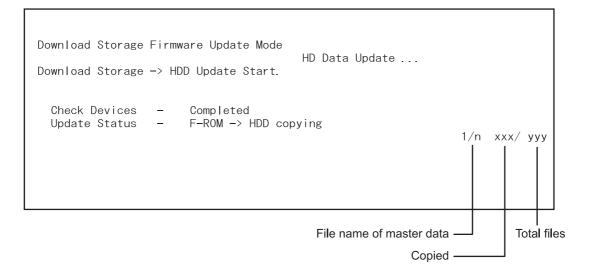
Download Storage -> HDD Update Start.

Check Devices - HDD Checking

Update Status -
```

 $\sqrt[n]{\Gamma}$

When the device check completes, copying the data to the HDD starts.



 $\frac{1}{\sqrt{2}}$

When all files have been copied, the backup of RIP font starts.

Download Storage Firmware Update Mode Download Storage -> HDD Update Start.	HD Data Update	
Check Devices - Completed Update Status - Backup file /PR	F> /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, thefollowing screen is displayed. Updating the master data is completed.

Download Storage Firmware Update Mode Download Storage -> HDD Update Start.	HD Data Update	Completed
Check Devices - Completed Update Status - Completed		1/n xxx/ yyy 2/n xxx/ yyy 3/n xxx/ yyy 4/n xxx/ yyy

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Updating the system ROM starts subsequently. 7 The device check starts.

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Download Storage Firmware Update Mode Download Storage -> FROM Update Start.	HD Data Update	Completed
Check Devices - Checking Update Status - Data Check -		

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When the device check completes, copying the data to the ROM of the equipment starts.

Download Storage Firmware Update Mode Download Storage -> FROM Update Start.	HD Data Update UI Data Update	Completed
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.

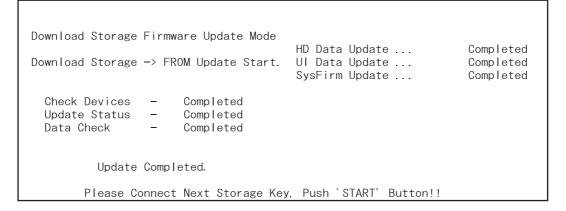
Check Devices - Completed

Update Status - Installing

Data Check -
```

 $\frac{1}{2}$

When copying all the data complete, the update completes with the following screen.



* 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.

Check Devices -Checking Update Status – Data Check – ----、 (Update Failed.) ----/

Error message

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

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	 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.

 - 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.

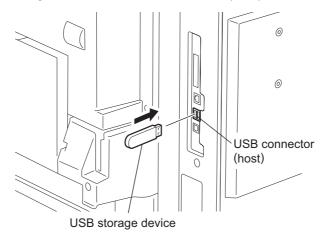


Fig.6-79

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 *1. HDD Update *2. UI Data Update *3. System Firmware Update *4. Engine Firmware Update *5. Scanner Firmware Update	UIF Version Vxxx.xxx.x UIO Version Vxxx.xxx.x UI1 Version Vxxx.xxx.x SYS Version Vxxx.xxx x ENG Version xxxxx-xx 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 Select Update Item	Version in update media
 *0. OS Update *1. HDD Update *2. UI Data Update *3. System Firmware Update 4. Engine Firmware Update 5. Scanner Firmware Update 	UIF Version Vxxx.xxx.x UIO Version Vxxx.xxx x UI1 Version Vxxx.xxx x 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.)

6

(6) Press the [START] button.

Updating starts and the processing status is displayed on the LCD screen.

Download Storage	Firmware Update Mode	
Download Board Check Devices Update Status Data Check -	-> FROM Update Start. - Completed - Installing	OS Update HD Data Update
		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 U 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?

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.

- (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.

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[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 08-938: Version of Web UI data language 6 in HDD

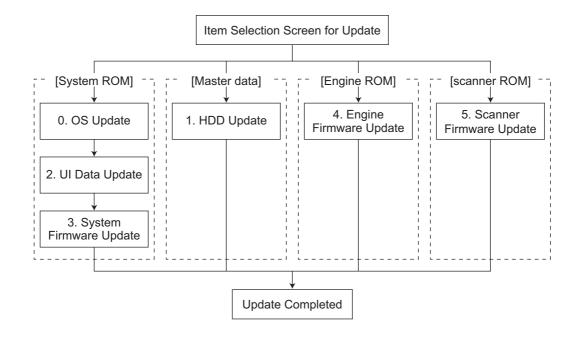
<Updating System ROM> 08-900: System ROM version 08-922: UI data fixed section version 08-923: UI data common section version 08-930: Version of UI data in FROM displayed at power ON

<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.



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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

TI ✓ tic

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 Select Update Item *0. OS Update *1. HDD Update *2. UI Data Update *3. System Firmware Update *4. Engine Firmware Update *5. Scanner Firmware Update



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 Completed 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 Download Storage -> HDD copying 1/n Engine Update Status xxxx/nnnnn Scanner Update Status xxxx/nnnnn

Д

When the [System ROM]-[OS Update] has been updated, "OS Update...Completed" is displayed and the [UI Update] update will start.

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Download Storage	Firmware Update Mode	
Download Board Check Devices Update Status Data Check	-> FROM Update Start. - Completed - Installing -	OS Update Completed) HD Data Update UI Data Update
Download Storage	e -> HDD copying 1∕n	Engine MAIN Update Flash Update Scanner Firm Update Flash Update
Engine Update Sta xxxx/nnnnn	atus	
Scanner Update St xxxx/nnnnn	atus	

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. Check Devices - Completed Update Status - Installing Data Check -	OS Update Completed HD Data Update UI Data Update Completed SysFirm Update
Download Storage -> HDD copying 1/n Engine Update Status xxxx/nnnnn Scanner Update Status xxxx/nnnnn	Engine MAIN Update Flash Update Scanner Firm Update Flash Update

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When the [Engine ROM] has been updated, "Engine MAIN Update..Flash Update" is changed to "Engine MAIN Update..Completed".

Check Devices - Completed Update Status - Installing Data Check -	OS Update Completed HD Data Update UI Data Update Completed SysFirm Update Engine MAIN Update Completed)
Download Storage -> HDD copying 1/n xxx/ yyy 2/n xxx/ yyy	Scanner Firm Update Flash Update

Л

When the [System ROM]-[System Firmware Update] has been updated, "SysFirm Update...Completed" is displayed.

Download Storage Firmware Update Mode	
Download Storage -> HDD copying 1/n xxx/ yyy 2/n xxx/ yyy 3/n Scanner Update Status xxxx/nnnnn	OS Update Completed HD Data Update UI Data Update Completed SysFirm Update Completed Engine MAIN Update Completed Scanner Firm Update Flash Update
File name of master data	—— Total files —— Copies —— When the [Master Data] has been undated

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/nnnnn	
Ţ	When the [Scanner ROM] has been updated "Scanner Firm UpdateFlash Update" is changed to "Scanner Firm UpdateCom- pleted".
	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.

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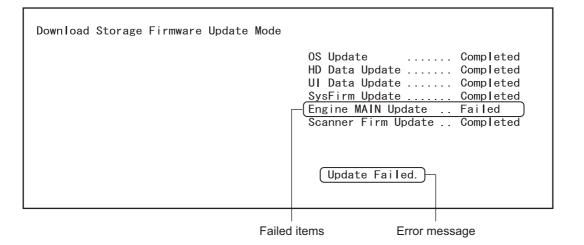
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* If the USB storage device is not recognized properly, the following message is displayed and the update is interrupted.

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.



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6.6 Appendix

6.6.1 e-STUDIO200L/230/280

[A] Assist Mode

This equipment has the Assist Mode to enable the following functions.

- 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 defection 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.

Firmware Version Up Mode
Select Number(1-3) and Press START key.
> 1 : Clear NvRAM flags.
 2 : Format UID rom PRF PR2 SMS Partition.
 3 : All Partition delete and create UID rom PRF PR2 SMS Partition.

Fig.6-80

(2) Select the item with the digital keys and press the [START] button.

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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 defection 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
			Output to the SEG board
2)	+5.1V		
,	+5.1VA	:	CN705 Pins 24 and 26
			Output to the SYS board
	+5.1VB	:	
			Output to the SYS board
	+5.1VB	•	CN706 Pin 26 Output to the FUS board
	+5.1VB		
	0.110	•	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	:	
	+5.1VB		Output to the SLG board CN708 Pins 5 and 6
	+0.1VD	·	Output to the RADF
3)	+12V		
	+12VA	:	CN705 Pin 7
			Output to the SYS board
	+12VB	:	CN705 Pin 5
	+12VB		Output to the SYS board CN706 Pin 22
	TIZVD	:	Output to the LGC board
	+12VB	:	CN708 Pin 13
			Output to the SLG board
4)	-12V		
	-12VA	:	CN705 Pin 9
	-12VB		Output to the SYS board 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

24V		
+24VD1 :	CN706	Pins 11, 12, 13 and 14
	Output to th	e LGC board, PFP/LCF (via LGC board)
+24VD1 :	CN707	Pins 15 and 16
	Output to th	e main motor
+24VD2 :	CN706	Pins 5 and 6
	Output to th	e 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 th	e ADU board
+24VD3 :	CN708	Pins 23 and 24
	Output to th	e RADF
+24VD4 :	CN708	Pins 19 and 20
	Output to th	e SLG board
+24VD5 :	CN707	Pin 8
	Output to th	le 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

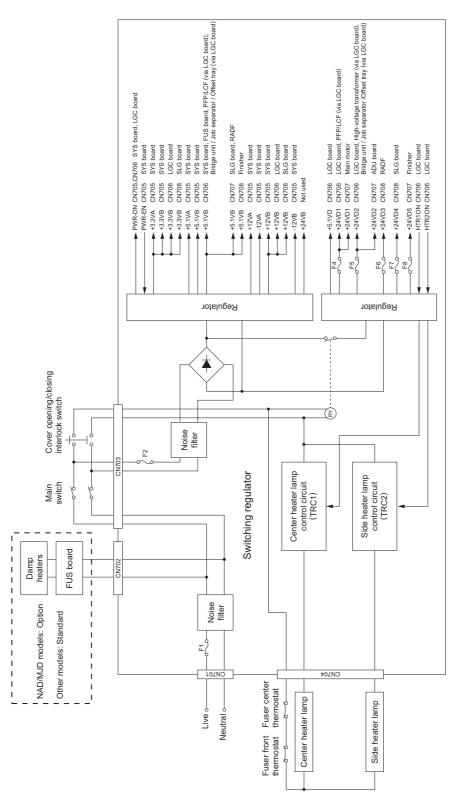
Connector	Destination	Voltage
CN706	For the LGC board, High-voltage transformer (via LGC board), PFP/LCF (via LGC board), Bridge unit / Job separator / Offset tray (via LGC board)	+5.1VD, +24VD1, +24VD2
CN707	For the ADU board, finisher	+24VD1, +24VD2, +24VD5
CN708	For the SLG board, RADF	+24VD3, +24VD4

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	
	PFP/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 count	er / Copy key card	
	Bridge unit / Jol	o 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	1	F8:5A (Semi time-lag)

7.3 Configuration of Power Supply Unit





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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.

 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]

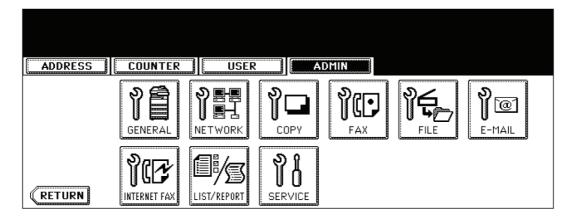
8.1.3 Setting procedure

- (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.

ADDRESS	COUNTER		
ADDRESS	CUUNTER	USER	
ADMINISTRATOR	PASSWORD		
		PASSWORD	

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.





(6) Press the [SERVICE] button in the ADMIN screen.

(7) The SERVICE screen is displayed.

ADDRESS	
SERVICE	
SUPPLY OR DER SETUP	
RETURN	



(8) Press the [SUPPLY ORDER SETUP] button.

Fig.8-4

- (9) Press the [ORDER INFORMATION] button.
- (10) The ORDER INFORMATION screen is displayed.

ADDRESS COUNTER USER	AUTIIN
ORDER INFORMATION	1
AUTO SUPPLY ORDER	
E-MAIL	
	CANCEL ENTER Next

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) SER-VICE screen.)

(13) The CUSTOMER/SUPPLIER screen is displayed.

ADDRESS	COUNTER	USER	ADMIN		
NAME TEL NUMBER E-MAIL ADDRESS			ADDRESS		
			CANCEL	ENTER	Next Prev

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			
NUMBER NAME TEL NUMBER E-MAIL			DESCRIPTION RESULT PRINT	ING ALWAYS	ONERROR	
			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	
SERVICE	
SUPPLY ORDER SETUP	
RETURN	



(20) Press the [SUPPLY ORDER SETUP] button.

ADDRESS COUNTER USER ADMIN	

C :	0 0
гig	.0-9

- (21) Press the [TONER ORDERING] button.
- (22) The TONER ORDERING screen is displayed.

ADDRESS COUNTER USER ADMIN
TONER ORDERING
TONER
RETURN

Fig.8-10

(23) Press the [TONER] button. (Select the part to be ordered.)

ADDRESS	USER	
PART NUMBER CONDITION 1 QUANTITY 1		AUTO ORDER



(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 CON-DITION.

[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.)

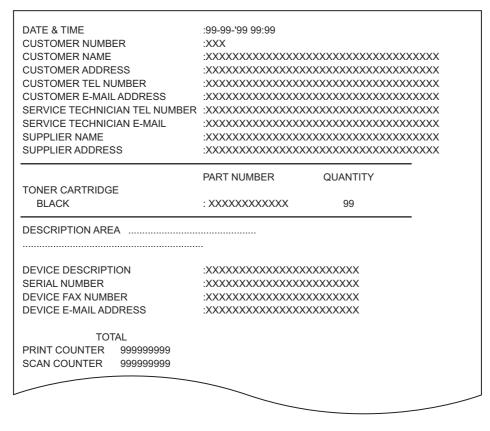


Fig.8-12

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

ſ

	ORDER XXXXXXXXX
DATE & TIME	:99-99-'99 99:99
CUSTOMER NUMBER	:XXX
CUSTOMER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER E-MAIL ADDRESS SERVICE TECHNICIAN	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SERVICE TECHNICIAN E-MAIL	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SUPPLIER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SUPPLIER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	PART NUMBER QUANTITY
TONER CARTRIDGE	
BLACK	: XXXXXXXXXXX 99
DESCRIPTION AREA	
DEVICE DESCRIPTION	:XXXXXXXXXXXXXXXXXXXXXXXXXXX
SERIAL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE FAX NUMBER	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE E-MAIL ADDRESS	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
TOTAL	
PRINT COUNTER 999999999	
SCAN COUNTER 999999999	

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.

ADDRESS	COUNTER	USER	ADMIN	
ADMINISTRATOR	PASSWORD		-	
	حتت *****_	PASSWORD		



(2) Press the [SERVICE] button.

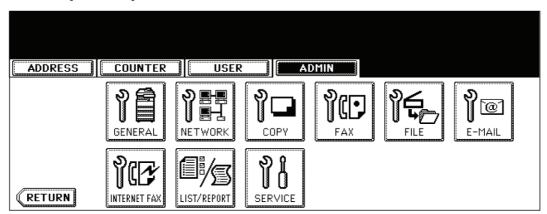


Fig.8-16

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

(3) Press the [SERVICE NOTIFICATION] button.

ADDRESS		USER	ADMIN	
SERVICE				
•	PPLYORDER SETUP			
RETURN				



- (4) Press the [E-MAIL] or [FAX] button in "SERVICE NOTIFICATION".
 - When the [OFF] button is pressed, all functions related Service Notification become ineffective.

SERVICE NOTIFICATION
OFF E-MAIL FAX
CANCEL

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.)

ADDRESS	ADMIN
SERVICE NOTIFICATION E-MAIL aaa@toshiba.com E-MAIL	TOTAL COUNTER TRANSMIT ON OFF PM COUNTER TRANSMIT ON OFF SERVICE CALL TRANSMIT ON OFF

Fig.8-19

• Press the [FAX NUMBER] button, key in the FAX number and then press the [ENTER] button.

ADDRESS COUNTER USER	ADMIN
SERVICE NOTIFICATION	TOTAL COUNTER TRANSMIT ON OFF PM COUNTER TRANSMIT ON OFF

Fig.8-20

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

(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.)

TOTAL COUNTER DETAILS
Date : SET
Time : 20 15 RESET



- 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/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".)

()	─Machine Model : ⁻ ─Serial Number : ⁻	07/11/2004 15:54 TOSHIBA e-STUDIO280 1234567890 00300000
(5)	ChargeCounterForm —— LargeSizeCharge —— LargeSizeCharge	eCount 1
(7)	PMCounterFormat: —— LargeSizePMCou —— LargeSizePMPap	
999	Charge Counter: <print counter=""> — Copy — Print — List _ Cox</print>	Large Small 00000000 0000000 0000000 0000000 000000
12- 13- 14- 15-	— FAX <scan counter=""> — Copy Scan — FAX Scan — Net Scan</scan>	00000000 0000000 00000000 0000000 000000
(16)	<fax counter=""> — Transmit — Receive Periodical Maintenai</fax>	00000000 0000000 0000000 0000000
18- 19- 20- 21-	Set PM Current PM Set PMTime Current PMTime	0000000 0000000 0000000
@—	Printer Error History Date Tim 05/08/2004 16:4 05/15/2004 22:2 05/15/2004 22:2 04/15/2004 22:2 03/25/2004 11:1	e ErrorCode 44 F110 28 F110 23 F110 - (*1) 23 F110



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

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
- (1) 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— 2— 3— 4—	-DATE : 05/03/10 13:47 -MACHINE MODEL : TOSHIBA e-STUDIO280 -SERIAL NUMBER : 1234567890 -TOTAL COUNTER : 00004787	
	CHARGE COUNTER FORMAT	PM COUNTER FORMAT
(5)	LARGE SIZE CHARGE COUNT : 1 LARGE SIZE CHARGE PAPER DEFINITION : 1	
	CHARGE COUNTER	
	PRINT COUNTER	SCAN COUNTER
9— 10— 11— 12—	LARGE SMALL COPY 0000000 0000000 PRINT 0000000 0000000 LIST 0000000 0000000 FAX 0000000 0000000	LARGE SMALL (13)— COPY SCAN 00000000 00000000 (14)— FAX SCAN 00000000 00000000 (15)— NET SCAN 00000000 00000000
Û	FAX COUNTER	PERIODICAL MAINTENANCE COUNTER
	LARGE SMALL	
16— 17—	TRANSMIT 0000000 0000000 RECEIVE 0000000 00000000	18— SET PM :00000000 19— CURRENT PM :00000000 20— SET PM TIME :00000000 21— CURRENT PM TIME :00000000
22—	- PRINTER ERROR HISTORY	
	DATE TIME ERROR CODE 05/03/09 16:44 F110 05/03/05 22:28 F110 05/03/05 22:23 F110 05/02/15 22:23 F110 05/01/25 11:12 F110	DATE TIME ERROR CODE (*2)

Fig.8-23

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

05/05

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
- (1) 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

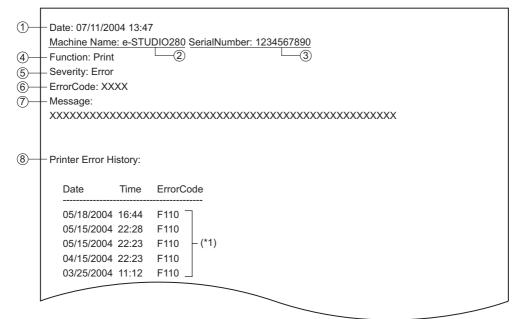


Fig.8-24

- 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)
Sub-Class number:	6 (=06h)
Protocol number:	80 (=50h)

(Mass storage class) (SCSI transfer command set) (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.

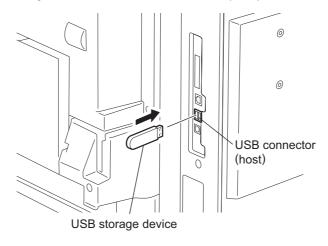


Fig. 9-1

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.

Select No.	Version X.XX
1: User Data Back Up 2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	

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.)

User Data Backup 1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info



(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. ٠
 - <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

User Data Backup

- 1: Address Book
- 2: Mail Box
- 3: Template
- 4: Combined
- *5: Department Code *6: User Info

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.

User Data Backup		
1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info	Completed	

Fig. 9-5

(10) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

User Data Backup	Back Up Completed
1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info	Completed Completed 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.

Select No.	Version X.XX
1: User Data Back Up 2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	

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.)

```
Setting Back Up
AdminSetting
1: Network/Print Service
2: SaveAsFile/Email/InternetFAX
3: Notification
4: Directory Service
Setting for Option
5: FAX Kit
6: WirelessLAN/Bluetooth Kit
```

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.

Setting Back Up AdminSetting *1: Network/Print ServiceCompleted *2: SaveAsFile/Email/InternetFAX *3: Notification *4: Directory Service Setting for Option 5: FAX Kit 6: WirelessLAN/Bluetooth Kit

Fig. 9-9

(17) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

Setting Back UpBack Up CompletedAdminSetting *1: Network/Print ServiceCompleted*2: SaveAsFile/Email/InternetFAX *3: Notification *4: Directory Service Setting for OptionCompleted		
*1: Network/Print ServiceCompleted*2: SaveAsFile/Email/InternetFAXCompleted*3: NotificationCompleted*4: Directory ServiceCompleted	Setting Back Up	Back Up Completed
5: FAX Kit 6: WirelessLAN/Bluetooth Kit	 *1: Network/Print Service *2: SaveAsFile/Email/InternetFAX *3: Notification *4: Directory Service Setting for Option 5: FAX Kit 	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.

1: User Data Back Up 2: User Data Restore	Select No.	Version X.XX
3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up	

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.)

SRAM Data Back Up	
1. SRAM	

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.

SRAM Data Back Up *1. SRAM



(24) "Back Up Completed" is displayed on the LCD screen when the backup has been properly completed.

SRAM Data Back Up	Back Up Completed
*1. SRAM	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.

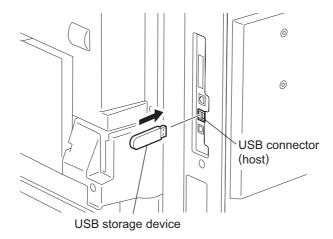


Fig. 9-15

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.

Select No.	Version X.XX
1: User Data Back Up 2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	

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.)

User Data Restore 1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info

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

User Data Restore

1: Address Book 2: Mail Box 3: Template 4: Combined

- *5: Department Code
- *6∶ User Info

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.

User Data Restoer		
1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info	Completed	



(8) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

		_
User Data Restoer	Restore Completed	
1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info	Completed Completed Completed	



- (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] \rightarrow [ADMIN] \rightarrow Enter the password \rightarrow

 $[COUNTER] \rightarrow [DEPARTMENT SETTING] \rightarrow Enter the password \rightarrow [RESET ALL COUNTERS]$ * 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.

Select No.	Version X.XX
1: User Data Back Up 2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	

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.)

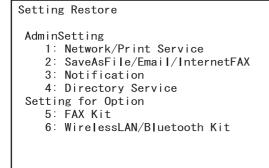


Fig. 9-22

(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.

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.

Setting Restore	
AdminSetting *1: Network/Print Service *2: SaveAsFile/Email/InternetFAX *3: Notification *4: Directory Service Setting for Option 5: FAX Kit 6: WirelessLAN/Bluetooth Kit	Completed

Fig. 9-23

(16) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

Setting Restore	Restore Completed
AdminSetting *1: Network/Print Service *2: SaveAsFile/Email/InternetFAX *3: Notification *4: Directory Service Setting for Option 5: FAX Kit 6: WirelessLAN/Bluetooth Kit	Completed Completed Completed 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.

	Select No.	Version X.XX
1: User Data Back Up 2: User Data Restore 3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up 6: SRAM Data Restore	3: Setting Back Up 4: Setting Restore 5: SRAM Data Back Up	

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.)

AM Data Restore	
1. SRAM	

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.

SRAM Data Restore *1. SRAM

Fig. 9-27

(23) "Restore Completed" is displayed on the LCD screen when the restore has been properly completed.

SRAM Data Restore	Restore Completed
*1. SRAM	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?

User Data Backup	Back Up ERROR X	
1: Address Book 2: Mail Box 3: Template *4: Combined *5: Department Code *6: User Info	ERROR	

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	Idap.sct
FAX setting	fax.sct
Wireless LAN setting / Bluetooth setting	wl.sct, bl.sct

<SRAM data file>

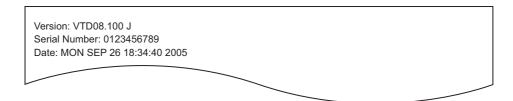
The folder "sram_data" is created in the root directory and the following file is stored in it.

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>



- File format (user_data.txt, setting_data.txt, sram_data.txt: all in common) Line 1: Version
 - Line 2: Serial number Line 3: Date

e-STUDIO200L/202L/230/232/280/282 DATA CLONING with USB STORAGE DEVICE (e-STUDIO202L/232/282) June 2004 © TOSHIBA TEC

10. WIRE HARNESS CONNECTION DIAGRAMS

10.1 AC Wire Harness

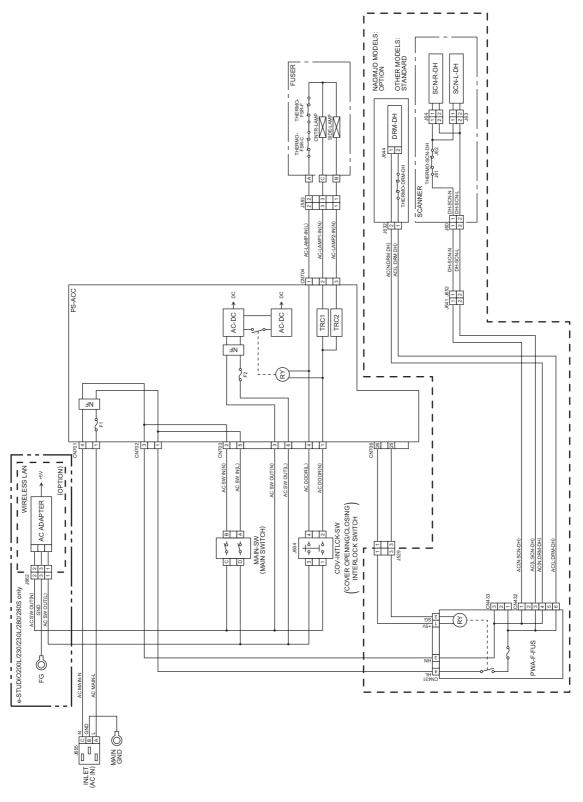
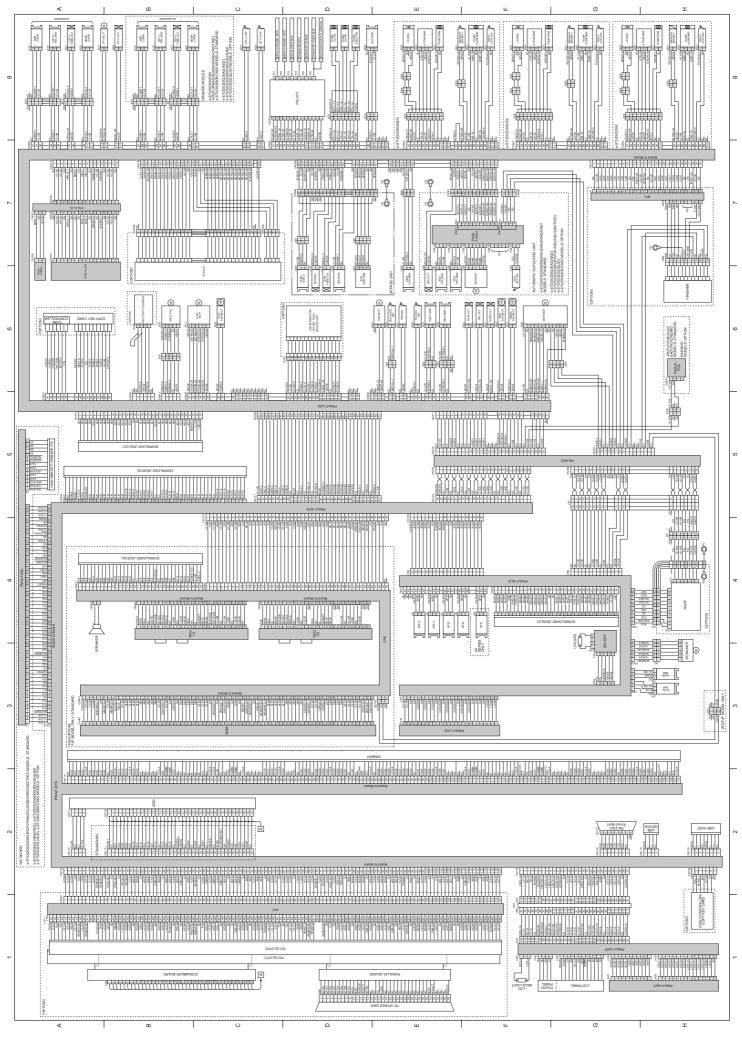


Fig.10-1

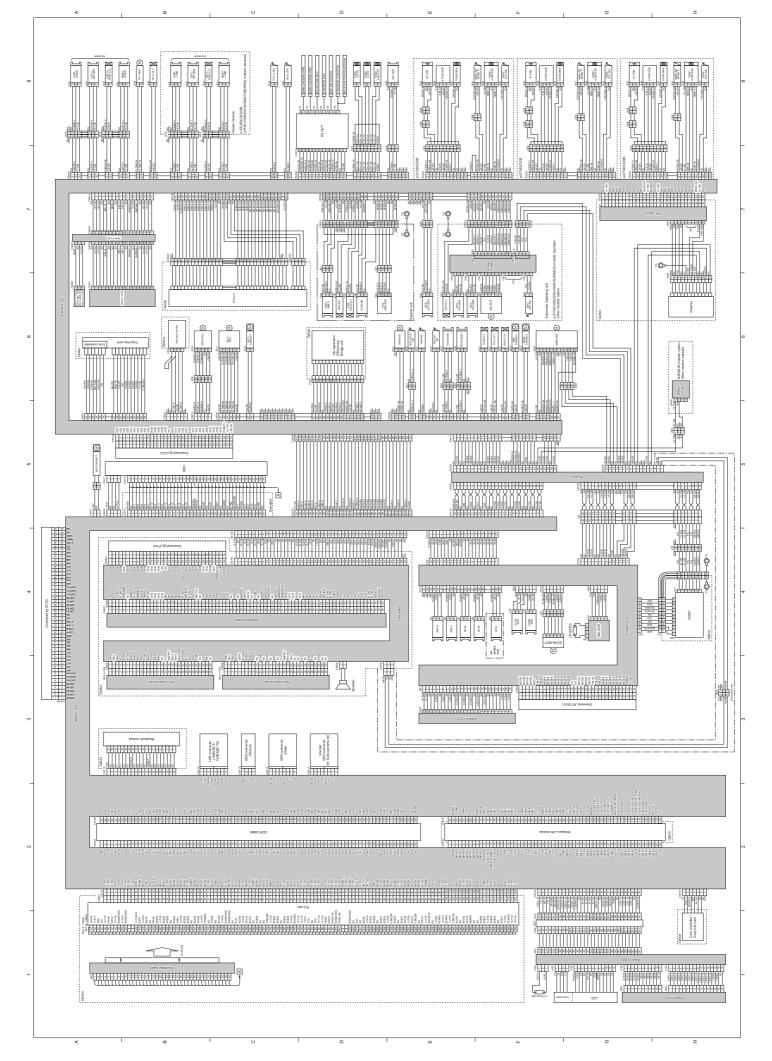
June 2004 © TOSHIBA TEC

10.2 DC Wire Harness (e-STUDIO200L/230/230L/280/280S)



40.20 CTUDIO2001 (220/2201 (200/2000) Table /a

	TUDIO200L/230/230L/280/280				
CN301 PWA-F-LGC (CN301) COIN CONTROLLER (OPTION)/ COPY KEY CARD (OPTION) Name Active Pin No Symbol Name Active	CN308 PWA-F-LGC (CN308) <> PS-HVT (CN720)/THMS-C-HTR, THMS-S-HTR, THMS-EDG-HTR, EXT-SNR Pin No Symbol Name At WOLKSA Developer AC bias high-voltage clock signal -	CN112 PWA-F-SYS (CN112) <> HDD (CN170) (STANDARD) Pin No Symbol Name Active 1 RESERVICE Signal ground - 2 20 Signal ground -	Pin No Symbol Name Active 1 +5.3VA +3.3V - 2 +5.3VA - -	CN1 PWA-F-SLG (CN1) <> PWA-F-CCD (CN14) Pin No Symbol Name Active 1 5.110 5.117 - 2 55.117 - - 2 05.117 - - 2 05.117 - -	CN501 FAX (CN501) <> NCU (1) (OPTION) Pin No Symbol Name Active 1 TXCUT Transition FAX data - 2 TXON Network FAX data -
AL CITROM Deal counter ON signal	A2 HVISOVNI-1A High-voltage power supply taskage detection signal L A3 HVISAV1A Separation bas voltage output reference voltage Analog A4 HVISIVA Separation bas voltage CNICPT signal	3 D07 Dala bas (7)	3 + 3.704 + 3.3 V 4 NC (UCSEV) Not connected - 5 D15 NF data but [15] 6 D154 NF data but [14]		3 DML DML New Synal 4 LD Dial pulse drve signal 5 EXTRG RG new signal 7
A5 PG Power ground Black and white mode counter ON signal and CST-CTR signal A5 MACTR Mono-color mode counter ON signal	AS HYVRUNA Instantic guot das oblige two reference voltage AZ HYVRUNA Instantic bas high-voltage object reference voltage AZ HYVRUNA Instantic bas high-voltage object reference AS HYVRUNA Voltage	7 DD5 Data bus [5] - 8 DD10 Data bus [10] - 9 DD4 Data bus [4] - 10 DD11 Data bus [4] - 10 DD11 Data bus [11] -	7 D13 0F data but [13] - 8 3G Signal ground - 9 D12 0F data but [12] - 10 D11 0F data but [11] -	8 SG Signal ground -	7 RLADJ1 MODEM select signal - 8 RLADJ2 MODEM select signal -
B1 PLCTR bit color mode counter CN signal and revense - bite counter signal - B2 B52 Bignal ground - B3 TS/2E3 Paper size signal-3 - B4 TS/2E2 Paper size signal-2 -	AB HVTAC-CA Developer AC bias high-voltage ONOFF signal A10 HVDVR-1A Developer IC bias high-voltage output reference voltage A11 HVDVR-1A Main charges crist output reference voltage Analog A11 HVDVR-1A Main charges crist output reference voltage Analog	11 2003 Data box (b) - 12 20012 Data box (2) - 13 2002 Data box (2) - 14 20013 Data box (1) - 15 2001 Data box (1) - 16 20014 Data box (1) -	11 O10 off data tun (10) - 12 SL4 Signal ground - 13 D00 off data tun (2) - 14 D00 off data tun (2) -	11 CDDCRXB CDD shit clock-3B - 12 S& Signal ground - 13 CDDCRXA CDD shit clock-3A - 14 Signal ground a - -	11 -1210 - 12 XAssig ground - 13 #12.00 #12.V - 14 #2405 #12.V -
B3 TSICE3 Paper atox signal-3 - B4 TSICE2 Paper atox signal-2 - B5 TSICE3 Paper atox signal-0 - B5 TSICE3 Paper atox signal-0 - B6 TSICE0 Paper atox signal-0 - B7 +5.1V +5.1V - B6 TSICE0 Paper atox signal-0 - B7 +5.1V +5.1V -	A11 HVW/R-1A Main charger grid output reference voltage Analog A12 HVTM-0A Main neadle electode charger voltage CNVCFF - A13 SG algenal ground - A14 424/U22 +34 V	18 D014 Data box [0] - 17 DD0 Data box [0] - 18 DD15 Data box [15] - 19 SG Signal ground - 20 No(PEV) Not corrected -	10 20 Bype grand - 13 2020 Bif of als had gl - 14 16 Bif of als had gl - 15 16 Bif of als had gl - 16 16 Bif of als had gl - 17 16 Bif of als had gl - 18 20 Bif of als had gl - 19 10 17 als had gl - 19 40 17 als had gl - 20 17 als had gl - - 20 16 16 als had gl - 21 600 17 als had gl -	16 SZ Signal ground - 17 CCD-EVEN CCD aven data - 18 SZ Signal ground - 19 CCD-OVEN CCD aven data -	16 AZ Analog ptound - 17 CI Ring signal collection L 18 ANEDET FAX data sinseer defaction L 19 REVA Line 1 External folgehores hood detection signal L 20 REVB Line 1 External folgehores hood detection signal L
CN302 PWA-F-LGC (CN302) <-> KEY COPY COUNTER (OPTION)	Artis LeVUL - Law offer thermistic connection detection agent BT COSSIV-LA Fuser role: other hermistic = signal Analog LTH=-LA Fuser role: other hermistic = signal Analog LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: other hermistic = signal Analog Si LTH=-LA Fuser role: site hermistic = signal Analog Si LTH=-LA Fuser role: site hermistic = signal Analog Si LTH=-LA Fuser role: site hermistic = signal Analog Si LTH=-LA Fuser role: site hermistic = site site hermistic = site site hermistic = site site hermistic = site site hermistic = site site site site site site site site	J Open and Constraints Open and Constraints	20 NC (SR02) Not corrected - 21 AO0 W advess tos 30 - 22 D07 W data bas 30 - 23 D05 W data bas 10 - 23 D05 W data bas 10 - 24 A15 W advess bas 15 -		6 0.2 2.4 0.2 0 0.2 2.4 0.2 0 0.2 2.4 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0 0.2 0.2 0.2 0.2 0 0.2 0.2 0.2 0.2 0.2 0 0.2 0.2 0.2 0.2 0.2 0 0.2 0.2 0.2 0.2 0.2 0 0.2 0.2 <
2 BG Biggial ground 3 KCTRC-0 Key conten/Copy key card connection L detection signal	B5 ETH+1A Fuser-roller edge thermislor + signal Analog B7 ETH-1A Fuser-roller edge thermislor - signal Analog B8 45.1Y3W 45.1V B9 5G Signal ground -	25 DOR ID read signal - 26 SG Signal ground - 27 IORDY ID ready signal - 28 SG Signal ground - 27 IORDY ID ready signal - 28 SG Signal ground -	20 U/O I/F data bus p	23 112/8 112/9 25 112/8 112/9 127 20 112/8 112/9 CN2 DWALE (0 (CN2) <-> DI THISNE HOME SNE	25 15.114 15.11 26 12/26 12/27 - 27 AG Analog ground - 28 112/26 112/2 -
4 24/02 124 V 5 RCTRD-0 Key copy counter CN signal 6 NC Not connected CN303 PWA-F-LGC (CN303) <> LP-ERS, ATTNR-SNR, THMS-DRM,	B10 EXTSW-1 Ext sense detection signal - B11 87.1 VE - - B12 NC Not connected - B13 NC Not connected - B14 NC Not connected -	32 NC(RESERV Reserve sizes)	27 104 27 464 total [1] - 28 A102 9 605 total [1] - 28 A102 9 605 total [1] - 29 A102 9 605 total [1] - 20 A102 9 605 total [1] - 20 010 9 666 total [1] - 20 021 9 666 total [1] -	CN2 PMA-F-SLG (CN2) <> PLTN-SNR, HOME-SNR Pits for Spitski Name Addres 1 001 + 100 - 000000 - - 2 1100 - 000000 - - 4 200 - 000000 - - 5 1700 - 000000 - - 5 1700 - 000000 - - 5 1700 - 000000 - - 5 1700 - 000000 - -	23 +24/8 +24/V - 30 PG Powerground - CN502 FAX (CN502) <→ NCU (2) (OPTION)
MAIN-SW (RESET), TEMP/HUMI-SNR, FRNT-COV-SW (e-STUDIO200L) Pin In Strated	CN210 RWA EL GC (CN210) <> REB (ORTION)// CE (ORTION)	S3 DA1 Device address [1] A /PD/AG Passed disposition L BA Passed disposition L	30 A09 IIF address bus (9	4 SG Signal ground - 5 HOME-14 Cantage home position sensor detection signal - 6 HOW +51 V -	CN502 FAX (CN502) <> NCU (2) (OPTION) Adlve Transmitter Minister Adlve 1 TOXIN Research 7X data 3 CML CML risky dive signal 4 L02 CML risky dive signal
AT ATSIZ/AT-1 PU convestion detaction agrae	Points - Syndraft - White Schemark - Contracting and Contracting - Active Activ	25 D/Q Divice address (r) - 36 D/Q Divice address (2) - 37 ICSD Dip select-0 L 38 ICS1 Dip select-0 L 39 IDX39 Device address rates present signal L 40 55 Signal strund -	32 A64 UP address bas 10 - 33 RF6257 System mask system - 40 A27 System mask system - 41 A2X Address bas 17 - 42 A2X Address bas 12 - 43 CGP1 Cha satisf system - 43 CGP1 Cha satisf system -	CN7 PWA-F-SLG (CN7) <-> RADF (CN2) (OPTION) Pin No Symbol Name Active 2 XCN FMCF induction ingral - 2 SCN-STR UMRD signal from RADF - 3 ROD Reduct sinit dista -	ATISDB -3 db ATT exchange signal - RLADJ1 Modern select signal - RLADJ1 Modern select signal -
AD SG Signal ground -	AS DRV5-1A PFPLCP driver control signal - AT DRV5-1A PFPLCP driver control signal - AS DRV5-1A PFPLCP driver control signal - AG DRV5-1A PFPLCP driver control signal -	CN113 PWA-F-SYS (CN113) <-> HDD (CN171) Pin No Symbol Name Active 1 +12/V +12 V -	43 I/CSP1 Chp siled signal - 44 A05 I/F address bus [3] - 45 NC (OED) Not connected - 45 NC (STXD) Not connected -	3 1002 Maccined and also - 4 000 Maccined and also - 5 000 Maccined and also - 6 000 Maccined and also - 7 000 Maccined and also - 8 000 Maccined and also - 9 000 Maccined and also - 9 000 Maccined and also -	# REGLX Not rand - 0 KG Signal grand - 11 12:56 Signal grand - 12 A/G Anoing strund - 13 17:05 Anoing strund - 14 Notice - - 15 17:05 - 15 16 Notice Notice -
A10 SS Stagn ground . B1 RS159X-GA Reast signal to the main switch H B2 rS4VD1 r24 V . B3 rS1VB r24 V . B3 rS1VB r24 V . B4 HMS-1A H .	AB DHV2-IA PPPLCP down control signal - A10 DHV1-IA PPPLCP down control signal - A11 DHV2-IA PPPLCP down control signal - A11 DHV2-IA PPPLCP down control signal - A13 DHV2-IA PPPLCP down control signal - A14 Std Signal signal - A14 Std Signal signal - A15 24401 Signal signal -		47 RW Read/write to NC - 48 SSG Signal ground - 40 A15 UF address bus 191 - 50 SG Signal ground -	3 CP-RPD Request signal from PADP 9 PECO PMADP signal - 10 CNT PMADP connection detection signal -	
Bit Web TA Hundy sensor signal Analog Si Web TA Hundy sensor signal Analog Si Si Si Signal ground Tetra and the sensor signal Analog Tetra and the sensor signal Analog Si FCO/SWH First cover opening/Casing switch signal Si Si Si Si Si Si Si Si Si Si Si Si	A14 SG Signal grand - A15 x34401 x34 V - A16 x34401 x34 V - B1 PG Nower grand - B1 PG Nower grand - B3 PG Nower grand - B3 PG2/EVA Smeldia bar-2 -	CN116 PWA-F-SYS (CN116) <->DIMM (0) Pin No Symbol Name Active 1 SG Signal ground - 2 D000 Memory data bas (0) -	52 S/4 aging ground	CND PVM.AF.\$LQ.(CND) SNUKEY_CND) 78: No. No. Adve. 78: No. No. Adve. 70: No. No. Adve. 70: No. No. Adve. 70: No. No. Adve. 80: Adve. No. Adve. 90: Adve. No. Adve. 91: Adve. No. Adve. 92: Adve. Adve. No. 93: Adve. Adve. -	17 Cl Reg signal detect L 18 AVECOFT FAX data answer detection L 19 REVA Line 2 External integhtom book detection signal - 20 REVA Line 2 External integhtom book detection signal - 21 NC Not connected -
B9 NC Not connected - B10 NC Not connected - CN303 PWA-F-LGC (CN303) <-> LP-ERS, ATTNR-SNR, THMS-DRM,	B3 S2020-04 S202 disk Sus-0 - B4 S2021-04 S202 disk Sus-1 - B5 S2022-04 S202 disk Sus-1 - B6 S2022-04 S202 disk Sus-1 - B7 S2022-04 S202 disk Sus-1 - B7 S2027-04 S202 disk Sus-1 - B7 S202-04 S202 disk Sus-1 -	3 DOI Memory data bas () - 4 DOZ Memory data bas () - 5 DOZ Memory data bas () - 6 +3.31W +3.31W - 7 DO4 Memory data bas (4) - 8 DOZ Memory data bas () -	2 12/07 32 0.077 32 0.077 33 0.077 34 0.077 35 0.070 36 0.070 37 0.070 38 0.070 39 0.070 30 0.070 31 0.070 32 0.070 33 0.070 32 0.070 32 0.070 32 0.070 33 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070 32 0.070		Total Constraint 16 Variant 16 Variant 26 Variant 27 Variant 26 Variant 27 Variant 28 Variant 29 Variant 20 Variant 29 Variant 20 Vare
MAIN-SW (RESET), TEMP/HUMI-SNR, FRNT-COV-SW (e-STUDIO230/230L) Pin No Syndod III consuming data March at Active Attributed III consuming data March at	B5 RET51-GA PFPLCP sensor detection signal RET52-GA PFPLCP sensor detection signal RET52-GA PFPLCP sensor detection signal RET54-GA PFPLCP sensor detection signal	8 025 Merroy data ba [5] 8 025 Merroy data ba [6] 10 027 Merroy data ba [7] 11 D026 Merroy data ba [7] 13 026 Merroy data ba [7] 14 0010 Merroy data ba [7]	CN124 PWA-F-SYS (CN124) <-> PCI (CN150)/ SCRAMBLER BOARD (OPTION)	CN10 PWA-F-SLG (CN10) <> SLG-FAN-MOT, APS1 (A4 SERIES ONLY), APS2, APS3, APS4, APS5 Pin No Symbol 1 NC Not cornected -	27 XG Analog ground - 25 +12/V +12/V - 29 NC Not connected - 30 NC Not connected -
A2 EPGLP-GA Exposure large drive signal - A3 F24V071 F24V07 - A4 PG Power ground - A5 ATS-1K AtZo-ton's reason delection signal Analog	B RETS-SA PMICD same detector signal - B10 RETS-SA PMICD same detector signal - B11 RETS-SA PMICD same detector signal - B12 RETS-SA PMICD same detector signal - B13 RETS-SA PMICD same detector signal - B14 RETS-SA PMICD same detector signal - B15 RETS-SA PMICD same detector signal - B16 RETS-SA PMICD same detector signal - B17 RETS-SA PMICD same detector signal -	15 DQ11 Memory data bus [11]	Pin No Symbol Name Active 1 *3.31% *3.3 V * 2 *3.31% *3.3 V - 3 *3.31% *3.3 V -	2 NC Not connected - 3 NC Not connected - 4 «5/WPS +5/ 4/95K Actionatic original detection sensor signal -	CN503 FAX (CN503) <> SPEAKER (OPTION) Pin No Symbol Name - 1 25** Speaker colpt (*) - 2 25** Speaker colpt (*) -
AG PLATIN REPORT BRIDG Cancel again Printing 1.24VD1 PAV (Platic term sensor) AT ATSVIN-1A Auto-some sensor detection signal Analog AG DRTH-1 Durw themating detection signal Analog 143 SG Signal ground 140 SG Signal ground	CN312 PWA-F-LGC (CN312) <> M/DC-POL Pin No Symbol Name Active	16 DU12 Memory data tau (12) - 17 DD13 Memory data tau (13) - 18 +3.34% +3.34% - 10 DD14 Memory data tau (14) - 20 T015 Memory data tau (14) - 21 ME Memory data tau (15) - 22 ME Memory data tau (15) -	4 5G Eignal ground - 5 -1294 -12 V - 6 -1294 -12 V - 7 -15.104 -15.1 V - 8 -15.104 -15.1 V - 8 -15.1 V -	G SG Styles as a strength of the strengt of the strength of the strength of the strength of the strength	2 SP- Speaker cutput (-) CN600 FAX (CN600) <-> MDM (CN401) (OPTION) Pin No Symbol Name Active
A10 SSG Eligning ground - A11 NC Not connected - B1 NC Not connected - B2 RSTSW-DA. Rest signal to the main switch H B3 N24VD1 - -	3 POMON-0 Polygonal motor ON/OFF signal H: OFF	21 NC Not corrected - 22 NC Not corrected - 23 SSG Signal strond - 24 NC Not corrected - 25 NC Not corrected - 25 NC Not corrected - 25 NC Not corrected - 26 NC Not corrected - 27 NC Not corrected -		10 -550/PS -65 vm/st-corginal detection remore rights/ 10 2523 Acquire statution of the statution remore rights/ 11 2523 Acquire statution of the sta	1 TXCD12 Transmitted data - 2 + 5: TVA + 5: V - 3 + 12VB + 12: V - 4 + 3: 3: V -
33 124V01 224 V 184 14 role 14 185 14105 14 185 15 12 185 15 12 185 14105 14 186 14 14 187 12 12 187 12049 1 187 12049 1 187 12049 1 187 12049 1 187 12049 1 188 12 1 189 12 1 189 12 1 180 14 1 181 14 1 181 12 1 181 12 1 181 12 1 181 12 1 181 12 1 181 12 1 181 12 1 181	CN313 PWA-F-LGC (CN313) <-> PWA-F-LRL (CN204)	26 123 XW 201 - 27 WE Data write enable signal - 28 DOMBO Adapti disable write mask-0 - 29 DOMBO Dada mich signal - 29 DOMBO Dada mich signal - 29 DOMBO Dada mich signal - 20 DOMBO Dada mich signal-0 - 20 DOMBO Dada mich signal-0 -	12 GG Magnal grannel 15 PCICLX[5] PCICLX[6] Magnal grannel 14 SG Ragnal grannel 15 PCICLX[5] PCI clock-3 16 PCICLX[5] PCI clock-3 16 SG Signal grannel	18 SG Signal ground -	5 MCICIDMA-1 Modern 2 DMA signal - 6 5G Signal ground - 7 MEM2CS-0 SRAM chip select signal - 8 45.1VB 45.1V - 9 MEM1072.0 42844 chip select signal -
Bir No. begas ground - BIO NC Not connected - BII NC Not connected -	2 HVD H51V -	30 ICS0 Chip select signal-0 - 31 NC Not connected - 32 SG Signal stord - 33 A0 Merrory address bus (0) - 34 A2 Merrory address bus (1) -	16 Subject ground - 17 REC0[1/# Salar requirit signal-1 - 16 REC0[2/# Salar requirit signal-2 - 19 2.5XN 5XN 5XN 20 AC[21] PC1 address/data bus [31] - 21 AC[22] PC1 address/data bus [25] -	CN19 PWA-F-SLG (CN19) <> SCAN-MOT Pin No Symbol Name Adlive 1 SXMM85 Scan motor often signal-8 - 2 r24004 r241 - 3 SXMM8 Scan motor often signal-8 -	F West Start Regard - 4 5.5.01 Start Regard - - 4 5.5.02 Start Regard -
CN303 PWA-F-LGC (CN303) <-> LP-ERS, ATTNR-SNR, THMS-DRM, MAIN-SW (RESET), TEMP/HUMI-SNR, FRNT-COV-SW (e-STUDIO280/2805)	4 55° Toping grand - 5 VMEXL-1 Lass prover certoil appart (inference using) - 6 TOC Oppart prover - 7 TOC Second appart of the second appart (inference appart of the second a	35 A4 Memory address bus [2] - 36 A6 Memory address bus [2] - 37 A5 Memory address bus [3] - 38 A6 Memory address bus [3] - 37 A5 Memory address bus [4] - 38 A10 Memory address bus [10] -	20 202 ml 20gml grand use prime - 21 20271 20gml grand use prime - 24 20271 20gml grand use prime - 26 20271 20gml grand use prime - 27 20271 20gml grand use prime - 28 20211 20gml grand use prime - 28 2014 20gml grand use prime - 29 2015 20gml grand use prime - 20 2015 20gml grand use prime - 20 2017 20gml grand use prime -	2 (24/D4 - 24 V - 3 (25/M4 - 36.m motor drive signal-8 - 4 (25/M4 - 36.m motor drive signal-A - 5 (24/D4 - 24/D4 5 (24/D4 - 24/D4 5 (25/M5A - 36.m motor drive signal-A - 5 (25/M5A	14 ACM address bus [14] - 15 ACI2 MCM address bus [12] - 16 ACI0 MCM address bus [10] - 17 ACI MCM address bus [10] - 18 ACI0 MCM address bus [10] - 19 ACI MCM address bus [10] -
Pin No. Symbol Name Active A1 A15201-1 PU connection detection signal L A2 ERGIP-KO Exposure temp drive signal - A3 ERGIP-KO Exposure temp drive signal -	9 PICT-1 Laser incage data (differential signal +) - 10 PICT-2 Laser incage data (differential signal -) - 11 SIG Signal ground - 12 WR0APC-Q APC write signal - 13 45.1V - - 14 SEDWIM-1 Laser full data signal -	30 DM Environment	27 AD[23] PCI address/data bus [23] - 28 SG Signal ground - 29 AD[21] PCI address/data bus [21] -	CN22 PWA-F-SLG (CN22) <> DOWNLOAD JIG (SLG) Pin No Symbol Name Active 1 M0700 ROM data bus [0] .	10 A(c) WDM address bus [4]
A4 IPG Power grand A5 Atds-form sensor detaction signal Analog A5 #Ads-form sensor detaction signal Analog A5 #Adv-form sensor detaction signal Analog A7 AtlSVID-14. Add-storm sensor detaction signal Analog A5 EURTH-1 Down termitter detection signal Analog	H 2420ML Laser shut down signal - 15 25 Signal ground - 16 45.1 VD - - 17 45.1 VD +2.1 V - 16 25.3 Signal ground -		31 +3.3 V - 32 AD[17] PCI address/data bus [17] - 33 CIBE(2)# Command and byte enable-2 -	1 MOT[2] NORI data but [2] - 3 MOT[4] NORI data but [4] - 4 MOT[6] NORI data but [4] - 5 MFD NORI data but [4] - 6 MKKUT[6] NORI data but [6] - 7 MRD10 Lindows but [6] -	27 A[0] MDM address to p) - 22 -52 Vin8 -5.1 V - 23 CEPTINET-0 CEPT reset signal - - 24 5.1 Vin8 -5.1 V - 25 5.2 Vin8 -5.1 V - 26 5.0 Vin8 -5.0 Vin8 - 27 5.2 Vin9 5.2 Vin9 - 27 5.2 Vin9 Ceptus -
All Direct contracts detection again Penalog A3 SSG Signal ground - A10 SSG Signal ground - A11 NC Not connected - A12 NC Not connected - B1 CENNOL - -	18 SG Signal ground - CN316 PWA-F-LGC (CN316) <-> DOWNLOAD JIG (LGC) Pin No Active Pin No Symbol Name Active 1 DIQI RXId data but [0] -	45 Noc Noc (non-nacional nacco) - 46 Noc Noc (non-nacional nacco) - 47 8.53 W - - 50 Noc (non-nacional nacco) - - 51 Noc (Not connected) - - 51 Noc (Not connected) - - 51 Noc (Not connected) - -	34 Sorgia gravin - 35 12/304 Polipic ready L 37 12/304 Polipic ready L 37 12/304 Dance salect L 38 So Spaga gravit - 39 100/VEL9 Dance salect L 39 100/VEL9 Lock L 40 VEUNA Ling party Error L	7 PRJ.07111 DL address bus [2]	28 D(0 MDM data bus (0 - 29 D(2) MDM data bus (2 -
B1 CPSW2-0 Not used - B2 B2 and grand - B3 R1018/4-04 Neat agoal to be main webb H B4 -24/01 -24 Not be main webb H B4 -24/01 -24 Not be main webb H B4 -24/01 -24 Not be main webb H B5 H05-14 Humbly sense signal Ansing R B5 H05-14 Humbly sense signal Ansing -	2 D[2] RCM data bus [2] - 3 D[4] RCM data bus [4] - 4 D[6] RCM data bus [6] -	53 NC Not connected - 54 55 Signal ground - 55 D016 Memory data bus [16] - 56 D017 Memory data bus [17] -	40 PERIOR Data party Error L 41 P3304 P334 P334 -	13 MAD(14) ROM address bus [14] - 14 MAD(15) ROM address bus [16] -	32 [3] MCM data txa [3] - 33 [2] MCM data txa [10] - 34 [2] MCM data txa [10] - 35 [2] MCM data txa [10] - 36 [2] MCM data txa [10] - 35 [2] MCM data txa [10] - 36 [2] MCM data txa [14] -
B5 TEMP-1 Temperature sensor signal Analog B9 FCCV/SW-1 Front cover opening/closing switch signal L	6 A(2) IRCM address bus [0] 7 A(2) IRCM address bus [2] 8 A(4) IRCM address bus [4] 9 A(4) IRCM address bus [4]	30 DG(1) Memory data bar (1) - 57 DG(18 Memory data bar (16) - 58 DG(19 Memory data bar (10) - 59 PS, 3VA + 23 V - 60 DG(20) Memory data bar (20) - 60 DG(20) Memory data bar (20) -	45 AC(14) PCI address/data bas [14] - 46 554 Signal ground - 47 AC(12) PCI address/data bas [15] - 48 AC(10) PCI address/data bas [16] -	15 MAD[31] ROM address but [16] - 16 SG Signal ground - 17 SG Signal ground - 16 MD1[1] ROM data bus [1] - 19 MD7[0] ROM data bus [2] -	36 Signal ground - 37 MGD12F1-6 Mode 2 detection signal - 38 SG Signal ground - 39 DEPCC-1 Disk request signal - 40 DMCRC-3 Disk actionwidge signal - 41 RDNR2 Pacelwid data -
B10 SG Signal ground B11 NC Not connected B12 NC Not connected D12 NC Not connected CN304 PWA-F-LGC (CN304) <> PWA-F-ADU (CN211, 212), ADU-CLT,	ID ASI RXM address to a Bi - IV IVI0 RXM address to a IO - IV RVM address to a IO - -	54 5G Not connected -	40 M20EN PC bas 65 MPz cock enable signal - 50 SG Signal ground - 51 A258 PCI address/data bas [5] - 52 A258 PCI address/data bas [7] -	B Opcodem) Spear argument </td <td>1 0</td>	1 0
CHOIL PRIOR LOC (CHOIL) OF PRIOR PRIOR PRIOR DUCLT, 212, ADD-CLT, STB-SCD, SFB-STE, SFB-STR, SFB-STR, SFB-STR, SFB-FEED-CLT, SFB-SCD, SFB-FEED-SNR-2 Pin No. Dynbot Name Active Al Address Active Strategies Control C	16 SG Signal ground -	Her Cold Lineary Status 5.0 . 1 Cold Cold . . 1 Cold Cold . . . 1 Cold Cold 1 Cold Cold Cold 1 Cold Cold Cold Cold . . . 1 Cold Cold Cold Cold .	53 +3.3 V - 54 AQ[5] PCI address/bits bus [5] - 55 AQ[3] PCI address/bits bus [3] - 56 AQ[3] PCI address/bits bus [3] - 57 AQ[4] PCI address/bits bus [3] - 57 AQ[4] PCI address/bits bus [3] - 57 AQ[4] PCI address/bits bus [1] -	24 PA(27) Ch. Offers has 32 - 25 OLC2 Not addres has 32 - 26 OLC2 Not addres has 32 - 27 OLC2 Not addres has 32 - 28 OLC2 Not addres has 12 - 29 OLC2 Not addres has 12 - 20 OLC2 Not addres has 12 - 21 OLC2 Not addres has 12 - 23 OLC2 Addres has 12	48 SG Signal ground -
A1 ACMITEXA ADU motor drive signal-0	20 DSI ROM data bua [5] - 21 D[7] ROM data bua [7] - 22 C52-0 Chip select agran L	10 DQD / Memory data tota (20) - 17 DQD / Memory data tota (20) - 12 DQD / Memory data tota (20) - 17 DQD / Memory data tota (20) - 17 DQD / Memory data tota (20) - 17 DQD / Memory data tota (20) - 14 DQD / Memory data tota (20) - 17 DQD / Memory data tota (20) -	50 12.3 W 12.3 V - 50 12.5 W 4.5 W - 60 12.3 W 5.3 V - 61 12.3 W 5.3 V - 62 5.3 W 5.3 V - 63 5.3 W 5.3 V -	27 MAD(9) RCM address toos (9) 28 MAD(91) RCM address toos (11) 29 MAD(13) RCM address toos (11) 20 MAD(13) RCM address toos (12) 30 MAD(15) RCM address toos (12) 31 MAD(15) RCM address toos (12) 31 MAD(17) RCM address toos (12) 32 RCMM01 RCM correction discustion (signal)	46 RO262-1 RC works signal - 58 RELWORD-2 SOLV Rep starts signal - 58 RELWORD-2 SOLV Rep starts signal - 51 RELWORD-2 SOLV Rep starts signal - 52 RELWORD-2 SOLV Rep starts signal - 53 RELWORD-2 SOLV Rep starts signal - 53 RELWORD-2 SOLV Rep starts signal - 54 RELWORD-2 SOLV Rep starts signal - 55 RELWORD-2 SOLV Rep starts signal - 54 RELWORD-2 SOLV Rep starts signal - 55 RELWORD-2 SOLV Rep starts signal - 56 RELWORD-2 SOLV Rep starts signal - 57 RELWORD-2 SOLV Rep starts signal -
A6 A011[2-1 A02 and sensor detection signal - A7 5 (W6 75.1 W - A6 50.3 Signal ground - A6 50.4 Signal ground - A6 80.4 No.1 A02 Ground -	24 [A] INDE BOSER COL[3] - 25 [A] INDE BOSER COL[3] - 26 [A] INDE BOSER COL[3] - 26 [A] INDE BOSER COL[3] -	75 D025 Memory data but (29) - 76 D030 Memory data but (30) - 77 D031 Memory data but (31) - 76 SG Signal ground -		All C_1 (VB (E) 1 for anyonic - ST LDD DDD draw signal - CN2 INV-EXP (CN2) <> LP-EXPO - - PN No Stable - - 1 Exposure tamp hap-valage noise - - 2 NO Not model - -	5 74/10 Mod address has 1% - 6 74/11 Mod address has 1% - 6 74/11 Mod address has 1% - 5 74/10 Mod address has 1% - 5 74/10 Mod address has 1% - 5 74/10 Mod address has 1% - 6 74/10 Mod address has 1% - 6 74/20 Mod address has 1% - 6 74/20 Mod address has 1% - 6 74/20 Mod address has 1% -
A10 ADTI-1 ADU entrance sames detaction signal L A11 ADDU penetryficionity avoid: folderelion signal - A12 *24VD2 *24 V - A13 *24VD2 *24 V - A14 *200 Lock:r/of deve signal L L A14 \$26 Signal ground L A15 \$26 cover comino/dosing smear detaction signal L	27 A(2) 100% address back[2) 26 A(3) 100% address back[2] 27 A(3) 100% address back[2] 28 A(3) 100% address back[2] 29 A(3) 100% address back[2] 20 A(3) A(3) A(3) 21 A(3) A(3) A(3) 22 A(3) A(3) A(3) 23 A(3) A(3) A(3) 24 A(3) A(3) -	Time Description	64 2620 Sopial granten - 62 171200 1712 - 67 172100 1712 - 67 172100 - 51 - 67 175100 - 51 - 68 175100 - - - 69 175100 - 51 - 70 10000000(1) - - -	Parker Park	50 [A[2] [MCM address has [5] - 61 [A[2] [MCM address has [5] - 61 [A[2] [MCM address has [5] - 62 [MCM address has [5] - - 63 [MCM address has [5] - - 64 [S, V0] - 5.1 V - 64 [S, V0] - 5.1 V -
A15 CSTCSW-1 Side colver opening/closing sensor detection signal L A16 +5.11% -	33 +5.11V - 34 EDS-0A External RDM loading status signal L CN317 PWA-FLGC (CN317) <> IPC (OPTION) Pin No Pin No Symbol Name Active	84 + 3.31A + 3.3 V 85 52 Signal ground 86 D032 Mercey data but (32) 87 D033 Mercey data but (33) 98 D054 Mercey data but (34)	71 12.33% - 72 RCIRST# PC reast ingral - 75 12.33% e3.35% - 74 PCICLR41 PCI dock-4 - 75 53.33% e3.35% - 76 CRIV(14) Carbot - 76 CRIV(14) Carbot -	J422 PWA-F-DSP (J422) <> LCD PANEL Name Active Pin No Symbol Name Active 1 VD Yasia louch postion designation terminal-D -	60 IURL2-0 MDM data read signal -
A13 NL NC CONSCIENT	1 SG Signal ground - 2 H5.1VE H5.1V - 3 A00 System address bus I01 -	89 D033 Menory data kus (35) - 80 +3.314 +3.5 V - 91 D036 Memory data kus (36) - 92 D037 Memory data kus (37) -	75 CART(1)# Grand-1 - 77 CART(0)# Crand-2 - 78 SG(7) Signal ground - 73 FML# Power Management Event - 80 AC[20] PCL address fields but [20] -	3 XR X-axis louch position detection terminal-R - 4 YU Y-axis touch position detection terminal-U -	TO D[5] MDM data bus [5] - 71 D[7] MDM data bus [7] - 72 D[7] MDM data bus [7] -
B4 29520-0 Bypans paper size detection signal-1 B5 29521-0 Bypans paper size detection signal-2 B5 29522-0 Bypans paper size detection signal-3 B7 252 Bypans paper detection signal - B5 29762349-1 B7 2978249-1 B7 2078249-1 B7 2078249	4 A22 System address but [] - 5 A24 System address but [4] - 6 A25 System address but [4] - 7 P105 System address but [6] - 8 P105 System data but [6] - 8 P102 System data but [7] - 9 P104 System data but [7] -	92 D238 Marroy data bua [26] - 94 D239 Marroy data bua [20] - 95 DD40 Marroy data bua [40] - 95 DD40 Marroy data bua [40] - 97 DD41 Marroy data bua [41] -	81 12.324 >3.337 > 82 14/2018 PCI and/resolidata bos (261 - 83 14/2018 PCI and/resolidata bos (261 - 84 52 Biging grand - 85 14/2018 PCI and/resolidata bos (261 - 85 15/2018 PCI and/resolidata bos (261 - 86 15/2014 PCI and/resolidata bos (261 - 86 15/2014 PCI and/resolidata bos (261 - 86 15/2014 - - 86 15/2014 - -	J423 PWA-F-DSP (J423) <> LCD BACK LIGHT Pin No Symbol Name Active 1 COTL* High-rolage lemminal - 2 NC Not connected - 3 COTL* High-rolage lemminal -	72 202 EMX data bas 20 - 72 2(11) MMX data bas 10(1) - 73 2(12) EMX data bas 10(1) - 74 2(12) EMX data bas 10(1) - 75 2(12) EMX data bas 10(1) - 76 2(12) EMX data bas 10(1) - 77 2(12) EMX data bas 10(1) - 78 2(12) Call the provide the part - 79 2(12) Call the provide the part - 70 2(12) Call the provide the part - 70 2(12) Call the provide the part - 70 2(12) Call the provide the part -
00 26 (LNP*** Openal system construction angless - 05 3.1 VE - - 010 2.4 VEQ 2.4 VE - 011 2470/22 2.4 VE - 011 2470/22 2.4 VE - 011 2470/22 2.4 VE -	10 ICOS System data bus [9] - 11 SGA Signal ground - 12 WE With signal - 13 ICOSP2.04 BIC chose alors trained -	56 DD42 Memory data bus [42] - 59 DD43 Memory data bus [43] - 100 DD44 Memory data bus [44] - 101 DD45 Memory data bus [45] - 100 DD45 Memory data bus [45] -	85 AC[24] PC1 address/data bus [24] - 86 +3.3 W - - 87 +5.3 W +3.3 W - 86 AC[22] PC1 address/data bus [22] - 80 AC[20] PC1 address/data bus [22] -	J424 PWA-F-DSP (J424) <-> LCD PANEL Pin No Symbol Name Active 1 170AUE Name Active 2 U201 IC02 data table pate -	76 CEP2 cho select signal - 79 DREDD2-1 Data request signal - 80 DACKD2-0 Data scenowledge signal -
B13 SFBCL2-0 Dypans pickup solenoid drive signal - B14 SG Signal ground - B15 SFBTRY-1 Not used - B16 +5.1 VB +5.1 V - B17 SG Stens ground -	14 25.1 V - 19 PC/DMO PC/bard conscion delecton signal L 16 EG Signal ground - 17 75.1 VB r/5.1 VC - 16 ADI System address bus [U] -	L Control Cont	90 SG Ground - 91 AQ1(b) PCI address/bits bus [18] - 92 AQ1(b) PCI address/bits bus [18] - 93 #S3:WA #S3:W - 94 PTOME# L	4 5G Signal ground - 5 +5.1VA +5.1 V -	CN602 FAX (CN602) <>> DOWNLOAD JIG (FAX) (OPTION) Pin No Symbol Name Active 1 D(0) RCM dein bin (6) - 2 D(2) RCM dein bin (2) -
B18 2NDFED-1 2nd transport sensor detection algoal - B19 +5.1VB +5.1V - B20 SFBCNT-1 Bypass unit connection detection algoal -	10 PCI Optimization column - 10 ACI System address but [5] - 20 ACI System address but [5] - 21 ACI System address but [5] - 22 ACI System address but [7] - 22 BCI System address but [7] - 20 System address but [7] -	107 SG Signal ground - 105 NC Not connected - 100 NC Not connected - 105 NC Not connected - 105 NC Not connected - 105 F3.33A +3.5 V - 111 EAS Comma defease strong strong -	SG Signal ground - SE TRDY# Target ready L 97 SG Signal ground -	6 SG Signal stound - 7 VEE Ground - 8 D.GPF LCD stable signal - 9 D0 LCD stable signal - 10 D1 LCD stable signal - 10 D1 LCD stable signal -	3 D(4) ROM drah bus [4] - 4 D(6) ROM drah bus [6] - 5 RD-2 ROM drah sus [6] - 6 A(2) ROM drah sus [6] - 7 A(2) ROM drah sus [6] - 7 A(2) ROM addrass bus [7] - 8 A(2) ROM addrass bus [7] -
CN305 PWA-F-LGC (CN305) <> FEED-SNR-1, RGST-SNR, TR-COV- SW, TNR-SW, AUG-LOCK-SW, TNR-MOT, MAIN-MOT, REAR-FAN-MOT, MID-FAN-MOT, RGST, CLT.TR-U-CLT, TR-MCIT	24 ICOS Stylatem data bua [5] 25 ICOS Stylatem data bua [7] 26 Scylatem data parameter	111 CAS Colume address rebus signal - 112 DOMB4 Colume facinitarium mask-4 - 113 DOMB5 Colume facinitarium mask-4 - 114 COL Colume facinitarium mask-4 - 115 DOMB5 Colume facinitarium mask-4 - 116 SC4 Colume facinitarium mask-4 - 118 SC4 Colume facinitarium facinitarium mask-4 - 119 SC4 Colume facinitarium facinitari	38 51C0F# 33cp L 39 2.5 3/M -5.5 V - 100 4.5 3/M +5.5 V - 101 3G Signal grand - 102 3G Signal grand - 102 3G Signal grand - 102 3G Signal grand -	11 D2 LC0 display data-2 - 12 D3 LC0 display data-3 - 1425 PWAJE/DSP (1425) <> PWAJE/KEY (1428)	6 A(4) ROM address bus (4) 9 A(6) ROM address bus (6) 10 A(6) ROM address bus (6) 11 A(16) ROM address bus (10) 12 ROM address bus (10)
TR-M-CLT Pin No Symbol Name Active A1 SG Signal ground Active Active A2 ISTFEE-1 full import sensor detection signal Active Active	21 Decipier Vacione agricuit - 22 DPIST-GA PPC reant signal - 23 r-5.1V6 r-5.1V - 30 SG Signal ground -	107 304 Surgars generation - 117 A1 Memory address bus [1] - 118 A3 Memory address bus [2] - 119 A5 Memory address bus [2] - 120 A7 Memory address bus [7] -	104 AD[15] PCI address/data bus [15] - 105 #3.31V #3.3V - 106 AD[13] PCI address/data bus [13] - 107 AD[11] PCI address/data bus [11] - 108 AD[11] PCI address/data bus [11] -	2 LDFC-2 LED driver output-1 L	Inc. Picture advantes con [14] - 13 A[14] RCM address ton [14] - 14 A[18] RCM address ton [16] - 15 A[18] RCM address ton [16] - 16 SG Signal ground -
A4 5G Signal ground A5 PSTPSW-1 Registration sensor detection signal - A6 IS.1VB - 16.1 V - A7 5G Signal ground - A8 SIGCSW-1 Transfer mair constrontination detection simal -	CN100 PWA-F-SYS (CN100) <-> DOWNLOAD JIG (SYS) Pin No Symbol Name Active 1 00//00 Syntem data bas 2 00//02 Syntem data bas 1 00//01 Syntem data bas	121 A0 Memory adduss bia [0] - 122 BA0 Eark select-0 - 123 A11 Memory adduss bia [11] - 124 >3.31A +3.5 V - 125 MVCH K11 Crick, land -	100 Jaguar ground - 100 AC(0) PCI address/data bus (0) - 110 SG Signal ground - 111 CBE(0)# Command and byte enable-0 - 112 +3.3 W - -	3 LDTC-4 LD drive adjul-4 L 4 LDTC-5 LD drive adjul-3 L 5 LDTC-6 LD drive adjul-3 L 6 LDTC-7 LD drive adjul-3 L 7 LDTC-8 LD drive adjul-3 L 7 LDTC-8 LD drive adjul-3 L 8 LDTC-8 LD drive adjul-3 L	16 SG Signal ground - 17 SG Signal ground - 18 Z[1] ROM data bas (1) - 19 O[3] ROM data bas (2) - 20 Z[2] ROM data bas (2) - 20 D[2] ROM data bas (2) -
Add Society - Logical provide committee committee and a second seco	3 20144 Syndem della bara (f. 4 20445 Syndem della bara (f. 5 204164 Syndem della bara (f. 6 204164 Syndem della bara (f. 7 204164 Syndem della bara (f. 7 204164 Syndem della bara (f. 8 2041744 Syndem della bara (f. 8 2041744 Syndem della bara (f.	125 NCCLR11 Good - Input - 126 AL2 Mercory address bus [12] - 127 SG Signal ground - 126 CER Clock enable signal - 127 SGS Clop select signal - 128 CIS Clop select signal - 130 COSIMS Code shadeburnit marke 6 -	113 A2(4) PCI address/blab bus [6] 114 A2(4) PCI address/blab bus [4] 115 S2 Signal ground 116 A2(2) PCI address/blab bus [2] 117 A2(2) PCI address/blab bus [2]	8 LDTC-9 LD drive adpul-9 L 9 LDTC-10 LD drive adpul-10 L 10 LDTC-11 LD drive adpul-11 L 11 LDTC-12 LD drive adpul-12 L 12 LDTC-12 LD drive adpul-12 L 13 LDTC-15 LD drive adpul-15 L	21 COT HOM data bas () - 22 EXOTS-D Cheater approximation of the second sec
A15 TNRMT-1A Toner motor drive agree	8 DATAH Syntem data bus [14] - 9 A21 Syntem address bus [11] - 10 A19 Syntem address bus [11] - 11 A11 Syntem address bus [13] - 12 A15 Syntem address bus [13] -	131 DQMB7 Output disable/write mask-7 -	- VL2 ML2 MIL2 81 - V12 MI2 81 - V12 M12 21 77	14 LDDN0 LED common driver signal-0 H 15 LDDN1 LED common driver signal-1 H 16 SG Signal ground -	A6 P(J) PCM address to (J) - 27 P(M) PCM address to (J) - 28 PCM PCM address to (J) - 29 A(U) PCM address to (J) - 20 A(U) PCM address to (U) - 21 PCM address to (U) - - 21 PCM address to (U) - - 22 PCM address to (U) - - 23 PCM/R0E FoC Uprocends to cord convection dataction algorithm -
ATT NC Not correction B1 REFLCAA Registration refler ducts drive signal - B2 REFLCAA Registration refler ducts drive signal - B2 REFLCAA Registration refler - B2 REFLCAA Registration refler - B3 REFLCAA Legar transport ducts drive signal - B5 REFLCAA Legar transport ducts drive signal -	13 A13 System address bus [13] - 14 A11 System address bus [11] - 15 A02 System address bus [2] - 16 A07 System address bus [7] -	131 Re2(A1) Memory address bas [15] - 131 Re2 Well connected - 138 Re2 Well connected - 139 Re2 Well connected - 130 Re2 Well connected - 139 Re2 Well connected - 130 Re2 Well connected - 130 Re2 Well connected - 130 Re2 Well connected - 131 Re2 Well connected - 132 Re2 Well connected - 133 Re2 Well connected - 134 Re2 Well connected - 135 Re2 Reamony connected - 136 Re24 Well connected - 136 Re24 Well connected - 146 Re24 Well connected -	CN126 PWA-F-SYS (CN126) <> COIN CONTROLLER (OPTION)/ COPY KEY CARD (OPTION) Pin No 5 Symbol - Symbol - Active 1 U.S Pinger also signal - 2 PULL-C Tul-Cort mode signal -	J426 PWA-F-DSP (J426) <> PWA-F-KEY (J429) Pin No Symbol Name Active 1 50x15 Baldos scorring signal 5 - 2 10x15 Baldos scorring signal 5 - 3 50x15 Baldos scorring signal 5 - 4 SEX12 Sados scorring signal 2 -	31 A(17) RCM address bus (17) - 32 RCMDET0-0 Download board correction detection signal L 33 S. 1VB +S.1V - 34 LEDDL-0 External RCM loading status signal L
B2 Instruction Opportunity of Calculation of Magnation Section 2017 Section 20	17 A/S System address but [3] - 18 A/S System raddress but [3] - 19 RDX System radd sgrad - 20 CS7-4 Ohp select sgrad (7-A) - 21 CS7-6 Ohp select sgrad (7-A) - 22 CS7-6 Ohp select sgrad (7-A) - 22 CS7-6 Ohp select sgrad (7-A) -		2 FULC Full-color mode signal - 3 MONO-C Mono-color mode signal - BW Black and while mode signal - 5 15.1VA 5.1V FOR V FOR V FOR V -	5 SCN11 Exting scaroing sizeal.	J600 IPC (J600) <>> FINISHER (J598) (OPTION) Pin No Symbol Name Active 1 R0D Receiver serial data - 2 SG Signal ground -
B3 MAMCW-GA Main motor rotational direction signal H: COW B10 MAMCK-1 Main motor reference dock signal D11 MAMCN-GA Main motor ON/CIFF signal H: COFF	23 + 3.2 W + 3.2 V	146 NC Not connected - 147 NC Not connected -	7 NC Not connected CN705 PS-ACC (CN705) <-> PWA-F-SYS (CN122) Pin No Symbol Pin No Symbol Name Active	RETS Button scanning return signal-3 RET6 Button scanning return signal-6 RET9 Button scanning return signal-0	3 TXD Transmitted serial data -
512 5G Signal ground -	27 DAVA3 System data bas 3 26 DAVA5 System data bas 3 29 DAVA7 System data bas 7 20 DAVA7 System data bas 7	146 52 Mercing data bas (b) 147 50251 Mercing data bas (b) 181 50252 Mercing data bas (b) 181 50252 Mercing data bas (b) 182 5262 Egral grant 183 5255 Mercing data bas (b) 184 5027 Mercing data bas (b)	Christip PS-ACCE (IN1765) <>> PMA-F-319 (Chr122) Active Total None tappy endots symp L 2 WH0423 Prose tappy endots symp L 2 WH0423 Prose tappy endots symp L 2 WH0423 Prose tappy endots symp L 4 2 WH0423 Prose tappy endots symp L 4 2 WH0423 Prose tappy endots symp L 4 2 WH0423 Prose tappy endots symp L 5 147248 1121 Prose L	J2 PWA-F-NIC (J2) <> LAN (10EASE-T/100EASE-TX) TFL 0 PAPA 2 (10 PAPA 2 (10 PAPA) Transmitted Stat + Norm 2 (10 PAPA) Transmitted Stat + 3 (20 PAPA) Transmitted Stat	A Sec. Sugna gradu S NaC Noi connecta NaC Noi connecta NaC Noi connecta NaC Noi connecta NaC Noi connecta NaC Noi connectador delecton agrad ControlMo Gaucut
B14 24X01 254 V B15 290070XA. Event cooling fun2 motor drive signal - B16 24X01 254 V B17 24X01 244 V B18 24X01 254 V CN306 PWA-F-LGC (CN306) <> EXIT-MOT, EXIT-FAN-MOT, JOB	31 DAIAHI System data bay 111 32 DAIAHI System data bay 131 33 DAIAHI System data bay 131 34 A20 System data bay 132 35 A16 System address bay 120 36 A16 System address bay 141 36 A16 System address bay 140	153 DQ26 Merrory data twa [20] - 154 DQ27 Merrory data twa [27] - 155 DQ28 Merrory data twa [20] - 156 DQ29 Merrory data twa [20] - 157 r3.3 Vk r3.3 Vk - 158 DQ26 Merrory data twa [20] -	7 +12VA +12 V - 8 SG Signal ground -	2 (107)PA Instantiation state - 3 (102)PA3 Restored data + - 4 FM45 Not used - 5 FM45 Not used - 6 (P02)PM6 Paceiwed data - - 7 F257 Mot used -	(PCI BUSPARALLEL BOARD <> PC IF (IEEE1244.C) With U Non Non 2 BLICT Saya 2 BLICT Saya 2 WAX1 Weat 2 WAX1 Saya
SEPARATOR (OPTION)/OFFSET TRAY (OPTION)/ BRIDGE UNIT (OPTION) 1000 Symbol 1000 Symbol 11 -24402 12 -2440	30 A12 System address bus 12	150 DO61 Memory data bas [61] - 160 DO62 Memory data bas [63] - 161 DO63 Memory data bas [63] -	0 104	7 FAVS Not used - 5 FAVS Not used - 5 NC(MTG) Not connected - 10 NC(MTG) Not connected - 11 SH SHeld -	2 DELECT DARG
	41 AOS System address bus [5] - 42 AO4 System address bus [4] - 43 AO2 System address bus [4] -	163 NO(CLK3) Clock-3 input -	14 2.3.14	12 SH Shead - 13 SH Shead - 14 SH Shead -	5 DA(1/2 Data boxit (2) - 2 DA(1/3) Data boxit (2) - 10 DA(1/4) Data boxit (2) - 10 DA(1/4) Data boxit (2) - 11 DA(1/4) Data boxit (2) -
A4 EXTND-CA Extin moler data signal-C A5 EXTND-CA Extin moler data signal-C A5 F24VCD -24 A5 F24VCD -24 A6 F24VCD -24 A7 F24VCD -24 A8 F24VCD -24 A9 F24 F24 A0 NC NC correlated A0 NC NC correlated	45 ACS0 System oftp select signal-0	160 24.0 170 address (b) . 167 54.1 70 address (b) . 167 54.2 70 address (b) . 168 74.3 NA 753.2 . 168 74.3 NA 753.2 . 168 74.3 NA 753.2 . 1717 PWA-F-SYS (CN117) <> PWA-F-LOC (CN309) .	20 +2.348 +2.3.V - 21 SG Signal ground -	CN206 PWA-F-LRL (CN206) <-> PER-F-LDR (C201) PIn No Symbol Name Active 1 50 Signal ground 2 15 THD 15.1 V 3 10 PER 15.1 V 	14 NNT fint - 15 STB sStobe -
A10 No Not Contraction - A11 No Not Contraction - A11 No Not Contraction - A13 No Not Contraction - A14 No Not Contraction - A15 No Not Contraction - A15 No Not Contraction -	40 52 Signal ground - 50 52 Signal ground - CN101 PWA-F-SYS (CN101) <> FAX (CN701) (OPTION) - INin No. Sambol Name Artise	Pfin No. Lymbol Name Addres A1 45.5 Vol. 7.5 Vol. -5.4 Vol. - A2 C025*0 System conservation - - A3 C025*0 System conservation - - A4 C025*0 System conservation - - A3 C025*0 System conservation - - A4 C025*0 System conservation - - A5 2878*3 System conservation - - A5 2878*3 System conservation - -	23 SG Signal ground - 24 P5.1W - 25 P5.1W +5.1V - 25 P5.1W +5.1V - 25 P5.1W +5.1V - 26 P5.1W +5.1V - 27 P5.1W +5.1V - 28 P5.1W +5.1V - 29 P5.1W +5.1V - 20 P5.1W +5.1V	Challon Print-Funk Challon Print-Funk Address Address PRINT Biggal strategies Strate Address Address 2 PS ND PS 1 V - - - 3 PS ND PS 1 V - - - 4 225 Biggal strategies - <td>IS NOLL N Calaxies In - 17 NAVID O-Audit - 18 HLH Host Logic High - 19 SS Signal grand - 20 SS Signal grand - 21 SS Signal grand -</td>	IS NOLL N Calaxies In - 17 NAVID O-Audit - 18 HLH Host Logic High - 19 SS Signal grand - 20 SS Signal grand - 21 SS Signal grand -
A17 NC Not connected -	Chthill PMLA-5-373 [Chthil] <> FAX [Cht701] [OPTION] This III State Main 2 0x10 Addem to 11 - 3 0x10 Addem to 11 - 4 0x10 Addem to 11 - 4 0x10 RAM to 10 - 5 0x10 RAM to 10 - 6 0x10 RAM to 10 - 7 0x10 RAM to 10 -		CN706 PS-ACC (CN706) <> PWA-F-LGC (CN311), PWA-F-LIS (CN431) Pin to Symbol Sensi ground 1 055 room 4 (CN10) 1 (CN10)	Y Yes War off - 8 200 Eppla priori - 9 PODY-1 Expla priori - 9 PODY-1 Expla priori - 11 S2 Eppla priori - 12 With/C-C PVC with signal - 13 S2 Eppla priori - 14 S2 Eppla priori - 14 S2 Eppla priori - 15 S2 Eppla priori - 16 S2 Topic priori - 16 S2 Topic priori - 16 S2 Topic priori - 17 S1 V -	22 5G Signal ground -
A18 NC 2007 Not connected sensor rigital - B1 NC 2007 ADVC/101 and sensor rigital - B2 NL 1501 ADVC/101 and sensor rigital - B3 RL 1501 ADVC/101 and sensor rigital - B4 S2 Signifigrand - B5 ZMMOV ADVC 104 and sensor rigital -	5 #5.1V5 #5.1V 6 2025 #74X data bas [3] 7 #5.1V8 #5.1V 8 2026 #74X data bas [6] 9 # 3.9#	AF 2152-0 Edites data AH CMCK System conversed non-nonledge argued AH CMCK System conversed non-nonledge argued AH CMCK System conversed non-nonledge argued AH SS System conversed non-nonledge argued AH SS System conversed non-nonledge argued AH SS Spage ground	1 SG Signal grannd - 2 2.5.1/10 2.5.1/10 - 3 RG Power grannd - 4 RG Power grannd - 5 0.24/102 0.24 V -	∠ INTOP://> 0 0 1 13 NC Not used - 14 SHEYME-1 Laser shut doen signal - 15 SC Signal ground - 16 S-1700 - 1.1	26 SG Signal ground - 27 SG Signal ground - 28 SG Signal ground - 29 SG Signal ground - 29 SG Signal ground -
B7 OPCHKI-1 JSPIOCT adament signal	9 3.1 V - 10 2005 PAX dist has [9] - 11 EG Egen grand - 12 2012 PAX dist has [9] - 13 EG Egen grand - 13 EG Egen grand - 13 EG Egen grand -	A13 IRCLK-1 Clock signal reput for image dash tarramitation - A14 SG Signal sprund A15 IRSYNC-0 Hosteenfal sciencing synchronized signal - A16 SG Signal sprund A17 INSYNC-0 Werkell sciencing synchronized signal B1 IWP/NT LIGC brand conserved direction sized	7 PG Power ground - 8 PG Power ground - 9 PG Power ground L	18 SG Signal ground . . . CN207 PWayEyI RI (CN207) <>> PWayEySNS (CN202)	30 SG Signal ground - 31 SG Signal ground - 32 SG Signal ground -
Bit FULL SMP-102 ZMPNOCT cover opening/sciency detection signal L D0 RLTRS-1 ZMP paper jam sense detection signal L D1 ZMP paper jam sense detection signal L D2 RLTRS-1 ZMP paper jam sense detection signal L D3 RLTRS-1 ZMP paper last sense detection signal L D4 ZMP super last sense detection signal L L D5 JPS cover stack sense detection signal L L	14 36 Signal ground - 15 50 Signal ground - 16 50 Signal ground - 17 50 Signal ground - 18 50 Signal ground - 18 50 Signal ground -	B2 SYSHST-O System reset signal L System reset signal L System reset signal DATA(1) EXA Transmitted data bus [0] - E44 EXATA(1) EXA Transmitted data bus [1] -	11 - 3300D1 - 334 V	Pin No Symbol Name Active 1 P5.1VD * 5.1 V - 2 SG Signal ground - 3 BDIN-1 Laser beam position detection signal (H-sync) -	33 52 Mignel grand - 34 52 Mignel grand - 35 52 Mignel grand - 35 52 Mignel grand - 36 FC Peripheral Logic High (Pal-up) H
BV RCIF-G CCC2 paper feed source detaclon signal - BI0 JECA speer feed source detaclon store detaclon speer feed source detaclon speer feed source detaclon store detaclon source detaclon speer feed source detaclon store detaclon store detaclon source detaclon store detaclon source detaclon store detaclon speer feed source detaclon store detaclon source detaclon store detaclon st		15 EXX02 EX Transmitte data tos (2) 16 EXX02 EX Transmitte data tos (2) 17 EXX02 EX Transmitte data tos (2) 18 EXX02 EX Transmitte data tos (2) 191 EXX02 EX Transmitte data tos (2) 191 EXX02 EX Transmitter data tos (2) 191 EXX02 EX Transmitter data tos (2) 191 EXX02 EX Transmitter data tos (2) 191 EXX02 EX Transmitter data tos (2) 191 EXX02 Exercise and tos tos transmitter data tos (2) 191 EXX02 Exercise and tos tos transmitter data tos (2) 191 EXX02 Exercise and tos tos transmitter data tos tos transmitter data tos (2) 191 EXX02 Exercise and tos tos tos tos tos tos tos tos tos tos	18 HTR2ON-1A Side heater ONOFF signal of fuser roller	CN721 PS-HVT (OUT1) <> HVT-MAIN Pin No Symbol Name Active I High-voltage to main needle electrode charger	
B16 NL Not connected -	22 45 FW -0.5 FV - 24 25 Anotage strend - 27 2400 Anotage strend - 27 2400 Anotage strend - 27 2400 Anotage strend - 28 2600 Anotage strend - 29 2400 Anotage strend - 29 2400 Anotage strend - 29 2600 Anotage strend - 20 2600 100 Strends to gip - 29 2000 100 Strends to gip - 20 2000 100 Strends to gip -	viu (DATX(7) (DA Transmitted data bus (7) B11 SG Signal ground B12 IDCLK-1 Clock signal objust for image data transmission B13 SG Signal ground B14 IPCINO Click and the topic round in advance.	10 HTH LON- A. Conterin basics CNVDFF signal of laser roller - 20 HSPDWH-1 AC and power of signal L 21 EG HSpanl ground - 22 F12VF -12V - 23 EG HSpanl ground - 23 EG HSpanl ground - 24 EVE - - 23 EG HSpanl ground - 24 EVE - - 25 HSpanl ground - -	CN722 PS-HVT (OUT2) <-> HVT-GRID Pin No Symbol Name Active 1 High-volage to main charger grid -	
CN307 PWA-F-LGC (CN307) <> EMP-U-SNR, CST-U-TRY-SNR, CST- U-FEED-CLT, NEMP-U-SNR, TRY-MOT, TR-L-CLT, EMP-L-SNR, CST-L-TRY-SNR, CST-L-FEED-CLT,	28 DECS IDC chip saled signal - 29 DD1 FAX data bus [1] - 30 DD2 FAX data bus [2] - 31 DD4 FAX data bus [2] -	B17 +5.3V6 +5.3 V -	25 SG Signal ground (to FUS board) - 26 +3.1VB +3.1V (to FUS board) - 27 +3.1VB +5.1V (to FUS board) -	CN723 PS-HVT (OUT3) <-> HVT-DEV Pin No. Symbol Name Active 1 High-voltage to developer charger bias -	
NEMPL-SNR, CST-U-SW, CST-U-SW Name Active At City Signal grant At City Signal grant At City Diper draver wrphy senacr detection signal St VID + + + + + + + + + + + + + + + + + + +	20 2020 FAX.dbh bau.10 - 31 2025 FAX.dbh bau.10 - 32 2025 FAX.dbh bau.10 - 33 2020 FAX.dbh bau.10 - 34 2027 FAX.dbh bau.10 - 35 2020 FAX.dbh bau.10 - 36 20210 FAX.dbh bau.10 - 36 20210 FAX.dbh bau.10 -	CN118 PWA-F-SYS (CN118) <-> PWA-F-DSP (J427) PIs No Symbol Name Adline 1 XSC1-IA LCD data lation colocit - 2 LDT-IA LCD data lation pulse H 3 WT-IA LCD frame storal H	20 82 Signal ground - 	CN724 PS-HVT (OUT4) <-> HVT-TR Pin No Symbol Name Active 1 Hgb-voltage to transfer charger bias	
A3 - 5, 105 - 14, 117 - A4 5G Signal ground - A5 CUTOP-1 Upger drawer tray-op sensor detection signal - A5 - 105 - 14, 117 - A7 CURDC-38, Upger drawer field clutch drive signal - A7 CURDC-38, Upger drawer field clutch drive signal - 54 - 54 - 	37 DD13 FAX data bas 13 - 38 DD14 FAX data bas 14 - 39 DD15 FAX data bas 15 -	4 YD-1A LCD acarning line alart signal H 5 NVGND Signal ground - 6 BZCNK-0A Buzzer-ON signal L	CN070 P5-ACC (CN70) <-> PWA-FAX (CN702) (OPTION)/ FNISHER (J 599) (OPTION)/WA-F-ADU (CN212) (OPTION)/ MAIN MOTOR PIN No Symbol Name 1 2 2 2	CN725 PS-HVT (OUT5) <-> HVT-SEP Pin No Symbol Name Active 1 High-voltage to separation charger bias	
A/ DURCOVA Opper diseare reade clubbl drive signal - - AS SS Signal ground	40 DIGR Data read signal - 41 DDW Data wrint signal and signal - 42 DMACK DMA schwarksges signal - 43 DLOGO Data wrint signal - 44 RECET Parent signal - 44 RECET Parent signal - 45 DEMOL DMA request signal -	8 LDCLK-1A LED serial clock	1 PG Signal ground - 2 24708 1424 V (to FXX bass) - 3 52 Signal ground - 4 15 TVB 15 V (to FXNEHER) - 5 NC Not connected -	CN726 PS-HVT (OUT6) <> HVT-GB/RGT-ROL Pin No Zymbol High-voluge to Name Active 1 Bin roder bas	
A13 CLTRM-1A Tray-up motor drive signal -	-5 Likki Regulti Light - 46 N/C Net connected - 47 TXVIP FAX with e-p agest - 48 2/C Signal grand - 49 2/C Signal grand - 49 2/C Signal grand - 30 N/C Net connected -	10 LDD 74h and 24 part L 11 LDD 74h and 24 part L 12 LDD 74h and 25 part L 13 LDD 74h and 25 part L 14 LDD 74h and 25 part L 15 LD 74h and 25 part - 16 LD 74h and 25 part - 17 LD 74h and 25 part - 18 L LD 74h and 25 part 19 L LD 74h and 25 part 19 L LD 74h and 25 part 10 L LD 74h and 25 part 11 L LD 74h and 26 part 12 LD 74h and 26 part - 13 L LD 74h and 26 part 14 L 74h and 27 part -	5 Nu Net connectse - 7 P-34 Signal ground - 8 >24VED5 >24V (Is FINGHER) - 7 P-34 Power ground -	1 Ion roler bias CN213 PWA-F-ADU (CN213) <> ADU-TRL-SNR PIn No Symbol Name Active IGG Bianal around BigG bianal around	
A15 24V01 25L V 81 5L Bipal ground - 82 CLEBH*1 Loare drawn mryly ansard detection agreal - 83 R3/VB 4-X1 - - 84 20 Signal ground - - 84 20 Signal ground - - 84 51/VB 4-X1 Signal ground - 84 51/VB 4-X1 - -	CN102 PWA-F-SYS (CN102) <-> PWA-F-SLG (CN4)	15 170.118	11 C34V05 C34V (in A00) - 12 C34V05 C34V (in A00) - 13 PG Power ground - 14 PG Power ground -	2 AOUT. ACU wit sensor detection signal	
187 1-21 V	Pin No Symbol Name Active 1 SYSET System reset signal - 2 SUTS Transmission exabled - 3 STIND Transmission regular signal - 4 SPRD Received Std. data - 5 SPRTS Transmission regular signal -	22 SUN(1) Kay controller 20 provinted area cas - 23 SUN(1) Kay controller 210 received ansist data - 24 SG Signal ground - 25 UID-1A LCD display data -	15 ≥34/UD1 ≥34/U (is main mobor) - 16 ≥34/UD1 ≥34/V (is main mobor) - CN708 PS.ACC (CN708) <> PWA-F-SLG (CN6)/	CN214 PWA-F-ADU (CN214) <> ADU-TRU-SNR Pin Mo Symbol Name Active 1 Symbol Symbol - - 2 XEUTU XEU Instruction agring - - 3 ¥5.11V - - -	
B11 15.11/B #5.11/F B12 S2 Signal ground - B13 CUSW-0 Upper dewart delection signal - B14 S2 Signal ground - B15 CUSW-0 Lower dewart delection signal - B14 S2 Signal ground - B15 CUSW-0 Lower dewart delection signal -	S 2011 S2. Characterization agent agent S 2011 S2. Characterization detection signal - S 2011 S2. Characterization detection signal - S 2011 S2. Characterization detection signal - S 2011 S2. Characterization detection signal S 2011 K. Chook signal for sciencing data framerisation S 2011 K. Chook signal for sciencing data framerisation -	26 L02-1A LC2 display disp-2 - 27 L01-1A LC2 display disp-1 - 28 L02-1A LC2 display disp-1 - 28 L02-1A LC2 display disp-1 - 29 S2 Signal gistrul - 30 LC2EN-1A LC2 enable signal H	CM/08 PS.ACC (CM/08) <> PMA.+SLG (CM6) RADE (CM1) (OPTION) Pin No Symbol 1 Social Symbol 2 Social Symbol 3 Social Symbol 2 Social Symbol	CN215 RWA 5 ADIL (CN215) CO ADIL MOT	
***** *************************	10 SHOEN Horizontal sciencing synchronized signal - 11 SZ Signal ground - - 12 SG Signal ground - - 13 SCD7 Scanning data [7] - - 14 SCC6 Scanning data [6] - -	30 LCDEN-LA LCD enable segue H CN119 PWA-F-SYS (CN119) <> USB DEVICE H PIn No Symbol Name Active 1 VEUS Name Active 2 Dr. USB sended data - 3 Dr. USB related data -	2 2.5 100 graft grants - 4 4.5 10.5 10.5 4 4.5 10.5 10.5 5 4.5 10.5 10.5 7 75 Spart grants - 8 10.5 Spart grants - 9 12.52 23.5 -	The Ise Topologic Name Action 0	
	13 SCOT Sconing data [7] - 14 SCOT Sconing data [8] - 15 SCOT Sconing data [8] - 16 SCOT Sconing data [8] - 17 SCOT Sconing data [8] - 18 SCOT Sconing data [8] - 19 SCOT Sconing data [7] -	4 BG Signal ground -		CN217 DWA E ADU (CN217) C> ADU SET SW	
	20 SC00 Sowning data (0 -	CN120 PWA-F-SYS (CN120) <> USB HOST Pin No Symbol Name Active 1 VUUS +51.V - - 2 D- U2S setal data - - 3 The U2B setal data - -	13 +12/V - 14 52 Signal ground - 15 NC Not connected - 16 NC Not connected -	Texts Symbol Symbol Address Ad	
		3 DF Usb sensi class - 4 25 Signal ground - 5 VBUS #5.1 V - 6 D- Usb sensi class -	17 GC Signal grand - 16 SG Signal grand - 15 24VEN 24 V - 20 24VEN 24 V - 21 PQ Power grand -		
		7 D* Dos tenicos - 5 SG Signal ground -	22 PG Power grand - 23 #24VDS #24 V (Is RADF) - 24 #24VDS #24 V (Is RADF) -		



10.5 Connector Table (e-STUDIO202L/232/282)

10.5 Connector Table (e-ST					
CN301 PWA-F-LGC (CN301) <-> COIN CONTROLLER (OPTION)/ COPY KEY CARD (OPTION) TEN No. 1 Sector	CN310 PWA-F-LGC (CN310) <-> PFP (OPTION)/LCF (OPTION) Pin No Symbol Name Active At CLXC-1A PPTILCF down control labb laged (C) -	CN105 PWA-F-SYS (CN105) <> DDR DIMM Plin No Symbol Name Active 1 \V62F Reference voltage -	CN115 PWA-F-SYS (CN115) <> USB CONNECTOR (DEVICE) Pin No Symbol Name Active 1 V0US ±5.1 V -	CN1 PWA-F-SLG (CN1) <-> PWA-F-CCD (CN14) Pin No Symbol Name Adlive 1 <5.110	J422 PWA-F-DSP (J422) <> LCD PANEL Pin No Symbol Name Active 1 YD Y-axis teach position detection terminal-D -
Att +24 Vbz +24 V A2 L1RON Total counter ON signal - A3 C1RON Total counter ON signal L A4 MC RUN MC nu signal L A4 MC RUN MC nu signal L	A2 CLKR-1A PPPLCP driver control lab.r light(0) - A3 SCSWC-0A PPLCP server delection pod enable algred(C) - A4 DRV-1A PPLCP driver control algred - A5 DRVe-1A PPPLCP driver control algred - A5 DRVS-1A PPPLCP driver control algred -	2 DD0 Memory data bas [0] - 3 SG Signal ground - 4 DD1 Memory data bas [1] - 5 DQ50 Data strobs signal [2] -	2 D- USB serial data - 3 D+ USB serial data - 4 SG Signal ground -	2 e5.1VB +51V - 3 SG Signal ground - 4 SG Signal ground - 5 CCORS CCO R5 signal -	RL X-asis louch position detection terminel- XR X-asis louch position detection terminel- VU Y-asis touch position detection terminel- VU Y-asis touch position detection terminel-
A5 PG Power ground -	A7 DRV4-1A PTPLCF driver control signal - A5 DRV3-1A PTPLCF driver control signal - 0000-1A PTPLCF driver control signal -	5 DC63 Data whole signal [0] - 6 DO24 Mercy data bia [2] - 7 VD0 +2,5 V - 8 DO23 Mercy data bia [2] - 9 NC Not connected - 10 NC Not connected -	CN117 PWA-F-SYS (CN117) ←> HDD-FAN-MOT Pin No Symbol Name Active 1 +12V - - 2 Signal ground - -	2 CCD CP Signal ground - 6 SZ Signal ground - 7 CCDCP CCD CP signal - - 8 SZ Signal ground - 9 CCDSP1 CCD SH signal - - 10 SZ Signal ground -	J423 PWAF-DSP (J423) <> LCD BACK LIGHT Pin No Symbol Name Active 3 CC/L+ High-rodiagn terminal
A7 BKCTR C37CTR signal mode counter CN signal and CTR C37CTR signal A5 MVCTM Mono-color mode counter CN signal PLCTR Mono-color mode counter CN signal and reverse B1 PLCTR Molecolor mode counter CN signal and reverse side counter signal S2 S5 Signal ground CTR	All DRVI-1A PPINCP development agent - All DRVI-1A PPINCP development agent - All DRVI-1A PPINCP development agent - All PRST-0 Reset agent - All Structure	11 SG Signal ground - 12 DG8 Merrory data bus (8) -	Image product Number of the second seco	11 CCDCK2B CCD shift clock-2B - 12 SG Signal ground -	2 TRC Trippending terminal 3 CC/L High-voltage terminal 1 J424 PWA-F-DSP (J424) <> LCD PANEL
B3 TSZE3 Paper size signal-3 - B4 TSZE2 Paper size signal-2 - B5 TSZE1 Paper size signal-2 -	A13 15,110 15,110 - A14 SG Signal ground - A15 124/01 x34 V - A16 r24/01 x34 V - B1 PG Power ground -	13 DGB1 Diata strobe signal [1] - 14 DGB1 Diata strobe signal [1] - 15 VDD #2.5 V - 16 CK1 Clock-1 input - 17 ICK1 Differential clock-1 input -	1 1P Not table - 2 RNAG Not table - 3 SPMU-5 Not table - 4 SPMU-5 Not table - 5 SPMU-6 Not table -	13 CCDCH2A CCD shift clock-2A - 14 SG Signal ground - 15 CCDCK1A CCD shift clock-1A - 16 SG Signal ground - 17 CCD-EVEN Signal ground - 17 CCD-EVEN CCD even data -	Pin No Symbol Name Active 1 TRAME LCD scamping ites start signal - 2 LAXO LCD stati size pulse - 3 CP LCD data is membraised code. -
B5 152/201 Paper atom signal-1 - B5 152/201 Waper atom signal-0 - B7 +5, TVB +5, 1 - B5 CTRONT2 Copy key card rCoin counter judgment signal -	B2 PG Power grand - B3 S2220-0A Sam data hau-0 - B4 S2221-7A Sam data hau-1 - B5 S2222-0A Sam data hau-2 -	17 ICK1 Differential clock-1 liput - 16 SG Signal ground - 19 DO10 Merrory class bas (10) - 20 DO11 Merrory class bas (11) - 21 CM20 Clock enable signal -	5 8/94-6 Notised - 6 8/94-2 Notised - 7 8/940-7 Notised - 8 8/94-4 Notised - 9 8/940-6 Notised -	18 SZ Eigeni ground - 19 CCD-CDD CCD odd data - 20 SZ Eigeni ground - 21 AG Analog ground -	4 SG Signal ground - 5 +5.11X - - 5 85.11X - - 7 WEE Ground -
CN302 PWA-F-LGC (CN302) <-> KEY COPY COUNTER (OPTION) Pin No Symbol Name Active 1 NC Not connected - 2 SG Sizenal pround -	B1 SE22-04. Ban dah bas-3 - B5 SE22-04. Ban dah bas-3 - B7 RET50-54. Byrk dab bas-3 - B7 RET50-54. Byrk dab bas-3 - B7 RET50-54. Byrk dab bas-3 - B7 RET50-54. PFNLCP server databas signt - B11 RET51-54. PFNLCP server databas signt - B11 RET51-54. PFNLCP server databas signt -	10 CCC C.5 Y mpl 11 C.C. C.S. Y mpl 15 C.C. Starting and the start 16 S.C. Starting and the start 10 COC Waters of able to the start 20 COC Coc 21 COC Coc 22 COC Waters of able to the start 23 COC Coc 24 COC Coc 25 COC Coc 24 COC Coc 25 COC Marce of able to the start 26 COC Marce of able to the start 25 COC Marce of able to the start 26 COC Marce of able to the start 26 COC Marce of able to the start	10 BPAU-5 Not used - 11 LEEDT GRNP Not used - 12 LEED2 VELP Not used -	10 Disconstrutt PRO particular Material - 00 Construct PRO particular Material - 00 Construct PRO particular Material - 00 Construct PRO particular Material - 01 Construct Segregation - 02 Construct Construct - 03 Construct - - 04 Construct - - 05 Construct - - 04 Construct - - - 05 Construct - - -	7 Vet - 8 5.01PF LCD stable signal - 9 05 LCD display data-0 - 10 D1 LCD display data-1 - 11 D2 LCD display data-2 - 13 LCD display data-2 -
2 BG Signal ground 3 KCTRC-0 Key capt counter/Copy key card connection 4 124/02 R24	Bit HETIS-CA. HPVLCF wave details ranged - Bit BitS-SC. HPVLCF wave details ranged - Bit BitS-SC. HPVLCF wave details ranged - Bit BitS-SC. HPVLCF wave details ranged - Bit REISS-SC. HPVLCF wave details ranged - Bit REISSCA. HPVLCF wave details ranged in signal in signal in signal in signal in signal in type. - Bit REISSCA. HPVLCF wave details ranged in signal in signal in signal in type. - Bit REISSCA. HPVLCF wave details ranged in signal in signal in type. - Bit REISSCA. HPVLCF wave details range wave details ranged in type. - Bit REISSCA. HPVLCF wave details range wave	27 AG Memory address bus [9]	13 ENABLEDIS- Males Weekess LAN enable signal - 14 LED2 YELN Not used - 15 CHSGND Signal ground - 16 END Hol used -	CN2 PWA-E-SLG (CN2) <-> PLTN-SNR HOME-SNR	12 D3 LCD display data-3 - J425 PWA-F-DSP (J425) <> PWA-F-KEY (J428) Pin No Symbol Pin No Symbol Name Active 1 LUD*-1 L L
6 NC Not connected -	B14 RETSTOA IPPLCF server detection signal - B15 SCSMB-0A IPPLCF server detection pot enable signal (B) - B16 LCCNT-0 LCF connection detection signal L	28 No memory sources conjunction - 30 VCD +2.5 V - 31 DQ19 Memory address bus [10] - 32 AS Memory address bus [5] - 33 DQ24 Memory address bus [5] -	16 RSV Not used - 17 NUTS# Interrupt request-35 - 18 #S.TVA #S.1 V - 19 #S.23.V #S.2 V - 20 NUTA# Interrupt request-A -	Pin No Symbol Name Active 1 SG Signal ground - 2 PETN-NA Petalain sense distribution signal - 3 1597 451 W - 4 907 Even annual -	Pin No symbol Adve 1 LDPC-1 LED driver output-1 L 2 LDPC-2 LED driver output-2 L 3 LDPC-4 LED driver output-4 L
CN303 PWAR-LGC (CN303 <> LP-EN3, AT INK-SNK, THMS-URM, MAIN-SW (RESET), TEMPIHUMI-SNK, FRNT-COV-SW (e-STUDIO2021) Pin No Symbol Name Active	Pin No Symbol Name Active	Book Construction in the second	20 INTA# infarrupt request-A - 21 RSV Not used - 22 RSV Not used - 23 SG Signal ground - 24 RSV Not used -	4 50 Signal ground 5 HSME-1A Cantage home position sensor detection signal 6 +50 +51 V	4 LUFC-5 LED dhwr adgul 6 L 5 LUFC-5 LED dhwr adgul 7 L 6 LUFC-5 LED dhwr adgul 7 L 7 LUFC-5 LED dhwr adgul 7 L 8 LUFC-5 LED dhwr adgul 7 L
AT INTERVAL PO CONSIGNATIONICON SIGNATION CONSIGNATION CONTRACTOR	1 POMCK-0 Polygonal motor reflemence dock signal L. Normal 2 POMCK-0 Polygonal motor CNVCFF signal L. Normal 3 POMCN-0 Polygonal motor CNVCFF signal L: ON 4 PG Polygonal motor CNVCFF signal L: ON 5 r QVU1 r 2V V	38 VED +2.5 V - 39 DO26 Memory data bas [20] - 40 DO27 Memory data bas [27] - 41 A2 Memory data bas [11] -	24 +3.39A +3.3 V 25 CLK PCIdod 25 R51# Resultional 27 SG Signal grand	CN7 PWA-F-SLG (CN7) <-> RADF (CN2) (OPTION) Pin No Symbol Name Active 1 ACK RADF account does stress - 2 SPCATE Name -	9 LDFC-10 LED driver output-10 L
Add Add-105-1A Non-of-contrainmon delaction signal Analog Add >24V01 >24V (Add-5ontrainmon delaction signal Analog Add >25V01 >25V (Add-5ontrainmon delaction signal Analog	CN313 PWA-F-LGC (CN313) <-> PWA-F-LRL (CN204)	41 A2 Memory address bus [1] - 42 SG Bigrang ground - 43 A1 Memory address bus [1] - 44 CBO Not used - 45 CB1 Not used -	20 #3.104 #3.3.V - 23 REGP Data request signal - 33 GNT# Grant - 31 #3.3.W #3.3.V -	1 ACK INZE* advancedup signal - 2 SCAC INZE* advancedup from INZEF* - 3 INZD Nocener/a sinki disia - 4 INZD Nocener/a sinki disia - 5 INZD Nocener/a sinki disia - 6 INZ Signal graund - 7 IDF+ACK Advancements signal room NAZIF* -	10 LDFC-11 LLD drive capbe11 L 11 LDFC-12 LD drive capbe12 L 12 LDFC-13 LD drive capbe12 L 14 LDDC-14 LD drive capbe13 L 14 LDDC-15 LD drive capbe139 L 15 LDDR1 LED commo drive sign4-6 H 16 SD Spage spared - 16 SD Spage spared -
A9 5G Signal ground - - Signal ground - 5G Signal ground - 51 R515W-5A Reset agraf to the main switch H 82 (2010) - 124 V -	PIN No Segmetics Name Accive 1 SG Segmal ground - - 2 155Q 25,11 V - - 3 155Q 25,11 V - -	46 VCD +2.5 V - 47 DOS6 Data stroke signal [8] - 48 A0 Memory address bin [0] - 49 CD2 Not used -	32 5G Signal ground - 33 AC(31) PCI address/data bus [31] - 34 PIME# +3.3 V - 35 AC(25) PCI address/data bus [28] -	6 BG Elignal ground and	1426 PWA/F/DSP (1426) <>> PWA/F/KEY (1429)
B3 +5.1VB +5.1V B4 HMS-1A Humidity sensor signal Analog B5 SG Signal ground B5 TEMP-1 Remperature sensor signal Analog B7 TEMP-1 Vince cover opening/closing switch signal	S WHUN-1 Later power control signal (whenence voltage) Signal (see the second signal (H-sync) BON-1 Later beam position detection signal (H-sync)	Visit Visit Signal ground - 50 Signal ground - 51 CB3 Not used - 52 BA1 Bank saled-1 - 53 DQ32 Memory data bus [52] -	36 R55V Not used - 37 5G Signal ground - 38 AC(30) PCI address/data but [30] - 38 AC[20] PCI address/data but [30] - 39 AC[20] PCI address/data but [30] - 30 AC[20] PCI address/data but [30] - 40 153.3V PSI address/data but [30] - 40 157.3V PSI address/data but [30] -	CN9 PWA-F-SLG (CN9) <> INV-EXP (CN1) PIn No Portfol Name Active Portfol Portfol Name Active	1 SCN15 Button scarning signal-5 - 2 SCN14 Button scarning signal-4 - 3 SCN15 Button scarning signal-3 -
B2 PLUVSV-1 Profe Cover opening costing sween signal - B5 SG Signal ground - B5 NC Not connected - B10 NC Not connected -	8 SC Signal ground - 9 PUD1-1 Laser image data (differential signal +) - 10 PD1-1 Laser image data (differential signal +) - 10 PD1-1 Laser image data (differential signal +) - 10 PD1-0 Laser image data (differential signal +) - 12 WWMPC-0 APIC write signal - - 13 eV type e-1 -	53 DUJ2 Wernory state bas [52] - 54 VDD +25 V - 55 DQ33 Merrory data bas [33] - 56 DQ54 Data arcbas signal [4] - 57 DQ34 Merrory data bas [54] -	40 + 3.10A + 3.3 V	1 PG Power ground - 2 PG Power ground - 3 LMPCNA Exposure lamp ON signal H 4 r24VD4 r24V - 5 r24VD4 r24 V -	4 SCN12 Button scinning signal-2 - 5 SCN11 Button scinning signal-1 - 6 RETO Button scinning situm signal-0 - 7 RET1 Button scinning situm signal-1 - 8 RET2 Button scinning situm signal-2 -
CN303 PWA-F-LGC (CN303) <-> LP-ERS, ATTNR-SNR, THMS-DRM, MAIN-SW (RESET), TEMP/HUMI-SNR, FRNT-COV-SW	13 <5.1 Yes	57 DQ34 Memory data bas [54] - 58 Signal genuend - 59 BA0 Bank aslect-0 - 60 DQ35 Memory data bas [50] - 61 DQ40 Memory data bas [40] -	45 CBE(3) Contract and byte enable-3		9 RET3 Button scanning return signal-3 - 10 RET6 Button scanning return signal-9 - 11 RET9 Button scanning return signal-9 -
(e-STUDIO232) Pin No Symbol PJ connection Address All ArSCNT- PJ connection detection signal L A2 EREU-PA Exposure tamp drive signal	17 - 45100 - 4510 - 18 53 Signal ground -	62 VED +2.5 V - 63 WE Data arts enable signal - 64 DOH Memory data bus [41] - 65 ICA5 Column advess shoes signal - 65 SCA Signal ground -	47 A2(22) PCI and/maximalian but 23 - 46 DDEL Writesan UAk UBander algonal - 40 SDE Writesan UAk UBander algonal - 50 SSG algonal growth - - 51 A2(21) PCI address Mak bus 21 - 51 A2(21) PCI address Mak bus 21 - 52 A2(22) PCI address Mak bus 21 -	Image: Circle (Circle) <> SLG+RANMOL, APS1 (A4 SERIES ONLY), APS2, APS3, APS4, APS5 Pin No Symbol 1 NC NoC Not connected 2 NC NoC Not connected	CN213 PWA-F-ADU CN213 <> ADU-TRL-SNR Pin No Symbol Name Adive 1 Signal grand - - 2 ACUPL Adil set sensor delection signal - 2 Normal - -
A3 +24Vp1 +24V A4 PG2 Power ground A5 A15-1A Auto-tomer sensor detection signal Analog A5 A15-1A Auto-tomer sensor detection signal Analog A5 >24Vp1 >24V V (auto-tomer sensor)	CN316 PWA-F-LGC (CN316) <> DOWNLOAD JIG (LGC) Pin No Symbol ROM data bas () 2 000 ROM data bas () 3 004 ROM data bas () 	66 SG Signal ground - 67 DOGS Data sirbos signal [3] - 68 DO42 Memory data bas [42] - 69 DO43 Memory data bas [43] -	52 AC(22) PC address/data bus [22] - 53 AC(19) PC address/data bus [19] - 54 AC(22) PC address/data bus [19] - 55 SG Signal ground - 56 SG Signal ground - 57 AV(22) PC address/data bus [20] - 58 PVR Parity - 57 SU(21) PC address/data bus [17] -	NV. NVC corrected	3 12110 12110
A7 ATSVR-1A Add-town xensor delection signal Analog A8 DR1H-1 Drum hemiator delection signal Analog A9 SG Signal ground - A10 SG Signal ground - A10 MC Met movement	3 Cl(4) ROM data bus (4) - 4 Cl(2) ROM data bus (4) - 5 RO-2 ROM data read signal - 6 A(5) ROM address bus (6) -	70 VCD +2.5 V - 71 NC Not connected - 72 DO48 Memory data bus (40) - 73 DO40 Memory data bus (40) - 74 SG Signal ground -	58 AD[18] PCI address/data bus [18] - 59 C685(2)# Command and byte enable-2 -	7 -400075 -5 8 49000 - 8 49000 - 10 -500975 -519 11 240575 -519 12 2500975 -61904 12 2500975 -61904 14 2400975 -101 15 2600985 Signal strated 16 2400985 -101 17 249512 Automatic original distriction service signal 16 2400985 -101 17 249512 Automatic original distriction service signal 16 2400985 -101 17 249512 Automatic original distriction service signal	CN214 PWA-F-ADU CN214 <-> ADU-TRU-SNR Pin No Symbol Name Active 1 Sci Signal ground - 2 ACUU ACU enfrance sensor detection signal - 3 activity - -
A11 NC Not connected - B1 NC Not connected - B2 RSTSW-3A. Reset signal to the main switch H B3 r24VD1 r24V -	7 A/2 FROM address bus (2) - 8 A/4 FROM address bus (6) - 9 A/61 FROM address bus (6) - 10 A/81 FROM address bus (6) - 11 A/101 FROM address bus (10) -		61 #07# #1000 fead ground - 62 \$5 Signal ground - 63 #33W #533V -	11 AV-5.3 Automatic crightal detection turnion signal - 12 SG Bignal ground - 13 +SUM75 +5V - 14 AP52 Automatic original detection sensor signal -	CN215 PWA-F-ADU (CN215) <-> ADU-MOT Pin No Symbol Name Adive
B4 +5.1VB +5.1V B5 HMS-1A Humidity sensor signal Anabo B5 SG Signal ground B7 TEMP-1 Semperature sensor signal Anabo B5 FCO/SM-1 Front cover coembackaines switch signal	11 A[10] Holes adores tos [10] - 12 A[14] ROM address tos [12] - 13 A[14] ROM address tos [14] - 14 A[16] ROM address tos [16] - 15 A[10] ROM address tos [16] -	77 VCD +2.5 V - 78 D0256 Class shokes signal [8] - 73 D0250 Memory data bas [50] - 80 D0251 Memory data bas [51] - 81 SG Signal ground - 82 VCD-ID NG used -	64 FPOMDE Cycle forms L 65 CLXMUN# Signal ground - 66 FRDY# Nargel mady L 67 228198 System flows L 68 STOP# L L 69 StOP# L L	Construction of the second secon	Pin No Symbol Name Active 1 24VU2 24 V Active Active <t< td=""></t<>
B8 FCOVSW-1 Front cover opening/closing switch signal - B5 SG Signal ground - B10 NC Not connected - B11 NC Not connected -	A(16) MOM INDExecting (16) - 16 SG Signal ground - 17 SG Signal ground - 18 D(1) ROM data bus (1) - 19 D(3) ROM data bus (2) -	82 VDO-ID Not used - 83 DOS68 Memory data bas [50] - 84 DOS7 Memory data bas [57] - 85 VDD +2.5 V -		CN19 PWA-F-SLG (CN19) <> SCAN-MOT Pin No Symbol Name Active 1 SCMM38 Scan motor drive signal-8 -	6 +24VD2 +24 V
CN303 PWA-F-LGC (CN303) <> LP-ERS, ATTNR-SNR, THMS-DRM, MAIN-SW (RESET), TEMP/HUMI-SNR, FRNT-COV-SW	19 D(2) ROM data bas (2) - 20 D(2) ROM data bas (2) - 21 D(2) ROM data bas (2) - 22 C53-0 Chip select agrad L 24 U(1) ROM addees bas (1) -	Image: Description Image:	73 CBE(1)# Command and byte enable-1 - 74 SG Sognal ground - 75 ACP14() PC1 address ddata bus [14] - 76 ACP14() PC1 address ddata bus [14] -	Pin No Symbol Name Adven 1 55/34835 Scan motor drive signal-0 - 2 124/024 -24 - 3 55/34855 Scan motor drive signal-0 - 4 55/34845 Scan motor drive signal-0 - 5 124/024 -24/02 -	CN217 PWA-F-ADU (CN217) <> ADU-SET-SW Pin No Symbol Name Active 1 SG: Signal ground - 2 COVSW ACU opening/dosing detection signal -
(e-STUDIO282) Name Active Plin No: Symbol Output Active A1 ATSCN1-1 PU connection detection signal L A2 EPGLP-GA Exposure lamp drive signal L	24 A(3) ROM address bus (3)	90 WP Net connected - 91 SDA Presence-detect serial data - 92 SCL Presence-detect serial dota - 93 SG Signal ground - 94 DOH Mercor data bas H1 - -			Pin No Symbol Name Active 1 TXCUT Transmitted TAX clas - 2 TXON Received TAX clas -
Az LPAD-VM System	26 A/7 ROM addees has 7 27 A/9 ROM addees has 7 28 A/11 ROM addees has 10 29 A/11 ROM addees has 11 20 A/12 ROM addees has 11 20 A/12 ROM addees has 11 20 A/12 ROM addees has 11 21 ROM addees has 11	94 DQ4 Memory data bas [4] - 95 DQ5 Memory data bas [5] - 96 VD0 +2.5 V - 97 DM5 Cata write mask signal [0] - 98 DQ5 Memory data bas [6] -	81 AQ[10] PCI address/data bus [10] - 82 Sid Signal ground - 83 Sid Signal ground -	Number Name Active 1 MD1(2) ROM data bus (0) - 2 MD1(2) ROM data bus (2) - 3 MD1(4) ROM data bus (4) - 4 MD1(4) ROM data bus (4) -	
A/ ALSVR-IA ALSO-DIFF senior detection signal Analog AS DRTH-1 Drum hemialor detection signal Analog AS SG Signal ground -	22 RCMOT-6 Download board connection detection aignal L 33 r5.1V8 r5.1V 34 LED-0A External RCM loading status signal L	93 DOF Memory data bus (7) - 92 DO7 Memory data bus (7) - 100 SG Signal ground - 101 NC Not connected - 100 NC Not connected -	84 AC(8) PCI address/data bus [9] - 85 AC(8) PCI address/data bus [9] - 86 C68(0)# Command and byte enable-0 - 87 AC(7) PCI address/data bus [7] - 87 AC(7) PCI address/data bus [7] -	- web/yei	7 RLADJI MODEM select agreel 8 RLADJZ MODEM select agreel 9 RGCLK Ring clock -
A10 SG Signal ground - A11 NC Not connacted - A12 NC Not connacted - B1 CPSW2-0 Not med - B2 SG Signal ground -	CN317 PWA-F-LGC (CN317) <> IPC BOARD (OPTION) Pin No Symbol Name Active 1 SS Signal ground	103 NC Not connected - 104 VCD +2.5 V - 105 DG12 Memory data bus [12] -	88 = 5.3 NA = 5.3 V 82 = 7.3 NA = 5.3 V 92 = AQ[8] = PCI address/data bus [5] 91 = AQ[9] = PCI address/data bus [5]	Didat Doration for equilation	10 AG Analog ground - 11 -12VB -12 V -
BZ Signal ground - BX BSTRW-GA, Resard signal to the main switch H B4 FATWO-T FATW B5 FATWO-T FATWO-T B5 FATWO-T FATWO-T B5 HME-TA. Humidity sensor signal Analog B7 SA Signal ground -	3 ADD System address bus [3]	168 DO13 Memory data has 13 - 107 DO11 Data with remain signal [1] - 108 DO14 Data with remain signal [1] - 109 DO14 Data with remain signal [1] - 109 DO14 Data with has 14[4] - 101 DO15 Memory data has 14[5] - 111 DO25 Code wrable signal - 112 VO26 2.5 V error -	80 AQ[4] VCI allowastida has [4] - 91 ROV Roi statu - 92 ROV Roi statu - 94 AQ[2] VCI allowastida has [1] - 94 AQ[2] VCI allowastida has [1] - 95 AQ[2] VCI allowastida has [1] - 97 RAVAL S.V - 97 RAVAL S.V - 96 AQ[1] VCI allowastida has [1] -		12 AVA AVAILOG gistrine - 13 +11/8 +12/V - 14 +24/V +24/V - 15 354/z Hing clock - 16 AVAIL Availog gisurd - 17 Climeter Hing clock - 17 Climeter Hing clock -
B5 PRO-1A Planting tender type Port Signal ground - Signal ground - B5 TEUP-1 Sergenerature sensor signal Analog B9 PEO/SW-1 Front cover openingloasing switch signal L B10 SG Signal ground -	4 Abd Application above (p) - 5 Abd4 System abdress bus (A) - 6 Abd5 System abdress bus (B) - 7 1005 System data bus (B) - 8 1002 System data bus (B) - 9 1004 System data bus (H) -	110 DQ15 Memory data bas [15] - 111 CRC1 Clock must signal - 112 VDD +2.5 V - 113 NC Not connected -	S6 AZ[0] PCI addressidata bus [0] - 27 -5.1 W - - 28 PESV WHP Not used - 29 AZ[1] PCI addressidata bus [1] - 20 SSV WHP Not used -	16 SG Signal ground - 17 SG Signal ground - 18 MDT(1) ROM data bus (1) - 19 MDT(2) ROM data bus (2) - 19 MDT(2) ROM data bus (2) -	17 Constraints of the second sec
B11 Nu Not connected - B12 Nu Not connected -	9 IPO4 System data bus (4) - 10 IPO5 System data bus (5) - 11 ISG Signal ground - 12 WE WHs signal - 13 CSIP24A IPC dispatch signal -	114 DO20 Memory data bus (20) - 115 A12 Memory address bus (12) - 116 SG Signal ground - 117 DO21 Memory address bus (21) - 118 A11 Memory address bus (11) -	100 RSV WIP Not used - 101 SG Signal ground - 102 SG Signal ground - 103 AC SYNC Signal ground - 104 MOSEN - Control	19 MOT[3] ROM data bas [] - 20 MOT[6] ROM data bas [] - 21 MOT[7] ROM data bas [7] - 29 PK4_C5 Objective State Signal - 23 PK4_C71 DL adfress bas [1] - 24 PK4_D713 DL adfress bas [2] -	21 INVISION Failure and step boars to be again - 22 EXTHOOK Subsental telliphone hook signal - 23 #5.1VM #5.1V - 24 AG Analog ground - 25 #9/M #5.V -
SID-COV-SNR, SFB-SIZE-SNR, SFB-SNR, SFB-FEED-CLT, SFB-SOL, SFB-FEED-SNR-2	12 W/W Write signal - 13 CCDP2AL W/C top saled signal - 14 CCDP2AL W/C top saled signal - 15 BYCEWA BYC top saled signal signal - 16 BYCE BYCE top saled signal signal - 17 H5.1 VB - - 16 AOT System saddress tous [1] -	119 DM2 Data write mask signal [2] - 120 VOD +2.5 V - 121 DO22 Memory data bus [22] -	104 MSDEN IVC1 buil 05 MHz clock enable signal - 105 AC SDARA IN Not used - - 106 C UT Signal ground - 107 AC SIT CLA: Signal ground -	24 PML013 DNL address bus [3] - 25 MAD[5] ROM address bus [5] - 26 MAD[7] ROM address bus [7] - 27 MAD[7] ROM address bus [7] - 26 MAD[7] ROM address bus [7] - 27 MAD[7] ROM address bus [7] -	20 -200 -12 26 -12 -12 27 AG Analog ground - 28 +12 - 29 +24/B +24 -
Pin No Symbol Name Active A1 ASMI155A ASU motor drive signal 0 - A2 ASMI15A ASU motor drive signal 0 - A3 ASMI15A ASU motor drive signal 0 - A3 ASMI15A ASU motor drive signal 0 - A4 ASU Inclor drive signal 0 - - A4 ASU Inclor drive signal 0 - -	17 r-5.116 r-6.116 - 18 AO1 System address bos [1] - 19 AO3 System address bos [2] - 20 AO3 System address bos [2] - 21 AO3 System address bos [2] - 21 AO3 System address bos [7] -	12: A6 Memory asterna ton [4] - 12: DO23 Memory asterna ton [4] - 14: DO2 Memory asterna ton [6] - 14: DO2 Memory asterna ton [6] - 15: DO26 Memory data ton [6] - 17: DO26 Memory data ton [6] - 17: DO26 Memory data ton [6] - 17: DO26 Memory data ton [6] - 18: VO0 +23 <v< td=""> - -</v<>	107 AC BT CLK. Signal ground 108 AC CODEC Signal ground 109 AC CODEC Signal ground 109 AC CODEC Signal ground 109 Dogs Signal ground	D D Deparation 1 0.00 Control = 1 1 0.00 Control = 1 1 0.00 Control = 1 2 Control = 1 2 Control = 1 2 Control = 1 2 Control = 1 3 Control = 1 4 Control = 1 <	20 DPVI Power ground - 20 PDVI Power ground - CN502 FAX (CN502) <> NCU (2) (OPTION) - Pin No Symbol Transmitted FAX data -
AG ADUVIC-1 ADU motor current control reservice votage - AG ADTR2-1 ADU exit sensor detection signal - AT 5.1VB +5.1 V -	23 FO3 System data bas [1]	126 DO258 Memory data bas [20] - 127 DO259 Memory data bas [20] - 128 VCD +2.5 V - 129 DMO 2.5 V - 129 DMO Data write mask signal [2] - 129 DAG Data write mask signal [2] -	109 ID1# Signal ground - 110 ACE RESET# Signal ground - 111 MOD AUDIO Not used - 103 MOD AUDIO Not used -		2 RXN Received FAX data - 3 CML CML relay drive signal -
A5 5G Bignal ground - A9 ADCINT-1 ADU connection detection signal L A10 ADTR1-1 ADU extrance sense detection signal L A11 ADCIN-1 ADU opening/closing switch detection signal -	24 FG3 optimits cont_i_i - 25 FG3 stant cont_i_i - 25 SG Signal ground - 27 SG Signal ground - 28 PPEST-CA PPC reset signal - 29 PPEST-CA PPC reset signal -	100 100 12.5 Y 101 0.00.2 Gas only mask signal [1] - 102 0.00.2 Gas only mask signal [2] - 103 0.00.2 Memory data is a [2] - 103 0.00.2 Memory data is a [2] - 103 0.00.2 Memory data is a [2] - 104 0.04 Memory data is a [2] - 104 0.04 Med and [1] - 105 0.05 Memory data is a [2] - 104 0.04 Med and [1] - 105 0.05 Memory data is a [2] -	113 ALDIO GND Not used	CN2 INV-EXP (CN2) <-> LP-EXPO Pin No 5ymbol Name Active 1 Exposure tamp high-voltage cutput 2 INF Water researcher	4 LD Dial pulse drive signal - 5 ERNIK Not used - 6 ATT3DB - 3 do ATT exchange signal - 7 RLADJI Modern select signal -
A12 >34VD2 >34 - A13 ASDCL-AA ASDL Club drive signal L A14 SG Signal ground L A15 CSTCGW-1 Side cave opening/closing sensor delection signal L	23 #5.116 #5.11V 30 SG Signal ground CN101 PWA-F-SYS (CN101) <-> PWA-F-SLG (CN4)	134 CB4 Not used - 135 CB5 Not used - 136 VCD +2.5 V - 137 CR0 Clock-0 input - 138 VCD +2.5 V - 137 CR0 Clock-0 input -	Instruction Syst AUDIO Syst A	1 Exposure imp high-voltage cutput - 2 N/C Viol connected - 3 N/C Viol connected - 4 Exposure imp high-voltage cutput -	5 PELADJ2 Modern select signal - 5 RISCLK Not used - 10 AG Expanal ground - 11 -12VB - -
A16 +5.1VB +5.1 A17 NC Not connected - A18 NC Not connected - A19 NC Not connected - A19 NC Not connected -	Pin No Symbol Name Active 1 SYSHST System reset signal - 2 SCIS Transmission exabled - 3 STMO Transmission SLC data -	15 100 - 2.5 V Figli - 151 0.50 Differential Soci-2 reput - 152 0.50 Differential Soci-2 reput - 153 0.50 Differential Soci-2 reput - 154 0.50 Differential Soci-2 reput - 153 0.50 More reput - 154 0.50 More reput - 154 0.50 More reput - 154 0.57 More reput - 154 0.57 More reput - 155 0.57 More reput -	IN Not Liald - 117 SYS ALLES O OUT GND Not used - 118 SYS ALLES O NO KND Not used -	CN206 PWA-F-LRL (CN206) <>> PER-F-LDR (C201) Pin No Symbol Name Active 1 SG Signal ground - 2 1-5.1VD - -	11 Fit All and a strength of the strengeh of the strength of the strengeh of the strength of the stren
A2D NC Not connected - B1 SFSZ3-0 Not and - B2 SG Signal ground - B3 SG Signal ground -	4 SROD Received 32.G data - 5 SRTS Transmission request signal - 5 SCNT 82.G based connection detection signal - 7 SG Signal ground - 8 ROVERN Wedral servation successful signal -	H2 CBS Not used - H3 VOD +25 V - H4 CB7 Not used - H45 SG Signal ground - H46 D205 Memory data bas D50 -	115 ALDIO GND Not used - 125 ALDIO GND Not used - 121 RSV Not used - 122 MPCMCTW Not used -	1 SG Signal ground - 2 -3,70,0 +3,1V - 3 -5,10,0 +3,1V - 4 SG Signal ground - 5 WULV-1 Signal ground - 6 SG Signal ground -	16 AG Analog ground - 17 CI Ring airgnal delact 18 AVSDET VFAX dala answer delaction 19 REVA Line 2 Estama bilaghone hook delaction signal -
B4 SP32D-0 Bypass paper size detection signal-1 - B5 SP32T-0 Bypass paper size detection signal-2 - B5 SP32D-0 Bypass paper size detection signal-3 - B7 SG Signal ground - B8 SP32D-0 Bypass paper size detection signal-3 - B7 SG Signal ground -	SVDEN Verical scanning synchronized signal - SDCLK Clock signal for scanning data transmission - SDCLN Protocelal scanning synchronized signal - SG Signal ground - SG Signal ground -	145 50:35 Memory data bas [05] 147 50:37 Memory data bas [05] 148 20:32 Memory data bas [05] 149 20:44 Table wife mask signal (01) 149 20:36 Memory data bas [05] 151 50:35 Memory data bas [05] 151 50:39 Memory data bas [05] 152 24 Eigel struct	123 VCCSVA Not used -	7 NC Not used - 8 SG Signal ground - 9 PIDT-1 Laser trage data (differential signal +) - 10 PIDT-0 Laser trage data (differential signal -) -	2D REVE Line 2 External telephone hook detection signal - 21 NC Not connected - 22 NC Not connected - 23 #5.1W #5.1W -
82 5.1VB +5.1V - 810 +24VD2 +24V 811 975CL-2 Bypass feed clutch drive signal L	13 SCD7 Scaning data [7]	150 DO258 Memory data bas [26] - 151 DO259 Memory data bas [26] - 152 253 Signal ground - 153 DO44 Memory data bas [46] - 154 HOS How address at/roba signal -	CN119 PWA-F-SYS (CN119) <> HDD (CN171) Plin No Symbol Name Active 1 112/X 122 1 2 552 Signal ground - 3 501 Signal ground -	4 Vicing Constrained Constrained	24 AG Anslog ground - 25 +5 V - - 26 +27 K +5 V - 27 AG Anslog ground -
B12 +24 VU - B13 SPECL3-0 Symma pickup solenoid drive signal - B14 SG Signal ground - B15 SPENTY-1 Not used - B16 -51 VV - -	13 Scarsby data [b] - 16 SCAH Scarsby data [b] - 17 SCAH Scarsby data [b] - 18 SCAH Scarsby data [b] - 19 SCAH Scarsby data [b] - 19 SCAH Scarsby data [b] - 20 Scarsby data [b] - - 20 SCAH Scarsby data [b] -	155 DQ45 Memory data bus (45) - 156 VDD +2.5 V -	4 2510 2519	15 SG Bgail ground - 16 +5.1V - - 17 +5.1V - - 18 35.2 Sgail ground -	20 FTLVB - 25 FTLVB + 26 FTLVB - 27 NC Not connected 30 NC Not connected
B17 SG Signal ground - B18 2NOFED-1 2nd transport sensor delection signal - B19 +5.11V +5.11V -	CN102 PWA-F-SYS (CN102) <-> FAX BOARD (CN701) (OPTION)	157 CS0 Chip select signel-0 - 158 CS1 CS1 pailed signel-1 - 159 DM5 Data write mask signal [5] - 150 DM5 Data write mask signal [5] - 150 DM5 Data write mask signal [5] - 150 DM5 Data write mask signal [6] - 160 DS1 Signal psould - 161 DS46 Merroy dath bas [47] - 162 DS147 Merory dath bas [47] -	(OPTION) Pin No: Symbol Name Active 1 >2.31% >3.3.V - 2 +3.31% >3.3.V -	CN207 PWA-F-LRL (CN207) <-> PWA-F-SNS (CN202) Pin No Symbol Active Active Name Active	CN503 FAX (CN503) <-> SPEAKER (OPTION) Pin No Symbol Name - 1 SP+ Speaker output (+) - 2 SP+ Speaker output (+) -
B20 SPBCNT-1 Bypass unit connection detection signal CN305 PWA-F-LGC (CN305) <-> FEED-SNR-1, RGST-SNR, TRCOL/SW_TND_MOT_MAIN_MOT_	Pin No Symbol Name Addive 1 r5.110 r5.110 - 2 DA1 ISE Addmss [1] - 3 r5.110 r5.11 - 4 1005 R5.12 -	112 DC47 Memory data bas [47] - 163 NC Not connected - 164 VCD + 25 V - 165 DC92 Memory data bas [52] - 165 DC92 Memory data bas [53] -	3 8.3.5.W 8.5.1.V - 4 SG Signal ground - 5 1.20N 1.02V - 6 1.20N 1.02V -	CN207 PWA-F-LR (CN207) <> PWA-F-SNS (CN202) Pin No. Symbol Name Active 1 r6.1700 r 5.110 Name Active 2 SGA Signal ground - - 3 BCIN-1 Laser biasin position detection signal (H-sync) -	CN600 FAX (CN600) <-> MODEM BOARD (CN401) (OPTION)
TR-COV-SW, TNR-SW, AUG-LOCK-SW, TNR-MOT, MAIN-MOT, REAR-FAN-MOT, MID-FAN-MOT, RGST, CLT.Rt-U-CLT, TR-M-CLT Pin No Symbol Signal ground Name Active	5	165 DO23 Memory data bas (53) - 167 NC Not connected - 168 VCD +2.5 V - 169 DMS Data write mask signal (6) - 170 DMS Data write mask signal (6) -	7 15.11% 15.11V 5 15.11% 15.11V 5 15.31% 15.11V 10 DSBL0 PCI also Diselect signal	CN705 PS-ACC (CN705) <> PWA-F-SYS (CN120) Pin No Symbol Name Active 1 PVIR-EN Power supply enable signal L 2 PVIR-EN Act man power down signal L	Pin No. Symbol Name Active 1 TXCUT2 Transmitted data - 2 #SUA #SV - 3 #TVM #L - 4 #SUM #SU -
A2 151/FEED-1 1ait transport sensor detection signal A3 45.1VB 45.1V A4 552 Signal ground A7 552 Signal ground A9 95179W1 Registrations memor detection signal	3	170 DD24 Memory data bas [54] - 171 DD25 Memory data bas [50] - 172 VCD +2.5 V - 173 NC Not connected -	11 CPEINT(D) Interrupt request-0 - 12 SG Signal ground - 13 IDSEL0 PCI stol-1 (Ibreint signal - 14 SG Signal ground -	3 NC Nd conneldad - 4 NC Nd conneldad - 5 +1XVB +12 V - 6 924 Bignal ground -	5 MCCDBAF1 Modem 2 DMA signal - 6 SG Signal ground - 7 MEMICS-0 250M chip select signal - 8 + 51 VK - 5 + 51 VK -
AS +5.1VB +5.1V AT SG Signal ground - AS SOCSW-1 Transfer cover opening/Doxing detection signal - AG NC Not connected -	13 55 Signal second - 14 55 Signal second - 15 55 Signal second - 16 55 Signal second - 17 55 Signal second - 18 55 Signal second -	174 DOB0 Memory data bas [50] - 175 DOB1 Memory data bas [51] - 176 SG Signal ground - 177 DOB7 Data write mask signal [7] -	15 PCL(R3) PC dobt-3 - 16 SG Signal ground - 17 REC(1) Disk request signal-1 - 16 REC(2) Disk request signal-0 -	7 +1XM +12 V 8 52 Signal ground - 9 NC Not connected - 10 52 Signal ground -	S MEM02-0 SPAM data read signal - 10 CLX05-1 Clock cut reads signal - 11 TXEN2-1 TX enable signal - 12 +5.1 VE - -
A10 TMRSW-1 Toner cartridge installation detection signal - A11 SG Signal ground detection signal - A12 TMRFULL-1 Cleaner auger tool detection signal - A13 SG Signal ground -	17 56 Segral ground - 18 56 Segral ground - 19 13.376 +3.314 - 20 NTRO DE Inferrupt request signal -	116 5042 Merroy das bas [5] - 117 5045 Merroy das bas [5] - 118 504 Presarce-date dasbas [6] - 118 554 Presarce-date dasbas [1] - 115 554 Presarce-date dasbas [1] - 115 554 Presarce-date dasbas [2] - 116 53.31 Pasarce-date dasbas [2] -	19 +3.3 W +3.3 V 20 AD(31) PC1 address/data bus [31] - 21 AD(20) PC1 address/data bus [25] - 22 SQ Signal ground - 23 M2971 PC1 address/data bus [25] -	11 S52 Signal general - 12 S53 Signal general - 14 7.3.5 X Signal general - 15 7.3.5 X Signal general - 16 7.3.5 X Signal general - 16 7.3.5 X Signal general - 17 555 Signal general -	12 75.1 VB - 5.0 VB 14 74.1 VB 15 74.1 VB 16 74.1 VB 17 74.1 VB 16 74.1 VB 17 74.1 MOM address tos 12.1 VB 17 74.8 MOM address tos 10.1 VB 17 74.8 MOM address tos 10.1 VB
A14 TNUMT-GA Toner motor drive signal - A15 TNUMT-TA Toner motor drive signal - A16 NC Not connected - A17 NC Not connected - A17 NC Not connected -	21 13.516 23.517 - 22 18.11% 25.11V - 23 1276 12.V - 24 KG Kenderand -	162 SA1 Preservo-delect address [1] - 183 SA2 Preservo-delect address [2] - 184 #S3/0A #S3/V -	23 HO[27] PCI address/data bus [27] - 24 HO[25] PCI address/data bus [25] - 25 R3.3 VA - - 26 R3.5 VA - - 26 CORE(3)# Command and byte enable-3 - 27 HO[20] PCI address/data bus [21] -	15	19 Adv Multi address bus (4)
Prime Nume Constraint	25 +12/5 +12/ - 26 DA0 ICE Addess [0] - 27 DA2 ICE Addess [0] - 28 DEC5 ICE Addess [0] - 28 DEC5 ICE Addess [0] -	CN109 PMA-F-SYS (CN109) <> PMA-F-LGC (CN309) Pin No Symbol Name Active A1 25/10 *31 V - A2 CB510 System command busy - A3 CM0-0 Command data -	27 AD(22) PCI address/data busy [23] - 26 Signal ground - - 27 AD(21) PCI address/data bus [21] - 28 AD(15) PCI address/data bus [25] -	18 26 Signal ground - 19 14, 37.06 16.31.V - 20 14, 37.06 17.31.V - 21 56.1 Signal ground - 22 56.1 Signal ground - 23 56.1 Signal ground - 23 56.2 Signal ground -	
BY STCLIF-OA Upper transport chich drive signal STCLIF-OA Upper transport chich drive signal STCLIF-OA Upper transport chich drive signal MAMBK-OA Main motor brake signal KNormal	22 DO1 FAX data bas 1 - 30 DO2 FAX data bas 2 - 31 DO4 FAX data bas 4 - 32 DO5 FAX data bas 4 -	A3 CMC-0 Contrant data	31 KJ NW KJ S - 32 AD(17) PCI address/data bus [17] - 33 CBE(2)# Command and byte mable-2 - 34 SS Signal ground -	23 SG Bigstigtsond - 24 -571W -571V - 25 -571V5 -571V - 28 -451V5 -571V -	A Or Or </td
BS MAMPL-1 Main molor PLL signal L: Normal D2 MAMCVI-0A Main molor rotational direction signal L: C/W, H: C/W B10 MAMCK-1 Main molor reference clock signal -	33 DD7 FAX data bas [7] - 34 DD64 FAX data bas [8] - 35 DD10 FAX data bas [10] - 36 DD11 FAX data bas [11] -	A10 SG Signal ground -	32 # 3.3 W - 37 DEVXEL Device select L 38 SG Signal ground -	CN706 PS-ACC (CN706) <> PWA-F-LGC (CN311), PWA-F-FUS (CN31) Pin No Symbol Name Active 1 05 V/0 S1 V 2 05 V/0 S1 V 2 05 V/0 S1 V 2 05 V/0 S1 V 3 05 V/0 S1 V/0 S1 V 3 05 V/0 S1 V/0 S	23 D[2] MDM data bus [2] - 30 D[4] MDM data bus [4] - 31 D[6] MDM data bus [6] - 32 D[6] MDM data bus [6] - 33 D[6] MDM data bus [6] -
B11 MAMON-GA Main motor ON/OFF signal L: CN, H: OFF B12 SG Signal ground - B13 +5, 1VB +5, 1V - B14 +20001 - -	36 LU11 PAX data but [11] - 37 DD13 PAX data but [13] - 38 DD14 PAX data but [14] - 39 DD15 PAX data but [14] - 40 DD0R DE (10 C mot a but [15]) -	A12 SG Samel anund	40 PERI69 Data parity Error -	2 + 5110 + 511V 3 PG Powerground 4 PG Powerground 5 + 724VD2	33 U[10] MLM data Euri (U) - 34 U[12] MLM data Euri (14) - 35 U[14] MLM data Euri (14) - 36 U[14] MLM data Euri (14) - 36 U[14] MLM data Euri (14) -
B14 #24V/D1 +24 V - B15 PMIRTN-0A Infernal cooling fan2 motor drive signal - B16 +24V/D1 +24 V - B17 CUMTN-0A Infernal cooling fan1 motor drive signal	41 DOW DEL KO write signal - 42 DMMCK DMM activate/day signal - 43 RULCS25 Chip select signal - 44 MESET Read signal L	A15 HSYNC-0 Hostonfall scarning synchronized signal - A15 SS Signal ground ynchroniaed signal - A17 VSYNC-0 Wertcal scarning synchronized signal - B1 MCNT-1 LGC board consection defaction signal -	42 Statem Even L 43 12-334 - 44 12-882-198 Command and byte anable-1 - 44 12-882-198 Command and byte anable-1 - 45 12-44 Cadematida base [14] - 46 12-55 Signal ground - 47 12-51 Cadematida base [12] -	6 - 24/02 - 24/0 7 PG - Power ground 8 PG - Power ground 9 PG - Power ground - L	Sourcestory - Seguini a second de seguini Sourcestory - Seguini a second de seguini Sourcestory - Deservations seguini seguini ORECOLO Deservationes de seguini ORECOLO Deservationes de seguini
CN306 PWA-F-LGC (CN306) <> EXIT-MOT, EXIT-FAN-MOT, JOB SEPARATOR (OPTION)/OFFSET TRAY (OPTION)/	45 DMARQ DMA request signal - 46 NC Not connected - 47 FXVMP FXX wake-up signal - 46 SG Signal ground - 47 FXVMP FXX wake-up signal - 46 SG Signal ground -	Dist Obst (a) but (b)	45 AC(10) PCI address/data bus [10] - 49 M652N PCI bus 65 MHz clock enable signal - 50 SG Signal ground -	1 100 111 111 1 1 1 100 111 111 111 1 1 100 111 111 111 111 1 1 100 111	-1.0 -0.0 -0.0 -2.0 -0.0 -0.0 -2.0 -0.0 -0.0 -2.0 -0.0 -0.0 -2.0 -0.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0 -2.0 -0.0
BRIDGE UNIT (OPTION) Pin No Symbol Addive At 224V At 24V02 At 2510 moloc drive signal-A	49 SG Signal ground - 50 NC Not connected -		22 A2[7] PCI address/data bus [7] 23 ~	14 #24/D1 #24 V - 15 NC Not connected - 16 NC Not connected - 17 NC Not connected -	46 MC022C5-0 Modern 2 Chip select signal 47 MC022PS1-0 Modern 2 reset signal 48 SG Signal ground 49 R022N2-1 R0x enable signal
A3 EXTMB-6A Exil meter drive algest-8 A4 EXTMB-6A Exil meter drive algest-0 A5 EXTMB-6A Exil meter drive algest-0 A5 EXTMD-6A Exil meter drive alg	CN104 PWA-F-SYS (CN104) <> PWA-F-DSP (J427) Pin No Symbol Name Active 1 X02-1A LCD data tarwarnisato clob - 2 UP-1A LCD data tarwarnisato clob H 3 UP-1A LCD data tarwarnisato clob H	Discrete and a set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second set of the second sec	35 Pol_1 Functionancean one prime - 55 Statistic Dignal groups - - 57 AU[1] Pol addressibilities but [1] - 58 +3.3 W - -	18 HTR204-1A Side heater CNNOFF signal of faser roller 19 HTR204-1A Center heater CNNOFF signal of saler roller 20 PSPDWN-1 AC main power down signal 21 SS Signal ground -	20 MEM/MH2-0. 29244M logh Syla write algrani - 51 MEM/MH2-0. 29244M logh Syla write algrani - 52 471410 2924M logh Syla write algrani - 53 471410 MEM address bus 1141 -
A7 #24VD2 #24 V - A5 VCMPNO Exhaust fair motor drive signal - A6 NC Not connected - A10 NC Not connected -	A TVT-TA LCD scarning time start signal H NVGAD Signal ground - BXVGAD Signal ground - BXZNFAN signal L CPPOW-TA Panel connection detection signal H	B15 SG Signal ground - B16 NDEN-O Data stable of the vertical scanning direction - B17 #33VE +53 VE -	26 Dist of grand grand - 27 RAZIII RC and status to a 11 - 28 RAZIII RC and status to a 11 - 29 RAZIII RC and status to a 11 - 20 RAZIII RC and status to a 11 - 20 RAZIII RC and status to a 11 - 20 RAZIII RC and status to a 11 - 21 RAZIIII RC and status to a 11 - 21 RAZIIII RC and status to a 11 - 22 RE a 12 RE and status to a 11 - 23 RC and status to a 11 - - 24 RE a 12 RE and status to a 11 - 23 RE a 12 RE a 12 -		54 A(12) MDM address bus [13] - 55 A(13) MDM address bus [13] - 56 A(11) MDM address bus [11] - 57 A(14) MDM address bus [15] - 57 A(14) MDM address bus [15] -
A11 NC Not connected - A12 NC Not connected - A13 NC Not connected - A14 NC Not connected -	5 IDCLF-14 LED satisf clock 9 IDCRF-14 LED satisf clock 10 IDCRF-14 LED satisf clock 10 IDCRF-14 LED clock satisf's signal 11 IDCRF-14 LED clock satisf's signal 1 IDCRF-14 LED clock satisf's signal. 1	Pin No Symbol Name Active 1 1XX2+ Transmitted data + -	04 54 50 50 50 50 50 50 50 50 50 50 50 50 50	x6 +5.1 V (to FUS board) - 27 +5.1 V (to FUS board) - 28 +5.1 V (to FUS board) - 29 +5.1 V - 29 55 Signal ground -	55 A(7) MCM address bus [7] - 50 A(3) MCM address bus [3] - 60 A(2) MCM address bus [3] - 61 A(1) MCM address bus [1] -
A15 NC Ngt connected - A16 NC Not connected - A17 NC Not connected - A18 NC Not connected - A18 NC Not connected -	D LCATE-LA. LCATE-LA. <thlcate-la.< th=""> <thlcate-la< td=""><td>Child P PMA-3-15 (Child) <> LAR (1998A5-11090A5-11) PH IN [Control Phane</td><td>65 15.1VA 45.1 V - 62 15.3 VA -5.3 V - 70 OPEINT(1) Interrupt request-1 -</td><td>CN707 PS-ACC (CN707) <-> FINISHER (1599) (OPTION)/</td><td></td></thlcate-la<></thlcate-la.<>	Child P PMA-3-15 (Child) <> LAR (1998A5-11090A5-11) PH IN [Control Phane	65 15.1VA 45.1 V - 62 15.3 VA -5.3 V - 70 OPEINT(1) Interrupt request-1 -	CN707 PS-ACC (CN707) <-> FINISHER (1599) (OPTION)/	
N/I N/I N/I N/I - 81 RC255-1 3970CT unit att sensor algosal - </td <td></td> <td>VOUN- Preceived data - - CND Not used CN411 DWA.E.SV. CN414 CN414 DWA.E.SV. CN414 C</td> <td>72 PCIRST# PCI reset signal - 73 #3.31% #3.31% - 74 PCICLR(4) PCI dock-4 -</td> <td>PWA-F-ADU (CN212) (OPTION) MAIN MOTOR Pin No Senior Adire 1 No Not connected - 2 No Not connected - 3 SG Spatial ground - 4 -51/10 - -</td> <td>od IORD2-0 MOM data read signal - 67 IOWR2-0 MOM data write signal - 68 D(1) MOM data to (1) - 69 D(2) MOM data to (2) - 69 D(2) MOM data to (2) -</td>		VOUN- Preceived data - - CND Not used CN411 DWA.E.SV. CN414 CN414 DWA.E.SV. CN414 C	72 PCIRST# PCI reset signal - 73 #3.31% #3.31% - 74 PCICLR(4) PCI dock-4 -	PWA-F-ADU (CN212) (OPTION) MAIN MOTOR Pin No Senior Adire 1 No Not connected - 2 No Not connected - 3 SG Spatial ground - 4 -51/10 - -	od IORD2-0 MOM data read signal - 67 IOWR2-0 MOM data write signal - 68 D(1) MOM data to (1) - 69 D(2) MOM data to (2) - 69 D(2) MOM data to (2) -
B4 SG Stepal ground - B5 J3P9W-0 J3SPCCT judgment signal L B5 RLCNT-0 J3SPCCT judgment signal L-CCT.	B CPRS F4A Heat rayst L 9 SS Signal provide the second	International construction Active Name Active Name Active 1 VUID 2 DS 1 VID 3 VPM	16 UAR(19# Grand-1 - 77 UAR(09# Grand-0 - 75 SG Signal ground -	3 SG Signal quoted - 4 +5.1V8 +5.1 V (io FINGHER) - 5 NC Not connected - 6 NC Not connected - 7 PC Family model -	rd D[5] MDM data bun [5] - 71 D[7] MDM data bun [7] - 72 D[8] MDM data bun [9] - 73 D[9] MDM data bun [9] -
B8 PLCSW-1 JSP/DCT cover opening/closing detection signal L B9 PLTRS-1 JSP, poper jam sensor detection signal - CCT: paper leed sensor detection signal - -	23 SHQ) fory conclust SD conclust serial data - 24 55 Signal graved - 25 UD3-14. LCD digity data-3 - 27 UD3-14. LCD digity data-3 - 27 UD3-14. LCD digity data-3 - 28 UD3-14. LCD digity data-3 - 29 UD3-14. LCD digity data-3 - 28 UD3-14. LCD digity data-3 - 29 UD3-14. LCD digity data-3 - 20 S5 Signal graved -	4 SG Signa ground - 5 VBUS #5.1 V 6 D1- USB serial data -	80 AC[30] PCI address/data bus [30] - 81 +3.31W +3.31W - 82 AC[28] PCI address/data bus [28] -	4 - 4.1% - 4.1% p.1%292-EP	72 Obj MOM Anis has [n] - 73 Obj MOM Anis has [n] - 74 Obj MOM Anis has [n] - 74 Obj MOM Anis has [n] - 74 Obj MOM Anis has [n] - 75 Obj MOM Anis has [n] - 76 Obj Station (Non-Non-Non-Non-Non-Non-Non-Non-Non-Non-
511 GASOL-3A JSPICCT gate sciencid driving signal - 512 #24VD2 #24 V -	23 UD0-14 LCD display date 0 - 23 UD0-14 LCD display date 0 - 30 LCD0H-1A LCD enable signal - 100 LCD0H-1A LCD enable signal H CN107 PWA-F-SYS (CN107) <-> COIN CONTROLLER (OPTION)/	7 D1+ USB serial data - 5 SG Signal ground - CN112 PWA-F-SYS (CN112) <> HDD (CN170) (STANDARD)	84 85 Bignal ground - 85 AG[24] PCI addressIdata bus [24] - 86 #3.31W #5.33V - 87 #3.31W #5.33V -	12 r/44 V (b ADU) - 12 r/24 V (b ADU) - 13 PG Power ground - 14 PG Power ground - 15 L920T1 - -	KDFACE-U LEFZ chip select signal CFF2QD2-1 Data request signal CFEQD2-1 Data science/sidge signal
B15 OFFSET2 OCT motor drive signal-2 - B16 NC Not connected -		Unit2 PWA-515 (UNIT2) 407 BUD (UNIT2) (STANDARD) Plin No. Symbol 1 RESET Reset signal 2 SG Signal ground 3 D07 Data bus (7) 	66 AD(22) PCI address/data bus [22] 70 40(20) DCI address/data bus [20]	16 +24VD1 +24 V (to main motor) -	CN602 FAX (CN602) <> DOWNLOAD JIG (FAX) (OPTION) Pin No Symbol Name Active 1 D(0) ROM data bus [0] - 2 D(2) ROM data bus [2] -
10 W2 W3 W3 Connected 1 17 NC Not connected 1 18 NC Not connected 1 17 17 NC Not connected 1 17	COPY KEY CARD (0PTION) Pin No Spitbal Name Active 1 US Spitbal	3 DD7 DB8 KB [] 4 DD6 DB8 KB [] 5 DD6 DB8 KB [] 5 DD7 DB8 KB [] 7 DD5 DB8 KB [] 7 DD5 DB8 KB [] 8 DD7 DB8 KB []	92 AC(16) PCI address/data bus [16] - 93 +3.3 VA +3.3 VA - 94 FMMMEs Cycle frame L 95 Signal ground - -	Offent Packoc Carries -> FALS La Carries -> FAL	Control (1) Control (1) <thcontrol (1)<="" th=""> <thcontrol (1)<="" th=""></thcontrol></thcontrol>
	4 BW Black and abla mode signal - 5 5.1 No. 7.5 U - 6 SG Signal graund - 7 No. Not connected - CN108 PWA-F-SYS (CN108) <> DOWNLOAD JIG (SYS)	9 DD4 Data bus [4] -	SG TREPY Target ready L S7 SG Signal ground - S8 STCP# Stop L	4 +5.116 +5.1V - 5 +5.116 +5.1V (o.RADF) - 6 +5.116 +5.1V (o.RADF) - 7 55 Signal ground -	7 A/2 ROM address bus [2] - 8 A/4 ROM address bus [4] - 9 A/6 ROM address bus [6] - 10 A/81 ROM address bus [6] -
CST-U-FEED-CLT, NEMP-U-SNR, TST-MOD, TR-L-CLT, EMP-L3-NR, CST-L3-WY CST-U-SW, CST-L3-WY Text A Diption Statistics A Dist Dist A Dist	CN108 PWA-F-SYS (CN108) <> DOWNLOAD JIG (SYS) Pin No Symbol Name Active 2 DX1/A2 Syntem data bus [2] - 3 DX1/A4 Syntem data bus [4] -	12 DOTA Data too (12) - 13 DOD2 Data too (12) - 14 DD13 Data too (11) - 15 DD12 Data too (11) -	100 +3.51V - 101 SG Signal ground - 102 SG Signal ground - 105 SG Signal ground -	SG Signal ground Sgral ground	11 A(10) NOM address bus [10] - 12 A(12) POM address bus [12] - 13 A(14) NOM address bus [14] - 14 A(10) ROM address bus [16] -
A3 +5.11% - A4 SC Bigging ground - A5 CUTOP-1 Upper drawn tray-up sensor detection signal - A5 FX1V8 +5.1 V - A7 CURRCAN Upper drawn tray-up sensor detection signal - A7 CURRCAN Upper drawn tray-up sensor detection signal -	4 DA1A6 System data bas [8] 5 DA1A6 System data bas [8] 6 DA1A6 System data bas [9] 7 DA1A12 System data bas [9] 7 DA1A12 System data bas [9] 7	17 DD0 Data bus [0]	104 AU(15) PC/ address/data dos (15)	- 2 SA Segnal ground	15 A(18 ROM address bus [18] - 16 SG Signal ground - 17 SG Signal ground - 18 D(1) ROM data bus (1) -
A7 CURBCA Upper drawn fred clubh drive signal - A8 = 24V01 = 24 A9 52 Signal ground - A10 52 Signal ground - A11 = 51V6 = 51.1 - A12 = 71.1 × 0.0 molar drive signal -	Control Optimity control on a log [14] - 5 DATAH System data bus [14] - 9 A21 System address bus [15] - 10 A19 System address bus [17] - 11 A17 System address bus [15] -	19 26 Signal givind - 20 (CQ2Y) Not connected - 21 MEXMIC DMM mount signal H 25 25 (G Signal pixond - 23 DOCW DV online signal - 25 55 (G Signal pixond - 24 55 Signal pixond -	105 AG113 PCJ address/bda bus 113 - 107 AQ111 PCJ address/bda bus 113 - 108 AQ113 PCJ address/bda bus 113 - 108 SG Signal ground - 105 AQ11 PCJ address/bda bus 113 - 105 AQ11 PCJ address/bda bus 113 - 105 DG2 Signal ground bus 113 - 105 DG2 Signal ground bus 113 - 107 DG2 Signal ground bus 113 - 107 DG2 Signal ground bus 113 - 107 DG2 Signal ground bus 114 - 107 DG2 Signal ground bus 114 - 107 DG2 Signal ground bus 114 - 107 DG2 Signal ground bus 115 - 107 DG2 Signal ground bus 114 -	IN INIC CONTRACTOR - 17 SG Signal ground - 18 SG Signal ground - 19 #24/VF4 #24 V - 20 #24/VF4 #24 V -	12 D(3) ROM data bus (2) - 20 D(3) ROM data bus (3) - 21 D(7) ROM data bus (7) - 22 D(7) ROM data bus (3) - 22 D(7) ROM data bus (3) -
A11 #5.1V9 -6.1V - A12 GLTMB-0A Reg-up motor drive aignal - A13 GLTMB-1A Tray-up motor drive aignal - A14 ZNDCL-0A Lower transport club drive aignal - A15 SUDCL-0A Lower transport club drive aignal -	12 A15 System advase has 113 - 13 A13 System advase has 111 - 14 A11 System advase has 191 - 15 A09 System advase has 191 -	23 ACOR ID read signal - 26 SG Signal gosund - 27 IDRDY ID ready signal -	112 0-3304 0-332 V	ID We COntrollation - 17 26 Span spread - 18 52 Span spread - 19 52 Span spread - 10 72 V - 20 72 V - 21 PC Name spread - 22 PC Name spread - 24 PC Name spread - 25 PC Name spread - 24 PC Name spread - 25 VI Integration - 26 PARCE PRAME - 26 PARCE PRAME -	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
B1 SG Signal ground CEMP-1 Lower drawer empty senaor detection signal CEMP-1 Lower drawer empty senaor detection signal	16 A07 System address bus [5] - 17 A05 System address bus [1] - 18 A07 System address bus [1] -	28 S2 S2 panal grazed - 29 CMMCR: CMA activonidige signal L 30 S2 Signal grazed - 51 INTRO: Interrupt request algoral H H 32 HESERVED: Interrupt request algoral - -	10 355 adjust globala bus [2] - 116 AZ[2] PCI address/data bus [2] - 117 AZ[2] PCI address/data bus [2] - 118 2.53 W - - 119 PS.1WA +5.1 V - 120 PS.1WA +5.1 V -	CN721 PS-HVT (OUT1) <-> MAIN CHARGER WIRE	27 A(5) IROM address bus [9] - 28 A(11) IROM address bus [11] - 29 A(11) IROM address bus [12] - 30 A(12) IROM address bus [15] -
B7 CLTOP-1 Lower drawer tray-up sensor detection signal B7 F5.1VE #5.1V B7 CLROC-0 Lower drawer feed clutch drive signal -	20 C80-A Cho nalect signal (0-A) - 21 C80-B Cho nalect signal (0-B) - 22 e3230A e323 V - 23 e3230A e32 V -	M POLC Passed disconsilion	40 PS.104 PS.1V	1 - High-voltage to main needle electrode charger -	AD C(14) Protein adverse bas (12) - 31 AL112 EXXM adverses bas (17) - 32 ROMDET-0 Download board connection detection signal L 33 R5.1VB -5.1 V - 34 LEDDL-0 External ROM loading atabas signal L
B3 S2 Signal ground Signal ground Signal ground Signal ground Signal ground Signal ground Signal Si	27 CATA3 System data bus 3	35 DAG Device address [0] - 36 DAG Device address [0] - 37 DAG Device address [0] - 37 E.50 Chip ashed 0 L 38 ICS1 Dip issled-1 L 38 E.52 Device active or alway present signal L 39 E.62. Device active or alway present signal L		CN722 PS-HVT (OUT2) <> MAIN CHARGER GRID PIn No Symbol: Name Active 1 High-voluge to main charger grid CN723 PS-HVT (OUT3) <> DEVELOPER BIAS	J600 IPC BOARD (J600) <-> FINISHER (J598) (OPTION) Pin No Symbol Name Active Pin No Symbol Name Active
B12 S2 Signal ground - B13 CUSW-0 Upper drawer detection signal - B14 S2 Signal ground - B15 CLSW-0 Lower drawer detection signal -	21 DMDS Dystem data but [2] - 26 DMRS Dystem data but [3] - 29 DMR/7 System data but [3] - 30 DMRS System data but [3] -	40 SG Sama anund		Pin No Symbol Name Active 1 High-votage to developer charger bias	1 RXD Receiver serial data - 2 SG Signal ground - 3 TXD Transmitted serial data - 4 SG Signal ground - 5 NO Not conserted -
CN308 PWA-F-LGC (CN308) <> PS-HVT (CN720)/THMS-C-HTR,	31 DATA11 System data bas [11] - 32 DATA13 System data bas [13] - 33 DATA15 System data bas [14] - 34 A20 System addreas bas [16] - 35 A16 System addreas bas [16] -	1 VDD +5.1V - 2 NC Not connected -		CN724 PS-HVT (OUT4) <-> TRANSFER BIAS Pin No Symbol Name Active 1 - High-volage to transfer charger bias -	5 NC Nol connected - 6 NC Nol connected - 7 NC Nol connected - 8 NC Nol connected - 9 NC Nol connected - 9 NC Nol connected - 10 CHYCMO Franker connection detection signal L
THMS-S-HTR, THMS-EDG-HTR, EXT-SNR PIN to Symbol Symbol Name Active A1 (HCLKA) Developer X Tas High-valage dock signal - A2 (HCS/MV-1A Hydrollage power paraly instage distiction signal L A3 (HCS/MV-1A Hydrollage nodes references voltage A4 (HCS/MV-1A Separation has voltage nodes references voltage A4 (HCS/MV-1A Separation has voltage nodes references voltage Analog -	26 A106 System address to a 114 27 A104 System address to a 114 28 A124 System address to a 114 29 A124 System address to a 114 29 A124 System address to a 114 29 A124 System address to a 114	4 C- Serial data - 5 D- Serial data - 6 Not Not connected - 7 Not Not connected - 8 DCTACH Signal ground - 9 Not Not connected - 9 Not Not connected -		CN725 PS-HVT (OUT5) <-> SEPARATION BIAS Pin No Symbol Name Active 1 - High-volage to separation charger bias -	P-LNI preater connection detection signal L CNT-GND Ground -
A4 HYT5P-0A Separation bias voltage ONCPF signal A5 HYTGE-0A Transfer pide bias voltage ONCPF signal A5 HYTVR-0A Transfer bias high-voltage output reference voltage A7 HYTT-0A Transfer bias high-voltage output reference voltage A8 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage A9 HYURI-1A Transfer bias high-voltage output reference voltage HYURI-1A Transfer bias high-vo	40 A65 System address bus 8 - 41 A66 System address bus 8 - 42 A64 System address bus 17 - 43 A62 System address bus 17 -	10 SG Signal ground - 11 NC Not connected - 12 NC Not connected -			
AS INVMP1-1A Developer AC bas high-collage odget reference voltage Analog AB INVVAC-DA Developer AC bas high-collage odget reference voltage A10 INVVAC-IA Developer AC bas high-voltage odget reference voltage A11 INVMVI-1A Main charger grid odget reference voltage A12 INVMVI-1A Main cade decider odget odget odget reference voltage A12 INVMVI-1A Main cade decider odget odget odget reference voltage A13 INVMVI-1A Main cade decider odget odget odget reference voltage	44 AZ2 System address bus [2] 45 PC0 Chin salart sized	14 NC Not connected - 15 NC Not connected -		CN728 P5-HVT (OUT6) <> TRANSFER GUIDE BIAS/REGISTRATION ROLLER BIAS Pie No Symbol Adive 1 High-rollage to transfer guide bias and registre- tion roles bias Adive	
A12 (HVTM-0A Main needle electrode charger voltage CNCPF signal - A15 S52 Signal ground - A14 = 24VD2 - 24V - B1 FULSSW-1A Fuser coller thermitider connection detection signal - B2 MTH-1A Fuser coller center thermitider + signal - Anabo	46 >3.3 W >3.5 W - 47 1450.1 System corto signal - 48 WR92 System actin signal - 49 SZ System actin signal - 49 SZ System actin signal - 49 SZ Szgang ground - 50 SZ Szgang ground -	16 NC Not connected - 17 NC Not connected - 18 NC Not connected - 19 NC Not connected - 12 NC Not connected - 20 SG Signal ground -			
83 MTH-1A Fuser roller conter Parentister - signal Analog 84 STH+1-IA Fuser roller and the hermitater + signal Analog 85 STH-1-1A Fuser roller aldo hermitater - signal Analog 85 STH-1-1A Fuser roller ados hermitater - signal Analog 85 STH-1-1A Fuser roller ados hermitater - signal Analog		20 SG Signal ground - CN114 PWA-F-SYS (CN114) <-> USB CONNECTOR (HOST) Pin No: Symbol Name Active Active			
B5 ETH-1A Flast rolat odg tratmast * signal Analog B7 ETH-1A Flast rolat odg tratmast * signal Analog B3 +5.175W +5.17 B9 SG Signal ground - B1 EXTEM-1 Sixt sensor oblaction signal -		2 D3- U93 serial data - 3 D3+ U93 serial data - 4 55 Signal gound - 5 U93 Signal gound -			
010 EX15W-1 EX15800 Ex150 E		5 VBUS +5.1 V - 6 D1- USB serial data - 7 D1+ USB serial data - 8 SG Signal ground -			
	1		5/11	1	1

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