

2. ERROR CODE AND SELF-DIAGNOSTIC MODE

2.1 Error Code List

One of the following error codes is displayed instead of the set number while pressing the [CLEAR] key and the digital key [8] simultaneously when the “CLEAR PAPER” or “CALL SERVICE” symbol is blinking.

2.1.1 Jam

Error code	Classification	Contents	Trouble-shooting
E010	Paper discharging jam	Jam not reaching the exit sensor : The paper which has passed through the fuser unit does not reach the exit sensor.	Ch. 5.1.1
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.	Ch. 5.1.1
E030	Other paper jam	Power-ON jam: The paper is remaining on the paper transport path when power is turned ON.	Ch. 5.1.4
E090		HDD abnormality causes jam: Image data to be printed cannot be prepared.	Ch. 5.1.4
E110	Paper misfeeding	ADU misfeeding (Paper not reaching the registration sensor): The paper which has passed through ADU does not reach the registration sensor during duplex printing.	Ch. 5.1.2
E120		Bypass misfeeding (Paper not reaching the registration sensor): The paper fed from the bypass tray does not reach the registration sensor.	Ch. 5.1.2
E130		Upper drawer misfeeding (Paper not reaching the upper drawer feed sensor): The paper fed from the upper drawer does not reach the upper drawer feed sensor.	Ch. 5.1.2
E140		Lower drawer misfeeding (Paper not reaching the lower drawer feed sensor): The paper fed from the lower drawer does not reach the lower drawer feed sensor.	Ch. 5.1.2
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.	Ch. 5.1.2
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.	Ch. 5.1.2
E190		LCF misfeeding (Paper not reaching the LCF feed sensor): The paper fed from the LCF does not reach the LCF feed sensor.	Ch. 5.1.2
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 upper drawer feed sensor.	Ch. 5.1.3
E210		Lower drawer transport jam (Paper not reaching the upper drawer feed sensor): The paper does not reach the upper drawer feed sensor after it has passed the lower drawer feed sensor.	Ch. 5.1.3

Error code	Classification	Contents	Trouble-shooting
E220	Paper transport jam	Lower drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the upper drawer feed sensor.	Ch. 5.1.3
E300		PFP upper drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the upper drawer feed sensor.	Ch. 5.1.3
E310		PFP upper drawer transport jam (Paper not reaching the upper drawer feed sensor): The paper does not reach the upper drawer feed sensor after it has passed the lower drawer feed sensor.	Ch. 5.1.3
E320		PFP upper drawer transport jam (Paper not reaching the lower drawer feed sensor): The paper does not reach the lower drawer feed sensor after it has passed the PFP upper drawer feed sensor.	Ch. 5.1.3
E330		PFP lower drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the upper drawer feed sensor.	Ch. 5.1.3
E340		PFP lower drawer transport jam (Paper not reaching the upper drawer feed sensor): The paper does not reach the upper drawer feed sensor after it has passed the PFP lower drawer feed sensor.	Ch. 5.1.3
E350		PFP lower drawer transport jam (Paper not reaching the lower drawer feed sensor): The paper does not reach the lower drawer feed sensor after it has passed the PFP upper drawer feed sensor.	Ch. 5.1.3
E360		PFP lower drawer transport jam (Paper not reaching the PFP upper drawer feed sensor): The paper does not reach the PFP upper drawer feed sensor after it has passed the PFP lower drawer feed sensor.	Ch. 5.1.3
E3C0		LCF transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the upper drawer feed sensor.	Ch. 5.1.3
E3D0		LCF transport jam (Paper not reaching the upper drawer feed sensor): The paper does not reach the upper drawer feed sensor after it has passed the lower drawer feed sensor.	Ch. 5.1.3
E3E0		LCF transport jam (Paper not reaching the lower drawer feed sensor): The paper does not reach the lower drawer feed sensor after it has passed the LCF feed sensor.	Ch. 5.1.3
E400	Cover open jam	Jam access cover open jam: The jam access cover has opened during printing.	Ch. 5.1.5
E410		Front cover open jam: The front cover has opened during printing.	Ch. 5.1.5
E420		PFP side cover open jam: The PFP side cover has opened during printing.	Ch. 5.1.5
E430		ADU open jam: The ADU has opened during printing.	Ch. 5.1.5
E440		Side cover open jam: The side cover has opened during printing.	Ch. 5.1.5

Error code	Classification	Contents	Trouble-shooting
E450	Cover open jam	LCF side cover open jam: The LCF side cover has opened during printing.	Ch. 5.1.5
E480		Relay unit open jam: The relay unit has opened during printing.	Ch. 5.1.5
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.	Ch. 5.1.3
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.	Ch. 5.1.3
E550	Other paper jam	Paper remaining jam on the transport path: The paper is remaining on the transport path when CRUN is OFF.	Ch. 5.1.4
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.	Ch. 5.1.6
E712		Jam not reaching the registration sensor: The original fed from the original feeding tray does not reach the registration sensor.	Ch. 5.1.6
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.	Ch. 5.1.6
E714		Feed signal reception jam: The feed signal is received even no original exists on the original feeding tray.	Ch. 5.1.6
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 reversal sensor (when scanning reverse side).	Ch. 5.1.6
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.	Ch. 5.1.6
E723		Jam not reaching the reversal sensor (during scanning): The original which passed the read sensor does not reach the reversal sensor when it is transported from the scanning section to reverse section.	Ch. 5.1.6
E724		Stop jam at the registration sensor: The trailing edge of the original does not pass the registration sensor after its leading edge has reached this sensor.	Ch. 5.1.6
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.	Ch. 5.1.6
E726		Transport/exit signal reception jam:	Ch. 5.1.6
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.	Ch. 5.1.6
E741		Stop jam at the reversal sensor: The trailing edge of the original does not pass the reversal sensor after its leading edge has reached this sensor.	Ch. 5.1.6

Error code	Classification	Contents	Trouble-shooting
E742	RADF jam	Jam not reaching the reversal sensor (during reverse feeding): The leading edge of the original does not reach the reversal sensor when original is fed from the reverse section.	Ch. 5.1.6
E743		Jam not reaching the exit sensor (during reverse feeding): The original does not reach the exit sensor after it has passed the reversal sensor when the original is discharged from the reverse section.	Ch. 5.1.6
E860		Jam access cover open: The jam access cover has opened during RADF operation.	Ch. 5.1.6
E870		RADF open jam: RADF has opened during RADF operation.	Ch. 5.1.6
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.	Ch. 5.1.7 (1)
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.	Ch. 5.1.7 (1)
E930		Jam at the bridge unit transport sensor 2: The trailing edge of the paper does not reach the bridge unit transport sensor 2 after its leading edge has reached the bridge unit transport sensor 1.	Ch. 5.1.7 (1)
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.	Ch. 5.1.7 (1)
E9F0	Finisher jam (Punch unit)	Punching jam: Punching is not performed properly. [MJ-1023/1024 (when MJ-6004 is installed)]	Ch. 5.1.7 (4)
EA10	Finisher jam (Finisher section)	Paper transport delay jam: The paper which has passed the bridge unit does not reach the inlet sensor. [MJ-1022/23/24]	Ch. 5.1.7 (2)
EA20		Paper transport stop jam: (1) The paper does not pass through the inlet sensor [MJ-1022/1023/1024]. (2) The paper has passed through the inlet sensor but does not reach or pass the feed path sensor or processing tray sensor.	Ch. 5.1.7 (2)
EA30		Power-ON jam: (1) Paper exists at the inlet sensor when power is turned ON. [MJ-1022/1023/1024] (2) Paper exists at the feed path sensor or processing tray sensor when power is turned ON. [MJ-1023/1024]	Ch. 5.1.7 (2)
EA40		Door open jam: (1) The finisher has been released from the copier during printing. [MJ-1022] (2) The upper/front cover of the finisher section or the upper/front door of the puncher section has opened during printing. [MJ-1023/1024]	Ch. 5.1.7 (2)
EA50		Stapling jam: Stapling is not performed properly. [MJ-1022/1023/1024]	Ch. 5.1.7 (2)

Error code	Classification	Contents	Trouble-shooting
EA60	Finisher jam (Finisher section)	Early arrival jam: The inlet sensor detects the paper earlier than a specified timing. [MJ-1022/1023/1024]	Ch. 5.1.7 (2)
EA70		Stack delivery jam: It cannot deliver the stack of paper on the intermediary process tray to the stack tray. [MJ-1022]	Ch. 5.1.7 (2)
EA80	Finisher jam (Saddle stitcher section)	Stapling jam: Stapling is not performed properly. [MJ-1024]	Ch. 5.1.7 (2)
EA90		Door open jam: The saddle stitcher door, the outlet cover or the inlet cover has opened during printing [MJ-1024].	Ch. 5.1.7 (3)
EAA0		Power-ON jam: Paper exists at No.1 paper sensor, No. 2 paper sensor, No.3 paper sensor, vertical path paper sensor or delivery sensor when power is turned ON. [MJ-1024]	Ch. 5.1.7 (3)
EAB0		Transport stop jam: The paper which passed through the inlet sensor does not reach or pass No.1 paper sensor, No. 2 paper sensor, No.3 paper sensor or delivery sensor. [MJ-1024]	Ch. 5.1.7 (3)
EAC0		Transport delay jam: The paper which has reached the inlet sensor does not pass through the inlet sensor. [MJ-1024]	Ch. 5.1.7 (3)
EAD0	Finisher jam	Print end command time-out jam:	Ch. 5.1.7 (5)
EAE0		Receiving time time-out jam:	Ch. 5.1.7 (5)
EAf0	Finisher jam (Finisher section)	Stack return jam: It cannot load the paper which passed through the delivery roller on the intermediary process tray. [MJ-1022]	Ch. 5.1.7 (2)
EB30	Finisher jam	Ready time time-out jam:	Ch. 5.1.7 (5)
EB50	Paper transport jam	Paper remaining on the paper transport path: It cannot detect the trailing edge of the paper when it passes the registration sensor.	Ch. 5.1.3
EB60		Paper remaining on the paper transport path: It cannot detect the trailing edge of the paper when it passes the registration sensor.	Ch. 5.1.3

2.1.2 Service call

Error code	Classification	Contents	Trouble-shooting
C010	Drive system related service call	Main motor abnormality: The main motor is not rotating normally.	Ch. 5.1.8
C020		Developer motor abnormality: The developer motor is not rotating normally.	Ch. 5.1.8
C030		Transport motor abnormality: The transport motor is not rotating normally.	Ch. 5.1.8
C040	Paper feeding system related service call	PFP motor abnormality: The PFP motor is not rotating normally. (the case that paper can be fed from any drawer except the PFP)	Ch. 5.1.9
C130		Upper drawer tray abnormality: The upper drawer tray motor is not rotating or the upper drawer tray is not moving normally. (the case that paper can be fed from any drawer except the upper drawer)	Ch. 5.1.9
C140		Lower drawer tray abnormality: The lower drawer tray motor is not rotating or the lower drawer tray is not moving normally. (the case that paper can be fed from any drawer except the lower drawer)	Ch. 5.1.9
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. (the case that paper can be fed from any drawer except the PFP upper drawer)	Ch. 5.1.9
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. (the case that paper can be fed from any drawer except the PFP lower drawer)	Ch. 5.1.9
C180		LCF tray motor abnormality: The LCF tray motor is not rotating or the LCF tray is not moving normally. (the case that paper can be fed from any drawer except the LCF)	Ch. 5.1.9
C1A0		LCF end fence motor abnormality: The LCF end fence motor is not rotating or the LCF end fence is not moving normally. (the case that paper can be fed from any drawer except the LCF)	Ch. 5.1.9
C1B0		LCF transport motor abnormality: The LCF transport motor is not rotating normally. (the case that paper can be fed from any drawer except the LCF)	Ch. 5.1.9
C260	Scanning system related service call	Peak detection error: Lighting of the exposure lamp (white reference) is not detected when power is turned ON.	Ch. 5.1.10
C270		Carriage home position sensor not going OFF within a specified time: The carriage does not shift from its home position in a specified time.	Ch. 5.1.10
C280		Carriage home position sensor not going ON within a specified time: The carriage does not reach to its home position in a specified time.	Ch. 5.1.10
C360	Copy process related service call	Main charger wire cleaner abnormality: Wire cleaner motor is not rotating or wire cleaner is not moving normally.	Ch. 5.1.16

Error code	Classification	Contents	Trouble-shooting
C410	Fuser unit related service call	Thermistor or heater abnormality at power-ON: Abnormality of service call the thermistor is detected when power is turned ON or the temperature of the fuser roller does not rise in a specified time after power is turned ON.	Ch. 5.1.11
C430		Thermistor abnormality after abnormality judgment: Abnormality of the thermistor is detected after a specified time has passed from power-ON (including ready time or energy saving mode).	Ch. 5.1.11
C440		Heater abnormality after abnormality judgment: The temperature of the fuser roller has exceeded the range of control (in this case, the main switch goes OFF automatically) or does not even reach the range.	Ch. 5.1.11
C450		Thermistor abnormality during printing: Abnormality of the thermistor is detected during printing.	Ch. 5.1.11
C470		IH initialization or IH power voltage abnormality: The AC input is not applied to the IH control circuit normally, or the input voltage is too high/low.	Ch. 5.1.11
C480		Overheating of IGBT: The temperature of the IGBT rises abnormally.	Ch. 5.1.11
C490		IH control circuit or IH coil abnormality: Abnormality is detected in IH control circuit or IH coil is broken/shorted.	Ch. 5.1.11
C550	Optional communication related service call	RADF I/F error: Communication error has occurred between the RADF and the scanner.	Ch. 5.1.12
C570		Communication error between Main CPU and IPC board	Ch. 5.1.12
C580		Communication error between IPC board and finisher	Ch. 5.1.12
C730	RADF related service call	EEPROM initialization error: EEPROM is not initialized normally when performing the code 05-356.	Ch. 5.1.13
C810		Fan motor abnormality: The fan motor is not rotating normally.	Ch. 5.1.13
C820		Read sensor adjustment error: The read sensor cannot be adjusted normally when performing the code 05-356.	Ch. 5.1.13
C830		Original length sensor adjustment error: The original length sensor cannot be adjusted normally when performing the code 05-356.	Ch. 5.1.13
C940	Circuit related service call	Main CPU abnormality	Ch.5.1.14
C950		LGC board abnormality	Ch. 5.1.14
C960		DRV board abnormality	Ch. 5.1.14
C970	Process related service call	High-voltage transformer abnormality: Leakage of the main charger is detected.	Ch. 5.1.18
CA10	Laser optical unit related service call	Polygonal motor abnormality: The polygonal motor is not rotating normally.	Ch. 5.1.15
CA20		H-Sync detection error: H-Sync detection PC board cannot detect laser beams.	Ch. 5.1.15
CB20	Finisher related service call	Delivery motor abnormality: Delivery motor or delivery roller is not rotating normally. [MJ-1022]	Ch. 5.1.16
CB30		Tray 1/Tray 2 shift motor abnormality: Tray 1/Tray 2 shift motor is not rotating or delivery tray is not moving normally. [MJ-1023/1024]	Ch. 5.1.16

Error code	Classification	Contents	Trouble-shooting
CB40	Finisher related service call	Rear aligning plate motor abnormality: Rear aligning plate motor is not rotating or aligning plate is not moving normally. [MJ-1023/1024]	Ch. 5.1.16
CB50		Staple motor abnormality: Staple motor is not rotating or stapler is not moving normally. [MJ-1022/1023/1024]	Ch. 5.1.16
CB60		Stapler shift motor abnormality: Stapler shift motor is not rotating or staple unit is not moving normally. [MJ-1023/1024]	Ch. 5.1.16
CB80		Backup RAM data abnormality: (1) Abnormality of checksum value on finisher controller board is detected when the power is turned on. [MJ-1023/1024] (2) Abnormality of checksum value on punch driver board is detected when the power is turned on. [MJ-1023/1024 (when MJ-6004 is installed)]	Ch. 5.1.16
CB90		Saddle stitcher paper pushing plate motor abnormality: Paper pushing plate motor is not rotating or paper pushing plate is not moving normally. [MJ-1024]	Ch. 5.1.16
CBA0		Saddle stitcher stitch motor (rear) abnormality: Stitch motor (rear) is not rotating or rotary cam is not moving normally. [MJ-1024]	Ch. 5.1.16
CBB0		Saddle stitcher stitch motor (front) abnormality: Stitch motor (front) is not rotating or rotary cam is not moving normally. [MJ-1024]	Ch. 5.1.16
CBC0		Alignment motor abnormality: Alignment motor is not rotating or aligning plate is not moving normally. [MJ-1024]	Ch. 5.1.16
CBD0		Guide motor abnormality: Guide motor is not rotating or guide is not moving normally. [MJ-1024]	Ch. 5.1.16
CBE0		Paper folding motor abnormality: Paper folding motor or paper folding roller is not rotating normally. [MJ-1024]	Ch. 5.1.16
CBF0		Paper positioning plate motor abnormality: Paper positioning plate motor is not rotating or paper positioning plate is not moving normally. [MJ-1024]	Ch. 5.1.16
CC00		Saddle stitcher sensor connector abnormality: Connector of guide home position sensor, paper pushing plate home position sensor or paper pushing plate top position sensor is disconnected. [MJ-1024]	Ch. 5.1.16
CC10		Saddle stitcher micro switch abnormality: With all cover closed, inlet door switch, delivery door switch or front cover switch is open. [MJ-1024]	Ch. 5.1.16
CC20		Communication error between finisher and saddle stitcher: Communication error between finisher controller board and saddle stitcher controller board [MJ-1023/1024]	Ch. 5.1.16
CC30		Stack processing motor abnormality: The stack processing motor is not rotating or the stack delivery belt is not moving normally. [MJ-1022]	Ch. 5.1.16
CC40		Swing motor abnormality: Swing motor is not rotating or swing unit is not moving normally. [MJ-1023/1024]	Ch. 5.1.16
CC50		Horizontal registration motor abnormality: Horizontal registration motor is not rotating or puncher is not shifting normally. [MJ-1023/1024 (when MJ-6004 is installed)]	Ch. 5.1.16

Error code	Classification	Contents	Trouble-shooting
CC60	Finisher related service call	Punch motor abnormality: Punch motor is not rotating or puncher is not shifting normally. [MJ-1023/1024 (when MJ-6004 is installed)]	Ch. 5.1.16
CC80		Front alignment motor abnormality: Front alignment motor is not rotating or front aligning plate is not moving normally. [MJ-1022] Front aligning plate motor abnormality: Front aligning plate motor is not rotating or aligning plate is not moving normally. [MJ-1023/1024]	Ch. 5.1.16
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]	Ch. 5.1.16
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]	Ch. 5.1.16
CCB0		Rear jogging motor abnormality: The rear jogging motor is not rotating or the rear jogging plate is not moving normally. [MJ-1022]	Ch. 5.1.16
CCD0		Stack ejection motor abnormality: Stack ejection motor or stack ejection roller is not rotating normally. [MJ-1023/1024]	Ch. 5.1.16
CCE0		Paper trailing edge assist motor abnormality: Paper trailing edge assist motor is not rotating or paper trailing edge assist is not moving normally. [MJ-1023/1024]	Ch. 5.1.16
CCF0		Gear changing motor abnormality: Gear changing motor is not rotating normally. [MJ-1023/1024]	Ch. 5.1.16
CE00		Communication error between finisher and punch unit: Communication error between finisher controller board and punch driver board [MJ-1023/1024 (when MJ-6004 is installed)]	Ch. 5.1.16
CE10	Image control related service call	Image quality sensor abnormality (OFF level): The output value of this sensor is out of a specified range when sensor light source is OFF.	Ch. 5.1.17
CE20		Image quality sensor abnormality (no pattern level): The output value of this sensor is out of a specified range when the image quality control test pattern is not formed.	Ch. 5.1.17
CE40		Image quality control test pattern abnormality: The test pattern is not formed normally.	Ch. 5.1.17
CE50		Temperature/humidity sensor abnormality: The output value of this sensor is out of a specified range.	Ch. 5.1.17
CE90		Drum thermistor abnormality: The output value of the drum thermistor is out of a specified range.	Ch. 5.1.17
CEA0	Copy process related service call	Revolver home position detection abnormality: It cannot detect that the revolver is at its home position.	Ch. 5.1.18
CEB0		Black developer unit lifting movement abnormality: The black developer unit does not move up or down normally (lifting cam does not operate normally).	Ch. 5.1.18
CEC0		2nd transfer roller position detection abnormality: The 2nd transfer roller does not contact/release normally.	Ch. 5.1.18
CEE0		Transfer belt marker detection abnormality (normal operation): The home position of the transfer belt cannot be detected.	Ch. 5.1.18

Error code	Classification	Contents	Trouble-shooting
CEE1	Copy process related service call	Transfer belt marker detection abnormality (when decelerating): Reference position of the transfer belt cannot be detected.	Ch. 5.1.18
CEF0		Revolver motor abnormality: Revolver motor is not rotating or revolver is not moving normally.	Ch. 5.1.18
CF20	Toner density control related service call	Toner density detection voltage abnormality: The output value of the color auto-toner sensor in printing is out of a specified range.	Ch. 5.1.19
CF30		Reference plate detection voltage abnormality: The output value of the color auto-toner sensor against the reference plate is out of a specified range at the light amount correction during an auto-toner adjustment or when a print job has finished.	Ch. 5.1.19
CF40		Light amount correction voltage abnormality: The light amount correction is not finished normally during an auto-toner adjustment or when a print job has finished, or the output value of the sensor is out of a specified range when the light amount correction has finished.	Ch. 5.1.19
CF50		Color auto-toner sensor abnormality: The connection of the color auto-toner sensor cannot be detected at the initialization, or the output value of color auto-toner sensor when the revolver starts rotating for initialization is out of a specified range.	Ch. 5.1.19
F070	Communication related service call	Communication error between system CPU and main CPU	Ch. 5.1.12
F100	Other service call	HDD format error: HDD cannot be initialized normally.	Ch. 5.1.20
F101		HDD unmounted: Connection of HDD cannot be detected.	Ch. 5.1.20
F102		HDD start error: HDD cannot become 'Ready' state.	Ch. 5.1.20
F103		HDD transfer time-out: Reading/writing cannot be performed in the specified time.	Ch. 5.1.20
F104		HDD data error: Abnormality is detected in the data of HDD.	Ch. 5.1.20
F105		HDD other error	Ch. 5.1.20
F110	Communication related service call	Communication error between system CPU and scanner CPU	Ch. 5.1.20

<<Error history>>

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

Display example

<u>EA10</u>	<u>03 07 26 17 57 32</u>	<u>064</u>	<u>064</u>	<u>23621000000</u>
Error code	YY MM DD HH MM SS	MMM	NNN	ABCDEFGHIJLO
4 digits	12 digits (Year is indicated with its last two digits.)	3 digits	3 digits	11 digits

A	Paper source
	0: Not selected 1: Bypass feed 2: LCF 3: Upper drawer 4: Lower drawer 5: PFP upper drawer 6: PFP lower drawer
B	Paper size code
	0: A5/ST 1: A5-R 2: ST-R 3: LT 4: A4 5: B5-R 6: LT-R 7: A4-R 8: OTHER/UNIV 9: B5 A: FOLIO/COMP B: LG C: B4 D: LD E: A3 F: 13"LG H: A6-R I: Post card J: 8.5SQ K: A3-wide L: 305x457 mm M: 8K-R N: 16K-R O: 16K Z: Not selected
C	Sort mode/staple mode
	0: Non-sort/Non-staple 1: Group 2: Sort 7: Front staple 8: Double staple 9: Rear staple A: Saddle stitch
D	ADF mode
	0: Unused 1: AUTO FEED (SADF) 2: STACK FEED
E	APS/AMS mode
	0: Not selected 1: APS 2: AMS
F	Duplex mode
	0: Not selected 1: Book 2: Double-sided/Single-sided 4: Double-sided/Duplex copying 8: Single-sided/Duplex copying
G	Unused
H	Image shift
	0: Unused 1: Book 2: Left 4: Right
I	Editing
	0: Unused 1: Masking 2: Trimming 3: Mirror image 4: Unused/Positive
J	Edge erase/Dual-page
	0: Unused 1: Edge erase 2: Dual-page 3: Edge erase & Dual-page
K	Unused
L	Function
	0: Unused 1: Copying 2: FAX/Internet FAX transmission 3: FAX/Internet FAX/E-mail reception printing 4: Unused 5: Printing/List print 6: Scan/E-mail transmission
MMM	Primary scanning reproduction ratio (Display in hexadecimal)
	(Mx256)+(Mx16)+M
NNN	Secondary scanning reproduction ratio (Display in hexadecimal)
	(Nx256)+(Nx16)+N
O	Color mode
	0: Auto color 1: Full color 2: Black 3: Unused 4: Twin color 5: Image smoothing 6: U-FINE Full color 7: Multivalued black

2.2 Self-diagnosis Modes

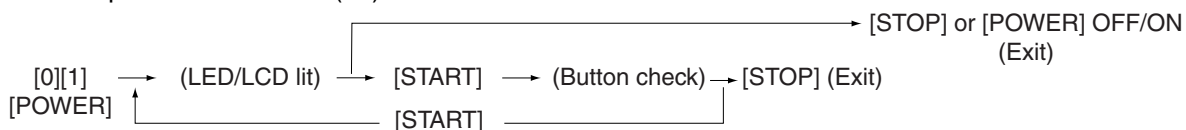
Mode	For start	Contents	For exit	Display
Control panel check mode	[0]+[1]+ [POWER]	All LEDs on the control panel are lit, and all the LCD pixels blink.	[STOP] or [POWER] OFF/ON	—
Test mode	[0]+[3]+ [POWER]	Checks the status of input/output signals.	[POWER] OFF/ON	100% C A4 TEST MODE
Test print mode	[0]+[4]+ [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 MODE
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]	Performs auto-toner adjustment and 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):

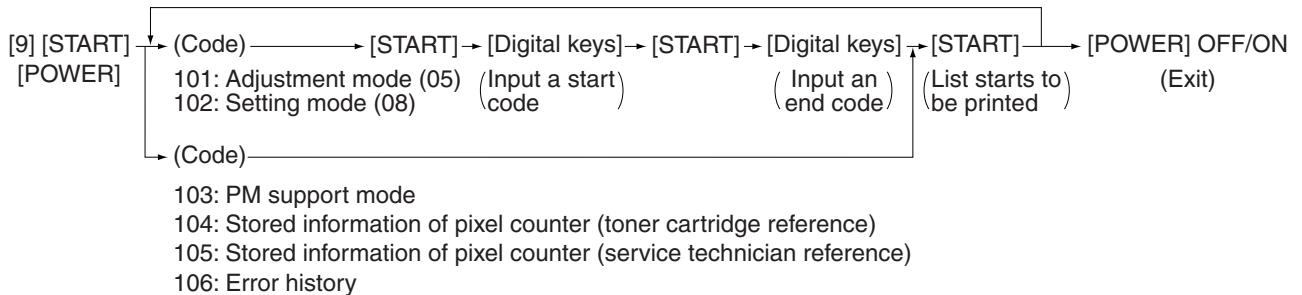


Notes:

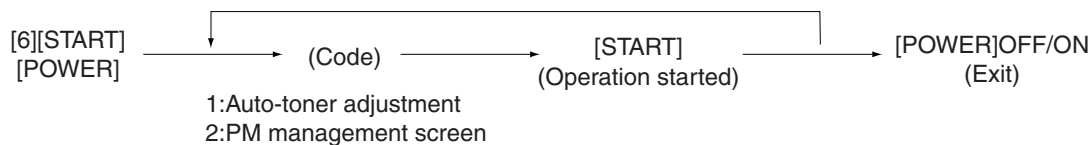
- A mode can be canceled only by pressing the [STOP] button during the button check and by the [STOP] button or [POWER] OFF/ON during the LED and LCD are lit.
- Button Check

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.)

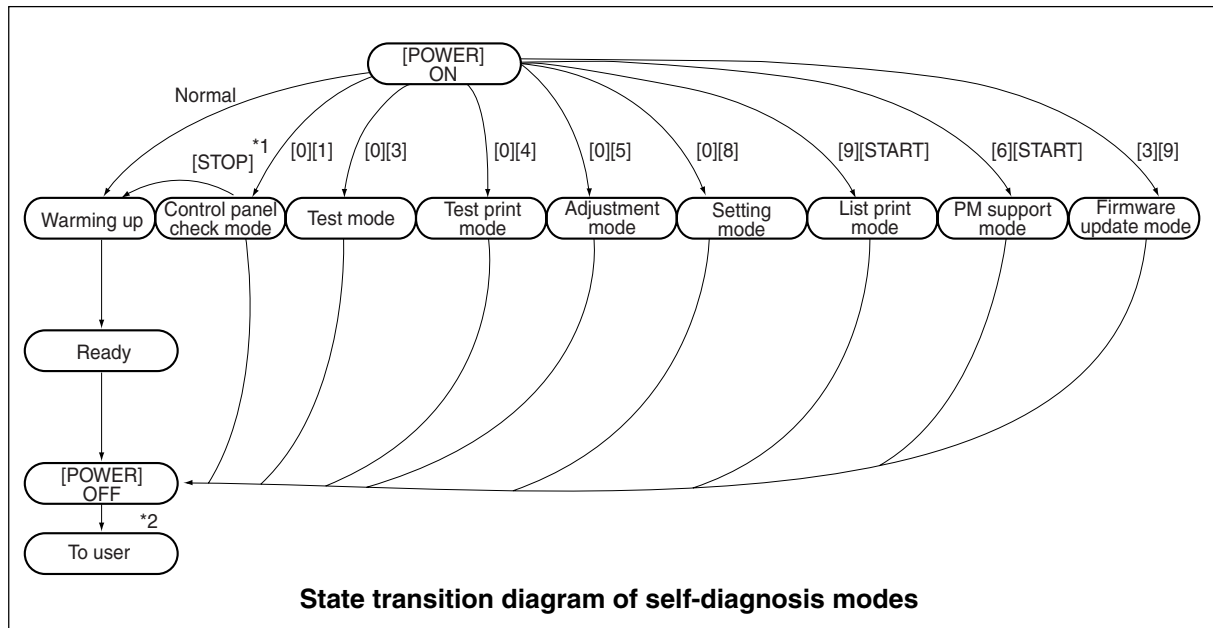
- Test mode (03): Refer to “2.2.1. Input check (test mode 03)” and “2.2.2. Output check (test mode 03)”.
- Test print mode (04): Refer to “2.2.3. Test print mode (04)”.
- Adjustment mode (05): Refer to “2.2.4. Adjustment mode (05)”.
- Setting mode (08): Refer to “2.2.5. Setting mode (08)”.
- List print mode (9S):



- PM support mode (6S):



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



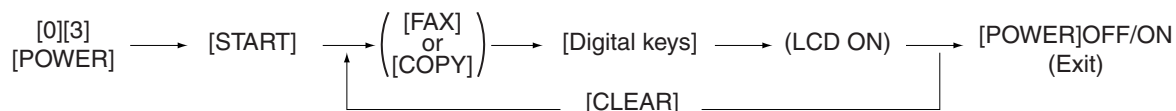
*1 In the “Control panel check mode”, copying is disabled. Enter the ready state by pressing the [STOP] button to start copying.

*2 Turn OFF the power after using the self-diagnosis mode, and leave the copier to the user.

2.2.1 Input check (Test mode 03)

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

<Operation procedure>



Note:

Initialization is performed before the copier enters the test mode.



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

Digital key	Button	Items to check	Condition with highlighted button
[1]	A	Bypass unit connection	Not connected
	B	ADU connection	Not connected
	C	—	
	D	LCF connection	Not connected
	E	—	
	F	—	
	G	—	
	H	—	
[2]	A	PFP upper drawer detection switch	Drawer not installed
	B	—	
	C	PFP upper drawer paper stock sensor	Paper almost empty
	D	PFP upper drawer feed sensor	Paper present
	E	PFP connection	Not connected
	F	PFP side cover open/close switch	Cover opened
	G	PFP upper drawer empty sensor	No paper
	H	PFP upper drawer tray-up sensor	Tray at upper limit position
[3]	A	LCF tray bottom sensor	Tray at bottom position
	B	LCF standby side paper misload detection sensor	Properly loaded
	C	—	
	D	—	
	E	—	
	F	—	
	G	—	
	H	Paper stock sensor at LCF feed side	Paper present
[4]	A	PFP lower drawer detection switch	Drawer not installed
	B	—	
	C	PFP lower drawer paper stock sensor	Paper almost empty
	D	PFP lower drawer feed sensor	Paper present
	E	PFP motor rotation status (Motor is rotating at output mode (03))	Abnormal rotation
	F	—	
	G	PFP lower drawer empty sensor	No paper
	H	PFP lower drawer tray-up sensor	Tray at upper limit position
[5]	A	LCF end fence home position sensor	Fence home position
	B	LCF end fence stop position sensor	Fence stop position
	C	Empty sensor at LCF standby side	No paper
	D	LCF side cover open/close switch	Cover closed
	E	LCF motor rotation status (Motor is rotating at output mode (03))	Motor stopped
	F	LCF tray-up sensor	Tray at upper limit position
	G	LCF feed sensor	No paper
	H	Empty sensor at LCF feed side	No paper
[6]	A	Lower drawer detection switch	Drawer not installed
	B	Upper drawer detection switch	Drawer not installed
	C	Lower drawer paper stock sensor	Paper almost empty
	D	Upper drawer paper stock sensor	Paper almost empty
	E	Lower drawer empty sensor	No paper
	F	Upper drawer empty sensor	No paper
	G	Lower drawer tray-up sensor	Tray at upper limit position
	H	Upper drawer tray-up sensor	Tray at upper limit position

Digital key	Button	Items to check	Condition with highlighted button
[7]	A	—	
	B	—	
	C	—	
	D	—	
	E	Side cover open/close switch	Cover opened
	F	Front cover switch	Cover opened
	G	—	
	H	Exit sensor Paper present	
[8]	A	Bypass feed paper width sensor 3	Refer to table 1
	B	Bypass feed paper width sensor 2	Refer to table 1
	C	Bypass feed paper width sensor 1	Refer to table 1
	D	Bypass feed paper width sensor 0	Refer to table 1
	E	Bypass sensor	No paper
	F	ADU open/close sensor	ADU opened
	G	ADU exit sensor	Paper present
	H	ADU entrance sensor	Paper present
[9]	A	—	
	B	—	
	C	—	
	D	—	
	E	—	
	F	Key copy counter connection	Not connected
	G	—	
	H	—	
[0]	A	—	
	B	—	
	C	—	
	D	—	
	E	—	
	F	—	
	G	—	
	H	—	

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

Bypass paper-width sensor				Paper-width size
3	2	1	0	
0	1	1	1	A3/LD
1	0	1	1	A4-R/LT-R
1	1	0	1	A5-R/ST-R
1	1	1	0	Card size
0	0	1	1	B4-R/LG
1	0	0	1	B5-R

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

Digital key	Button	Items to check	Condition with highlighted button
[1]	A	2nd transfer roller contact detection	Release
	B	Black developer unit contact detection	Release operation
	C	Black developer unit position detection	Release position
	D	Main motor synchronized signal detection	Stopped or abnormal status
	E	Developer motor synchronized signal detection	Stopped or abnormal status
	F	Transport motor synchronized signal detection	Stopped or abnormal status
	G	Polygonal motor synchronized signal detection	Stopped or abnormal status
	H	24V Power supply	Power OFF
[2]	A	IPC board connection	Not connected
	B	Color toner cartridge installation detection sensor	Installed normally
	C	Revolver home position sensor	Home position
	D	—	
	E	—	
	F	Toner bag full detection sensor	Toner bag full
	G	Black auto-toner sensor connection	Not connected
	H	—	
[3]	A	—	
	B	—	
	C	—	
	D	—	
	E	—	
	F	—	
	G	Lower drawer feed sensor	No paper
	H	Upper drawer feed sensor	Paper present
[4]	A	—	
	B	—	
	C	—	
	D	—	
	E	Bridge unit connection	Not connected
	F	Color auto-toner sensor connection	Not connected
	G	—	
	H	—	
[5]	A	—	
	B	—	
	C	—	
	D	—	
	E	—	
	F	(Reserved) RADF connection	RADF connected
	G	(Reserved) Platen sensor	Platen cover opened
	H	(Reserved) Carriage home position sensor	Home position

Digital key	Button	Items to check	Condition with highlighted button
[6]	A	—	
	B	—	
	C	—	
	D	(Reserved) APS sensor (APS-5)	No original
	E	(Reserved) APS sensor (APS-4)	No original
	F	(Reserved) APS sensor (APS-3)	No original
	G	(Reserved) APS sensor (APS-2)	No original
	H	(Reserved) APS sensor (APS-1)	No original
[7]	A	(Reserved) RADF tray sensor	Original present
	B	(Reserved) RADF empty sensor	Original present
	C	(Reserved) RADF jam access cover open/close switch	Cover opened
	D	(Reserved) RADF open/close sensor	RADF opened
	E	(Reserved) RADF exit sensor	Original present
	F	(Reserved) RADF reversal sensor	Original present
	G	(Reserved) RADF read sensor	Original present
	H	(Reserved) RADF registration sensor	Original present
[8]	A	—	
	B	—	
	C	—	
	D	—	
	E	(Reserved) RADF original length sensor	Original present
	F	(Reserved) RADF original width sensor 1	Original present
	G	(Reserved) RADF original width sensor 2	Original present
	H	(Reserved) RADF original width sensor 3	Original present
[9]	A	Black toner cartridge detection switch	Cartridge not installed
	B	—	
	C	—	
	D	Bypass feed sensor	No paper
	E	Registration sensor	Paper present
	F	—	
	G	—	
	H	Transfer belt home position sensor	Home position
[0]	A	Bridge unit transport sensor 2	Paper present
	B	Bridge unit transport cover open/close sensor	Cover opened
	C	Bridge unit transport sensor 1	Paper present
	D	Bridge unit paper full detection sensor	Paper not full
	E	—	
	F	Main charger wire cleaner home position sensor	Home position
	G	Main charger wire cleaner returning sensor	Returning position
	H	—	

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

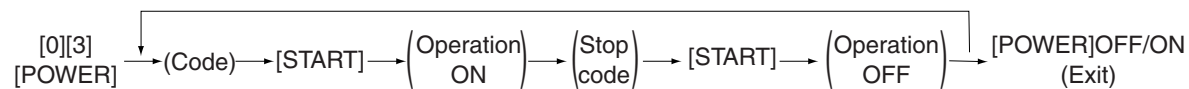
Digital key	Items to check	Message on the touch panel
[1]	Temperature sensor	Displays the temperature inside the equipment. (Unit: °C)
[2]	Humidity sensor	Displays the humidity inside the equipment. (Unit: %RH)
[3]	Drum thermistor	Displays the temperature near the drum surface. (Unit: °C)

2.2.2 Output check (test mode 03)

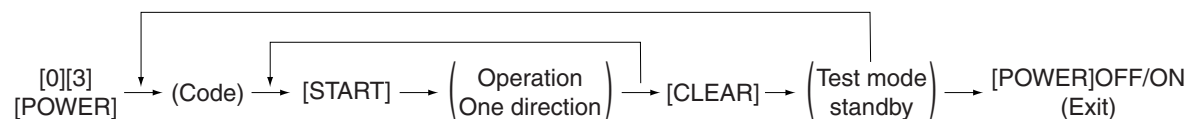
Status of the output signals can be checked by entering the following codes in the test mode 03.

<Operation procedure>

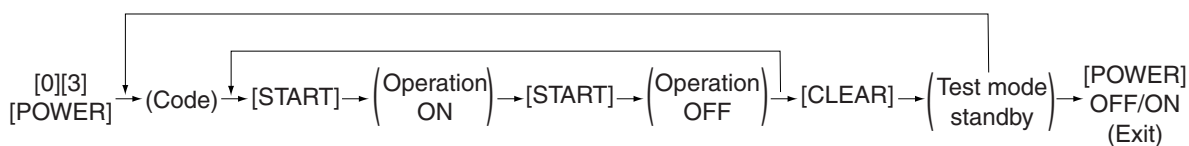
Procedure 1



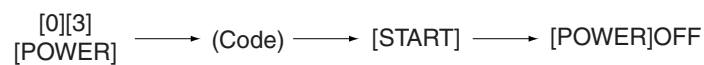
Procedure 2



Procedure 3



Procedure 5



Code	Function	Code	Function	Procedure
101	Main motor ON (Operational without black developer unit)	151	Code No.101 function OFF	1
102	Toner motor K (normal rotation) ON	152	Code No.102 function OFF	1
103	Polygonal motor (600dpi) ON	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	160	Code No.110 function OFF	1
112	Developer motor ON (Operational with black developer unit)	162	Code No.112 function OFF	1
115	Drum cleaning brush motor ON	165	Code No.115 function OFF	1
116	Transfer belt cleaner auger motor ON	166	Code No.116 function OFF	1
118	Laser ON	168	Code No.118 function OFF	1
120	Exit motor (normal rotation) ON	170	Code No.120 function OFF	1
121	Exit motor (reversal rotation) ON	171	Code No.121 function OFF	1
122	LCF motor ON	172	Code No.122 function OFF	1
123	Transport motor ON	173	Code No.123 function OFF	1
124	Toner motor K (reversal rotation) ON	174	Code No.124 function OFF	1
125	Color auto-toner sensor shutter ON (open)	175	Code No.125 function OFF	1
126	Color auto-toner sensor LED ON	176	Code No.126 function OFF	1
201	Upper drawer feed clutch ON/OFF			3
202	Lower drawer feed clutch ON/OFF			3
203	Transport clutch ON/OFF			3
204	Bypass feed clutch ON/OFF			3
205	Paper pushing clutch ON/OFF			3
206	LCF pickup solenoid ON/OFF			3
207	LCF end fence reciprocating movement			2
208	LCF end fence motor ON/OFF			3
209	LCF feed clutch ON/OFF			3
210	LCF transport clutch ON/OFF			3
211	(Reserved) RADF feed motor (normal rotation) ON/OFF			3
212	(Reserved) RADF feed motor (reversal rotation) ON/OFF			3
213	(Reserved) RADF read motor (normal rotation) ON/OFF			3
214	(Reserved) RADF read motor (reversal rotation) ON/OFF			3
215	(Reserved) RADF reversal motor (normal rotation) ON/OFF			3
216	(Reserved) RADF reversal motor (reversal rotation) ON/OFF			3
218	Key copy counter count up			2
225	PFP transport clutch ON/OFF			3
226	PFP upper drawer feed clutch ON/OFF			3
228	PFP lower drawer feed clutch ON/OFF			3
232	Bridge unit gate solenoid ON/OFF			3
235	Discharge lamp ON/OFF			3
241	IH board cooling fan (low speed) ON/OFF			3
242	Upper drawer tray-up motor ON (tray up)			2
243	Lower drawer tray-up motor ON (tray up)			2
248	Developer bias (Black) [+DC] ON/OFF			3
249	Developer bias (Black) [-DC] ON/OFF			3
252	Main charger (Black and color) ON/OFF			3
261	Scan motor ON (Automatically stops at limit position, speed can be changed by using ZOOM key)			2

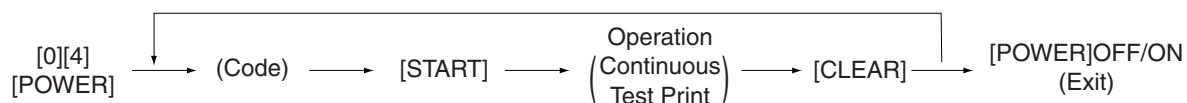
Code	Function	Procedure
264	Scanner cooling fan 1 ON/OFF	3
265	Scanner cooling fan 2 ON/OFF	3
266	Scanner cooling fan 3 ON/OFF	3
267	Scanner exposure lamp ON/OFF	3
268	Laser unit cooling fan (high speed) ON/OFF	3
271	LCF tray-up motor UP/DOWN	2
278	PFP upper drawer tray-up motor ON (tray up)	2
280	PFP lower drawer tray-up motor ON (tray up)	2
294	RADF reverse solenoid ON/OFF	3
295	Power OFF mode (for 200V series)	5
297	RADF fan motor ON/OFF	3
410	Power supply cooling fan (low speed) ON/OFF	3
411	Power supply cooling fan (high speed) ON/OFF	3
412	Toner scattering prevention fan (low speed) ON/OFF	3
413	Toner scattering prevention fan (high speed) ON/OFF	3
414	Paper cooling fan (low speed) ON/OFF	3
415	Paper cooling fan (high speed) ON/OFF	3
416	IH board cooling fan (high speed) ON/OFF	3
417	Ozone exhaust fan (low speed) ON/OFF	3
418	Ozone exhaust fan (high speed) ON/OFF	3
419	Developer bias (Black) [AC] ON/OFF	3
420	Developer bias (Color) [+DC] ON/OFF	3
421	Developer bias (Color) [-DC1] ON/OFF	3
422	Developer bias (Color) [AC] ON/OFF	3
424	1st transfer roller bias [+] ON/OFF	3
425	1st transfer roller bias [-] ON/OFF	3
426	2nd transfer roller bias [+] ON/OFF	3
427	2nd transfer roller bias [-] ON/OFF	3
428	Drum cleaning blade bias ON/OFF	3
430	Image quality sensor cleaning solenoid ON/OFF	3
431	Color developer unit drive clutch ON/OFF	3
432	Black developer unit drive clutch ON/OFF	3
433	Black developer unit contact clutch ON/OFF	3
434	2nd transfer roller drive clutch ON/OFF	3
435	2nd transfer roller contact clutch ON/OFF	3
436	2nd transfer roller cleaner contact clutch ON/OFF	3
437	Transfer belt cleaner contact clutch ON/OFF	3
438	Coating roller contact solenoid ON/OFF	3
439	Intermediary roller drive clutch (for transport drive) ON/OFF	3
440	Intermediary roller drive clutch (for process speed drive) ON/OFF	3
441	Color auto-toner sensor	3
442	Color developer toner supply clutch ON/OFF	3
450	Revolver motor ON/OFF (printing operation)	3
451	Revolver motor operation (at standby position)	2
452	Revolver motor operation (at toner cartridge Y access position)	2
453	Revolver motor operation (at toner cartridge M access position)	2
454	Revolver motor operation (at toner cartridge C access position)	2
455	Revolver motor operation (at developer unit Y access position)	2
456	Revolver motor operation (at developer unit M access position)	2
457	Revolver motor operation (at developer unit C access position)	2

Code	Function	Procedure
458	Revolver motor operation (at home position)	2
459	Revolver motor operation (at developing position)	2
460	Black developer unit lifting movement ON/OFF (continuous lifting movement)	3
461	Main charger wire cleaning movement (one reciprocating movement)	2

2.2.3 Test print mode (test mode 04)

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

<Operation procedure>



Notes:

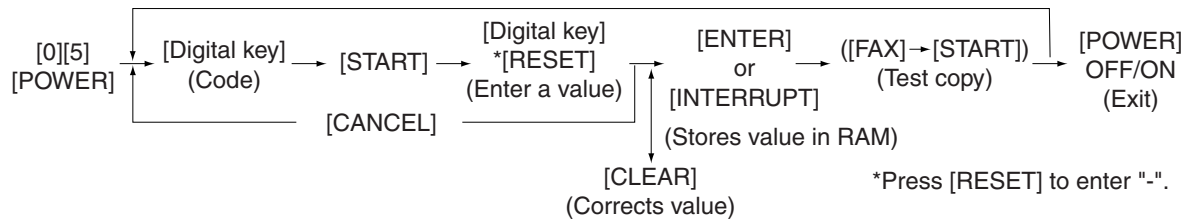
1. When an error occurs, it is indicated on the panel, but the recovery operation is not performed.
Turn OFF the power and then back ON to clear the error.
2. During test printing, the [CLEAR] button is disabled when “Wait adding toner” is displayed.

Code	Types of test pattern	Remarks
101	Pattern for making the gamma correction table	Binary error diffusion
102	Pattern for making the gamma correction table	Binary dither
142	Grid pattern	Pattern width: 2 dots, Pitch: 10 mm
204	Grid pattern	Pattern width: 1 dot, Pitch: 10 mm
219	6% test pattern	
220	8% test pattern	
230	Secondary scanning direction 33 gradation steps	2 pixels standard, Width: 10 mm
231	Secondary scanning direction 33 gradation steps	3 pixels standard, Width: 10 mm
234	Halftone	
270	Image quality control test pattern	For checking the image quality control

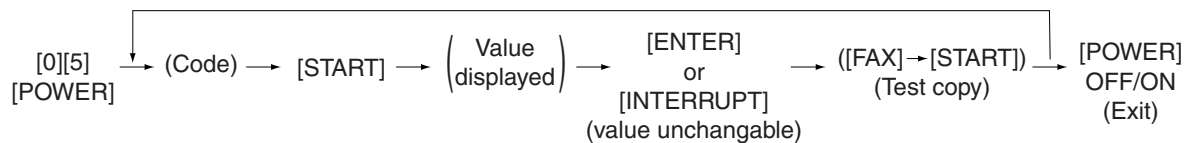
2.2.4 Adjustment mode (05)

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

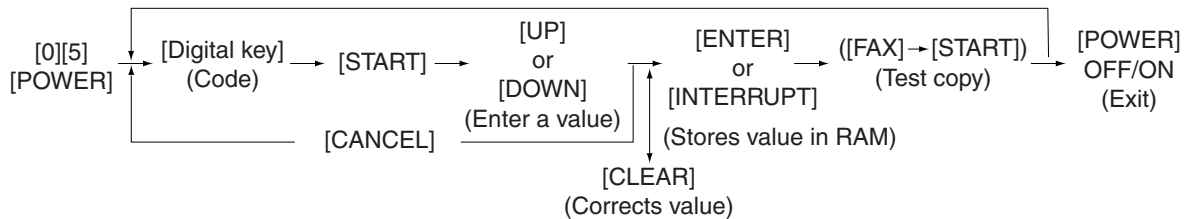
Procedure 1



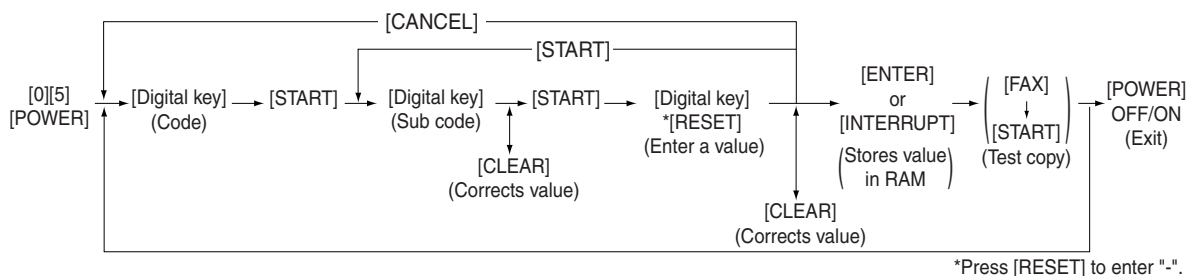
Procedure 2



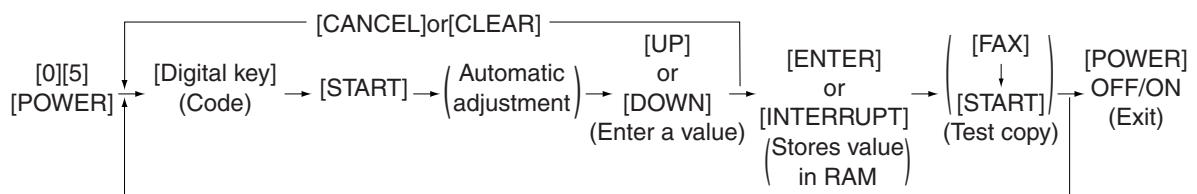
Procedure 3



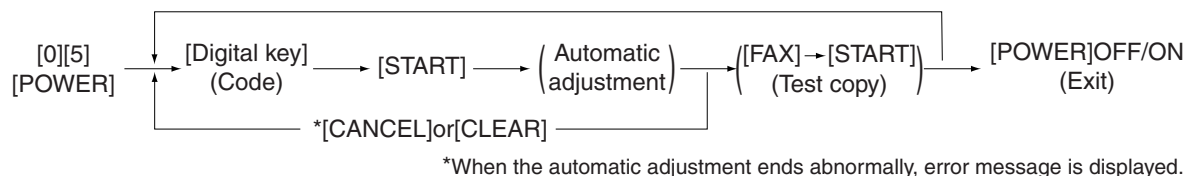
Procedure 4



Procedure 5

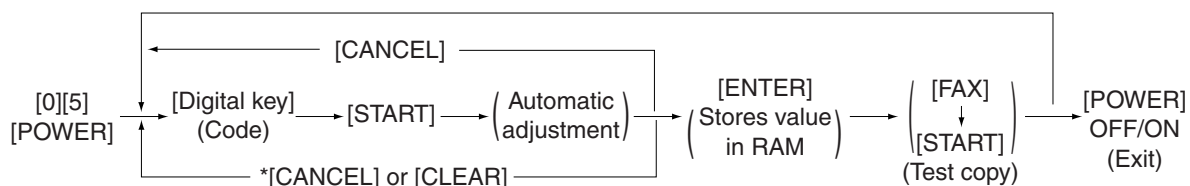


Procedure 6



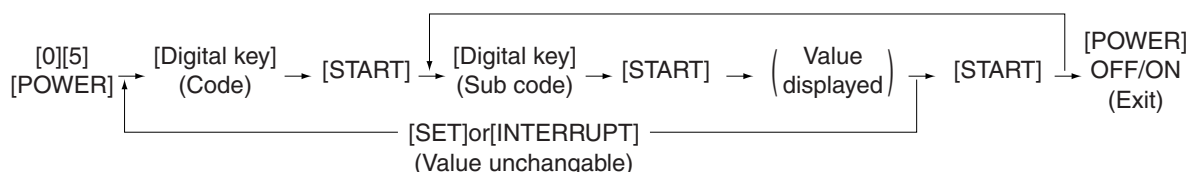
*When the automatic adjustment ends abnormally, error message is displayed.

Procedure 7

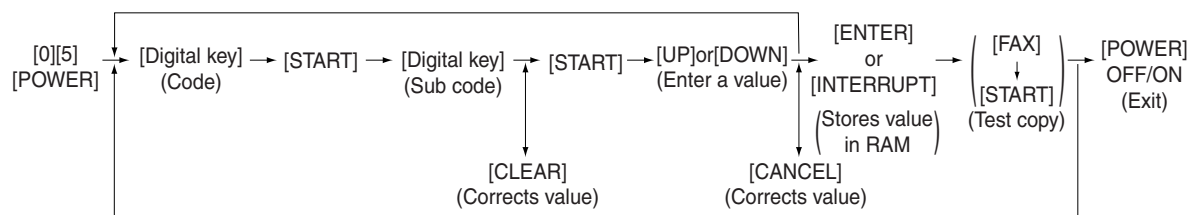


*When the automatic adjustment ends abnormally, error message is displayed.

Procedure 10



Procedure 14



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 copier for approx. 3 minutes after it has become ready state and then start up the adjustment mode again.

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
200	Devel- opment	Automatic adjustment of the auto-toner sensor	All (Y,M,C,K)	ALL	- <0-255>	M	The value starts changing approx. 3 minutes after this adjustment started.	5
201			Y	ALL	- <0-255>	M	The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.) (▶ Chapter 3.2)	5
202			M	ALL	- <0-255>	M		5
203			C	ALL	- <0-255>	M		5
204			K	ALL	- <0-255>	M		5
206			YMC	ALL	- <0-255>	M		5
210	Transfer	1st transfer roller bias output adjustment (When not transferred)		ALL	225 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	3
211-0	Transfer	1st transfer roller bias output adjustment (Image quality control test pattern)	Y	ALL (color)	133 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
211-1			M	ALL (color)	133 <0-225>	M		14
211-2			C	ALL (color)	133 <0-225>	M		14
211-3			K	ALL (color)	137 <0-225>	M		14
212	Transfer	1st transfer roller bias output adjustment	Normal paper	ALL (black)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	3
214			Thick paper 1	ALL (black)	145 <0-225>	M		3
215			Thick paper 2	ALL (black)	145 <0-225>	M		3
216			Thick paper 3	ALL (black)	145 <0-225>	M		3
217			OHP film	ALL (black)	145 <0-225>	M		3
218-0	Transfer	1st transfer roller bias outputbias out-put adjust- ment (Normal paper)	Y	ALL (color)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
218-1			M	ALL (color)	145 <0-225>	M		14
218-2			C	ALL	145 <0-225>	M		14
218-3			K	ALL (color)	145 <0-225>	M		14

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
220-0	Transfer	1st transfer roller bias output adjustment (Thick paper 1)	Y	ALL (color)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
220-1		M	ALL (color)	145 <0-225>	M	14		
220-2		C	ALL (color)	145 <0-225>	M	14		
220-3		K	ALL (color)	145 <0-225>	M	14		
221-0	Transfer	Transfer 1st transfer roller bias output adjustment (Thick paper 2)	Y	ALL (color)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
221-1		M	ALL (color)	145 <0-225>	M	14		
221-2		C	ALL (color)	145 <0-225>	M	14		
221-3		K	ALL (color)	145 <0-225>	M	14		
222-0	Transfer	Transfer 1st transfer roller bias output adjustment (Thick paper 3)	Y	ALL (color)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
222-1		M	ALL (color)	145 <0-225>	M	14		
222-2		C	ALL (color)	145 <0-225>	M	14		
222-3		K	ALL (color)	145 <0-225>	M	14		
223-0	Transfer	Transfer 1st transfer roller bias output adjustment (OHP film)	Y	ALL (color)	145 <0-225>	M	When the value decreases, the 1st transfer roller bias output increases.	14
223-1		M	ALL (color)	145 <0-225>	M	14		
223-2		C	ALL (color)	145 <0-225>	M	14		
223-3		K	ALL (color)	145 <0-225>	M	14		
224	Transfer	2nd transfer roller bias output adjustment (When cleaning the roller [+])		ALL	137 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	3
225	Transfer	2nd transfer roller bias output adjustment (When cleaning the roller [-])		ALL	196 <159-255>	M	When the value decreases, the 2nd transfer roller bias output increases.	3
226	Transfer	2nd transfer roller bias output adjustment (Paper interval/When not transferred)		ALL	169 <159-255>	M	When the value decreases, the 2nd transfer roller bias output increases.	3

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
227-0	Transfer	2nd transfer roller bias output adjustment (Normal paper)	Single side	ALL (black)	140 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	14
227-1			Reverse side at duplexing	ALL (black)	140 <0-158>	M		14
227-2			Single side	ALL (color)	134 <0-158>	M		14
227-3			Reverse side at duplexing	ALL (color)	134 <0-158>	M		14
229-0	Transfer	2nd transfer roller bias output adjustment (Thick paper 1)	Single side	ALL (black)	140 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	14
229-1			Reverse side at duplexing	ALL (black)	140 <0-158>	M		14
229-2			Single side	ALL (color)	134 <0-158>	M		14
229-3			Reverse side at duplexing	ALL (color)	134 <0-158>	M		14
230-0	Transfer	2nd transfer roller bias output (Thick paper 2)		ALL (black)	125 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	14
230-1				ALL (color)	122 <0-158>	M		14
231-0	Transfer	2nd transfer roller bias output (Thick paper 3)		ALL (black)	110 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	14
231-1				ALL (color)	107 <0-158>	M		14
232-0	Transfer	2nd transfer roller bias output (OHP film)		ALL (black)	93 <0-158>	M	When the value decreases, the 2nd transfer roller bias output increases.	14
232-1				ALL (color)	87 <0-158>	M		14
233	Transfer	1st transfer roller bias offsetting		ALL (color)	5 <0-10>	M	Sets the offset amount of 1st transfer roller bias. 0: -500V 1: -400V 2: -300V 3: -200V 4: -100V 5: 0V 6: +100V 7: +200V 8: +300V 9: +400V 10: +500V	1
234-0	Transfer	2nd transfer roller bias offsetting adjustment (Normal paper)	Single side	ALL (black)	5 <0-10>	M	Sets the offset amount of 2nd transfer roller bias. 0: -500V 1: -400V 2: -300V 3: -200V 4: -100V 5: 0V 6: +100V 7: +200V 8: +300V 9: +400V 10: +500V	4
234-1			Reverse side at duplexing	ALL (black)	5 <0-10>	M		4
234-2			Single side	ALL (color)	5 <0-10>	M		4
234-3			Reverse side at duplexing	ALL (color)	5 <0-10>	M		4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
236-0	Transfer	2nd transfer roller bias offsetting adjustment (Thick paper 1)	Single side	ALL (black)	5 <0-10>	M	Sets the offset amount of 2nd transfer roller bias. 0: -500V 1: -400V 2: -300V 3: -200V 4: -100V 5: 0V 6: +100V 7: +200V 8: +300V 9: +400V 10: +500V	4
236-1			Reverse side at duplexing	ALL (black)	5 <0-10>	M		4
236-2			Single side	ALL (color)	5 <0-10>	M		4
236-3			Reverse side at duplexing	ALL (color)	5 <0-10>	M		4
237-0	Transfer	2nd transfer roller bias offsetting adjustment (Thick paper 2)		ALL (black)	5 <0-10>	M		4
237-1				ALL (color)	5 <0-10>	M		4
238-0	Transfer	2nd transfer roller bias offsetting adjustment (Thick paper 3)		ALL (black)	5 <0-10>	M		4
238-1				ALL (color)	5 <0-10>	M		4
239-0	Transfer	2nd transfer roller bias offsetting adjustment (OHP film)		ALL (black)	5 <0-10>	M		4
239-1				ALL (color)	5 <0-10>	M		4
241	Main charger	Main charger grid bias adjustment	Y	ALL	77 <0-255>	M	As the value increases,the trans- former output increases. The adjustment value becomes effective only when the setting mode (08-400, 401,409) is 0 (invalid).	3
242			M	ALL	77 <0-255>	M		3
243			C	ALL	77 <0-255>	M		3
244			K	ALL	100 <0-255>	M		3
245	Transfer	1st transfer roller bias offsetting		ALL (black)	5 <0-10>	M	Sets the offsetting amount of 1st transfer roller bias. 0: -500 V 1: -400 V 2: -300 V 3: -200 V 4: -100 V 5: 0 V 6: +100 V 7: +200 V 8: +300 V 9: +400 V 10: +500 V	1
250	Transfer	1st transfer roller bias output voltage	+Low	ALL	2000 <1800-4400>	M	Transformer output setting of the 1st transfer roller bias. When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
251			+High	ALL	200 <0-500>	M		1
252	Transfer	2nd transfer roller bias output voltage	+Low	ALL	4800 <4320-5280>	M	Transformer output setting of the 2nd transfer roller bias (plus output). When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
253			+High	ALL	516 <416-616>	M		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
254	Transfer	2nd transfer roller bias output voltage	-Low	ALL	-110 <-9999-0>	M	Transformer output setting of the 2nd transfer roller bias (minus output). When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
255			-High	ALL	-2000 <-9999-0>	M		1
262-0	Transfer	1st transfer roller bias actual value display (Image quality control test pattern)	Y	ALL (color)	133 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
262-1			M	ALL (color)	133 <0-225>	M		10
262-2			C	ALL (color)	133 <0-225>	M		10
262-3			K	ALL (color)	137 <0-225>	M		10
263	Transfer	1st transfer roller bias actual value display	Normal paper	ALL (black)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	2
265			Thick paper 1	ALL (black)	145 <0-225>	M		2
266			Thick paper 2	ALL (black)	145 <0-225>	M		2
267			Thick paper 3	ALL (black)	145 <0-225>	M		2
268			OHP film	ALL (black)	145 <0-225>	M		2
269-0	Transfer	1st transfer roller bias actual value display (Normal paper)	Y	ALL (color)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
269-1			M	ALL (color)	145 <0-225>	M		10
269-2			C	ALL (color)	145 <0-225>	M		10
269-3			K	ALL (color)	145 <0-225>	M		10
271-0	Transfer	1st transfer roller bias actual value display (Thick paper 1)	Y	ALL (color)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
271-1			M	ALL (color)	145 <0-225>	M		10
271-2			C	ALL (color)	145 <0-225>	M		10
271-3			K	ALL (color)	145 <0-225>	M		10
272-0	Transfer	1st transfer roller bias actual value display (Thick paper 2)	Y	ALL (color)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
272-1			M	ALL (color)	145 <0-225>	M		10
272-2			C	ALL (color)	145 <0-225>	M		10
272-3			K	ALL (color)	145 <0-225>	M		10

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
273-0	Transfer	1st transfer roller bias actual value display (Thick paper 3)	Y	ALL (color)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
273-1			M	ALL (color)	145 <0-225>	M		10
273-2			C	ALL (color)	145 <0-225>	M		10
273-3			K	ALL (color)	145 <0-225>	M		10
274-0	Transfer	1st transfer roller bias actual value display (OHP film)	Y	ALL (color)	145 <0-225>	M	Displays the value of 1st transfer roller bias when the actual printing is operated.	10
274-1			M	ALL (color)	145 <0-225>	M		10
274-2			C	ALL (color)	145 <0-225>	M		10
274-3			K	ALL (color)	145 <0-225>	M		10
275	Transfer	2nd transfer roller bias actual value (When cleaning the roller)	(+)	ALL	137 <0-255>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	2
276			(-)	ALL	196 <0-255>	M		2
277-0	Transfer	2nd transfer roller bias actual value display (Normal paper)	Single side	ALL (black)	140 <0-158>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	10
277-1			Reverse side at duplexing	ALL (black)	140 <0-158>	M		10
277-2			Single side	ALL (color)	134 <0-158>	M		10
277-3			Reverse side at duplexing	ALL (color)	134 <0-158>	M		10
279-0	Transfer	2nd transfer roller bias actual value display (Thick paper 1)	Single side	ALL (black)	140 <0-158>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	10
279-1			Reverse side at duplexing	ALL (black)	140 <0-158>	M		10
279-2			Single side	ALL (color)	134 <0-158>	M		10
279-3			Reverse side at duplexing	ALL (color)	134 <0-158>	M		10
290-0	Transfer	2nd transfer roller bias offsetting adjustment (Thick paper 2)		ALL (black)	125 <0-158>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	10
290-1				ALL (color)	122 <0-158>	M		10
291-0	Transfer	2nd transfer roller bias offsetting adjustment (Thick paper 3)		ALL (black)	110 <0-158>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	10
291-1				ALL (color)	107 <0-158>	M		10

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
292-0	Transfer	2nd transfer roller bias offsetting adjustment (OHP film)		ALL (black)	93 <0-158>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated.	10
292-1				ALL (color)	87 <0-158>	M		10
293-0	Transfer	2nd transfer roller bias correction of leading/trailing edge of paper	Normal paper	ALL	90 <0-100>	M	Corrects the 2nd transfer roller bias output of leading/trailing edge of paper (05-227, 229, 230, 231 and 232). Correcting factor: %	14
293-1			Thick paper 1	ALL	90 <0-100>	M		14
293-2			Thick paper 2	ALL	80 <0-100>	M		14
293-3			Thick paper 3	ALL	70 <0-100>	M		14
293-4			OHP film	ALL	70 <0-100>	M		14
294-0	Transfer	Actual value display of 2nd transfer roller bias of leading/trailing edge of paper (Normal paper)	Single side	ALL (black)	142 <0-255>	M	Displays the value of 2nd transfer roller bias when the actual printing is operated. (The value adjusted in 05-293 is displayed.)	10
294-1			Reverse side at duplex printing	ALL (black)	142 <0-255>	M		10
294-2			Single side	ALL (color)	137 <0-255>	M		10
294-3			Reverse side at duplex printing	ALL (color)	137 <0-255>	M		10
296-0	Transfer	Actual value display of 2nd transfer roller bias of leading/trailing edge of paper (Thick paper 1)	Single side	ALL (black)	137 <0-255>	M		10
296-1			Reverse side at duplex printing	ALL (black)	137 <0-255>	M		10
296-2			Single side	ALL (color)	134 <0-255>	M		10
296-3			Reverse side at duplex printing	ALL (color)	134 <0-255>	M		10
297-0	Transfer	Actual value display of 2nd transfer roller bias of leading/trailing edge of paper (Thick paper 2)	ALL (black)	133 <0-255>	M		10	
297-1			ALL (color)	131 <0-255>	M		10	
298-0	Transfer	Actual value display of 2nd transfer roller bias of leading/trailing edge of paper (Thick paper 3)	ALL (black)	127 <0-255>	M		10	
298-1			ALL (color)	121 <0-255>	M		10	
299-0	Transfer	Actual value display of 2nd transfer roller bias of leading/trailing edge of paper (OHP film)	ALL (black)	129 <0-255>	M		10	
299-1			ALL (color)	126 <0-255>	M		10	

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
305	Scanner	Image location adjustment of secondary-scanning direction (scanner section)		ALL	128 <92-164>	SYS	When the value increases by “1”, the image shifts by approx. 0.137mm toward the trailing edge of the paper.	1
306	Scanner	Image location adjustment of secondary-scanning direction (scanner section)		ALL	128 <0-255>	SYS	When the value increases by “1”, the image shifts by approx. 0.0423mm toward the front side of the paper.	1
308	Scanner	Distortion mode		ALL	-	-	Moves carriages to the adjusting position. (▶ Chapter 3. 4. 4.)	6
330-0	Image control	Image quality closed-loop	Y	ALL	3 <0-255>	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 2.	4
330-1		control contrast voltage correction/	M	ALL	3 <0-255>	M		4
330-2		Mode 2 maximum number of time	C	ALL	3 <0-255>	M		4
330-3		corrected	K	ALL	3 <0-255>	M		4
331-0	Image control	Image quality closed-loop	Y	ALL	2 <0-255>	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 2.	4
331-1		control laser power correction/	M	ALL	2 <0-255>	M		4
331-2		Mode 2 maximum number of time	C	ALL	2 <0-255>	M		4
331-3		corrected	K	ALL	2 <0-255>	M		4
332-0	Image control	Image quality closed-loop	Y	ALL	1 <0-255>	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 1.	4
332-1		control contrast voltage correction/	M	ALL	1 <0-255>	M		4
332-2		Mode 1 maximum number of time	C	ALL	1 <0-255>	M		4
332-3		corrected	K	ALL	1 <0-255>	M		4
333-0	Image control	Image quality closed-loop	Y	ALL	1 <0-255>	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 1.	4
333-1		control laser power correction/	M	ALL	1 <0-255>	M		4
333-2		Mode 1 maximum number of time	C	ALL	1 <0-255>	M		4
333-3		corrected	K	ALL	1 <0-255>	M		4
334	Image control	Main charger grid calibration voltage 1 (low)		ALL	300 <270-330>	M	Transformer output calibration of the main charger grid bias. When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
335	Image control	Main charger grid calibration voltage 1 (high)		ALL	1200 <1080-1320>	M		1
338	Image control	Color developer bias DC (-) calibration voltage 1 (low)		ALL	100 <85-115>	M	Transformer output calibration of the color developer bias. When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
339	Image control	Color developer bias DC (-) calibration voltage 2 (high)		ALL	900 <810-990>	M		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
340	Scanner	Reproduction ratio adjustment of secondary-scanning direction (scanner section)		ALL	128 <0-255>	SYS	When the value increases by “1”, the reproduction ratio in the secondary-scanning direction (vertical to paper feeding direction) increases by approx. 0.223%.	1
354	RADF	Adjustment of RADF paper alignment	for single-sided original	ALL	10 <0-20>	SYS	When the value increases by “1”, the aligning amount increases by approx. 0.5mm.	1
355			for double-sided original	ALL	10 <0-20>	SYS		1
356	RADF	Automatic adjustment of RADF sensor and EEPROM initialization		ALL	-	SYS	Performs the adjustment and initialization when the RADF board or RADF sensor is replaced.	6
357	RADF	Fine adjustment of RADF transport speed		ALL	50 <0-100>	SYS	When the value increases by “1”, the reproduction ratio of the secondary scanning direction on original (fed from the RADF) increases by approx. 0.1%.	1
358	RADF	RADF sideways deviation adjustment		ALL	128 <0-256>	SYS	When the value increases by “1”, the image of original fed from the RADF shifts toward the rear side of paper by approx. 0.0423mm.	1
359	Scanner	Carriage position adjustment during scanning from RADF		ALL (black)	128 <0-255>	SYS	When the value increases by “1”, the carriage position shifts by approx. 0.1 mm toward the exit side when using the RADF.	1
360				ALL (color)	128 <0-255>	SYS		1
365	RADF	RADF leading edge position 1 adjustment	for single-sided original	ALL	50 <0-100>	SYS	When the value increases by “1”, the copied image of original fed from the RADF shifts toward the trailing edge of paper by approx. 0.1mm.	1
366			for double-sided original	ALL	50 <0-100>	SYS		1
372	Image control	Black developer bias DC (-) calibration voltage 1 (low)		ALL	100 <85-115>	M	Transformer output calibration of the black developer bias. When replacing the high-voltage transformer, the values listed in attached data sheet are entered. (Unit: V)	1
373	Image control	Black developer bias DC (-) calibration voltage 2 (high)		ALL	900 <810-990>	M		1
380-0	Image control	Image quality open-loop control/contrast voltage initial value display	Y	ALL	320 <0-999>	M	Displays the contrast voltage initial value set by the open-loop control. (Unit: V)	10
380-1			M	ALL	330 <0-999>	M		10
380-2			C	ALL	340 <0-999>	M		10
380-3			K	ALL	375 <0-999>	M		10

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
381-0	Image control	Contrast voltage actual value display	Y	ALL	320 <0-999>	M	Displays the contrast voltage at the actual print. (Unit: V)	10
381-1			M	ALL	330 <0-999>	M		10
381-2			C	ALL	340 <0-999>	M		10
381-3			K	ALL	375 <0-999>	M		10
382-0	Image control	Image quality open-loop control/ laser power initial value display	Y	ALL	408 <0-999>	M	Displays the laser power initial value set by the open-loop control. (Unit: μ W)	10
382-1			M	ALL	408 <0-999>	M		10
382-2			C	ALL	408 <0-999>	M		10
382-3			K	ALL	408 <0-999>	M		10
383-0	Image control	Laser power actual value display	Y	ALL	92 <0-255>	M	Displays the laser power at the actual print. (bit value)	10
383-1			M	ALL	92 <0-255>	M		10
383-2			C	ALL	92 <0-255>	M		10
383-3			K	ALL	92 <0-255>	M		10
384-0	Image control	Laser power actual value display	Y	ALL	408 <0-999>	M	Displays the laser power at the actual print. (Unit: μ W)	10
384-1			M	ALL	408 <0-999>	M		10
384-2			C	ALL	408 <0-999>	M		10
384-3			K	ALL	408 <0-999>	M		10
385-0	Image control	Main charger grid bias actual value display	Y	ALL	78 <0-255>	M	Displays the main charger grid bias at the actual print. (bit value)	10
385-1			M	ALL	84 <0-255>	M		10
385-2			C	ALL	87 <0-255>	M		10
385-3			K	ALL	94 <0-255>	M		10
386-0	Image control	Developer bias DC (-) actual value display	Y	ALL	135 <0-255>	M	Displays the developer bias at the actual print. (bit value)	10
386-1			M	ALL	137 <0-255>	M		10
386-2			C	ALL	139 <0-255>	M		10
386-3			K	ALL	146 <0-255>	M		10

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
388	Image control	Output value display of image quality sensor	When the light source is OFF	ALL	0 <0-1023>	M	Displays the output value of image quality sensor when the sensor light source is OFF.	2
389			Transfer belt surface	ALL	0 <0-1023>	M	Displays the output value of image quality sensor (when there is no test pattern) on the transfer belt.	2
390-0			High-density pattern Y	ALL	0 <0-1023>	M	Displays the output value of image quality sensor when a high-density test pattern is written.	10
390-1			High-density pattern M	ALL	0 <0-1023>	M		10
390-2			High-density pattern C	ALL	0 <0-1023>	M		10
390-3			High-density pattern K	ALL	0 <0-1023>	M		10
391-0			Low-density pattern Y	ALL	0 <0-1023>	M	Displays the output value of image quality sensor when a low-density test pattern is written.	10
391-1			Low-density pattern M	ALL	0 <0-1023>	M		10
391-2			Low-density pattern C	ALL	0 <0-1023>	M		10
391-3			Low-density pattern K	ALL	0 <0-1023>	M		10
392	Image control	Light amount adjustment result of image quality sensor		ALL	0 <0-255>	M	The LED light amount adjustment value of this sensor is the reference value to set the reflected light from the belt surface.	2
393	Image control	Relative humidity display during latest closed-loop control		ALL	0 <0-100>	M	Displays the relative humidity at the latest performing of the closed-loop control.	2
394	Image control	Enforced performing of image quality open-loop control		ALL	-	M	Performs the image quality open-loop control.	6
395	Image control	Enforced performing of image quality closed-loop control (color)		ALL	-	M	Performs the image quality closed-loop control.	6
396	Image control	Image quality control initialization		ALL	-	M	Performs the image quality control, initialize each control value.	6
401	Laser	Fine adjustment of polygonal motor rotation speed (reproduction ratio adjustment)	PRT		128 <0-255>	M	When the value increases by "1", the reproduction ratio of primary scanning direction increases by approx. 0.07%. (approx. 0.5mm/5 step)	1
405			PPC		128 <0-255>	M		1

Adjustment mode (05)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Proce- dure
410	Laser	Adjustment of primary scanning laser writing start position side by approx. 0.0423mm.	PPC	128 <0-255>	M	When the value increases by "1", the writing start position shifts to the front side by approx. 0.0423mm.	1
411			PRT	128 <0-255>	M		
421	Drive	Adjustment of secondary scanning direction reproduction ratio (fine adjustment of main motor speed)	PPC /PRT	128 <0-255>	M	When the value increases by "1", the reproduction ratio of secondary scanning direction decreases by approx. x.xx%.	1
422			FAX	128 <0-255>	M		
424	Drive	Fine adjustment of exit motor speed	PPC /PRT	107 <0-255>	M	When the value increases by "1", the rotation becomes faster by approx. x.xx%.	1
425			FAX	121 <0-255>	M		
426	Drive	Adjustment of secondary scanning direction reproduction ratio (fine adjustment of transport motor speed)	PPC /PRT	138 <0-255>	M	When the value increases by "1", the reproduction ratio of secondary scanning direction decreases by approx. x.xx%.	1
427			FAX	139 <0-255>	M		1
430	Image	Top margin adjustment (blank area at the leading edge of the paper)	PPC	0 <0-255>	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423mm.	1
431	Image	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)	PPC	0 <0-255>	M		1
432	Image	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)	PPC	0 <0-255>	M		1
433	Image	Bottom margin adjustment (blank area at the trailing edge of the paper)	PPC	0 <0-255>	M		1
435	Image	Top margin adjustment (blank area at the leading edge of the paper)	PRT	24 <0-255>	M		1
436	Image	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)	PRT	0 <0-255>	M		1
437	Image	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)	PRT	0 <0-255>	M		1
438	Image	Bottom margin adjustment (blank area at the trailing edge of the paper)	PRT	0 <0-255>	M		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
440	Laser	Secondary scanning laser	Upper drawer	ALL	20 <0-40>	M	When the value increases by “1”, the image shifts toward the leading edge of the paper by approx. 0.4mm.	1
441		writing start position	Lower drawer	ALL	40 <0-80>	M		1
442			Bypass feeding	ALL	20 <0-40>	M		1
443			LCF	ALL	20 <0-40>	M		1
444			PFP	ALL	20 <0-40>	M		1
445			Duplex feeding	ALL	20 <0-40>	M		1
448-0	Paper feeding	Paper aligning amount adjustment at the registration section (PFP upper drawer)	Long size	ALL	15 <0-63>	M	When the value increases by “1”, the aligning amount increases by approx. 0.8mm. <Paper length> Long size: 330mm or longer Middle size: 220mm to 329mm Short size: 219mm or shorter	4
448-1			Middle size	ALL	15 <0-63>	M		4
448-2			Short size	ALL	15 <0-63>	M		4
449-0	Paper feeding	Paper aligning amount adjustment at the registration section (PFP lower drawer)	Long size	ALL	15 <0-63>	M		4
449-1			Middle size	ALL	15 <0-63>	M		4
449-2			Short size	ALL	15 <0-63>	M		4
450-0	Paper feeding	Paper aligning amount adjustment at the registration section (Upper drawer)	Long size	ALL	18 <0-63>	M		4
450-1			Middle size	ALL	18 <0-63>	M		4
450-2			Short size	ALL	18 <0-63>	M		4
452-0	Paper feeding	Paper aligning amount adjustment at the registration section (Lower drawer)	Long size	ALL	15 <0-63>	M		4
452-1			Middle size	ALL	15 <0-63>	M		4
452-2			Short size	ALL	15 <0-63>	M		4
455-0	Paper feeding	Paper aligning amount adjustment at the registration section (Duplex feeding)	Long size	ALL	33 <0-63>	M		4
455-1			Middle size	ALL	33 <0-63>	M		4
455-2			Short size	ALL	33 <0-63>	M		4
457	Paper feeding	Paper aligning amount adjustment at the registration section (LCF)		ALL	15 <0-63>	M		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
458-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding/Normal paper)	Long size	ALL	20 <0-63>	M	When the value increases by “1”, the aligning amount increases by approx. 0.8mm. <Paper length> Long size: 330mm or longer Middle size: 220mm to 329mm Short size: 219mm or shorter	4
458-1			Middle size	ALL	20 <0-63>	M		4
458-2			Short size	ALL	20 <0-63>	M		4
460-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding/Thick paper 1)	Long size	ALL	20 <0-63>	M		4
460-1			Middle size	ALL	20 <0-63>	M		4
460-2			Short size	ALL	17 <0-63>	M		4
461-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding/Thick paper 2) Short	Long size	ALL	20 <0-63>	M		4
461-1			Middle size	ALL	20 <0-63>	M		4
461-2			Short size	ALL	17 <0-63>	M		4
462-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding/Thick paper 3) Short	Long size	ALL	20 <0-63>	M	4	
462-1			Middle size	ALL	20 <0-63>	M	4	
462-2			Short size	ALL	20 <0-63>	M	4	
462-3			Post card	ALL	16 <0-63>	M	4	
463-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding/OHP film)	Long size	ALL	20 <0-63>	M	4	
463-1			Middle size	ALL	20 <0-63>	M	4	
463-2			Short size	ALL	20 <0-63>	M	4	

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
466-0	Paper feeding	Adjustment of paper pushing amount Post /Bypass feeding Thin	Normal paper	ALL	128 <0-255>	M		4
466-1			Post card	ALL	128 <0-255>	M		4
466-2			Thin paper	ALL	128 <0-255>	M		4
466-3			Envelope	ALL	128 <0-255>	M		4
466-4			Thick paper 1	ALL	128 <0-255>	M		4
466-5			Thick paper 2	ALL	128 <0-255>	M		4
466-6			Thick paper 3	ALL	128 <0-255>	M		4
466-7			OHP film	ALL	128 <0-255>	M		4
467	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		ALL	128 <0-255>	M		1
468-0	Finisher	Fine adjustment of binding position /folding position	A4-R /LT-R	ALL	0 <-14-14>	M	When the value increases by "1", the binding/folding position shifts toward the right page by 0.25mm.	4
468-1			B4	ALL	0 <-14-14>	M		4
468-2			A3/LD	ALL	0 <-14-14>	M		4
469-0	Paper feeding	Paper aligning amount adjustment at the registration section (Upper drawer)	Thick paper 1 Long size	ALL	18 <0-63>	M	When the value increases by "1", the aligning amount increases by approx. 0.8mm. <Paper length> Long size: 330mm or longer Middle size: 220mm to 329mm Short size: 219mm or shorter	4
469-1			Thick paper 1 Middle size	ALL	18 <0-63>	M		4
469-2			Thick paper 1 Short size	ALL	18 <0-63>	M		4
470-0	Paper feeding	Paper aligning amount adjustment at the registration section (Lower drawer)	Thick paper 1 Long size	ALL	15 <0-63>	M		4
470-1			Thick paper 1 Middle size	ALL	15 <0-63>	M		4
470-2			Thick paper 1 Short size	ALL	15 <0-63>	M		4

Adjustment mode (05)									
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure	
471-0	Paper feeding	Paper aligning amount adjustment at the registration section (PFP upper drawer)	Thick paper 1 Long size	ALL	15 <0-63>	M	When the value increases by "1", the aligning amount increases by approx. 0.8mm. <Paper length> Long size: 330mm or longer Middle size: 220mm to 329mm Short size: 219mm or shorter	4	
471-1			Thick paper 1 Middle size	ALL	15 <0-63>	M		4	
471-2			Thick paper 1 Short size	ALL	15 <0-63>	M		4	
472-0	Paper feeding	Paper aligning amount adjustment at the registration section (PFP lower drawer)	Thick paper 1 Long size	ALL	15 <0-63>	M		4	
472-1			Thick paper 1 Middle size	ALL	15 <0-63>	M		4	
472-2			Thick paper 1 Short size	ALL	15 <0-63>	M		4	
473-0	Paper feeding	Paper aligning amount adjustment at the registration section (LCF)	Thick paper 1	ALL	15 <0-63>				4
474-0	Paper feeding	Paper aligning amount adjustment at the registration section (ADU)	Thick paper 1 Long size	ALL	33 <0-63>	M			4
474-1			Thick paper 1 Middle size	ALL	33 <0-63>	M			4
474-2			Thick paper 1 Short size	ALL	33 <0-63>	M			4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
475-0	Paper feeding	Paper aligning amount adjustment at the registration section (Bypass feeding)	Thick paper 2 Long size	ALL	28 <0-63>	M	When the value increases by "1", the aligning amount increases by approx. 0.8mm. <Paper length> Long size: 330mm or longer Middle size: 220mm to 329mm Short size: 219mm or shorter	4
475-1			Thick paper 2 Middle size	ALL	28 <0-63>	M		4
475-2			Thick paper 2 Short size	ALL	28 <0-63>	M		4
475-3			Thick paper 3 Long size	ALL	28 <0-63>	M		4
475-4			Thick paper 3 Middle size	ALL	28 <0-63>	M		4
475-5			Thick paper 3 Short size	ALL	28 <0-63>	M		4
475-6			OHP film Long size	ALL	28 <0-63>	M		4
475-7			OHP film Middle size	ALL	28 <0-63>	M		4
475-8			OHP film Short size	ALL	28 <0-63>	M		4
475-9			Post card	ALL	28 <0-63>	M		4
480	Revolver	Revolver home position adjustment		ALL (color)	128 <0-255>	M		1
481	Revolver	Revolver standby position adjustment		ALL (color)	128 <0-255>	M		1
482	Revolver	Revolver development position adjustment	Y	ALL (color)	128 <0-255>	M		1
483			M	ALL (color)	128 <0-255>	M		1
484			C	ALL (color)	128 <0-255>	M		1

Adjustment mode (05)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
485-0	Revolver	Revolver driving current (120° revolving)	At pre-hold	ALL (color)	2 <0-7>	M	4
485-1			At acceleration	ALL (color)	2 <0-7>	M	4
485-2			At same speed	ALL (color)	2 <0-7>	M	4
485-3			At deceleration	ALL (color)	2 <0-7>	M	4
485-4			At post-hold	ALL (color)	2 <0-7>	M	4
486-0	Revolver	Revolver driving current (65° revolving)	At pre-hold	ALL (color)	2 <0-7>	M	4
486-1			At acceleration	ALL (color)	2 <0-7>	M	4
486-2			At same speed	ALL (color)	2 <0-7>	M	4
486-3			At deceleration	ALL (color)	2 <0-7>	M	4
486-4			At post-hold	ALL (color)	2 <0-7>	M	4
487-0	Revolver	Revolver driving current (55° revolving)	At pre-hold	ALL (color)	2 <0-7>	M	4
487-1			At acceleration	ALL (color)	2 <0-7>	M	4
487-2			At same speed	ALL (color)	2 <0-7>	M	4
487-3			At deceleration	ALL (color)	2 <0-7>	M	4
487-4			At post-hold	ALL (color)	2 <0-7>	M	4
488-0	Revolver	Revolver driving current (Low speed revolving)	At pre-hold	ALL (color)	2 <0-7>	M	4
488-1			At acceleration	ALL (color)	2 <0-7>	M	4
488-2			At same speed	ALL (color)	2 <0-7>	M	4
488-3			At deceleration	ALL (color)	2 <0-7>	M	4
488-4			At post-hold	ALL (color)	2 <0-7>	M	4
489-0	Revolver	Revolver driving current (Holding)	At ready	ALL (color)	6 <0-7>	M	4
489-1			At Print	ALL (color)	6 <0-7>	M	4
494	Laser	Secondary scanning data laser writing start position	When decelerating to 1/2	ALL	128 <0-255>	M	1
495			When decelerating to 1/3	ALL	128 <0-255>	M	1
496			When decelerating to 1/4	ALL	128 <0-255>	M	1

Adjustment mode (05)								
Code	Classifi- cation	Items		Func- tion	Default <Acceptable value>	RAM	Contents	Proce- dure
497-0	Laser	Adjustment of drawer sideways deviation	Upper drawer	ALL	128 <0-255>	M	When the value increases by “1”, the image shifts toward the front side by 0.0423mm.	4
497-1			Lower drawer	ALL	128 <0-255>	M		4
497-2			PFP upper drawer	ALL	128 <0-255>	M		4
497-3			PFP lower drawer	ALL	128 <0-255>	M		4
497-4			LCF	ALL	128 <0-255>	M		4
497-5			Bypass feeding	ALL	128 <0-255>	M		4
498-0	Laser	Adjustment of duplex feeding sideways devia- tion	Long size	ALL	148 <0-255>	M	When the value increases by “1”, the image shifts toward the front side by 0.0423mm.	4
498-1			Short size (A4/LT or smaller)	ALL	148 <0-255>	M		4
501	Image	Density adjustment Fine adjustment of “manual density” /Center value	Photo	PPC (black)	128 <0-255>	SYS	When the value increases, the image of the center step density becomes darker.	1
503			Text /Photo	PPC (black)	128 <0-255>	SYS		1
504			Text	PPC (black)	128 <0-255>	SYS		1
505	Image	Density adjustment Fine adjustment of “manual density” /Light step value	Text	PPC (black)	20 <0-255>	SYS	When the value increases, the image of the “light” steps becomes lighter.	1
506			Photo	PPC (black)	20 <0-255>	SYS		1
507			Text	PPC (black)	20 <0-255>	SYS		1
508	Image	Density adjustment Fine adjustment of “manual density” /Dark step value	Text	PPC (black)	20 <0-255>	SYS	When the value increases, the image of the “dark” steps becomes darker.	1
509			Photo	PPC (black)	20 <0-255>	SYS		1
510			Text	PPC (black)	20 <0-255>	SYS		1
512	Image	Density adjustment Fine adjustment of “automatic density”	Photo	PPC (black)	128 <0-255>	SYS	When the value increases, the image becomes darker.	1
514			Text /Photo	PPC (black)	128 <0-255>	SYS		1
515			Text	PPC (black)	128 <0-255>	SYS		1
532	Image	Range correction Background peak adjustment	Text	PPC (black)	40 <0-255>	SYS	When the value increases, the background becomes more bright- ened.	1
533			Photo	PPC (black)	16 <0-255>	SYS		1
534			Text	PPC (black)	40 <0-255>	SYS		1

Adjustment mode (05)									
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure	
570	Image	Range correction on original manually set on the original glass	Text /Photo	PPC (black)	22 <11-14, 21-24, 31-34, 41-44>	SYS	Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. <div>Background peak Text peak 1: fixed fixed 2: varied fixed 3: fixed varied 4: varied varied</div>	1	
571			Photo	PPC (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1	
572			Text	PPC (black)	22 <11-14, 21-24, 31-34, 41-44>	SYS		1	
580	Image	Automatic gamma adjustment		PPC (black)	-	-	Adjusts the gradation reproduction automatically.	7	
590-0	Image	Adjustment of gamma balance (Text/Photo)	L	PPC (black)	128 <0-255>	SYS	When the value increases, the density in the target area becomes higher. Note: L : Low density area M : Medium density area H : High density area	4	
590-1			M	PPC (black)	128 <0-255>	SYS		4	
590-2			H	PPC (black)	128 <0-255>	SYS		4	
591-0	Image	Adjustment of gamma balance (Text)	L	PPC (black)	128 <0-255>	SYS		4	
591-1			M	PPC (black)	128 <0-255>	SYS		4	
591-2			H	PPC (black)	128 <0-255>	SYS		4	
592-0	Image	Adjustment of gamma balance (Photo)	L	PPC (black)	128 <0-255>	SYS		4	
592-1			M	PPC (black)	128 <0-255>	SYS		4	
592-2			H	PPC (black)	128 <0-255>	SYS		4	
596-0	Image	Adjustment of gamma balance (PS/Photo)	L	PRT (black)	128 <0-255>	SYS		When the value increases, the density in the target area becomes higher. L : Low density area M : Medium density area H : High density area	4
596-1			M	PRT (black)	128 <0-255>	SYS			4
596-2			H	PRT (black)	128 <0-255>	SYS			4
597-0	Image	Adjustment of gamma balance (PS/Text)	L	PRT (black)	128 <0-255>	SYS		4	
597-1			M	PRT (black)	128 <0-255>	SYS		4	
597-2			H	PRT (black)	128 <0-255>	SYS		4	

Adjustment mode (05)								
Code	Classifi- cation	Items		Func- tion	Default <Acceptable value>	RAM	Contents	Proce- dure
598-0	Image	Adjustment of gamma balance (PCL/Photo)	L	PRT (black)	128 <0-255>	SYS	When the value increases, the density in the target area becomes higher. L : Low density area M : Medium density area H : High density area	4
598-1			M	PRT (black)	128 <0-255>	SYS		4
598-2			H	PRT (black)	128 <0-255>	SYS		4
599-0	Image	Adjustment of gamma balance (PCL/Text)	L	PRT (black)	128 <0-255>	SYS		4
599-1			M	PRT (black)	128 <0-255>	SYS		4
599-2			H	PRT (black)	128 <0-255>	SYS		4
604	Image	Sharpness adjustment	Text /Photo	PPC (black)	0 <0-31>	SYS	When the value increases, the image becomes sharper. When the value de- creases, the image becomes softer. The smaller the value is, the less the moire becomes. * The default value 0 is equivalent to 16 (center value).	1
605			Text	PPC (black)	0 <0-31>	SYS		1
606			Photo	PPC (black)	0 <0-31>	SYS		1
648	Image	Adjustment of blurred/thin spotted text	Text /Photo	PPC (black)	30 <0-255>	SYS	Adjustment of the blurred/thin spotted text With increasing the value, the thin spotted text is suppressed, and with decreasing it, the blurred text is suppressed.	1
654	Image	Binary image shaving/shaving level	PS	PRT (black)	5 <0-9>	SYS	When the value decreases, the width of text becomes wider.	1
655			PCL	PRT (black)	5 <0-9>	SYS		1
663	Paper feeding	Maximum output value when applying Half Duty		PRT (black)	255 <0-255>	SYS		1
664	Image	Upper limit in toner saving mode	PS	PRT (black)	176 <0-255>	SYS	When the value decreases, the printing density becomes lighter.	1
665			PCL	PRT (black)	176 <0-255>	SYS		1
667-0	Paper feeding	Setting beam level conver- sion		PPC (black)	0 <0-255>	M	Beam level is set for 4 divided smooth- ing. When the value decreases, the beam diameter becomes smaller to reproduce the smaller dots.	4
667-1				PPC (black)	63 <0-255>	M		4
667-2				PPC (black)	127 <0-255>	M		4
667-3				PPC (black)	191 <0-255>	M		4
667-4				PPC (black)	255 <0-255>	M		4
667-5				PPC (black)	0 <0-255>	M		4
667-6				PPC (black)	0 <0-255>	M		4
667-7				PPC (black)	0 <0-255>	M		4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
693	Image	Range correction on original set on the RADF	Text /Photo	PPC (black)	22 <11-14, 21-24, 31-34, 41-44>	SYS	Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively.	1
694			Photo	PPC (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
695			Text	PPC (black)	22 <11-14, 21-24, 31-34, 41-44>	SYS		Background peak Text peak 1: fixed fixed 2: varied fixed 3: fixed varied 4: varied varied
700	Image	Adjustment of binarized threshold (Text)	Center value	FAX (black)	125 <0-255>	SYS	When the value increases, the image of center value density becomes darker.	1
701			Light step value	FAX (black)	20 <0-255>	SYS	When the value increases, the image of "light" side becomes lighter.	1
702			Dark step value	FAX (black)	20 <0-255>	SYS	When the value increases, the image of "dark" side becomes darker.	1
710	Image	Density adjustment "manual density" fine adjustment/Center value	Photo	FAX (black)	128 <0-255>	SYS	When the value increases, the image of the center step density becomes darker.	1
714			Text /Photo	FAX (black)	128 <0-255>	SYS		1
715	Image	Density adjustment "manual density" fine adjustment/Light step value	Photo	FAX (black)	20 <0-255>	SYS	When the value increases, the image of the "light" steps becomes lighter.	1
719			Text /Photo	FAX (black)	20 <0-255>	SYS		1
720	Image	Density adjustment "manual density" fine adjustment/Dark step value	Photo	FAX (black)	20 <0-255>	SYS	When the value increases, the image of the "dark" steps becomes darker.	1
724			Text /Photo	FAX (black)	20 <0-255>	SYS		1
725	Image	Density adjustment "automatic density" fine adjustment	Photo	FAX (black)	128 <0-255>	SYS	When the value increases, the image becomes darker.	1
729			Text /Photo	FAX (black)	128 <0-255>	SYS		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
825	Image	Range correction on original manually set on the original glass	Text /Photo	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS	Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. <div>Background peak Text peak</div> <div>1: fixed fixed</div> <div>2: varied fixed</div> <div>3: fixed varied</div> <div>4: varied varied</div>	1
826			Text	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
827			Photo	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
828			Gray scale	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
830	Image	Range correction on original set on the RADF	Text /Photo	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS	Sets whether the value of the background peak and text peak are fixed or not. One's place is an adjustment for "automatic density" and ten's place is for "manual density". Once they are fixed, the range correction is performed with standard values. The values of the background peak and text peak affect the reproduction of the background density and text density respectively. <div>Background peak Text peak</div> <div>1: fixed fixed</div> <div>2: varied fixed</div> <div>3: fixed varied</div> <div>4: varied varied</div>	1
831			Text	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
832			Photo	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
833			Gray scale	SCN (black)	12 <11-14, 21-24, 31-34, 41-44>	SYS		1
835	Image	Range correction Background peak adjustment	Text /Photo	SCN (black)	48 <0-255>	SYS	When the value increases, the background becomes more brightened.	1
836			Text	SCN (black)	64 <0-255>	SYS		1
837			Photo	SCN (black)	32 <0-255>	SYS		1
838			Gray scale	SCN (black)	32 <0-255>	SYS		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
840	Image	Sharpness adjustment	Text /Photo	SCN (black)	0 <0-31>	SYS	When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. * The default value 0 is equivalent to 16 (center value).	1
841			Text	SCN (black)	0 <0-31>	SYS		1
842			Photo	SCN (black)	0 <0-31>	SYS		1
843			Gray scale	SCN (black)	0 <0-31>	SYS		1
845	Image	Density adjust- ment “manual density” fine adjustment/Center value	Text /Photo	SCN (black)	128 <0-255>	SYS	When the value increases, the image becomes darker.	1
846			Text	SCN (black)	128 <0-255>	SYS		1
847			Photo	SCN (black)	128 <0-255>	SYS		1
848			Gray scale	SCN (black)	128 <0-255>	SYS		1
850	Image	Density adjust- ment “manual density” fine adjustment/Light step value	Text /Photo	SCN (black)	20 <0-255>	SYS	When the value increases, the image of the “light” steps becomes lighter.	1
851			Text	SCN (black)	20 <0-255>	SYS		1
852			Photo	SCN (black)	20 <0-255>	SYS		1
853			Gray scale	SCN (black)	35 <0-255>	SYS		1
855	Image	Density adjust- ment “manual density” fine adjustment/Dark step value	Text /Photo	SCN (black)	20 <0-255>	SYS	When the value increases, the image of the “dark” steps becomes darker.	1
856			Text	SCN (black)	20 <0-255>	SYS		1
857			Photo	SCN (black)	20 <0-255>	SYS		1
858			Gray scale	SCN (black)	20 <0-255>	SYS		1
860	Image	Density adjust- ment “automatic density” fine adjustment	Text /Photo	SCN (black)	128 <0-255>	SYS	When the value increases, the image becomes darker.	1
861			Text	SCN (black)	128 <0-255>	SYS		1
862			Photo	SCN (black)	128 <0-255>	SYS		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
880-0	Image	Adjustment of gamma balance (Text/Photo)	L	SCN (black)	128 <0-255>	SYS	When the value increases, the density in the target area becomes higher. L : Low density area M : Medium density area H : High density area	4
880-1			M	SCN (black)	128 <0-255>	SYS		4
880-2			H	SCN (black)	128 <0-255>	SYS		4
881-0	Image	Adjustment of gamma balance (Text)	L	SCN (black)	128 <0-255>	SYS		4
881-1			M	SCN (black)	128 <0-255>	SYS		4
881-2			H	SCN (black)	128 <0-255>	SYS		4
882-0	Image	Adjustment of gamma balance (Photo)	L	SCN (black)	128 <0-255>	SYS		4
882-1			M	SCN (black)	128 <0-255>	SYS		4
882-2			H	SCN (black)	128 <0-255>	SYS		4
883-0	Image	Adjustment of gamma balance (Grayscale)	L	SCN (black)	128 <0-255>	SYS	4	
883-1			M	SCN (black)	128 <0-255>	SYS	4	
883-2			H	SCN (black)	128 <0-255>	SYS	4	
884	Image	Reproduction ratio fine adjustment of primary scanning direction		SCN (black)	128 <0-255>	SYS	When the value increases by “1”, the reproduction ratio of primary scanning direction increases by approx. 0.1%.	1
976	Maintenance	Equipment number (serial number) display		ALL	-	SYS	When this adjustment is performed with this code, the setting code (08- 995) is also performed automatically. (10 digits)	1
1000	Image	Automatic gamma adjustment	PS /600x600dpi	PRT (color)	-	SYS	Adjusts the gradation reproduction for each color, Y, M, C and K.	7
1001			PS /1200x600dpi	PRT (color)	-	SYS		7
1002			PCL /600x600dpi	PRT (color)	-	SYS		7
1003			PCL /1200x600dpi	PRT (color)	-	SYS		7

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1010-0	Image	Color balance adjustment for “Y” (PS/600x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1010-1			M	PRT (color)	128 <0-255>	SYS		4
1010-2			H	PRT (color)	128 <0-255>	SYS		4
1011-0	Image	Color balance adjustment for “M” (PS/600x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS		4
1011-1			M	PRT (color)	128 <0-255>	SYS		4
1011-2			H	PRT (color)	128 <0-255>	SYS		4
1012-0	Image	Color balance adjustment for “C” (PS/600x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS		4
1012-1			M	PRT (color)	128 <0-255>	SYS		4
1012-2			H	PRT (color)	128 <0-255>	SYS		4
1013-0	Image	Color balance adjustment for “K” (PS/600x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS	4	
1013-1			M	PRT (color)	128 <0-255>	SYS	4	
1013-2			H	PRT (color)	128 <0-255>	SYS	4	
1014-0	Image	Color balance adjustment for “Y” (PS/600x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1014-1			M	PRT (color)	128 <0-255>	SYS		4
1014-2			H	PRT (color)	128 <0-255>	SYS		4
1015-0	Image	Color balance adjustment for “M” (PS/600x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS		4
1015-1			M	PRT (color)	128 <0-255>	SYS		4
1015-2			H	PRT (color)	128 <0-255>	SYS		4
1016-0	Image	Color balance adjustment for “C” (PS/600x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS		4
1016-1			M	PRT (color)	128 <0-255>	SYS		4
1016-2			H	PRT (color)	128 <0-255>	SYS		4
1017-0	Image	Color balance adjustment for “K” (PS/600x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS	4	
1017-1			M	PRT (color)	128 <0-255>	SYS	4	
1017-2			H	PRT (color)	128 <0-255>	SYS	4	

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1018-0	Image	Color balance adjustment for “Y” (PS/1200x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1018-1			M	PRT (color)	128 <0-255>	SYS		4
1018-2			H	PRT (color)	128 <0-255>	SYS		4
1019-0	Image	Color balance adjustment for “M” (PS/1200x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS		4
1019-1			M	PRT (color)	128 <0-255>	SYS		4
1019-2			H	PRT (color)	128 <0-255>	SYS		4
1020-0	Image	Color balance adjustment for “C” (PS/1200x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS		4
1020-1			M	PRT (color)	128 <0-255>	SYS		4
1020-2			H	PRT (color)	128 <0-255>	SYS		4
1021-0	Image	Color balance adjustment for “K” (PS/1200x600dpi/ Photo)	L	PRT (color)	128 <0-255>	SYS	4	
1021-1			M	PRT (color)	128 <0-255>	SYS	4	
1021-2			H	PRT (color)	128 <0-255>	SYS	4	
1022-0	Image	Color balance adjustment for “Y” (PS/1200x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1022-1			M	PRT (color)	128 <0-255>	SYS		4
1022-2			H	PRT (color)	128 <0-255>	SYS		4
1023-0	Image	Color balance adjustment for “M” (PS/1200x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS		4
1023-1			M	PRT (color)	128 <0-255>	SYS		4
1023-2			H	PRT (color)	128 <0-255>	SYS		4
1024-0	Image	Color balance adjustment for “C” (PS/1200x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS		4
1024-1			M	PRT (color)	128 <0-255>	SYS		4
1024-2			H	PRT (color)	128 <0-255>	SYS		4
1025-0	Image	Color balance adjustment for “K” (PS/1200x600dpi/ Text)	L	PRT (color)	128 <0-255>	SYS	4	
1025-1			M	PRT (color)	128 <0-255>	SYS	4	
1025-2			H	PRT (color)	128 <0-255>	SYS	4	

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1026-0	Image	Color balance adjustment for “Y”	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1026-1		(PCL/600x600dpi/ Photo)	M	PRT (color)	128 <0-255>	SYS		4
1026-2			H	PRT (color)	128 <0-255>	SYS		4
1027-0	Image	Color balance adjustment for “M”	L	PRT (color)	128 <0-255>	SYS		4
1027-1		(PCL/600x600dpi/ Photo)	M	PRT (color)	128 <0-255>	SYS		4
1027-2			H	PRT (color)	128 <0-255>	SYS		4
1028-0	Image	Color balance adjustment for “C”	L	PRT (color)	128 <0-255>	SYS		4
1028-1		(PCL/600x600dpi/ Photo)	M	PRT (color)	128 <0-255>	SYS		4
1028-2			H	PRT (color)	128 <0-255>	SYS		4
1029-0	Image	Color balance adjustment for “K”	L	PRT (color)	128 <0-255>	SYS	4	
1029-1		(PCL/600x600dpi/ Photo)	M	PRT (color)	128 <0-255>	SYS	4	
1029-2			H	PRT (color)	128 <0-255>	SYS	4	
1030-0	Image	Color balance adjustment for “Y”	L	PRT (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1030-1		(PCL/600x600dpi/ Text)	M	PRT (color)	128 <0-255>	SYS		4
1030-2			H	PRT (color)	128 <0-255>	SYS		4
1031-0	Image	Color balance adjustment for “M”	L	PRT (color)	128 <0-255>	SYS		4
1031-1		(PCL/600x600dpi/ Text)	M	PRT (color)	128 <0-255>	SYS		4
1031-2			H	PRT (color)	128 <0-255>	SYS		4
1032-0	Image	Color balance adjustment for “C”	L	PRT (color)	128 <0-255>	SYS		4
1032-1		(PCL/600x600dpi/ Text)	M	PRT (color)	128 <0-255>	SYS		4
1032-2			H	PRT (color)	128 <0-255>	SYS		4
1033-0	Image	Color balance adjustment for “K”	L	PRT (color)	128 <0-255>	SYS	4	
1033-1		(PCL/600x600dpi/ Text)	M	PRT (color)	128 <0-255>	SYS	4	
1033-2			H	PRT (color)	128 <0-255>	SYS	4	

Adjustment mode (05)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1034-0	Image	Color balance adjustment for "Y"	L	PRT (color)	128 <0-255>	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1034-1		(PCL/ 1200x600dpi/ Photo)	M	PRT (color)	128 <0-255>		4
1034-2			H	PRT (color)	128 <0-255>		4
1035-0	Image	Color balance adjustment for "M"	L	PRT (color)	128 <0-255>		4
1035-1		(PCL/ 1200x600dpi/ Photo)	M	PRT (color)	128 <0-255>		4
1035-2			H	PRT (color)	128 <0-255>		4
1036-0	Image	Color balance adjustment for "C"	L	PRT (color)	128 <0-255>		4
1036-1		(PCL/ 1200x600dpi/ Photo)	M	PRT (color)	128 <0-255>		4
1036-2			H	PRT (color)	128 <0-255>		4
1037-0	Image	Color balance adjustment for "K"	L	PRT (color)	128 <0-255>		4
1037-1		(PCL/ 1200x600dpi/ Photo)	M	PRT (color)	128 <0-255>		4
1037-2			H	PRT (color)	128 <0-255>		4
1038-0	Image	Color balance adjustment for "Y"	L	PRT (color)	128 <0-255>	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1038-1		(PCL/ 1200x600dpi/Text)	M	PRT (color)	128 <0-255>		4
1038-2			H	PRT (color)	128 <0-255>		4
1039-0	Image	Color balance adjustment for "M"	L	PRT (color)	128 <0-255>		4
1039-1		(PCL/ 1200x600dpi/Text)	M	PRT (color)	128 <0-255>		4
1039-2			H	PRT (color)	128 <0-255>		4
1040-0	Image	Color balance adjustment for "C"	L	PRT (color)	128 <0-255>		4
1040-1		(PCL/ 1200x600dpi/Text)	M	PRT (color)	128 <0-255>		4
1040-2			H	PRT (color)	128 <0-255>		4
1041-0	Image	Color balance adjustment for "K"	L	PRT (color)	128 <0-255>		4
1041-1		(PCL/ 1200x600dpi/Text)	M	PRT (color)	128 <0-255>		4
1041-2			H	PRT (color)	128 <0-255>		4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
1046-0	Image	Adjustment of maximum toner amount (Normal paper)	PS	PRT (color)	255 <0-255>	SYS	When the value decreases, the image becomes lighter. Note: When the value increases, the image offsetting may occur.	4
1046-1			PCL	PRT (color)	255 <0-255>	SYS		4
1047-0	Image	Adjustment of maximum toner amount (Thick paper 1)	PS	PRT (color)	255 <0-255>	SYS		4
1047-1			PCL	PRT (color)	255 <0-255>	SYS		4
1048-0	Image	Adjustment of maximum toner amount (Thick paper 2)	PS	PRT (color)	255 <0-255>	SYS		4
1048-1			PCL	PRT (color)	255 <0-255>	SYS		4
1049-0	Image	Adjustment of maximum toner amount (Thick paper 3)	PS	PRT (color)	255 <0-255>	SYS		4
1049-1			PCL	PRT (color)	255 <0-255>	SYS		4
1050-0	Image	Adjustment of maximum toner amount (OHP film)	PS	PRT (color)	185 <0-255>	SYS		4
1050-1			PCL	PRT (color)	185 <0-255>	SYS		4
1055	Image	Upper limit in toner saving mode	PS/ 600x600dpi	PRT (color)	176 <0-255>	SYS	When the value decreases, the printing density becomes lighter.	1
1056			PS/ 1200x600dpi	PRT (color)	176 <0-255>	SYS		1
1057			PCL/ 600x600dpi	PRT (color)	176 <0-255>	SYS		1
1058			PCL/ 1200x600dpi	PRT (color)	176 <0-255>	SYS		1
1060	Image	Reproduction ratio fine adjustment of primary-scanning direction		SCN (color)	128 <0-255>	SYS	When the value increases by “1”, the reproduction ratio of primary scanning direction decreases by approx. x.xx%.	1
1065	Image	Judgment threshold for ACS		SCN (color)	70 <0-255>	SYS	When the value increases, originals tend to be judged as monochrome, and when the value decreases, they tend to be judged as color in auto-color mode.	1
1066	Image	Judgment threshold for ACS on original set on the RADF		SCN (color)	70 <0-255>	SYS		1
1070	Image	Fine adjustment of background	Text	SCN (color)	0 <0-50>	SYS	Adjusts the level of background. When the value increases, the background becomes more brightened.	1
1071			Printed image	SCN (color)	0 <0-50>	SYS		1
1072			Photo	SCN (color)	0 <0-50>	SYS		1
1075	Image	Fine adjustment of black density	Text	SCN (color)	0 <0-4>	SYS	Adjusts the black density of the scanned image. When the value increases, the black density becomes darker.	1
1076			Printed image	SCN (color)	0 <0-4>	SYS		1
1077			Photo	SCN (color)	0 <0-4>	SYS		1

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
1080	Image	RGB conversion method selection	Text	SCN (color)	0 <0-3>	SYS	Sets the color space format of the output image. 0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB	1
1081			Printed image	SCN (color)	0 <0-3>	SYS		1
1082			Photo	SCN (color)	0 <0-3>	SYS		1
1086	Image	Sharpness adjustment	Text	SCN (color)	0 <0-31>	SYS	When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. * The default value 0 is equivalent to 16 (center value).	1
1087			Printed image	SCN (color)	0 <0-31>	SYS		1
1088			Photo	SCN (color)	0 <0-31>	SYS		1
1550	Image	Density adjust- ment "manual density" fine adjustment/Center value	Text /Photo	PPC (color)	128 <0-255>	SYS	When the value increases, the image becomes darker.	1
1551			Text	PPC (color)	128 <0-255>	SYS		1
1552			Printed image	PPC (color)	128 <0-255>	SYS		1
1553			Photo	PPC (color)	128 <0-255>	SYS		1
1554			Map	PPC (color)	128 <0-255>	SYS		1
1560	Image	Density adjust- ment "manual density" fine adjustment/Dark step value	Text /Photo	PPC (color)	20 <0-255>	SYS	When the value increases, the image of the "dark" steps becomes darker.	1
1561			Text	PPC (color)	20 <0-255>	SYS		1
1562			Printed image	PPC (color)	20 <0-255>	SYS		1
1563			Photo	PPC (color)	20 <0-255>	SYS		1
1564			Map	PR (color)	20 <0-255>	SYS		1
1570	Image	Density adjust- ment "manual density" fine adjustment/Light step value	Text /Photo	PPC (color)	20 <0-255>	SYS	When the value increases, the image of the "light" steps becomes lighter.	1
1571			Text	PR (color)	20 <0-255>	SYS		1
1572			Printed image	PPC (color)	20 <0-255>	SYS		1
1573			Photo	PPC (color)	20 <0-255>	SYS		1
1574			Map	PPC (color)	20 <0-255>	SYS		1

Adjustment mode (05)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1580	Image	Density adjustment "automatic density" fine adjustment	Text	PPC	128	When the value increases, the image becomes darker.	1
1581			/Photo	(color)	<0-255>		1
1582			Text	PPC	128		1
1583			(color)	(color)	<0-255>		1
1584			Printed image	PPC	128		1
			(color)	(color)	<0-255>		
			Photo	PPC	128		1
			(color)	(color)	<0-255>		
			Map	PPC	128		1
			(color)	(color)	<0-255>		
1612	Image	Adjustment of maximum toner amount	Normal paper	PPC	255	When the value decreases, the image becomes lighter. Note: When the value increases, image offsetting may occur.	1
1613			Thick paper 1	PPC	255		1
1614			(color)	(color)	<0-255>		1
1615			Thick paper 2	PPC	237		1
1616			(color)	(color)	<0-255>		1
			Thick paper 3	PPC	237		1
			(color)	(color)	<0-255>		
			OHP film	PPC	230		1
			(color)	(color)	<0-255>		
1642	Image	Automatic gamma adjustment	Color/	PPC	-	Adjusts the gradation reproduction for each color; Y, M, C and K.	7
1643			Black	(color)			7
			Color	PPC	-		7
			(color)	(color)			
1675	Image	Judgment threshold for ACS	PPC	70	SYS	When the value increases, originals tend to be judged as monochrome, and when the value decreases, they tend to be judged as color in auto-color mode.	1
			(color)	<0-255>			1
1676	Image	Judgment threshold for ACS on original set on the RADF	PPC	70	SYS		1
			(color)	<0-255>			
1688	Image	Automatic offsetting adjustment for background processing (background density)	Text	PPC	128	When the value increases, the background becomes darker.	1
1689			/Photo	(color)	<0-255>		1
1690			Text	PPC	128		1
1691			(color)	(color)	<0-255>		1
1692			Printed image	PPC	128		1
			(color)	(color)	<0-255>		
			Photo	PPC	128		1
			(color)	(color)	<0-255>		
			Map	PPC	128		1
			(color)	(color)	<0-255>		
1693	Image	Automatic offsetting adjustment for background processing (text density)	Text	PPC	128	When the value increases, the text becomes darker.	1
1694			/Photo	(color)	<0-255>		1
1695			Text	PPC	128		1
1696			(color)	(color)	<0-255>		1
1697			Printed image	PPC	128		1
			(color)	(color)	<0-255>		
			Photo	PPC	128		1
			(color)	(color)	<0-255>		
			Map	PPC	128		1
			(color)	(color)	<0-255>		

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1698	Image	Manual offsetting adjustment for background processing (background density)	Text /Photo	PPC (color)	128 <0-255>	SYS	When the value increases, the background becomes darker.	1
1699			Text	PPC (color)	128 <0-255>	SYS		1
1700			Printed image	PPC (color)	128 <0-255>	SYS		1
1701			Photo	PPC (color)	128 <0-255>	SYS		1
1702			Map	PPC (color)	128 <0-255>	SYS		1
1708	Image	Manual offsetting adjustment for background processing (text density)	Text /Photo	PPC (color)	128 <0-255>	SYS	When the value increases, the text becomes darker.	1
1709			Text	PPC (color)	128 <0-255>	SYS		1
1710			Printed image	PPC (color)	128 <0-255>	SYS		1
1711			Photo	PPC (color)	128 <0-255>	SYS		1
1712			Map	PPC (color)	128 <0-255>	SYS		1
1737	Image	Sharpness adjustment	Text /Photo	PPC (color)	0 <0-31>	SYS	When the value increases, the image becomes sharper. When the value decreases, the image becomes softer. The smaller the value is, the less the moire becomes. *The default value 0 is equivalent to 16 (center value).	1
1738			Text	PPC (color)	0 <0-31>	SYS		1
1739			Printed image	PPC (color)	0 <0-31>	SYS		1
1740			Photo	PPC (color)	0 <0-31>	SYS		1
1741			Map	PPC (color)	0 <0-31>	SYS		1
1769	Image	Setting for highlighter	Vivid	PPC (color)	0 <0-2>	SYS	Sets the reproduction mode for highlighter for four types of one touch adjustment. 0: Default 1: Highlighter 1 2: Highlighter 2	1
1770			Clear	PPC (color)	0 <0-2>	SYS		1
1771			Warm	PPC (color)	0 <0-2>	SYS		1
1772			Cold	PPC (color)	0 <0-2>	SYS		1
1779-0	Image	Color balance adjustment for “Y” (Text/Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1779-1			M	PPC (color)	128 <0-255>	SYS		4
1779-2			H	PPC (color)	128 <0-255>	SYS		4
1780-0	Image	Color balance adjustment for “Y” (Text)	L	PPC (color)	128 <0-255>	SYS		4
1780-1			M	PPC (color)	128 <0-255>	SYS		4
1780-2			H	PPC (color)	128 <0-255>	SYS		4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1781-0	Image	Color balance adjustment for “Y” (Text/Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1781-1			M	PPC (color)	128 <0-255>	SYS		4
1781-2			H	PPC (color)	128 <0-255>	SYS		4
1782-0	Image	Color balance adjustment for “Y” (Photo)	L	PPC (color)	128 <0-255>	SYS		4
1782-1			M	PPC (color)	128 <0-255>	SYS		4
1782-2			H	PPC (color)	128 <0-255>	SYS		4
1783-0	Image	Color balance adjustment for “Y” (Map)	L	PPC (color)	128 <0-255>	SYS		4
1783-1			M	PPC (color)	128 <0-255>	SYS		4
1783-2			H	PPC (color)	128 <0-255>	SYS		4
1784-0	Image	Color balance adjustment for “M” (Text/Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1784-1			M	PPC (color)	128 <0-255>	SYS		4
1784-2			H	PPC (color)	128 <0-255>	SYS		4
1785-0	Image	Color balance adjustment for “M” (Text)	L	PPC (color)	128 <0-255>	SYS		4
1785-1			M	PPC (color)	128 <0-255>	SYS		4
1785-2			H	PPC (color)	128 <0-255>	SYS		4
1786-0	Image	Color balance adjustment for “M” (Printed image)	L	PPC (color)	128 <0-255>	SYS		4
1786-1			M	PPC (color)	128 <0-255>	SYS		4
1786-2			H	PPC (color)	128 <0-255>	SYS		4
1787-0	Image	Color balance adjustment for “M” (Photo)	L	PPC (color)	128 <0-255>	SYS	4	
1787-1			M	PPC (color)	128 <0-255>	SYS	4	
1787-2			H	PPC (color)	128 <0-255>	SYS	4	
1788-0	Image	Color balance adjustment for “M” (Map)	L	PPC (color)	128 <0-255>	SYS	4	
1788-1			M	PPC (color)	128 <0-255>	SYS	4	
1788-2			H	PPC (color)	128 <0-255>	SYS	4	

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
1789-0	Image	Color balance adjustment for “C” (Text/Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value value increases. Note: L : Low density area M : Medium density area H : High density area	4
1789-1			M	PPC (color)	128 <0-255>	SYS		4
1789-2			H	PPC (color)	128 <0-255>	SYS		4
1790-0	Image	Color balance adjustment for “C” (Text)	L	PPC (color)	128 <0-255>	SYS		4
1790-1			M	PPC (color)	128 <0-255>	SYS		4
1790-2			H	PPC (color)	128 <0-255>	SYS		4
1791-0	Image	Color balance adjustment for “C” (Printed image)	L	PPC (color)	128 <0-255>	SYS		4
1791-1			M	PPC (color)	128 <0-255>	SYS		4
1791-2			H	PPC (color)	128 <0-255>	SYS		4
1792-0	Image	Color balance adjustment for “C” (Photo)	L	PPC (color)	128 <0-255>	SYS	4	
1792-1			M	PPC (color)	128 <0-255>	SYS	4	
1792-2			H	PPC (color)	128 <0-255>	SYS	4	
1793-0	Image	Color balance adjustment for “C” (Map)	L	PPC (color)	128 <0-255>	SYS	4	
1793-1			M	PPC (color)	128 <0-255>	SYS	4	
1793-2			H	PPC (color)	128 <0-255>	SYS	4	
1794-0	Image	Color balance adjustment for “K” (Text/Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1794-1			M	PPC (color)	128 <0-255>	SYS		4
1794-2			H	PPC (color)	128 <0-255>	SYS		4
1795-0	Image	Color balance adjustment for “K” (Text)	L	PPC (color)	128 <0-255>	SYS		4
1795-1			M	PPC (color)	128 <0-255>	SYS		4
1795-2			H	PPC (color)	128 <0-255>	SYS		4
1796-0	Image	Color balance adjustment for “K” (Printed image)	L	PPC (color)	128 <0-255>	SYS		4
1796-1			M	PPC (color)	128 <0-255>	SYS		4
1796-2			H	PPC (color)	128 <0-255>	SYS		4

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
1797-0	Image	Color balance adjustment for "K" (Photo)	L	PPC (color)	128 <0-255>	SYS	The target color, mode and density area become darker as the value increases. Note: L : Low density area M : Medium density area H : High density area	4
1797-1			M	PPC (color)	128 <0-255>	SYS		4
1797-2			H	PPC (color)	128 <0-255>	SYS		4
1798-0	Image	Color balance adjustment for "K" (Map)	L	PPC (color)	128 <0-255>	SYS		4
1798-1			M	PPC (color)	128 <0-255>	SYS		4
1798-2			H	PPC (color)	128 <0-255>	SYS		4
1800-0	Image control	Upper limit value of contrast voltage	Y	ALL	450 <0-999>	M	Sets the upper limit value of the contrast voltage at the image quality control. (Unit: V)	4
1800-1			M	ALL	450 <0-999>	M		4
1800-2			C	ALL	450 <0-999>	M		4
1800-3			K	ALL	450 <0-999>	M		4
1801-0	Image control	Lower limit value of contrast voltage	Y	ALL	120 <0-999>	M	Sets the lower limit value of the contrast voltage at the image quality control. (Unit: V)	4
1801-1			M	ALL	120 <0-999>	M		4
1801-2			C	ALL	120 <0-999>	M		4
1801-3			K	ALL	120 <0-999>	M		4
1802-0	Image control	Upper limit value of laser power	Y	ALL	800 <0-999>	M	Sets the upper limit value of the laser power at the image quality control. (Unit: μ W)	4
1802-1			M	ALL	800 <0-999>	M		4
1802-2			C	ALL	800 <0-999>	M		4
1802-3			K	ALL	800 <0-999>	M		4
1803-0	Image control	Lower limit value of laser power	Y	ALL	350 <0-999>	M	Sets the lower limit value of the laser power at the image quality control. (Unit: μ W)	4
1803-1			M	ALL	350 <0-999>	M		4
1803-2			C	ALL	350 <0-999>	M		4
1803-3			K	ALL	350 <0-999>	M		4
1804-0	Image control	Background voltage actual value display	Y	ALL	125 <0-999>	M	Displays the background voltage at the actual print. (Unit: V)	10
1804-1			M	ALL	125 <0-999>	M		10
1804-2			C	ALL	125 <0-999>	M		10
1804-3			K	ALL	125 <0-999>	M		10

Adjustment mode (05)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
1805-0	Image control	Drum initial voltage characteristic/slope factor display	Y	ALL	975 <0-999>	M	Displays the slope factor of the approximate expression of the drum initial voltage to the main charger grid voltage at the open-loop control.	10
1805-1			M	ALL	975 <0-999>	M		10
1805-2			C	ALL	975 <0-999>	M		10
1805-3			K	ALL	981 <0-999>	M		10
1806-0	Image control	Drum initial voltage characteristic/offset factor display	Y	ALL	50 <-999-999>	M	Displays the offset factor of the approximate expression of the drum initial voltage to the main charger grid voltage at the open-loop control.	10
1806-1			M	ALL	50 <-999-999>	M		10
1806-2			C	ALL	50 <-999-999>	M		10
1806-3			K	ALL	50 <-999-999>	M		10
1807-0	Image control	Drum residual voltage characteristic/slope factor display (main charger grid low voltage area)	Y	ALL	50 <0-999>	M	Displays the slope factor of the approximate expression of the drum residual voltage to the main charger grid voltage at the open-loop control.	10
1807-1			M	ALL	50 <0-999>	M		10
1807-2			C	ALL	50 <0-999>	M		10
1807-3			K	ALL	50 <0-999>	M		10
1808-0	Image control	Drum residual voltage characteristic/offset factor display (main charger grid low voltage area)	Y	ALL	50 <-999-999>	M	Displays the offset factor of the approximate expression of the drum residual voltage to the main charger grid voltage at the open-loop control.	10
1808-1			M	ALL	50 <-999-999>	M		10
1808-2			C	ALL	50 <-999-999>	M		10
1808-3			K	ALL	50 <-999-999>	M		10
1809-0	Image control	Drum residual voltage characteristic/slope factor display (main charger grid high voltage area)	Y	ALL	50 <0-999>	M	Displays the slope factor of the approximate expression of the drum residual voltage to the main charger grid voltage at the open-loop control.	10
1809-1			M	ALL	50 <0-999>	M		10
1809-2			C	ALL	50 <0-999>	M		10
1809-3			K	ALL	50 <0-999>	M		10
1810-0	Image control	Drum residual voltage characteristic/offset factor display (main charger grid high voltage area)	Y	ALL	50 <-999-999>	M	Displays the offset factor of the approximate expression of the drum residual voltage to the main charger grid voltage at the open-loop control.	10
1810-1			M	ALL	50 <-999-999>	M		10
1810-2			C	ALL	50 <-999-999>	M		10
1810-3			K	ALL	50 <-999-999>	M		10

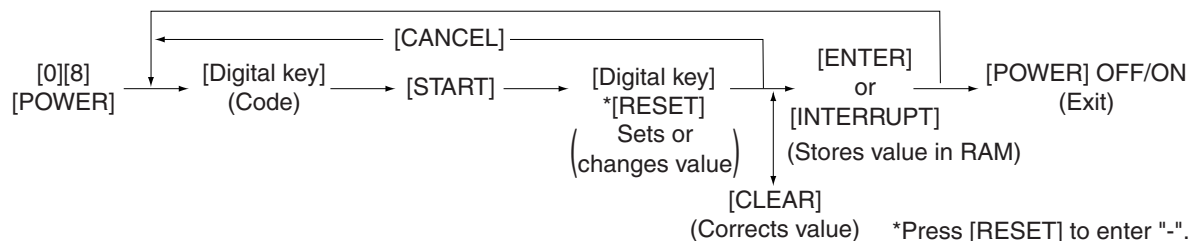
Adjustment mode (05)								
Code	Classifi- cation	Items		Func- tion	Default <Acceptable value>	RAM	Contents	Proce- dure
1811-0	Image control	Contrast voltage/ upper limit actual value display	Y	ALL	450 <0-999>	M	Displays the upper limit value of the contrast voltage at the actual print. (Unit: V)	10
1811-1			M	ALL	450 <0-999>	M		10
1811-2			C	ALL	450 <0-999>	M		10
1811-3			K	ALL	600 <0-999>	M		10
1812-0	Image control	Contrast voltage/ lower limit actual value display	Y	ALL	120 <0-999>	M	Displays the lower limit value of the contrast voltage at the actual print. (Unit: V)	10
1812-1			M	ALL	120 <0-999>	M		10
1812-2			C	ALL	120 <0-999>	M		10
1812-3			K	ALL	120 <0-999>	M		10
1813-0	Image control	Display of background voltage/upper limit actual value	Y	ALL	170 <0-999>	M	Displays the upper limit value of the background voltage at the actual print. (Unit: V)	10
1813-1			M	ALL	170 <0-999>	M		10
1813-2			C	ALL	170 <0-999>	M		10
1813-3			K	ALL	170 <0-999>	M		10
1814-0	Image control	Background voltage/lower limit actual value display	Y	ALL	80 <0-999>	M	Displays the lower limit value of the background voltage at the actual print. (Unit: V)	10
1814-1			M	ALL	80 <0-999>	M		10
1814-2			C	ALL	80 <0-999>	M		10
1814-3			K	ALL	80 <0-999>	M		10
1815-0	Image control	Contrast voltage/ correction number of time display	Y	ALL	0 <0-255>	M	Displays the actual number of time of the contrast voltage correction at the closed-loop control.	10
1815-1			M	ALL	0 <0-255>	M		10
1815-2			C	ALL	0 <0-255>	M		10
1815-3			K	ALL	0 <0-255>	M		10
1816-0	Image control	Laser power correction/number of time display	Y	ALL	0 <0-255>	M	Displays the actual number of time of the laser power correction at the closed-loop control.	10
1816-1			M	ALL	0 <0-255>	M		10
1816-2			C	ALL	0 <0-255>	M		10
1816-3			K	ALL	0 <0-255>	M		10

Adjustment mode (05)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1817	Image control	Laser power actual value display	PPC (black)	92 <0-255>	M	Displays the laser power value when the printing is actually performed. (Bit value)	2
1819	Image control	Laser power correcting factor	PPC (black)	100 <100-255>	M		1
1820	Image control	Laser power actual value display	PRT (black)	92 <0-255>	M	Displays the laser power value when the printing is actually performed. (Bit value)	2
1821	Image control	Laser power correcting factor	PRT (black)	100 <100-255>	M		1

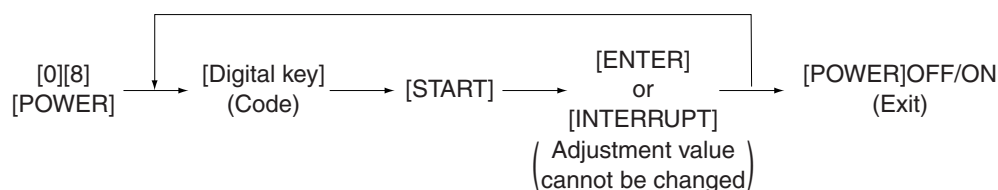
2.2.5 Setting mode (08)

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

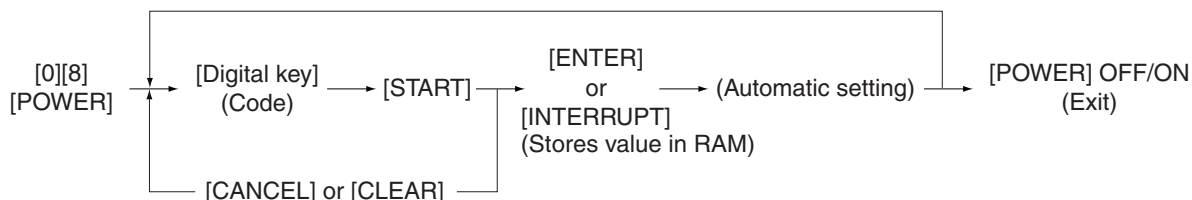
Procedure 1



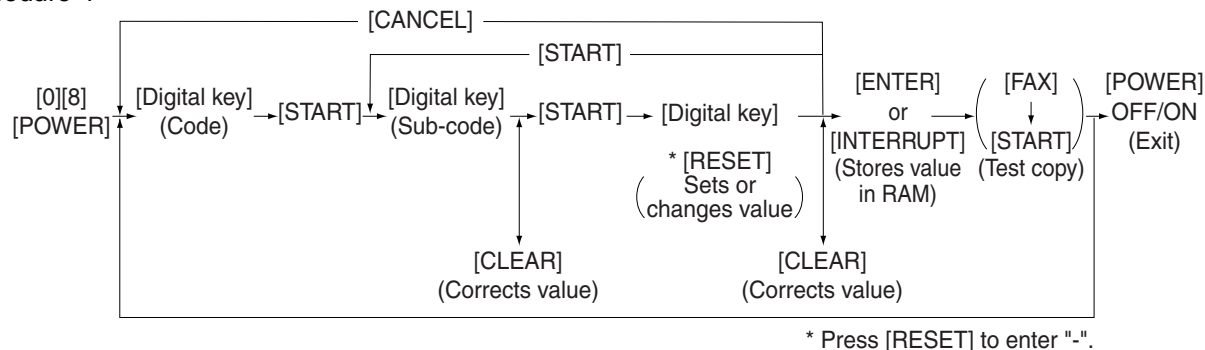
Procedure 2



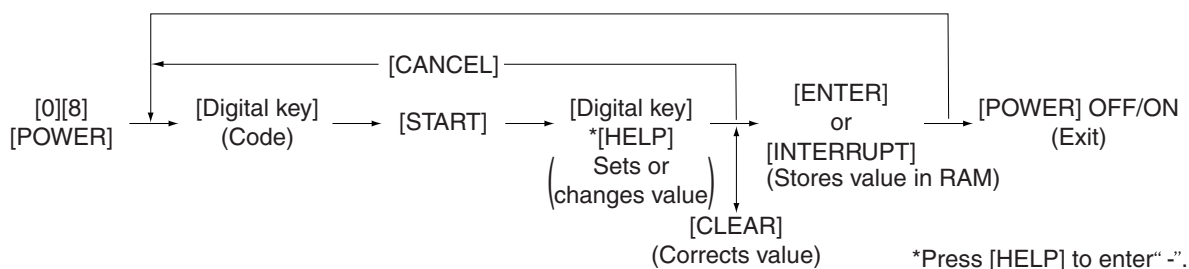
Procedure 3



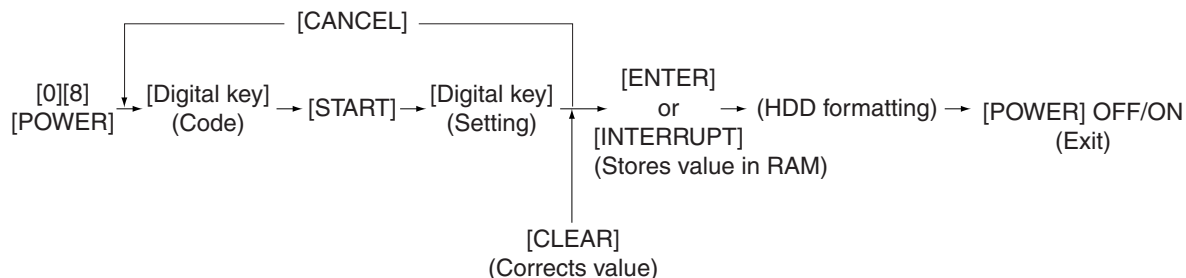
Procedure 4



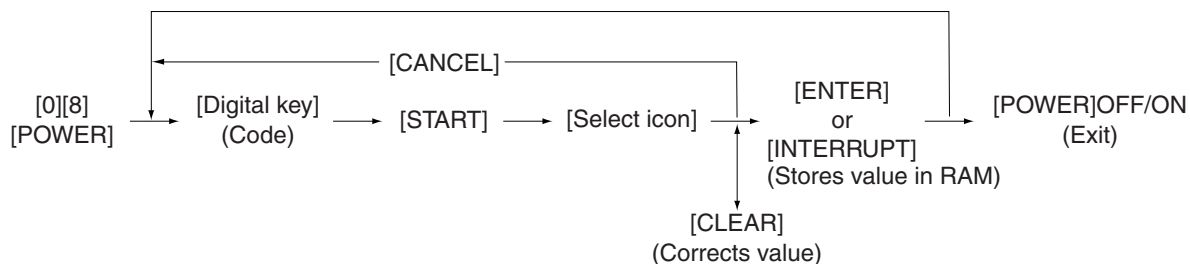
Procedure 5



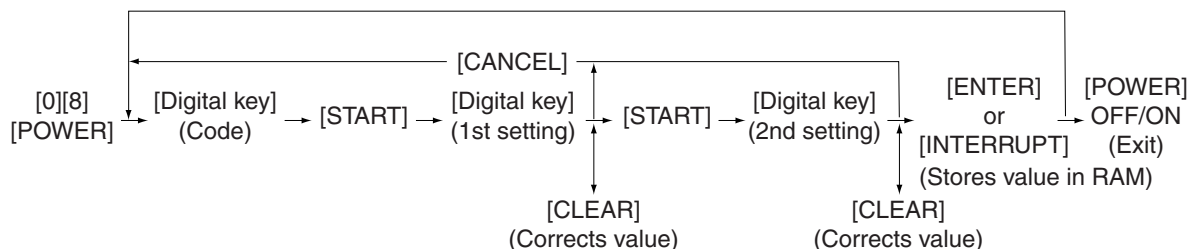
Procedure 7



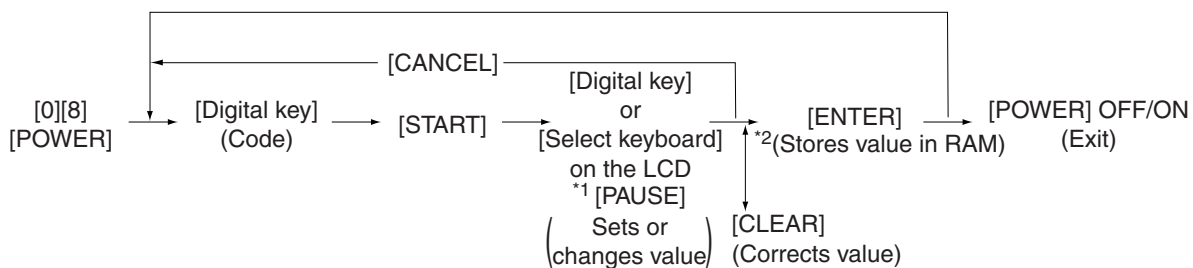
Procedure 9



Procedure 10



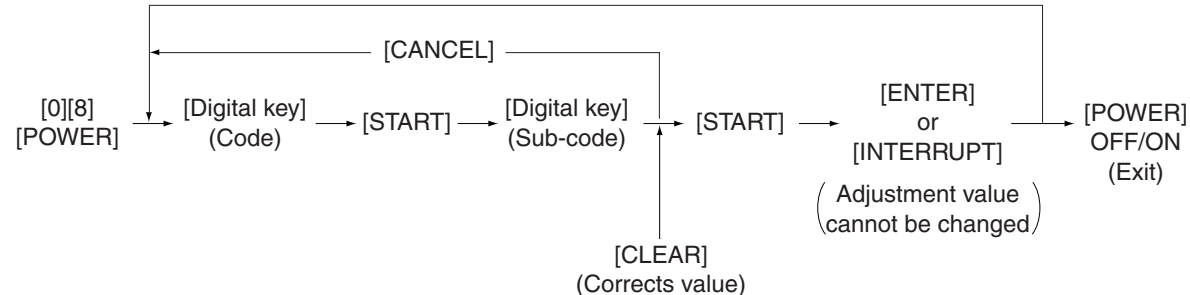
Procedure 11 and 12



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

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

Procedure 14



Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
200	General	Date and time setting	ALL	- <13 digits>	-	Year/month/date/day/hour/minute/ second Example: 03 07 0 13 13 27 48 "Day" - "0" is for "Sunday". Proceeds Monday through Saturday from "1" to "6".	5
201	General	Destination selection	ALL	EUR: 0 UC: 1 JPN: 2 <0-3>	M	0: EUR 1: UC 2: JPN 3: Other	1
202	User interface	Counter installed externally	ALL	0 <0-3>	M	0: No external counter 1: Coin controller 2: Copy key card 3: Key copy counter	1
203	General	Line adjustment mode	ALL	0 <0-1>	M	0: For factory shipment 1: For line *Field: "0" must be selected	1
204	User interface	Auto-clear timer setting	ALL	3 <0-10>	SYS	Timer to return the copier to the default settings when the [START] key 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	11 <0, 6-15>	SYS	Timer to automatically switch to the energy saving mode when the copier 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
206	User interface	Auto shut off mode timer setting	ALL	9 <0-20>	SYS	Timer to automatically turn OFF the power when the copier has not been used 0: 3min. 1: 5min. 2: 10min. 3: 15min. 4: 20min. 5: 25min. 6: 30min. 7: 40min. 8: 50min. 9: 60min. 10: 70min. 11: 80min. 12: 90min. 13: 100min. 14: 110min. 15: 120min. 16: 150min. 17: 180min. 18: 210min. 19: 240min. 20: Not used	1
207	User interface	Highlighting display on LCD	ALL	0 <0-1>	SYS	0: Black letter on white background 1: White letter on black background	1
209	User interface	Default filing format when E-mailing (common in all color modes)	ALL (color)	0 <0-1>	SYS	0: TIFF (Multi) 1: PDF	1
216	Paper feeding	Tab paper printing/Tab extension setting (Bypass feeding)	ALL	130 <100-200>	SYS		1
217	Paper feeding	Tab paper printing/Tab shift setting (Bypass feeding)	ALL	130 <0-300>	SYS		1
218	User interface	Default filing format when storing files (at color/ACS modes)	ALL (color)	1 <0-3>	SYS	0: TIFF (Multi) 1: PDF 2: JPG 3: TIFF (Single)	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
219	User interface	Default filing format when storing files (at black mode)	ALL (black)	0 <0-3>	SYS	0: TIFF (Multi) 1: PDF 2: JPG 3: TIFF (Single)	1
220	User interface	Language displayed at power-ON	ALL	JPN: 5 OTHER: 0 <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	0 <0-4>	SYS	0: Language 1 1: Language 2 2: Language 3 3: Language 4 4: Language 5	1
223	Maintenance	Switching of output pages/driving counts at PM	ALL	0 <0-1>	M	0: Output pages 1: Driving counts	1
224	Paper feeding	Paper size for bypass feed	ALL	UNDEF	SYS	Press the icon on the LCD to select the size.	9
225	Paper feeding	Paper size for upper drawer	ALL	EUR:A4 UC:LT JPN:A4	M	Press the icon on the LCD to select the size.	9
226	Paper feeding	Paper size for lower drawer	ALL	EUR:A3 UC:LD JPN:A3	M	Press the icon on the LCD to select the size.	9
227	Paper feeding	Paper size for PFP upper drawer	ALL	EUR: A4-R UC: LT-R JPN: A4-R	M	Press the icon on the LCD to select the size.	9
228	Paper feeding	Paper size for PFP lower drawer	ALL	EUR:A4 UC:LG JPN:B4	M	PPress the icon on the LCD to select the size.	9
229	Paper feeding	Paper size (A3) feeding/widthwise direction	ALL	420/297 <182-432/ 140-297>	M		10
230	Paper feeding	Paper size (A4-R) feeding/widthwise direction	ALL	297/210 <182-432/ 140-297>	M		10
231	Paper feeding	Paper size (A5-R) feeding/widthwise direction	ALL	210/148 <182-432/ 140-297>	M		10
232	Paper feeding	Paper size (B4-R) feeding/widthwise direction	ALL	364/257 <182-432/ 140-297>	M		10
233	Paper feeding	Paper size (B5-R) feeding/widthwise direction	ALL	257/182 <182-432/ 140-297>	M		10
234	Paper feeding	Paper size (LT-R) feeding/widthwise direction	ALL	279/216 <182-432/ 140-297>	M		10
235	Paper feeding	Paper size (LD) feeding/widthwise direction	ALL	432/279 <182-432/ 140-297>	M		10
236	Paper feeding	Paper size (LG) feeding/widthwise direction	ALL	356/216 <182-432/ 140-297>	M		10
237	Paper feeding	Paper size (ST-R) feeding/widthwise direction	ALL	216/140 <182-432/ 140-297>	M		10

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
238	Paper feeding	Paper size (COMPUTER) feeding/widthwise direction	ALL	356/257 <182-432/ 140-297>	M		10
239	Paper feeding	Paper size (FOLIO) feeding/widthwise direction	ALL	330/210 <182-432/ 140-297>	M		10
240	Paper feeding	Paper size (13"LG) feeding/widthwise direction	ALL	330/216 <182-432/ 140-297>	M		10
241	Paper feeding	Paper size (8.5"X8.5") feeding/widthwise direction	ALL	216/216 <182-432/ 140-297>	M		10
242	Paper feeding	Paper size (Non-standard) feeding/widthwise direction	ALL	432/279 <148-432/ 105-297>	M		10
243	Paper feeding	Memory 1 Paper size (bypass feeding/ non-standard type) feeding/widthwise direction	ALL	148/100 <148-432/ 100-297>	SYS		10
244	Paper feeding	Paper size (8K) feeding/widthwise direction	ALL	390/270 <182-432/ 140-297>	M		10
245	Paper feeding	Paper size (16K-R) feeding/widthwise direction	ALL	270/195 <182-432/ 140-297>	M		10
246	Paper feeding	Paper size (A3-wide) feeding/widthwise direction	ALL	457/305 <182-457/ 140-305>	M		10
247	Paper feeding	Memory 2 Paper size (bypass feeding/ non-standard type) feeding/widthwise direction	ALL	148/100 <148-432/ 100-297>	SYS		10
248	Paper feeding	Memory 3 Paper size (bypass feeding/ non-standard type) feeding/widthwise direction	ALL	148/100 <148-432/ 100-297>	SYS		10
249	Paper feeding	Memory 4 Paper size (bypass feeding/ non-standard type) feeding/widthwise direction	ALL	148/100 <148-432/ 100-297>	SYS		10
250	Maintenance	Service call telephone number	ALL	0 <14 digits>	SYS	A telephone number can be entered up to 14 digits. Use the [Pause] button to enter a hyphen(-).	11
251	Maintenance	Setting value of PM counter	ALL	Refer to contents <8 digits>	M	Driving counts of the drum <Default> e-STUDIO 3511 UC, EUR: 120000 JPN: 0 e-STUDIO 4511 UC, EUR: 150000 JPN: 0	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
252	Maintenance	Current value of PM time counter Display/0 clearing	ALL	0 <8 digits>	M	Driving counts of the drum (Registration sensor ON) is counted.	1
253	Maintenance	Error history display	ALL	-	SYS	Displaying of the latest 20 errors data	2
254	Paper feeding	LT ↔ A4/LD ↔ A3	PRT	1 <0-1>	SYS	Exits the LT size paper forcibly when A4 print is performed from the client computer in the network print function though only LT paper exists. Similarly, exits the A4/LD/A3 size paper forcibly when LT/A3/LD print is performed from the client computer in the network print function though only A4/LD/A3 paper exists. 0: Valid 1: Invalid	1
255	Paper feeding	PFP/LCF installation	ALL	0 <0-4>	M	0: Automatic 1: PFP single-drawer type installed 2: PFP dual-drawer type installed 3: LCF installed 4: Not installed	1
256	Paper feeding	Paper size setting /LCF	ALL	EUR:A4 UC:LT JPN:A4	M	Press the icon on the LCD to select the size.	9
257	Counter	Counter copy	ALL	- <1-2>	-	1: Electrical counter -> Backup counter 2: Backup counter -> Electrical counter	1
258	Maintenance	FSMS acceptance	ALL	1 <0-2>	SYS	0: Prohibited 1: Accepted (only serial) 2: Accepted (serial + USB)	1
259	Network	Storage period at testing for free and private	PRT	14 <0-30>	SYS	0: No limits 1 to 30: 1 to 30 days	1
260	Network	Web data retention period	ALL	10 <3 digits>	SYS	Unit: Minute	1
261	Network	Web Box data retention period	ALL	10 <3 digits>	SYS	Unit: Minute	1
262	Network	TWAIN data retention period	ALL	10 <3 digits>	SYS	Unit: Minute	1
263	Network	Administrator's password (Maximum 6 digits)	ALL	123456 <6 digits>	SYS	Able to enter within 6 digits (Figures only)	11
264	Network	File retention period	ALL	30 <0-999>	SYS	0: No limits 1 to 999: 1 to 999 days	1
265	Network	Maximum data capacity at E-mailing	ALL	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		Full guarantee of the documents in BOX when the HDD is full	ALL	0 <0-1>	SYS	0: Not fully guaranteed (The documents may be erased by CutDoc/ SaveDo) 1: Fully guaranteed (Copies of the documents are retained at any time)	1
268		ACS threshold (Step value)	ALL	3 <1-5>	SYS		1
269		Search method in address book	ALL	0 <0-1>	SYS	0: AND 1: OR	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
270		Storage setting of user box (Set when creating user box)	ALL	0 <0-999>	SYS	0: Not erase 1 to 999: 1 to 999 days	1
271		Warning display of the HDD capacity to be filled	ALL	90 <0-100>	SYS	Sets the percentage of the HDD capacity filled which warning is displayed 0 to 100: 0 to 100 %	1
272		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	Network	Default size setting of partitioned data to be transmitted	ALL	0 <0-6>	SYS	Only the default value set on template is defined. 0: No partitioning 1: 64 2: 128 3: 256 4: 512 5: 1024 6: 2048	1
274	Network	Default size setting of partitioned data Page by Page	ALL	0 <0-4>	SYS	Only the default value set on template is defined. 0: No partitioning 1: 256 2: 512 3: 1024 4: 2048	1
275		Default setting of encode method	ALL	0 <0-3>	SYS	0: MH 1: MR 2: MMR 3: JBIG	1
276		Default setting of scanning density (B/W)	ALL	0 <0-11>	SYS	0: Automatic 1: -5 2: -4 3: -3 4: -2 5: -1 6: 0 7: +1 8: +2 9: +3 10: +4 11: +5	1
277		Default setting of background adjustment (Color)	ALL	3 <1-5>	SYS	1: -2 2: -1 3: 0 4: +1 5: +2	1
278		Default setting of color mode	ALL	0 <0-4>	SYS	0: B/W 1: Grayscale2: Scale 3: Full color 4: Auto Color	1
279		Default setting of resolution (Color)	ALL	2 <0-3>	SYS	0: 100 dpi 1: 150 dpi 2: 200 dpi 3: 300dpi	1
280		Default setting of resolution (Gray)	ALL	2 <0-4>	SYS	0: 100 dpi 1: 150 dpi 2: 200 dpi 3: 300dpi 4: 400 dpi	1
281		Default setting of resolution (B/W)	ALL	1 <0-4>	SYS	0: 150 dpi 1: 200 dpi 2: 300 dpi 3: 400dpi 4: 600 dpi	1
282		Default setting of original mode (Color)	ALL	0 <0-2>	SYS	0: Text 1: Text/Photo 2: Photo	1
283		Default setting of original mode (B/W)	ALL	0 <0-2>	SYS	0: Text 1: Text/Photo 2: Photo	1
284		Default setting of scanning mode	SCN	0 <0-2>	SYS	0: Single 1: Book 2: Tablet	1
285		Default setting of rotation angle of original	ALL	0 <0-3>	SYS	0: 0 degree 1: 90 degrees 2: 180 degrees 3: 270 degrees	1
286		Default setting of original paper size	ALL	0 <0-19>	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	1
287		ON/OFF setting of "Notification"	ALL	0 <0-1>	SYS	0: OFF 1: ON	1

Adjustment mode (08)								
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Proce- dure	
288		Searching interval of erasing files exceeding saving time limit	ALL	12 <1-24>	SYS	Unit: Hour	1	
289		Default setting of back-ground (Gray)	ALL	3 <1-5>	SYS	1: -2 2: -1 3: 0 4: +1 5: +2	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 <0-4>	SYS	0: Normal 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 (Exit bin)	PRT	0 <0-2>	SYS	0: Inner receiving tray 1: 1 bin 2: 2 bin	1	
296	Network	Raw printing job (Number of form lines)	PRT	1200 <500-12800>	SYS	500 to 12800 (Number of form lines)	1	
297	Network	Raw printing job (PCL font pitch)	PRT	1000 <44-9999>	SYS	44 to 9999 (PCL font pitch)	1	
298	Network	Raw printing job (PCL font size)	PRT	1200 <400-99975>	SYS	400 to 99975 (PCL font size)	1	
299	Network	Raw printing job (PCL font number)	PRT	0 <0-79>	SYS		1	
300	User interface	Maximum number of printouts (MAX9)	ALL	0 <0-2>	SYS	0: 999 1: 99 2: 9	1	
301-0	Counter	Number of output pages at full color mode in copier function	A3	PPC (color)	0 <8 digits>	SYS	Counts the output pages at the full color mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
301-1	Counter		A4	PPC (color)	0 <8 digits>	SYS		4
301-2	Counter		A5	PPC (color)	0 <8 digits>	SYS		4
301-3	Counter		A6	PPC (color)	0 <8 digits>	SYS		4
301-4	Counter		B4	PPC (color)	0 <8 digits>	SYS		4
301-5	Counter		B5	PPC (color)	0 <8 digits>	SYS		4
301-6	Counter		FOLIO	PPC (color)	0 <8 digits>	SYS		4
301-7	Counter		LD	PPC (color)	0 <8 digits>	SYS		4
301-8	Counter		LG	PPC (color)	0 <8 digits>	SYS		4
301-9	Counter		LT	PPC (color)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
301-10	Counter	Number of output pages at full color	ST	PPC (color)	0 <8 digits>	SYS	Counts the output pages at the full color mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
301-11	Counter	mode in copier function	COMP	PPC (color)	0 <8 digits>	SYS		4
301-12	Counter		13"LG	PPC (color)	0 <8 digits>	SYS		4
301-13	Counter		8.5"x8.5"	PPC (color)	0 <8 digits>	SYS		4
301-14	Counter		16K	PPC (color)	0 <8 digits>	SYS		4
301-15	Counter		8K	PPC (color)	0 <8 digits>	SYS		4
301-16	Counter		Others	PPC (color)	0 <8 digits>	SYS		4
302	User interface	Original counter display		ALL	EUR: 2 UC: 0 JPN: 0 <0, 2>	SYS	Sets whether the original counter is displayed or not. 0: Not displayed 1: Displayed	1
303-0	Counter	Number of output pages at full color	A3	PRT (color)	0 <8 digits>	SYS	Counts the output pages at the full color mode in the printer function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
303-1	Counter	mode in printer function	A4	PRT (color)	0 <8 digits>	SYS		4
303-2	Counter		A5	PRT (color)	0 <8 digits>	SYS		4
303-3	Counter		A6	PRT (color)	0 <8 digits>	SYS		4
303-4	Counter		B4	PRT (color)	0 <8 digits>	SYS		4
303-5	Counter		B5	PRT (color)	0 <8 digits>	SYS		4
303-6	Counter		FOLIO	PRT (color)	0 <8 digits>	SYS		4
303-7	Counter		LD	PRT (color)	0 <8 digits>	SYS		4
303-8	Counter		LG	PRT (color)	0 <8 digits>	SYS		4
303-9	Counter		LT	PRT (color)	0 <8 digits>	SYS		4
303-10	Counter		ST	PRT (color)	0 <8 digits>	SYS		4
303-11	Counter		COMP	PRT (color)	0 <8 digits>	SYS		4
303-12	Counter		13"LG	PRT (color)	0 <8 digits>	SYS		4
303-13	Counter		8.5"x8.5"	PRT (color)	0 <8 digits>	SYS		4
303-14	Counter		16K	PRT (color)	0 <8 digits>	SYS		4
303-15	Counter		8K	PRT (color)	0 <8 digits>	SYS		4
303-16	Counter		Others	PRT (color)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
304-0	Counter	Number of output pages at twin color mode in copier function	A3	PPC (color)	0 <8 digits>	SYS	Counts the output pages at the twin color mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
304-1	Counter		A4	PPC (color)	0 <8 digits>	SYS		4
304-2	Counter		A5	PPC (color)	0 <8 digits>	SYS		4
304-3	Counter		A6	PPC (color)	0 <8 digits>	SYS		4
304-4	Counter		B4	PPC (color)	0 <8 digits>	SYS		4
304-5	Counter		B5	PPC (color)	0 <8 digits>	SYS		4
304-6	Counter		FOLIO	PPC (color)	0 <8 digits>	SYS		4
304-7	Counter		LD	PPC (color)	0 <8 digits>	SYS		4
304-8	Counter		LG	PPC (color)	0 <8 digits>	SYS		4
304-9	Counter		LT	PPC (color)	0 <8 digits>	SYS		4
304-10	Counter		ST	PPC (color)	0 <8 digits>	SYS		4
304-11	Counter		COMP	PPC (color)	0 <8 digits>	SYS		4
304-12	Counter		13"LG	PPC (color)	0 <8 digits>	SYS		4
304-13	Counter		8.5"x8.5"	PPC (color)	0 <8 digits>	SYS		4
304-14	Counter		16K	PPC (color)	0 <8 digits>	SYS		4
304-15	Counter		8K	PPC (color)	0 <8 digits>	SYS		4
304-16	Counter		Others	PPC (color)	0 <8 digits>	SYS		4
305-0	Counter	Number of output pages at black mode in copier function	A3	PPC (black)	0 <8 digits>	SYS	Counts the output pages at the black mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
305-1	Counter		A4	PPC (black)	0 <8 digits>	SYS		4
305-2	Counter		A5	PPC (black)	0 <8 digits>	SYS		4
305-3	Counter		A6	PPC (black)	0 <8 digits>	SYS		4
305-4	Counter		B4	PPC (black)	0 <8 digits>	SYS		4
305-5	Counter		B5	PPC (black)	0 <8 digits>	SYS		4
305-6	Counter		FOLIO	PPC (black)	0 <8 digits>	SYS		4
305-7	Counter		LD	PPC (black)	0 <8 digits>	SYS		4
305-8	Counter		LG	PPC (black)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure	
305-9	Counter	Number of output pages at black mode in copier function	LT	PPC (black)	0 <8 digits>	SYS	Counts the output pages at the black mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
305-10	Counter		ST	PPC (black)	0 <8 digits>	SYS		4
305-11	Counter		COMP	PPC (black)	0 <8 digits>	SYS		4
305-12	Counter		13"LG	PPC (black)	0 <8 digits>	SYS		4
305-13	Counter		8.5"x8.5"	PPC (black)	0 <8 digits>	SYS		4
305-14	Counter		16K	PPC (black)	0 <8 digits>	SYS		4
305-15	Counter		8K	PPC (black)	0 <8 digits>	SYS		4
305-16	Counter		Others	PPC (black)	0 <8 digits>	SYS		4
306-0	Counter	Number of output pages at black mode in printer function	A3	PRT (black)	0 <8 digits>	SYS	Counts the output pages at the black mode in the printer function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
306-1	Counter		A4	PRT (black)	0 <8 digits>	SYS		4
306-2	Counter		A5	PRT (black)	0 <8 digits>	SYS		4
306-3	Counter		A6	PRT (black)	0 <8 digits>	SYS		4
306-4	Counter		B4	PRT (black)	0 <8 digits>	SYS		4
306-5	Counter		B5	PRT (black)	0 <8 digits>	SYS		4
306-6	Counter		FOLIO	PRT (black)	0 <8 digits>	SYS		4
306-7	Counter		LD	PRT (black)	0 <8 digits>	SYS		4
306-8	Counter		LG	PRT (black)	0 <8 digits>	SYS		4
306-9	Counter		LT	PRT (black)	0 <8 digits>	SYS		4
306-10	Counter		ST	PRT (black)	0 <8 digits>	SYS		4
306-11	Counter		COMP	PRT (black)	0 <8 digits>	SYS		4
306-12	Counter		13"LG	PRT (black)	0 <8 digits>	SYS		4
306-13	Counter		8.5"x8.5"	PRT (black)	0 <8 digits>	SYS		4
306-14	Counter		16K	PRT (black)	0 <8 digits>	SYS		4
306-15	Counter		8K	PRT (black)	0 <8 digits>	SYS		4
306-16	Counter		Others	PRT (black)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure	
307-0	Counter	Number of output pages at list print mode	A3	PRT (black)	0 <8 digits>	SYS	Counts the output pages at the list print mode for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large- sized paper (08-353).	4
307-1	Counter		A4	PRT (black)	0 <8 digits>	SYS		4
307-2	Counter		A5	PRT (black)	0 <8 digits>	SYS		4
307-3	Counter		A6	PRT (black)	0 <8 digits>	SYS		4
307-4	Counter		B4	PRT (black)	0 <8 digits>	SYS		4
307-5	Counter		B5	PRT (black)	0 <8 digits>	SYS		4
307-6	Counter		FOLIO	PRT (black)	0 <8 digits>	SYS		4
307-7	Counter		LD	PRT (black)	0 <8 digits>	SYS		4
307-8	Counter		LG	PRT (black)	0 <8 digits>	SYS		4
307-9	Counter		LT	PRT (black)	0 <8 digits>	SYS		4
307-10	Counter		ST	PRT (black)	0 <8 digits>	SYS		4
307-11	Counter		COMP	PRT (black)	0 <8 digits>	SYS		4
307-12	Counter		13"LG	PRT (black)	0 <8 digits>	SYS		4
307-13	Counter		8.5"x8.5"	PRT (black)	0 <8 digits>	SYS		4
307-14	Counter		16K	PRT (black)	0 <8 digits>	SYS		4
307-15	Counter		8K	PRT (black)	0 <8 digits>	SYS		4
307-16	Counter		Others	PRT (black)	0 <8 digits>	SYS		4
308-0	Counter	Number of output pages in FAX function	A3	FAX	0 <8 digits>	SYS	Counts the output pages in the FAX function for each paper size accord- ing to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
308-1	Counter		A4	FAX	0 <8 digits>	SYS		4
308-2	Counter		A5	FAX	0 8 digits>	SYS		4
308-3	Counter		A6	FAX	0 <8 digits>	SYS		4
308-4	Counter		B4	FAX	0 <8 digits>	SYS		4
308-5	Counter		B5	FAX	0 <8 digits>	SYS		4
308-6	Counter		FOLIO	FAX	0 <8 digits>	SYS		4
308-7	Counter		LD	FAX	0 <8 digits>	SYS		4
308-8	Counter		LG	FAX	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Proce- dure	
308-9	Counter	Number of output pages in FAX function	LT	FAX	0 <8 digits>	SYS	Counts the output pages in the FAX function for each paper size accord- ing to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
308-10	Counter		ST	FAX	0 <8 digits>	SYS		4
308-11	Counter		COMP	FAX	0 <8 digits>	SYS		4
308-12	Counter		13"LG	FAX	0 <8 digits>	SYS		4
308-13	Counter		8.5"x8.5"	FAX	0 <8 digits>	SYS		4
308-14	Counter		16K	FAX	0 <8 digits>	SYS		4
308-15	Counter		8K	FAX	0 <8 digits>	SYS		4
308-16	Counter		Others	ALL	0 <8 digits>	SYS		4
309-0	Counter	Number of scanning pages at full color mode in copier function	A3	SCN (color)	0 <8 digits>	SYS	Counts the scanning pages at the full color mode in the copier function for each paper size according to the setting for the count setting of large- sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
309-1	Counter		A4	SCN (color)	0 <8 digits>	SYS		4
309-2	Counter		A5	SCN (color)	0 <8 digits>	SYS		4
309-3	Counter		A6	SCN (color)	0 <8 digits>	SYS		4
309-4	Counter		B4	SCN (color)	0 <8 digits>	SYS		4
309-5	Counter		B5	SCN (color)	0 <8 digits>	SYS		4
309-6	Counter		FOLIO	SCN (color)	0 <8 digits>	SYS		4
309-7	Counter		LD	SCN (color)	0 <8 digits>	SYS		4
309-8	Counter		LG	SCN (color)	0 <8 digits>	SYS		4
309-9	Counter		LT	SCN (color)	0 <8 digits>	SYS		4
309-10	Counter		ST	SCN (color)	0 <8 digits>	SYS		4
309-11	Counter		COMP	SCN (color)	0 <8 digits>	SYS		4
309-12	Counter		13"LG	SCN (color)	0 <8 digits>	SYS		4
309-13	Counter		8.5"x8.5"	SCN (color)	0 <8 digits>	SYS		4
309-14	Counter		16K	SCN (color)	0 <8 digits>	SYS		4
309-15	Counter		8K	SCN (color)	0 <8 digits>	SYS		4
309-16	Counter		Others	SCN (color)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
310-0	Counter	Number of scanning pages at full color mode in network scanning function	A3	SCN (color)	0 <8 digits>	SYS	Counts the scanning pages at the full color mode in the network scanning function for each paper size accord- ing to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
310-1	Counter		A4	SCN (color)	0 <8 digits>	SYS		4
310-2	Counter		A5	SCN (color)	0 <8 digits>	SYS		4
310-3	Counter		A6	SCN (color)	0 <8 digits>	SYS		4
310-4	Counter		B4	SCN (color)	0 <8 digits>	SYS		4
310-5	Counter		B5	SCN (color)	0 <8 digits>	SYS		4
310-6	Counter		FOLIO	SCN (color)	0 <8 digits>	SYS		4
310-7	Counter		LD	SCN (color)	0 <8 digits>	SYS		4
310-8	Counter		LG	SCN (color)	0 <8 digits>	SYS		4
310-9	Counter		LT	SCN (color)	0 <8 digits>	SYS		4
310-10	Counter		ST	SCN (color)	0 <8 digits>	SYS		4
310-11	Counter		COMP	SCN (color)	0 <8 digits>	SYS		4
310-12	Counter		13"LG	SCN (color)	0 <8 digits>	SYS		4
310-13	Counter		8.5"x8.5"	SCN (color)	0 <8 digits>	SYS		4
310-14	Counter		16K	SCN (color)	0 <8 digits>	SYS		4
310-15	Counter		8K	SCN (color)	0 <8 digits>	SYS		4
310-16	Counter		Others	SCN (color)	0 <8 digits>	SYS		4
311-0	Counter	Number of scanning pages at twin color mode in copier function	A3	SCN (color)	0 <8 digits>	SYS	Counts the scanning pages at the twin color mode in the copier function for each paper size according to the setting for the count setting of large- sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
311-1	Counter		A4	SCN (color)	0 <8 digits>	SYS		4
311-2	Counter		A5	SCN (color)	0 <8 digits>	SYS		4
311-3	Counter		A6	SCN (color)	0 <8 digits>	SYS		4
311-4	Counter		B4	SCN (color)	0 <8 digits>	SYS		4
311-5	Counter		B5	SCN (color)	0 <8 digits>	SYS		4
311-6	Counter		FOLIO	SCN (color)	0 <8 digits>	SYS		4
311-7	Counter		LD	SCN (color)	0 <8 digits>	SYS		4
311-8	Counter		LG	SCN (color)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
311-9	Counter	Number of scanning pages at	LT	SCN (color)	0 <8 digits>	SYS	Counts the scanning pages at the twin color mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
311-10	Counter	twin color mode in copier function	ST	SCN (color)	0 <8 digits>	SYS		4
311-11	Counter		COMP	SCN (color)	0 <8 digits>	SYS		4
311-12	Counter		13"LG	SCN (color)	0 <8 digits>	SYS		4
311-13	Counter		8.5"x8.5"	SCN (color)	0 <8 digits>	SYS		4
311-14	Counter		16K	SCN (color)	0 <8 digits>	SYS		4
311-15	Counter		8K	SCN (color)	0 <8 digits>	SYS		4
311-16	Counter		Others	SCN (color)	0 <8 digits>	SYS		4
312-0	Counter	Number of scanning pages at	A3	SCN (black)	0 <8 digits>	SYS	Counts the scanning pages at the black mode in the copier function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
312-1	Counter	black mode in copier function	A4	SCN (black)	0 <8 digits>	SYS		4
312-2	Counter		A5	SCN (black)	0 <8 digits>	SYS		4
312-3	Counter		A6	SCN (black)	0 <8 digits>	SYS		4
312-4	Counter		B4	SCN (black)	0 <8 digits>	SYS		4
312-5	Counter		B5	SCN (black)	0 <8 digits>	SYS		4
312-6	Counter		FOLIO	SCN (black)	0 <8 digits>	SYS		4
312-7	Counter		LD	SCN (black)	0 <8 digits>	SYS		4
312-8	Counter		LG	SCN (black)	0 <8 digits>	SYS		4
312-9	Counter		LT	SCN (black)	0 <8 digits>	SYS		4
312-10	Counter		ST	SCN (black)	0 <8 digits>	SYS		4
312-11	Counter		COMP	SCN (black)	0 <8 digits>	SYS		4
312-12	Counter		13"LG	SCN (black)	0 <8 digits>	SYS		4
312-13	Counter		8.5"x8.5"	SCN (black)	0 <8 digits>	SYS		4
312-14	Counter		16K	SCN (black)	0 <8 digits>	SYS		4
312-15	Counter		8K	SCN (black)	0 <8 digits>	SYS		4
312-16	Counter		Others	SCN (black)	0 <8 digits>	SYS		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
313-0	Counter	Number of scanning pages in network scanning function	A3	SCN (black)	0 <8 digits>	SYS	Counts the scanning pages in the network scanning function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
313-1	Counter		A4	SCN (black)	0 <8 digits>	SYS		4
313-2	Counter		A5	SCN (black)	0 <8 digits>	SYS		4
313-3	Counter		A6	SCN (black)	0 <8 digits>	SYS		4
313-4	Counter		B4	SCN (black)	0 <8 digits>	SYS		4
313-5	Counter		B5	SCN (black)	0 <8 digits>	SYS		4
313-6	Counter		FOLIO	SCN (black)	0 <8 digits>	SYS		4
313-7	Counter		LD	SCN (black)	0 <8 digits>	SYS		4
313-8	Counter		LG	SCN (black)	0 <8 digits>	SYS		4
313-9	Counter		LT	SCN (black)	0 <8 digits>	SYS		4
313-10	Counter		ST	SCN (black)	0 <8 digits>	SYS		4
313-11	Counter		COMP	SCN (black)	0 <8 digits>	SYS		4
313-12	Counter		13"LG	SCN (black)	0 <8 digits>	SYS		4
313-13	Counter		8.5"x8.5"	SCN (black)	0 <8 digits>	SYS		4
313-14	Counter		16K	SCN (black)	0 <8 digits>	SYS		4
313-15	Counter		8K	SCN (black)	0 <8 digits>	SYS		4
313-16	Counter		Others	SCN (black)	0 <8 digits>	SYS		4
314-0	Counter	Number of scanning pages in FAX function	A3	SCN (black)	0 <8 digits>	SYS	Counts the scanning pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
314-1	Counter		A4	SCN (black)	0 <8 digits>	SYS		4
314-2	Counter		A5	SCN (black)	0 <8 digits>	SYS		4
314-3	Counter		A6	SCN (black)	0 <8 digits>	SYS		4
314-4	Counter		B4	SCN (black)	0 <8 digits>	SYS		4
314-5	Counter		B5	SCN (black)	0 <8 digits>	SYS		4
314-6	Counter		FOLIO	SCN (black)	0 <8 digits>	SYS		4
314-7	Counter		LD	SCN (black)	0 <8 digits>	SYS		4
314-8	Counter		LG	SCN (black)	0 <8 digits>	SYS		4

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
314-9	Counter	Number of scanning pages in FAX function	LT	SCN (black)	0 <8 digits>	Counts the scanning pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
314-10	Counter		ST	SCN (black)	0 <8 digits>		4
314-11	Counter		COMP	SCN (black)	0 <8 digits>		4
314-12	Counter		13"LG	SCN (black)	0 <8 digits>		4
314-13	Counter		8.5"x8.5"	SCN (black)	0 <8 digits>		4
314-14	Counter		16K	SCN (black)	0 <8 digits>		4
314-15	Counter		8K	SCN (black)	0 <8 digits>		4
314-16	Counter		Others	SCN (black)	0 <8 digits>		4
315-0	Counter	Number of transmitted pages in FAX function	A3	FAX	0 <8 digits>	Counts the transmitted pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large-sized paper (08-353).	4
315-1	Counter		A4	FAX	0 <8 digits>		4
315-2	Counter		A5	FAX	0 <8 digits>		4
315-3	Counter		A6	FAX	0 <8 digits>		4
315-4	Counter		B4	FAX	0 <8 digits>		4
315-5	Counter		B5	FAX	0 <8 digits>		4
315-6	Counter		FOLIO	FAX	0 <8 digits>		4
315-7	Counter		LD	FAX	0 <8 digits>		4
315-8	Counter		LG	FAX	0 <8 digits>		4
315-9	Counter		LT	FAX	0 <8 digits>		4
315-10	Counter		ST	FAX	0 <8 digits>		4
315-11	Counter		COMP	FAX	0 <8 digits>		4
315-12	Counter		13"LG	FAX	0 <8 digits>		4
315-13	Counter		8.5"x8.5"	FAX	0 <8 digits>		4
315-14	Counter		16K	FAX	0 <8 digits>		4
315-15	Counter		8K	FAX	0 <8 digits>		4
315-16	Counter		Others	FAX	0 <8 digits>		4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
316-0	Counter	Number of received pages in FAX function	A3	FAX	0 <8 digits>	SYS	Counts the received pages in the FAX function for each paper size according to the setting for the count setting of large-sized paper (08-352) and the definition setting of large- sized paper (08-353).	4
316-1	Counter		A4	FAX	0 <8 digits>	SYS		4
316-2	Counter		A5	FAX	0 <8 digits>	SYS		4
316-3	Counter		A6	FAX	0 <8 digits>	SYS		4
316-4	Counter		B4	FAX	0 <8 digits>	SYS		4
316-5	Counter		B5	FAX	0 <8 digits>	SYS		4
316-6	Counter		FOLIO	FAX	0 <8 digits>	SYS		4
316-7	Counter		LD	FAX	0 <8 digits>	SYS		4
316-8	Counter		LG	FAX	0 <8 digits>	SYS		4
316-9	Counter		LT	FAX	0 <8 digits>	SYS		4
316-10	Counter		ST	FAX	0 <8 digits>	SYS		4
316-11	Counter		COMP	FAX	0 <8 digits>	SYS		4
316-12	Counter		13"LG	FAX	0 <8 digits>	SYS		4
316-13	Counter		8.5"x8.5"	FAX	0 <8 digits>	SYS		4
316-14	Counter		16K	FAX	0 <8 digits>	SYS		4
316-15	Counter		8K	FAX	0 <8 digits>	SYS		4
316-16	Counter		Others	FAX	0 <8 digits>	SYS		4
317-0	Counter	Display of number of output pages at full color mode in copier function	Large	PPC (color)	0 <8 digits>	SYS	Displays the number of output pages at the full color mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes.	14
317-1	Counter		Small	PPC (color)	0 <8 digits>	SYS		14
317-2	Counter		Total	PPC (color)	0 <8 digits>	SYS		14

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
318-0	Counter	Display of number of output pages at full color mode in printer function	Large	PRT (color)	0 <8 digits>	SYS	Displays the number of output pages at the full color mode in the printer function. Large: Number of output pages of large-sized paper defined at 08-353	14
318-1	Counter		Small	PRT (color)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
318-2	Counter		Total	PRT (color)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
319-0	Counter	Display of number of output pages at twin color mode in copier function	Large	PPC (color)	0 <8 digits>	SYS	Displays the number of output pages at the twin color mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353	14
319-1	Counter		Small	PPC (color)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
319-2	Counter		Total	PPC (color)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
320-0	Counter	Display of number of output pages at black copy mode in copier function	Large	PPC (black)	0 <8 digits>	SYS	Displays the number of output pages at the black mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353	14
320-1	Counter		Small	PPC (black)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
320-2	Counter		Total	PPC (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
321-0	Counter	Display of number of output pages at black copy mode in printer function	Large	PRT (black)	0 <8 digits>	SYS	Displays the number of output pages at the black mode in the printer function. Large: Number of output pages of large-sized paper defined at 08-353	14
321-1	Counter		Small	PRT (black)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
321-2	Counter		Total	PRT (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
322-0	Counter	Display of number of output pages at list print mode	Large	PRT (black)	0 <8 digits>	SYS	Displays the number of output pages at the list print mode in the printer function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper	14
322-1	Counter		Small	PRT (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
322-2	Counter		Total	PRT (black)	0 <8 digits>	SYS		14
323-0	Counter	Display of number of output pages in FAX function	Large	FAX (black)	0 <8 digits>	SYS	Displays the number of output pages in the FAX function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper	14
323-1	Counter		Small	FAX (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
323-2	Counter		Total	FAX (black)	0 <8 digits>	SYS		14
324-0	Counter	Display of number of scanning pages at full color mode in copier function	Large	SCN (color)	0 <8 digits>	SYS	Displays the number of scanning pages at the full color mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper	14
324-1	Counter		Small	SCN (color)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
324-2	Counter		Total	SCN (color)	0 <8 digits>	SYS		14
325-0	Counter	Display of number of scanning pages at full color mode in network scanning function	Large	SCN (color)	0 <8 digits>	SYS	Displays the number of scanning pages at the full color mode in the network scanning function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper	14
325-1	Counter		Small	SCN (color)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
325-2	Counter		Total	SCN (color)	0 <8 digits>	SYS		14

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
326-0	Counter	Display of number of scanning pages at twin color mode in copier function	Large	SCN (color)	0 <8 digits>	SYS	Displays the number of scanning pages at the twin color mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353	14
326-1	Counter		Small	SCN (color)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
326-2	Counter		Total	SCN (color)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
327-0	Counter	Display of number of scanning pages at black mode in copier function	Large	SCN (black)	0 <8 digits>	SYS	Displays the number of scanning pages at the black mode in the copier function. Large: Number of output pages of large-sized paper defined at 08-353	14
327-1	Counter		Small	SCN (black)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
327-2	Counter		Total	SCN (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
328-0	Counter	Display of number of scanning pages in FAX function	Large	SCN (black)	0 <8 digits>	SYS	Displays the number of scanning pages in the FAX function. Large: Number of output pages of large-sized paper defined at 08-353	14
328-1	Counter		Small	SCN (black)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
328-2	Counter		Total	SCN (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14
329-0	Counter	Display of number of scanning pages in network scanning function	Large	SCN (black)	0 <8 digits>	SYS	Displays the number of scanning pages in the network scanning function. Large: Number of output pages of large-sized paper defined at 08-353	14
329-1	Counter		Small	SCN (black)	0 <8 digits>	SYS	Small: Number of output pages other than set as large-sized paper	14
329-2	Counter		Total	SCN (black)	0 <8 digits>	SYS	Total: Total number output pages of all paper sizes.	14

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
330-0	Counter	Display of number of transmitted pages in FAX function	Large	FAX (black)	0 <8 digits>	SYS	Displays the number of transmitted pages in the FAX function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes.	14
330-1	Counter		Small	FAX (black)	0 <8 digits>	SYS		14
330-2	Counter		Total	FAX (black)	0 <8 digits>	SYS		14
331	User interface	Screen priority selection		ALL	0 <0-3>	SYS	Sets the screen to be displayed after the auto-clear time has passed or it has recovered from the energy saving mode or sleep mode. 0: Copier 1: Fax 2: Scan 3: Box	1
332-0	Counter	Display of number of received pages in FAX function	Large	FAX (black)	0 <8 digits>	SYS	Displays the number of received pages in the FAX function. Large: Number of output pages of large-sized paper defined at 08-353 Small: Number of output pages other than set as large-sized paper Total: Total number output pages of all paper sizes.	14
332-1	Counter		Small	FAX (black)	0 <8 digits>	SYS		14
332-2	Counter		Total	FAX (black)	0 <8 digits>	SYS		14
333-0	Counter	Display of total number of output pages at full color mode	Large	ALL (color)	0 <8 digits>	SYS	Displays the total number of pages at full color mode in the copier/printer/scanning functions.	14
333-1	Counter		Small	ALL (color)	0 <8 digits>	SYS		14
333-2	Counter		Total	ALL (color)	0 <8 digits>	SYS		14
334-0	Counter	Display of total number of pages at twin color mode	Large	ALL (color)	0 <8 digits>	SYS	Displays the total number of pages at twin color mode in the copier/scanning functions.	14
334-1	Counter		Small	ALL (color)	0 <8 digits>	SYS		14
334-2	Counter		Total	ALL (color)	0 <8 digits>	SYS		14
335-0	Counter	Display of total number of pages at black mode	Large	ALL (black)	1 <0-1>	M	Displays the total number of pages at list print mode and black mode in the copier/printer/scanning/FAX functions.	14
335-1	Counter		Small	ALL (black)	1 <0-1>	M		14
335-2	Counter		Total	ALL (black)	1 <0-1>	M		14
346	Counter	Count setting of large-sized paper (PM)		ALL	1 <0-1>	M	0: Counted as 1 1: Counted as 2	1
347	Counter	Definition setting of large-sized paper (PM)		ALL	1 <0-1>	M	0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
348	Counter	Count setting of thick paper	ALL	1 <0-1>	M	0: Counted as 1 1: Counted as 2	1
349	Counter	Count setting of OHP film	ALL	1 <0-1>	M	0: Counted as 1 1: Counted as 2	1
352	Counter	Count setting of large-sized paper (Fee charging system counter)	ALL	JPN: 0 OTHER: 1 <0-2>	M	0: Counted as 1 1: Counted as 2 2: Counted as 1 (Mechanical counter is double counter)	1
353	Counter	Definition setting of large-sized paper (Fee charging system counter)	ALL	0 <0-1>	M	0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP	1
356	Counter	Counter for upper drawer feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from upper drawer	2
357	Counter	Counter for lower drawer feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from lower drawer	2
358	Counter	Counter for bypass feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from bypass feed	2
359	Counter	Counter for LCF feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from LCF	2
360	Counter	Counter for PFP upper drawer feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from PFP upper drawer	2
370	Counter	Counter for PFP lower drawer feeding	ALL	0 <8 digits>	M	Counts the number of sheets fed from PFP lower drawer	2
372	Counter	Counter for ADU	ALL	0 <8 digits>	M	Counts the number of output pages of duplex printing.	2
374	Counter	Counter for RADF	ALL	0 <8 digits>	SYS	Counts the number of fed paper from the RADF	2
375	Maintenance	Setting value of PM time counter display/0 clearing	ALL	Refer to contents <8 digits>	M	Counts the drum driving time (drum motor ON). <Default> e-STUDIO3511 JPN: 0 UC, EUR: 200,000 e-STUDIO4511 JPN: 0 UC, EUR: 160,000	1
376	Maintenance	Current value of PM time counter	ALL	0 <8 digits>	M		1
390	Counter	Number of errors in HDD (Copying)	PPC	0 <8 digits>	SYS		2
391	Counter	Number of errors in HDD (FAX)	FAX	0 <8 digits>	SYS		2
392	Counter	Number of errors in HDD (Network scanning)	SCN	0 <8 digits>	SYS		2
393	Counter	Number of errors in HDD (Printer)	PRT	0 <8 digits>	SYS		2
398	Image processing	Number of ON/OFF of polygonal motor	ALL	0 <8 digits>	M		2
399	Image processing	Accumulated time of polygonal motor at normal rotation	ALL	0 <8 digits>	M		2

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
400	Fuser	Fuser unit error status counter	ALL	0 <0-18>	M	0: No error 1: C410 (Once) 2: C410 (consecutively occurred) 3: C460 4: C430 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	1
409	Fuser	Fuser roller temperature at a low-power mode (Center thermistor)	ALL	0 <0-16>	M	0: OFF 1: 40°C 2: 45°C 3: 50°C 4: 55°C 5: 60°C 6: 65°C 7: 70°C 8: 75°C 9: 80°C 10: 85°C 11: 90°C 12: 95°C 13: 100°C 14: 105°C 15: 110°C 16: 115°C	1
410-0	Fuser	Fuser roller temperature during printing (Center thermistor/Normal paper)	ALL (black)	12 <0-16>	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C	4
410-1			ALL (color)	12 <0-16>	M	9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4
411	Fuser	Fuser roller temperature on standby (Center thermistor)	ALL	12 <0-16>	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	1
413-0	Fuser	Fuser roller temperature during printing (Center thermistor/Thick paper 1)	ALL (black)	12 <0-16>	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C	4
413-1			ALL (color)	12 <0-16>	M	9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4
430	Fuser	Fuser unit transport deceleration (OHP film)	ALL	0, 3 <0-3>	M	0: 1/1 1: 1/2 2: 1/3 3: 1/4	1
431	Fuser	Fuser unit transport deceleration (Thick paper 1)	ALL	0, 1 <0-3>	M	0: 1/1 1: 1/2 2: 1/3 3: 1/4	1
432	Fuser	Fuser unit transport deceleration (Thick paper 2)	ALL	0, 2 <0-3>	M	0: 1/1 1: 1/2 2: 1/3 3: 1/4	1
437-0	Fuser	Fuser roller temperature during printing (Center thermistor /Thick paper 2)	ALL (black)	12 <0-16>	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C	4
437-1			ALL (color)	10 <0-16>	M	9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4

Adjustment mode (08)									
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents		
438-0	Fuser	Fuser roller temperature during printing (Center thermistor/OHP film)		ALL (black)	12 <0-16>	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C		4
438-1				ALL (color)	10 <0-16>	M	9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C		4
439	Fuser	Pre-running time for first printing (Thick paper 2)		ALL	14 <0-16>	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.		1
440	Fuser	Pre-running time for first printing (Normal paper)		ALL	12 <0-16>	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.		1
441	Fuser	Pre-running time for first printing (Thick paper 1)		ALL	9 <0-16>	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.		1
462	RADF	Setting for switchback operation to copy mixed-sized original on RADF		ALL	0 <0-1>	M	Sets whether or not detecting the original length by transporting without scanning in reverse when finding A4-R/FOLIO paper. 0: Invalid- Judges as A4-R without transporting in reverse with no scanning. 1: Valide- Judges whether it is A4-R or FOLIO size by transporting in reverse with no scanning. * The original is transported in reverse with no scanning when detecting LT-LG size-paper in LT, regardless of this setting.		1
463-0	Paper feeding	Feeding retry counter setting value (upper drawer)	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the upper drawer.		4
463-1			Others	ALL	5 <0-5>	M			4
464-0	Paper feeding	Feeding retry counter setting value (lower drawer)	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the lower drawer.		4
464-1			Others	ALL	5 <0-5>	M			4
465-0	Paper feeding	Feeding retry counter setting value (PFP upper drawer)	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the PFP upper drawer.		4
465-1			Others	ALL	5 <0-5>	M			4

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
466-0	Paper feeding	Feeding retry counter setting	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the PFP lower drawer.	4
466-1		value (PFP lower drawer)	Others	ALL	5 <0-5>	M		4
467-0	Paper feeding	Feeding retry counter setting	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the bypass tray.	4
467-1		value (bypass feed)	Others	ALL	5 <0-5>	M		4
468-0	Paper feeding	Feeding retry counter setting	Normal paper	ALL	5 <0-5>	M	Sets the number of times of the feeding retry from the LCF.	4
468-1		value (LCF)	Others	ALL	5 <0-5>	M		4
469	Separation	Speed switching for subseparation fan		ALL	0 <0-1>	M	0: High speed 1: Low speed	1
470	Paper feeding	Paper size (305x457 mm) feeding/widthwise direction		ALL	457/305 <148-457/ 105-305>	M		10
471	Paper feeding	Paper size (Post card) feeding/widthwise direction		ALL	148/100 <148-432/ 100-297>	M		10
478	Laser	Frequency judgment of Separation polygonal motor (at a regular speed)		ALL	0 <0-1>	M	0: 2 times 1: 12 times	1
479	Laser	Judging method of polygonal motor at acceleration/ deceleration		ALL	0 <0-1>	M	0: Waiting time for polygonal motor rotation overshooting 0.6 sec. 1: Waiting time for polygonal motor rotation overshooting 2.2 sec.	1
480	Paper feeding	Paper source priority selection		ALL	0 <0-5>	M	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		ALL	1 <0-2>	SYS	Sets whether or not changing the drawer automatically to the other drawer with the paper of the same size when paper in the selected drawer has run out. 0: OFF 1: ON (Changes to the drawer with the same paper direction and size: ex. A4 to A4) 2: ON (Changes to the drawer with the same paper size. Paper with the different direction is acceptable as long as the size is the same: ex., A4 to A4-R, LT-R to LT. "1" is applied when the staple/hole-punch is specified.)	1
482	Paper feeding	Feeding retry		ALL	0 <0-1>	M	0: ON 1: OFF	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
483	Laser	Pre-running rotation of polygonal motor	ALL	0 <0-2>	SYS	0: Valid (when using RADF and manually-set original) 1: Invalid 2: Valid (when using RADF only)	1
484	Laser	Polygonal motor stop at the auto-clear mode	ALL	0 <0-1>	SYS	0: Valid 1: Invalid	1
485	Laser	Polygonal motor rotation stopping status	ALL	0 <0-1>	SYS	0: Rotating 1: Stopped	1
486	Laser	Polygonal motor stopping period	ALL	0 <0-2>	SYS	0: 15sec. 1: 30sec. 2: 45sec.	1
489	Laser	Polygonal motor rotation number on standby	ALL	5 <0-5>	M	0: 38090.55rpm 1: 35000rpm 2: 30000rpm 3: 25000rpm 4: 20000rpm 5: 10000rpm	1
490	Laser	Polygonal motor rotation in the energy saving mode	ALL	0 <0-1>	M	0: Stopped 1: 10000rpm	1
502	Image	Error diffusion and dither setting at a photo mode	PPC (black)	0 <0-1>	SYS	Sets the image reproduction method at photo mode. 0: Error diffusion 1: Dither	1
503	User interface	Density mode priority	PPC (black)	0 <0-1>	SYS	0: Automatic 1: Manual (Center)	1
511	Main charger	Main charger wire auto-cleaning setting	ALL	1 <0-1>	M	0: Invalid 1: Valid	1
526	Fuser	Pre-running time for first printing (OHP film/black)	ALL	16 <0-16>	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	1
541	Image control	Environment correction control of 1st transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 1st transfer roller bias depending on the environment. 0: Invalid 1: Valid	1
542	Image control	Transfer belt life correction of 1st transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 1st transfer roller bias depending on the transfer belt life. 0: Invalid 1: Valid	1
543	Image control	1st transfer roller life correction of 1st transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 1st transfer roller bias depending on the 1st transfer roller life. 0: Invalid 1: Valid	1
544	Image control	Environment correction control of 2nd transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 2nd transfer roller bias depending on the environment. 0: Invalid 1: Valid	1
545	Image control	Transfer belt life correction of 2nd transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 2nd transfer roller bias depending on the transfer belt life. 0: Invalid 1: Valid	1
546	Image control	2nd transfer roller life correction of 2nd transfer roller bias	ALL	1 <0-1>	M	Sets whether or not correcting the 2nd transfer roller bias depending on the 2nd transfer roller life. 0: Invalid 1: Valid	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
547	Transfer	Setting of 2nd transfer bias paper type correction control	ALL	0 <0-1>	M	0: Invalid 1: Valid	1
548	Transfer	Setting of 2nd transfer bias table (for each destination/ paper type)	ALL	2 <0-2>	M	0: TEG 1: HM 2: P50S	1
549	Image control	Image quality control/open- loop control 1	ALL	1 <0-1>	M	Sets whether or not performing the open-loop control 1. 0: Invalid 1: Valid	1
550	Image	Original mode priority	PPC (black)	0 <0-3>	SYS	0: Text/Photo 1: Photo 2: Text 3: GRAY SCALE	1
551	Image control	Image quality control/open- loop control 2	ALL	1 <0-1>	M	Sets whether or not performing the open-loop control 2. 0: Invalid 1: Valid	1
552	Image control	Drum life correction control	ALL	1 <0-1>	M	Sets whether or not correcting the drum voltage depending on the drum life in open-loop control. 0: Invalid 1: Valid	1
553	Image control	Drum temperature correction control	ALL	1 <0-1>	M	Sets whether or not correcting the drum voltage depending on the drum surface temperature in open-loop control. 0: Invalid 1: Valid	1
554	Image control	Image quality open-loop control/Contrast voltage initial value	ALL	1 <0-1>	M	Sets whether or not deciding the initial value of contrast voltage in open-loop control. 0: Invalid 1: Valid	1
555	Image control	Drum life correction of laser power initial value	ALL	1 <0-1>	M	Sets whether or not correcting the laser power depending on the drum life when the laser power initial value is set in open-loop control. 0: Invalid 1: Valid	1
556	Image control	Image quality closed-loop control/Contrast voltage	ALL	1 <0-1>	M	Sets whether or not correcting the contrast voltage in closed-loop control. 0: Invalid 1: Valid	1
557	Image control	Image quality closed-loop control/Laser power	ALL	1 <0-1>	M	Sets whether or not correcting the laser power in closed-loop control. 0: Invalid 1: Valid	1
558	Image control	Contrast voltage/Correction gain environment setting	ALL	1 <0-1>	M	Sets whether or not switching the correction amount once at contrast voltage correction depending on the environment. 0: Invalid 1: Valid	1
559	Image control	Image quality closed-loop control automatic start-up/At power-ON	ALL (color)	1 <0-2>	M	Sets whether performing closed-loop control automatically at power-ON when the fuser roller temperature becomes below the specified level. 0: Invalid 1: Valid (at mode 1) 2: Valid (at mode 2)	1
560	Image	Mode switching for image smoothing (Text/Photo)	PPC (black)	1 <0-1>	M	0: Invalid 1: Valid	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
561	Image	Mode switching for image smoothing (Photo)	PPC (black)	0 <0-1>	M	0: Invalid 1: Valid	1
562	Image	Mode switching for image smoothing (Text)	PPC (black)	1 <0-1>	M	0: Invalid 1: Valid	1
565	Image control	Image quality closed-loop control automatic start-up/ Relative humidity variation	ALL (color)	1 <0-2>	M	Sets whether or not performing closed-loop control automatically when the relative humidity becomes below the specified level from the previous control. 0: Invalid 1: Valid (at mode 1) 2: Valid (at mode 2)	1
566	Image control	Image quality closed-loop control automatic start-up/ Period of time unattended	ALL (color)	1 <0-2>	M	Sets whether or not performing closed-loop control automatically when the equipment has not been used for a specified period of time. 0: Invalid 1: Valid (at mode 1) 2: Valid (at mode 2)	1
567	Image control	Image quality closed-loop control automatic start-up/ Accumulated print volume	ALL (color)	2 <0-2>	M	Sets whether or not performing closed-loop control automatically when the specified number of sheets has been printed out from the previous control. 0: Invalid 1: Valid (at mode 1) 2: Valid (at mode 2)	1
568	Image control	Image quality closed-loop control automatic start-up/ When recovered from "Toner empty"	ALL (color)	2 <0-2>	M	Sets whether or not performing closed-loop control automatically when recovered from "Toner empty". 0: Invalid 1: Valid (at mode 1) 2: Valid (at mode 2)	1
569	Image control	Image quality closed-loop control automatic start-up/ Temperature setting of fuser roller at power-ON	ALL (color)	6 <0-20>	M	Sets the fuser roller temperature to perform closed-loop control when "1" or "2" (valid) is set in 08-559. 0: 20°C 1: 25°C 2: 30°C 3: 35°C 4: 40°C 5: 45°C 6: 50°C 7: 55°C 8: 60°C 9: 65°C 10: 70°C 11: 75°C 12: 80°C 13: 85°C 14: 90°C 15: 95°C 16: 100°C 17: 105°C 18: 110°C 19: 115°C 20: 120°C	1
570	Image control	Image quality closed-loop control automatic start-up/ Relative humidity difference setting	ALL (color)	4 <0-6>	M	Sets the relative humidity difference to perform the closed-loop control when "1" or "2" (valid) is set in 08-565. 0: 0% 1: 5% 2: 10% 3: 15% 4: 20% 5: 25% 6: 30%	1
571	Image control	Image quality closed-loop control automatic start-up/ Setting of period of time unattended	ALL (color)	4 <0-24>	M	Sets the period of time unattended to perform closed-loop control when "1" or "2" (valid) is set in 08-566. Setting value x 1 (hour)	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
572	Image control	Image quality closed-loop control automatic start-up/ Setting of accumulated print volume	ALL (color)	10 <0-30>	M	Sets the number of accumulated print volume to perform closed-loop control when "1" or "2" (valid) is set in 08-567. Setting value x 100 (pages)	1
573	Image control	Abnormality detection count (Y) Display/0 clearing	ALL	0 <0-16>	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1
574	Image control	Abnormality detection count (M) Display/0 clearing	ALL	0 <0-16>	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1
575	Image control	Abnormality detection count (C) Display/0 clearing	ALL	0 <0-16>	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1
576	Image control	Abnormality detection count (K) Display/0 clearing	ALL	0 <0-16>	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1
585	User interface	Original mode priority	PPC (color)	0 <0-4>	SYS	0: Text/Photo 1: Text 2: Printed image 3: Photo 4: Map	1
587	User interface	Density mode priority	PPC (color)	1 <0-1>	SYS	0: Automatic 1: Manual (Center)	1
588	User interface	Color mode priority	PPC (color)	1 <0-2>	SYS	0: Auto color 1: Black 2: Full color	1
595	Image	Scanning operation switching for calibration by user	PPC (Color)	0 <0-1>	SYS	0: Color/black (Automatic gamma adjustment (05-1642) is performed.) 1: Color (Automatic gamma adjustment (05-1643) is performed.)	1
597	Image	Gamma correction table all clearing	PRT (color)	-	SYS	Clearing of the HDD area	3
602	User interface	Screen setting for automatic energy saver/automatic power OFF	ALL	EUR:0 UC:1 JPN:1 <0-1>	SYS	0: OFF 1: ON	1
603	User interface	Setting for automatic duplexing mode	ALL	0 <0-3>	SYS	0: Invalid 1: Single-sided to duplex copying 2: Two-sided to duplex copying 3: User selection	1
604	User interface	APS priority selection	ALL	0 <0-2>	SYS	0: APS 1: AMS 2: None	1
605	User interface	Centering printing of primary/secondary scanning at AMS	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
607	User interface	RADF mode priority	PPC	0 <0-1>	SYS	0: Continuous feeding (by pressing the [START] key) 1: Single feeding (by setting original on the tray)	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
609-0		Threshold of ACS setting (08-268)	"1" for ACS setting ALL	88 <0-255>	SYS		4
609-1		"2" for ACS setting	ALL	108 <0-255>	SYS		4
609-2		"3" for ACS setting	ALL	148 <0-255>	SYS		4
609-3		"4" for ACS setting	ALL	178 <0-255>	SYS		4
609-4		"5" for ACS setting	ALL	208 <0-255>	SYS		4
610	User interface	Key touch sound of control panel	ALL	1 <0-1>	SYS	0: OFF (Not slow down) 1: ON to slow down	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 icon on the LCD to select the size.	9
614	Network	Local I/F time-out period	ALL	6 <1-50>	SYS		1
615	Maintenance	Size information of main memory and page memory	ALL	-	SYS	Confirms if the main memory and page memory are correctly recognized.	2
616	Counter	Setting of twin color mode count in copier function as black mode	PPC (color)	0 <0-1>	SYS	Counts the twin color copy as the black copy. 0: OFF 1: ON	1
617	User interface	Print setting without department code	ALL	0 <0-1>	SYS	0: Printed 1: Not printed	1
618	User interface	Original size priority	PPC	0 <0-1>	SYS	0: Same size originals 1: Mixed size originals	1
619	Paper feeding	Time lag before auto-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 0.5sec.	1
620	User interface	Department management setting (Copier)	ALL	1 <0-1>	SYS	0: Invalid 1: Valid	1
621	User interface	Department management setting (FAX)	ALL	1 <0-1>	SYS	0: Invalid 1: Valid	1
622	User interface	Department management setting (Printer)	ALL	1 <0-1>	SYS	0: Invalid 1: Valid	1
623	User interface	Department management setting (Network scanner)	ALL	1 <0-1>	SYS	0: Invalid 1: Valid	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
624	User interface	Department management setting (List print)	ALL	1 <0-1>	SYS	0: Invalid 1: Valid	1
625	User interface	Blank copying prevention mode during RADF jamming	PPC	0 <0-1>	SYS	0: OFF 1: ON (Start printing when the scanning of each page is finished)	1
626	Laser	Outer guide elimination when paper size is not selected for a bypass feed printing	PPC	1 <0-1>	SYS	When a size is not selected for a bypass feed printing, 0: OFF (Outer guide not eliminated image printed in the largest size) 1: ON (Image printed with a standard width detected by the bypass guide)	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 <0-2>	SYS	0: Automatic 1: Portrait 2: Landscape	1
629	User interface	Department management printing counter	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
632	User interface	Automatic calibration disclosure level	PPC	1 <0-2>	SYS	Sets the disclosing level of automatic calibration. 0: Service technician 1: Administrator 2: User	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
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	PPCN	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 priority setting (RADF)	PPC	2 <0-4>	SYS	0: Invalid 1: STAPLE 2: SORT 3: GROUP 4: ALTERNATION	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
642	User interface	Sorter mode priority setting	PPC	0 <0-4>	SYS	0: NON-SORT 1: STAPLE 2: SORT 3: GROUP 4: ALTERNATION	1
643	User interface	Color 1 at twin color selection (Select what color black in original is copied)	ALL (color)	0 <0-6>	SYS	0: K 1: Y 2: M 3: C 4: R 5: G 6: B	1
644	User interface	Color 2 at twin color selection (Select what color black in original is copied)	ALL (color)	4 <0-6>	SYS	0: K 1: Y 2: M 3: C 4: R 5: G 6: B	1
645	User interface	Correction of reproduction ratio in editing copy	PPC	10 <0-10>	SYS	Sets the reproduction ratio for the "X in 1" printing (including magazine sort) to the "Reproduction ratio x Correction ratio". 0: 90% 1: 91% 2: 92% 3: 93% 4: 94% 5: 95% 6: 96% 7: 97% 8: 98% 9: 99% 10: 100%	1
646	User interface	Image position in editing	PPC	0 <0-1>	SYS	Sets the page pasted position for "X in 1" to the upper left corner/center. 0: Cornering 1: Centering	1
647		Rotation of paper direction for BOX printing	ALL	1 <0-1>	SYS	0: Rotation OFF 1: Rotation ON	1
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 1-bin 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 date, time and page number	PPC	2 <0-3>	SYS	Hyphen Dropout (with page number)(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	PPC	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-start setting for bypass feed printing	PPC	0 <0-1>	SYS	Sets whether or not feeding a paper automatically into the copier when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding)	1

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
659	User interface	Auto-start setting for bypass feed printing		PPC	1 <0-1>	SYS	Sets whether or not feeding a paper automatically into the copier 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
665	General	M/SYS all clearing		ALL	-	M/ SYS	Initializes all the adjustment modes and the setting modes.	3
669	General	System all clearing		ALL	-	SYS	Initializes system NVRAM area.	3
671	User interface	Size indicator		ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
672	General	Initialization of department management information		-	-	SYS	Initializing of the department management information * Enter the code with the digital keys and press the [INITIALIZE] button to perform the initialization. If the area storing the department management information is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management function is not set on. In this case, initialize the area with this code. This area is normally initialized at the factory.	3
675-0		PPC low speed mode	Upper drawer	PPC	0 <0-1>	SYS	0: OFF (Not slow down) 1: ON to slow down	4
675-1			Lower drawer	PPC	0 <0-1>	SYS		4
675-2			PFP upper drawer	PPC	0 <0-1>	SYS		4
675-3			PFP lower drawer	PPC	0 <0-1>	SYS		4
675-4			LCF	PPC	0 <0-1>	SYS		4
676		Bypass feed "SLOW" icon display		ALL	0 <0-1>	SYS	0: OFF 1: ON	1

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
677-0		PRT low speed mode	Normal paper	PRT	0 <0-1>	SYS	0: OFF (Not slow down) 1: ON to slow down	4
677-1			Thick paper 1	PRT	0 <0-1>	SYS		4
677-2			Thick paper 2	PRT	0 <0-1>	SYS		4
677-3			Thick paper 3	PRT	0 <0-1>	SYS		4
677-4			OHP film	PRT	0 <0-1>	SYS		4
684	General	Rebuilding all data bases		ALL	-	SYS		3
685	General	Rebuilding all data bases related to address book		ALL	-	SYS		3
686	General	Rebuilding all data bases related to log		ALL	-	SYS		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	5
691	General	HDD type display		ALL	- <0-2>	SYS	0: Not formatted 1: Not used 2: Normal format	2
692	Maintenance	Performing panel calibration		ALL	-	SYS		1
693	General	Initialization of NIC information		ALL	-	SYS		3
694	General	Performing HDD testing		ALL	-	SYS		3
696	Scrambler board	Installation of scrambler board (Option)		ALL	0 <0-1>	-	0: Not installed 1: Installed	2
697	Scrambler board	Setting key code length for scrambler board		ALL	0 <0-1>	-	0: 128 bit 1: 64 bit	1
698	Scrambler board	Entering the key code for scrambler board		ALL	-	-		3
699	General	Erasing all data in HDD		ALL	-	-		3
701	FAX	Destination setting for facsimile		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. 5: Germany 6: U.K. 7: Italy 8: Belgium 9: Netherlands 10: Finland 11: Spain 12: Austria 13: Switzerland 14: Sweden 15: Denmark 16: Norway 17: Portugal 18: France 19: Greece 20: Poland 21: Hungary 22: Czech 23: Turkey 24: South Africa 25: Taiwan	1
702	Maintenance	Remote-controlled service function		ALL	2 <0-2>	SYS	0: Valid (Remote-controlled server) 1: Valid (L2) 2: Invalid	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
703	Maintenance	Remote-controlled service HTTP server URL setting (Maximum 256 Bytes)	ALL	-	SYS		11
704	Maintenance	Remote-controlled service HTTP server Port number setting	ALL	0 <0-9999>	SYS		1
707	Maintenance	Remote-controlled service HTTP initially-registered server URL setting (Maximum 256 Bytes)	ALL	-	SYS		11
708	Maintenance	Remote-controlled service HTTP initially-registered server Port number setting	ALL	0 <0-9999>	SYS		1
711	Maintenance	Remote-controlled service lengthened polling interval	ALL	2 <0-2>	SYS	0: Valid (Once a month) 1: Valid (Once a week) 2: Invalid	1
715	Maintenance	Remote-controlled service periodical polling timing (Hour/Hour/Minute/Minute)	ALL	-	SYS		1
716	Maintenance	Remote-controlled service polling interval at emergency	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
717	Maintenance	Remote-controlled service response waiting time (Timeout)	ALL	3 <1-30>	SYS	Unit: Minute	1
718	Maintenance	Remote-controlled service initial registration	ALL	0 <0-1>	SYS	0: OFF 1: Start	1
719	Maintenance	Remote-controlled service tentative password (Maximum 10 letters)	ALL	-	SYS		11
720	Maintenance	Status of remote-controlled service initial registration (Display only)	ALL	0 <0-1>	SYS	0: Not registered 1: Registered	2
721	Maintenance	Service center call function	ALL	0 <0-1>	SYS	0: OFF 1: By HTTP	1
722	Maintenance	Service center call E-mail address setting (Maximum 192 letters)	ALL	-	SYS		11
723	Maintenance	Service center call HTTP server URL setting (Maximum 256 letters)	ALL	-	SYS		11
724	Maintenance	Service center call HTTP server port number setting	ALL	0 <0-9999>	SYS		1
726	Maintenance	HTTP proxy setting	ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1
727	Maintenance	HTTP proxy IP address setting (xxx xxx xxx xxx)	ALL	-	SYS		11

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
728	Maintenance	HTTP proxy port number setting	ALL	0 <0-9999>	SYS		1
729	Maintenance	HTTP proxy ID setting (Maximum 30 letters)	ALL	-	SYS		11
730	Maintenance	HTTP proxy password setting (Maximum 30 letters)	ALL	-	SYS		11
731	Maintenance	HTTP proxy panel display	ALL	1 <0-1>	SYS	0: Valid 1: Invalid	1
732	Maintenance	Automatic ordering function of supplies	ALL	3 <0-3>	SYS	0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF	1
733	Maintenance	Automatic ordering function of supplies FAX number (Maximum 16 digits)	ALL	-	SYS	Enter hyphen with the [Pause] button	11
734	Maintenance	Automatic ordering function of supplies E-mail address (Maximum 192 letters)	ALL	-	SYS	List: 256 digits	11
735	Maintenance	Automatic ordering function of supplies HTTP server URL setting (Maximum 256 letters)	ALL	-	SYS		11
736	Maintenance	Automatic ordering function of supplies HTTP server port number setting	ALL	0 <0-9999>	SYS		1
738	Maintenance	Automatic ordering function of supplies User's name (Maximum 50 letters)	ALL	-	SYS		11
739	Maintenance	Automatic ordering function of supplies User's telephone number (Maximum 32 letters)	ALL	-	SYS	Enter hyphen with the [Pause] button	11
740	Maintenance	Automatic ordering function of supplies User's E-mail address (Maximum 192 letters)	ALL	-	SYS	List: 256 digits	11
741	Maintenance	Automatic ordering function of supplies User's address (Maximum 100 letters)	ALL	-	SYS		11
742	Maintenance	Automatic ordering function of supplies Service number (Maximum 5 digits)	ALL	0 <5 digits>	SYS		1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
743	Maintenance	Automatic ordering function of supplies Service technician's name (Maximum 50 letters)	ALL	-	SYS		11
744	Maintenance	Automatic ordering function of supplies Service technician's telephone number (Maximum 32 digits)	ALL	-	SYS	Enter hyphen with the [Pause] button	11
745	Maintenance	Automatic ordering function of supplies Service technician's E-mail address (Maximum 192 letters)	ALL	-	SYS	List: 256 digits	11
746	Maintenance	Automatic ordering function of supplies Supplier's name (Maximum 50 letters)	ALL	-	SYS		11
747	Maintenance	Automatic ordering function of supplies Supplier's address (Maximum 100 letters)	ALL	-	SYS		11
748	Maintenance	Automatic ordering function of supplies Notes (Maximum 200 letters)	ALL	-	SYS		11
749	Maintenance	Information about supplies Part number of toner cartridge C (Maximum 20 digits)	ALL	-	SYS		11
750	Maintenance	Information about supplies Order quantity of toner cartridge C	ALL	1 <1-99>	SYS		1
751	Maintenance	Information about supplies Stock quantity of toner cartridge C	ALL	1 <1-99>	SYS		1
752	Maintenance	Information about supplies Part number of toner cartridge M (Maximum 20 digits)	ALL	-	SYS		11
753	Maintenance	Information about supplies Order quantity of toner cartridge M	ALL	1 <1-99>	SYS		1
754	Maintenance	Information about supplies Stock quantity of toner cartridge M	ALL	1 <1-99>	SYS		1
755	Maintenance	Information about supplies Part number of toner cartridge Y (Maximum 20 digits)	ALL	-	SYS		11
756	Maintenance	Information about supplies Order quantity of toner cartridge Y	ALL	1 <1-99>	SYS		1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
757	Maintenance	Information about supplies Stock quantity of toner cartridge Y	ALL	1 <1-99>	SYS		1
758	Maintenance	Information about supplies Part number of toner cartridge K (Maximum 20 digits)	ALL	-	SYS		11
759	Maintenance	Information about supplies Order quantity of toner cartridge K	ALL	1 <1-99>	SYS		1
760	Maintenance	Information about supplies Stock quantity of toner cartridge K	ALL	1 <1-99>	SYS		1
761	Maintenance	Information about supplies Part number of toner bag (Maximum 20 digits)	ALL	-	SYS		11
762	Maintenance	Information about supplies Order quantity of toner bag	ALL	1 <1-99>	SYS		1
763	Maintenance	Information about supplies Stock quantity of toner bag	ALL	1 <1-99>	SYS		1
764	Maintenance	Automatic ordering supplies Result table printout	ALL	1 <0-2>	SYS	0: OFF 1: Always 2: ON Error	1
765	Maintenance	Automatic ordering supplies Display	ALL	2 <0-2>	SYS	0: Valid (FAX/Internet FAX) 1: Valid (FAX/Internet FAX/HTTP) 2: Invalid	1
766	Maintenance	Reset of service NVRAM Area reset of UTY service NVRAM	ALL	0 <0-1>	SYS	0: Default 1: Reset	1
767	Maintenance	Notification setting	ALL	0 <0-1>	SYS	Enables to set up to 3 E-mail addresses to be sent. (08-768, 777, 778) 0: Invalid 1: Valid	1
768	Maintenance	Destination E-mail address (Maximum 192 letters)	ALL	-	SYS		11
769	Maintenance	Total counter information transmission setting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
770	Maintenance	Total counter transmission interval setting (1 to 31 days)	ALL	1 <1-31>	SYS		1
771	Maintenance	PM counter notification setting	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
772	Maintenance	Dealer's name (Maximum 100 letters)	ALL	-	SYS	Needed at initial registration	11
773	Maintenance	Login name (Maximum 20 letters)	ALL	-	SYS	Needed at initial registration	11
774	Maintenance	Setting of notification display	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
775	Maintenance	Sending or not sending error history of copier	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
776	Maintenance	Setting total counter transmission interval (Hour/Hour/Minute/Minute)	ALL	-	SYS		1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
777	Maintenance	Destination E-mail address 2 (Maximum 192 letters)	ALL	-	SYS		11
778	Maintenance	Destination E-mail address 3 (Maximum 192 letters)	ALL	-	SYS		11
779	Maintenance	Notification format selection	ALL	0 <0-1>	SYS	0: Text 1: Text + XML data	1
780	Maintenance	Remote-controlled service polling day selection Day-1	ALL	0 <0-31>	SYS	0: OFF 1 to 31: 1st to 31st of a month	1
781	Maintenance	Remote-controlled service polling day selection Day-2	ALL	0 <0-31>	SYS	0: OFF 1 to 31: 1st to 31st of a month	1
782	Maintenance	Remote-controlled service polling day selection Day-3	ALL	0 <0-31>	SYS	0: OFF 1 to 31: 1st to 31st of a month	1
783	Maintenance	Remote-controlled service polling day selection Day-4	ALL	0 <0-31>	SYS	0: OFF 1 to 31: 1st to 31st of a month	1
784	Maintenance	Remote-controlled service polling day selection Sunday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
785	Maintenance	Remote-controlled service polling day selection Monday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
786	Maintenance	Remote-controlled service polling day selection Tuesday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
787	Maintenance	Remote-controlled service polling day selection Wednesday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
788	Maintenance	Remote-controlled service polling day selection Thursday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
789	Maintenance	Remote-controlled service polling day selection Friday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
790	Maintenance	Remote-controlled service polling day selection Saturday	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
791	Maintenance	Information of supplies setting of toner cartridge C	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
792	Maintenance	Information of supplies setting of toner cartridge M	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
793	Maintenance	Information of supplies setting of toner cartridge Y	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
794	Maintenance	Information of supplies setting of toner cartridge K	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
795	Maintenance	Information of supplies setting of toner bag	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1
796	Maintenance	Remote-controlled service lengthened interval polling (End of month)	ALL	0 <0-1>	SYS	0: Invalid 1: Valid	1

Adjustment mode (08)									
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure	
797	Maintenance	Firmware download		ALL	0 <0-1>	SYS	0: Accepted 1: Prohibited	1	
810	Image control	Transfer bias correction table setting		ALL	1 <1-3>	M	1 : TYPE1 2 : TYPE2 3 : TYPE3	1	
823-0	Development	Color auto-toner sensor/light	Y	ALL (color)	0 <0-1>	M	Displays "1" when the abnormal output voltage is detected for the color auto-toner sensor light amount correction. ([CF40] error)	4	
823-1		amount correction	M	ALL (color)	0 <0-1>	M		4	
823-2		voltage abnormal detection	C	ALL (color)	0 <0-1>	M		0: Normal 1: Abnormality detected	4
824-0	Development	Color auto-toner sensor/toner	Y	ALL (color)	0 <0-1>	M	Displays "1" when the abnormal toner density detection voltage is detected. ([CF20] error)	4	
824-1		density detection	M	ALL (color)	0 <0-1>	M		0: Normal	4
824-2		voltage abnormal detection	C	ALL (color)	0 <0-1>	M		1: Abnormality detected	4
858-0	Development	Toner empty detection	Y	ALL (color)	0 <0-1>	M	Becomes "1" when detecting the toner empty.	4	
858-1			M	ALL (color)	0 <0-1>	M		0: Normal 1: Empty detected	4
858-2			C	ALL (color)	0 <0-1>	M			4
859-0	Development	Color toner forced supply level	Y	ALL (color)	0 <0-1>	M	Becomes "1" when the toner density decreases and it is judged forced toner supply is needed.	4	
859-1		display	M	ALL (color)	0 <0-1>	M		0: Normal level	4
859-2			C	ALL (color)	0 <0-1>	M		1: Forced supply level	4
860-0	Development	Color auto-toner sensor/proper	Upper limit	ALL (color)	20 <0-1023>	M	Sets the range for judging whether the sensor output value when the sensor light source is OFF is correct or not.	4	
860-1		range setting of OFF level voltage	Lower limit	ALL (color)	0 <0-1023>	M			4
861-0	Development	Color auto-toner sensor/proper	Upper limit	ALL (color)	205 <0-255>	M	Sets the range for judging whether the adjustment result of sensor light amount is correct or not.	4	
861-1		range setting of standard light amount voltage	Lower limit	ALL (color)	40 <0-255>	M			4
862-0	Development	Color auto-toner sensor/proper	Upper limit	ALL (color)	820 <0-1023>	M	Sets the range for judging whether the sensor output value for the reference plate is correct or not.	4	
862-1		range setting of reference plate output	Lower limit	ALL (color)	205 <0-1023>	M			4
863-0	Development	Color auto-toner sensor/proper	Upper limit	ALL (color)	400 <0-1023>	M	Sets the range for judging whether the sensor output value for the sleeve is correct or not.	4	
863-1		range setting of developer output	Lower limit	ALL (color)	155 <0-1023>	M			4
864	Development	Color auto-toner sensor/sensor OFF output value display at power ON		ALL (color)	- <0-1023>	M	Displays the sensor output value when the sensor light source is OFF at power ON.	2	

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
865	Development	Color auto-toner sensor/ reference plate output value display at power ON		ALL (color)	- <0-1023>	M	Displays the sensor output value with the standard light amount for the reference plate at power ON.	2
866-0	Development	Color auto-toner sensor/abnormal detection potential	Upper limit	ALL (color)	820 <0-1023>	M	Sets the range for judging whether the difference between the sensor output when the sensor light source is OFF and the sensor output for the reference plate is correct or not.	4
866-1		difference setting of reference plate output	Lower limit	ALL (color)	205 <0-1023>	M		4
867	Development	Color auto-toner control environment and life light amount correction setting		ALL (color)	0 <0-1>	M	Sets whether the sensor light amount is corrected or not depending on the environment and life. 0: Correction 1: No correction	1
868	Development	Color auto-toner adjustment finishing range setting		ALL (color)	4 <0-255>	M	Sets the difference from the target value for judging whether the color auto-toner adjustment finishes correctly or not.	1
869	Development	Color auto-toner control environment and life light amount correction/correction finishing range setting		ALL (color)	5 <0-255>	M	Sets the difference from the target value for judging whether the light amount correction finishes correctly or not.	1
870	Development	Color auto-toner sensor/ setting of number of times of error detection at light amount correction		ALL (color)	3 <0-255>	M	Sets the number of times of continu- ous error detection before the light amount correction abnormality is displayed.	1
871	Development	Color auto-toner control environment and life light amount correction/display of number of times of refer- ence plate detection error		ALL (color)	0 <0-255>	M	Displays the number of times of the reference plate detection error for the environment and life light amount correction.	2
872	Development	Color auto-toner control environment and life light amount correction/display of number of times of light amount control voltage adjustment error		ALL (color)	0 <0-255>	M	Displays the number of times of the light amount control voltage adjust- ment error for the environment and life light amount correction.	2
873-0	Development	Color auto-toner control/developer initial output	Y	ALL (color)	256 <0-1023>	M	Sets the initial developer output target value.	4
873-1		setting	M	ALL (color)	256 <0-1023>	M		4
873-2			C	ALL (color)	256 <0-1023>	M		4
874	Development	Color developer life correc- tion		ALL (color)	0 <0-1>	M	Sets whether the toner density detection voltage correction is performed or not depending on the developer life in the color auto-toner control. 0: Corrected 1: Not corrected	1

Adjustment mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Procedure
875-0	Development	Color developer life correction value (segment 0)	Y	ALL (color)	0 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 0-2000 is set as the correction amount.	4
875-1			M	ALL (color)	0 <-512-511>	M		4
875-2			C	ALL (color)	0 <-512-511>	M		4
876-0	Development	Color developer life correction value (segment 1)	Y	ALL (color)	-4 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 2001- 5000 is set as the correction amount.	4
876-1			M	ALL (color)	-2 <-512-511>	M		4
876-2			C	ALL (color)	-2 <-512-511>	M		4
877-0	Development	Color developer life correction value (segment 2)	Y	ALL (color)	-8 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 5001- 10000 is set as the correction amount.	4
877-1			M	ALL (color)	-4 <-512-511>	M		4
877-2			C	ALL (color)	-4 <-512-511>	M		4
878-0	Development	Color developer life correction value (segment 3)	Y	ALL (color)	-12 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 10001- 20000 is set as the correction amount.	4
878-1			M	ALL (color)	-6 <-512-511>	M		4
878-2			C	ALL (color)	-6 <-512-511>	M		4
879-0	Development	Color developer life correction value (segment 4)	Y	ALL (color)	-16 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 20001- 30000 is set as the correction amount.	4
879-1			M	ALL (color)	-8 <-512-511>	M		4
879-2			C	ALL (color)	-8 <-512-511>	M		4
880-0	Development	Color developer life correction value (segment 5)	Y	ALL (color)	-20 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count within 30001- 37500 is set as the correction amount.	4
880-1			M	ALL (color)	-10 <-512-511>	M		4
880-2			C	ALL (color)	-10 <-512-511>	M		4
881-0	Development	Color developer life correction value (segment 6)	Y	ALL (color)	-24 <-512-511>	M	Sets the correction amount of the toner density detection voltage depending on the developer life. In this code, the life count 37501 or more is set as the correction amount.	4
881-1			M	ALL (color)	-12 <-512-511>	M		4
881-2			C	ALL (color)	-12 <-512-511>	M		4
900	Version	System firmware ROM version		ALL	-	-	JPN: T350SJXXX UC, EUR, Others: T350SUXXX	2
903	Version	Printer ROM version		ALL	-	-	350M-XXX	2
905	Version	Scanner ROM version		ALL	-	-	350S-XXX	2
907	Version	RADF ROM version		ALL	-	-	DF-XXX	2
908	Version	Finisher ROM version		ALL	-	-	SDL-XXX FIN-XXX	2

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
915	Version	Fax board ROM version	FAX	-	-	F562-XXX	2
916	Version	NIC board ROM version	ALL	-	-	X.XXX	2
920	Version	FROM basic section software version	ALL	-	-	VX.X/X.X	2
921	Version	FROM internal program	ALL	-	-	VXXX.XXX	2
922	Version	UI data fixed section version	ALL	-	-	VXXX.XXX	2
923	Version	UI data common section version	ALL	-	-	VXXX.XXX	2
924	Version	Version of UI data language 1 in HDD	ALL	-	-	VXXX.XXX	2
925	Version	Version of UI data language 2 in HDD	ALL	-	-	VXXX.XXX	2
926	Version	Version of UI data language 3 in HDD	ALL	-	-	VXXX.XXX	2
927	Version	Version of UI data language 4 in HDD	ALL	-	-	VXXX.XXX	2
928	Version	Version of UI data language 5 in HDD	ALL	-	-	VXXX.XXX	2
929	Version	Version of UI data language 6 in HDD	ALL	-	-	VXXX.XXX	2
930	Version	Version of UI data in FROM displayed at power-ON	ALL	-	-	VXXX.XXX	2
931	Version	Version of UI data language 7 in HDD	ALL	-	-	VXXX.XXX	2
995	Maintenance	Copier number (serial number) display	ALL	0 <10 digits>	SYS	This code can be also keyed in from the adjustment mode (05-976). 10 digits	11
999	Maintenance	FSMS total counter	ALL	0 <8 digits>	SYS	Refers to values of total counter	1
1001	Network	Reset of NIC board	ALL	3 <1-3>	NIC	1: Cold 2: Warm 3: No reset	12
1002	Network	Selection of NIC board status information	ALL	1 <1-2>	NIC	1: Not printed out when the copier is restarted 2: Printed out when the copier 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 (Maximum 32 letters) Not scannable	ALL	-	NIC	Writing only	12
1005	Network	Availability of IP	ALL	1 <1-2>	NIC	1: Available 2: Not available	12
1006	Network	Method of IP addressing	ALL	2 <1-2>	NIC	1: Unchanging 2: Automatic addressing (DHCP)	12
1007	Network	Domain name (Maximum 96 letters)	ALL	-	NIC		12

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1008	Network	IP address	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		12
1009	Network	Subnet mask	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		12
1010	Network	Gateway	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		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: ieee802.3 SNAP 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 Apple Talk	ALL	1 <1-2>	NIC	1: Available 2: Not available	12
1015	Network	Zone setting of Apple Talk (Maximum 32 letters) “*” is displayed as a default value	ALL	*	NIC	*: 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	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		12
1019	Network	IP address to DNS server (Secondary)	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		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

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1023	Network	NetBios name (Maximum 16 letters)	ALL	-	NIC		12
1024	Network	Name of WINS server or IP address (Primary/Maximum 128 letters)	ALL	-	NIC		12
1025	Network	Name of WINS server or IP address(Secondary / Maximum 128 letters)	ALL	-	NIC		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 (Maximum 127 letters)	ALL	-	NIC		12
1029	Network	Directory service tree (Maximum 47 letters)	ALL	-	NIC		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	1 <1-2>	UTY NIC	1: Available 2: Not available	12
1034	Network	TCP port number to Control- ler HTTP client	ALL	80 <1-65535>	SYS		1
1035	Network	IP address to HTTP server (Primary)	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		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 (Maximum 128 Bytes)	ALL	-	NIC		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>	SYS	1: Available 2: Not available	12
1041	Network	TCP port number of SMTP server	ALL	25 <1-65535>	SYS		12
1042	Network	E-mail box name to SMTP server (Maximum 192 letters)	ALL	-	SYS		12
1043	Network	Availability of Offramp	ALL	2 <1-2>	SYS	1: Available 2: Not available	12
1044	Network	Offramp security	ALL	1 <1-2>	SYS	1: Available 2: Not available	12
1045	Network	Printing at Offramp	ALL	1 <1-2>	SYS	1: Available 2: Not available	12

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
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 (Maximum 128 Bytes)	ALL	-	NIC		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 (Maximum 32 letters)	ALL	-	NIC		12
1050	Network	Login password to POP3 (Maximum 32 letters)	ALL	-	NIC		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 (Maximum 128 letters)	ALL	-	NIC		12
1055	Network	TCP port number of FTP client	ALL	21 <1-65535>	SYS		12
1056	Network	Data port number of FTP client	ALL	0 <0-65535>	SYS		12
1057	Network	Login name to FTP server (Maximum 31 letters)	ALL	-	SYS		11
1058	Network	Login password to FTP server (Maximum 31 letters)	ALL	-	SYS		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>	SYS		12
1061	Network	Login name to FTP client (Maximum 31 letters)	ALL	-	SYS		11
1062	Network	Login password to FTP client (Maximum 31 letters)	ALL	-	SYS		11
1063	Network	MIB function	ALL	1 <1-2>	NIC	1: Valid 2: Invalid	12
1065	Network	Setting of read Community (Maximum 31 letters)	ALL	public	NIC		12
1066	Network	Setting of read/Write Community (Maximum 31 letters)	ALL	private	NIC		12
1067	Network	Authentication TRAP function	ALL	1 <1-2>	NIC	1: Valid 2: Invalid	12
1068	Network	ALERTS TRAP function	ALL	1 <1-2>	NIC	1: Valid 2: Invalid	12

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1069	Network	TRAP destination IP address	ALL	000/000/ 000/000 <000-255/ 000-255/ 000-255/ 000-255>	NIC		12
1070	Network	Community setting of TRAP (via IP) (Maximum 31 letters)	ALL	public	NIC		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 (Maximum 31 letters)	ALL	-	NIC		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 (Maximum 127 letters)	ALL	-	NIC		12
1082	Network	IPP printer location (Maximum 127 letters)	ALL	-	NIC		12
1083	Network	IPP printer information (Maximum 127 letters)	ALL	-	NIC		12
1084	Network	IPP printer information (more) (Maximum 127 letters)	ALL	-	NIC		12
1085	Network	Installer of IPP printer driver (Maximum 127 letters)	ALL	-	NIC		12
1086	Network	IPP printer "Make and Model" (Maximum 127 letters)	ALL	-	NIC		12
1087	Network	IPP printer information (more) MFG (Maximum 127 letters)	ALL	-	NIC		12
1088	Network	IPP message from operator (Maximum 127 letters)	ALL	-	NIC		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 (Maximum 31 letters)	ALL	print	NIC		12
1091	Network	Printer user password of FTP (Maximum 31 letters)	ALL	-	NIC		12
1092	Network	TCP port number to FTP print server	ALL	21 <1-65535>	NIC		12
1093	Network	Login name to Novell print server (Maximum 47 letters)	ALL	-	NIC		12

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1094	Network	Login password to Novell print server (Maximum 31 letters)	ALL	-	NIC		12
1095	Network	Name of Search Root server (Maximum 31 letters)	ALL	-	NIC		12
1096	Network	Scan rate setting of print queue	ALL	5 <0-255>	NIC	Unit: Second	12
1370	Image processing	Image quality control time accumulating counter	ALL	0 <8 digits>	M	Counts driving count of the drum (image quality control time). Counts up when drum motor and image quality control are ON.	1
1372	Image processing	Heater and energizing time accumulating counter Display/0 clearing	ALL	0 <8 digits>	M	Counts up the heater control time accumulated (when power of the copier is ON) but does not count at energy saving mode. When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	1
1378	Image processing	Fuser roller ready temperature time accumulating counter	ALL	0 <8 digits>	M	Counts up the heater control time accumulated (on standby). When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	2
1380	Image processing	Fuser roller printing temperature time accumulating counter	ALL	0 <8 digits>	M	Counts up the heater control time accumulated (during printing). When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	2
1382	Image processing	Fuser roller energy saving temperature time accumulating counter Display/0 clearing	ALL	0 <8 digits>	M	Counts up the heater control time accumulated (at energy saving mode). When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	2
1385	Image processing	Number of output pages (Thick paper 1)	ALL	0 <8 digits>	M	Counts up when the registration sensor is ON. When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	1
1386	Image processing	Number of output pages (Thick paper 2)	ALL	0 <8 digits>	M	Counts up when the registration sensor is ON. When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	1
1387	Image processing	Number of output pages (Thick paper 3)	ALL	0 <8 digits>	M	Counts up when the registration sensor is ON. When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	1

Adjustment mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1388	Image processing	Number of output pages (OHP film)	ALL	0 <8 digits>	M	Counts up when the registration sensor is ON. When the counter value of the fuser belt is cleared, this counter value is also cleared in sync at PM support mode.	1
1389	Main charger	Main charger wire cleaning counter display/0 clearing	ALL	0 <5 digits>	M	Does not count up when cleaning is invalid.	1
1390	Paper feeding	Feeding retry counter (upper drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the upper drawer.	1
1391	Paper feeding	Feeding retry counter (lower drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the lower drawer.	1
1392	Paper feeding	Feeding retry counter (PFP upper drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the PFP upper drawer.	1
1393	Paper feeding	Feeding retry counter (PFP lower drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the PFP lower drawer.	1
1394	Paper feeding	Feeding retry counter (bypass feed)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the bypass tray.	1
1395	Paper feeding	Feeding retry counter (LCF)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the LCF.	1
1396	Paper feeding	Feeding retry counter setting value (upper drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the upper drawer.	1
1397	Paper feeding	Feeding retry counter setting value (lower drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the lower drawer.	1
1398	Paper feeding	Feeding retry counter setting value (PFP upper drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the PFP upper drawer.	1
1399	Paper feeding	Feeding retry counter setting value (PFP lower drawer)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the PFP lower drawer.	1
1400	Paper feeding	Feeding retry counter setting value (bypass feed)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the bypass tray.	1
1401	Paper feeding	Feeding retry counter setting value (LCF)	ALL	0 <8 digits>	M	Sets the number of times of the feeding retry from the LCF.	1

<<Pixel counter related code>> (► Chapter 2.2.6)

Note: In the pixel counter function, the twin color copy mode is regarded as the full color mode.

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1500	Pixel counter	Standard paper size setting	ALL	EUR: 0 UC: 1 JPN: 1	SYS	Selects the standard paper size to convert it into the pixel count (%). 0: A4 1: LT	1
1501	Pixel counter	Pixel counter all clearing	ALL	-	SYS	Clears all information related to the pixel counter.	3
1502	Pixel counter	Service technician reference counter clearing	ALL	-	SYS	Clears all information related to the service technician reference pixel counter.	3
1503	Pixel counter	Toner cartridge reference counter clearing	ALL	-	SYS	Clears all information related to the toner cartridge reference pixel counter.	3
1504	Pixel counter	Pixel counter display setting	ALL	0 <0-1>	SYS	Selects whether or not to display the pixel counter on the LCD screen. 0: Displayed 1: Not displayed	1
1505	Pixel counter	Displayed reference setting	ALL	0 <0-1>	SYS	Selects the reference when displaying the pixel counter on the LCD screen. 0: Service technician reference 1: Toner cartridge reference	1
1509	Pixel counter	Pixel counter clear flag/ Service technician reference	ALL	0 <0-1>	SYS	Becomes "1" when 08-1502 is performed.	2
1510	Pixel counter	Service technician reference cleared date	ALL	-	SYS	Displays the date on which 08-1502 was performed.	2
1511	Pixel counter	Toner cartridge reference cleared date (Y)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1512	Pixel counter	Toner cartridge reference cleared date (M)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1513	Pixel counter	Toner cartridge reference cleared date (C)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1514	Pixel counter	Toner cartridge reference cleared date (K)	ALL	-	SYS	Displays the date on which 08-1503 was performed.	2
1515	Pixel counter	Toner cartridge reference count started date (Y)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1516	Pixel counter	Toner cartridge reference count started date (M)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1517	Pixel counter	Toner cartridge reference count started date (C)	ALL (color)	-	SYS	Displays the date on which 08-1503 was performed.	2
1518	Pixel counter	Toner cartridge reference count started date (K)	ALL	-	SYS	Displays the date on which 08-1503 was performed.	2
1547	Pixel counter	Number of output pages/full color (Service technician reference)	PPC (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode and service technician reference. [Unit. page]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1548	Pixel counter	Number of output pages/black (Service technician reference)	PPC (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, black mode and service technician reference. [Unit. page]	2
1549	Pixel counter	Number of output pages/full color (Service technician reference)	PRT (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode and service technician reference. [Unit. page]	2
1550	Pixel counter	Number of output pages/black (Service technician reference)	PRT (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, black mode and service technician reference. [Unit. page]	2
1551	Pixel counter	Number of output pages/black (Service technician reference)	FAX (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the FAX function, black mode and service technician reference. [Unit. page]	2
1552	Pixel counter	Number of output pages/full color (K) (Toner cartridge reference)	PPC (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner K and toner cartridge reference. [Unit. page]	2
1553	Pixel counter	Number of output pages/black (Toner cartridge reference)	PPC (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, black mode and toner cartridge reference. [Unit. page]	2
1554	Pixel counter	Number of output pages/full color (K) (Toner cartridge reference)	PRT (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner K and toner cartridge reference. [Unit. page]	2
1555	Pixel counter	Number of output pages/black (Toner cartridge reference)	PRT (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, black mode and toner cartridge reference. [Unit. page]	2
1556	Pixel counter	Number of output pages/black (Toner cartridge reference)	FAX (black)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the FAX function, black mode and toner cartridge reference. [Unit. page]	2
1557	Pixel counter	Number of output pages/full color (Y) (Toner cartridge reference)	PPC (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner Y and toner cartridge reference. [Unit. page]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1558	Pixel counter	Number of output pages/full color (Y) (Toner cartridge reference)	PRT (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner Y and toner cartridge reference. [Unit. page]	2
1559	Pixel counter	Number of output pages/full color (M) (Toner cartridge reference)	PPC (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner M and toner cartridge reference. [Unit. page]	2
1560	Pixel counter	Number of output pages/full color (M) (Toner cartridge reference)	PRT (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner M and toner cartridge reference. [Unit. page]	2
1561	Pixel counter	Number of output pages/full color (C) (Toner cartridge reference)	PPC (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner C and toner cartridge reference. [Unit. page]	2
1562	Pixel counter	Number of output pages/full color (C) (Toner cartridge reference)	PRT (color)	<8 digits>	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner C and toner cartridge reference. [Unit. page]	2
1563	Pixel counter	Toner cartridge Y replacement counter	ALL (color)	<3 digits>	SYS	Counts the number of time of the toner cartridge Y replacement.	2
1564	Pixel counter	Toner cartridge M replacement counter	ALL (color)	<3 digits>	SYS	Counts the number of time of the toner cartridge M replacement.	2
1565	Pixel counter	Toner cartridge C replacement counter	ALL (color)	<3 digits>	SYS	Counts the number of time of the toner cartridge C replacement.	2
1566	Pixel counter	Toner cartridge K replacement counter	ALL	<3 digits>	SYS	Counts the number of time of the toner cartridge K replacement.	2
1577	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2
1578	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2
1579	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2
1580	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1581	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2
1582	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2
1583	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2
1584	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2
1585	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2
1586	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2
1587	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2
1588	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2
1589	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2
1590	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2
1591	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2
1592	Pixel counter	Average pixel count/black (Service technician reference)	PPC (black)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, black mode and service technician reference. [Unit: 0.01%]	2
1593	Pixel counter	Average pixel count/black (Service technician reference)	PRT (black)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, black mode and service technician reference. [Unit: 0.01%]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1594	Pixel counter	Average pixel count/black (Service technician reference)	FAX (black)	0 <0-10000>	SYS	Displays the average pixel count in the FAX function, black mode and service technician reference. [Unit: 0.01%]	2
1595	Pixel counter	Average pixel count/black (Service technician reference)	PPC+ PRT+ FAX (black)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer/FAX function, black mode and service technician reference. [Unit: 0.01%]	2
1596	Pixel counter	Latest pixel count/full color (Y+M+C+K) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2
1597	Pixel counter	Latest pixel count/full color (Y) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2
1598	Pixel counter	Latest pixel count/full color (M) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2
1599	Pixel counter	Latest pixel count/full color (C) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2
1600	Pixel counter	Latest pixel count/full color (K) (Service technician reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2
1601	Pixel counter	Latest pixel count/full color (Y+M+C+K) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2
1602	Pixel counter	Latest pixel count/full color (Y) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2
1603	Pixel counter	Latest pixel count/full color (M) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2
1604	Pixel counter	Latest pixel count/full color (C) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2
1605	Pixel counter	Latest pixel count/full color (K) (Service technician reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2
1606	Pixel counter	Latest pixel count/black (Service technician reference)	PPC (black)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, black mode and service technician reference. [Unit: 0.01%]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1607	Pixel counter	Latest pixel count/black (Service technician reference)	PRT (black)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, black mode and service technician reference. [Unit: 0.01%]	2
1608	Pixel counter	Latest pixel count/black (Service technician reference)	FAX (black)	0 <0-10000>	SYS	Displays the latest pixel count in the FAX function, black mode and service technician reference. [Unit: 0.01%]	2
1609	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2
1610	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2
1611	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2
1612	Pixel counter	Average pixel count/full color (K) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2
1613	Pixel counter	Average pixel count/black (Toner cartridge reference)	PPC (black)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, black mode and toner cartridge reference. [Unit: 0.01%]	2
1614	Pixel counter	Average pixel count/full color+black (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy function, full color/black mode and toner cartridge reference. [Unit: 0.01%]	2
1615	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2
1616	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2
1617	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2
1618	Pixel counter	Average pixel count/full color (K) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2
1619	Pixel counter	Average pixel count/black (Toner cartridge reference)	PRT (black)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, black mode and toner cartridge reference. [Unit: 0.01%]	2

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1620	Pixel counter	Average pixel count/full color+black (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the printer function, full color/black mode and toner cartridge reference. [Unit: 0.01%]	2
1621	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2
1622	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2
1623	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PPC+ PRT (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2
1624	Pixel counter	Average pixel count/full color (K)+black (Toner cartridge reference)	PPC+ PRT+ FAX (color)	0 <0-10000>	SYS	Displays the average pixel count in the copy/printer/FAX function, black mode and toner cartridge reference. [Unit: 0.01%]	2
1625	Pixel counter	Average pixel count/black (Toner cartridge reference)	FAX (black)	0 <0-10000>	SYS	Displays the average pixel count in the FAX function, black mode and toner cartridge reference. [Unit: 0.01%]	2
1626	Pixel counter	Latest pixel count/full color (Y) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2
1627	Pixel counter	Latest pixel count/full color (M) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2
1628	Pixel counter	Latest pixel count/full color (C) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2
1629	Pixel counter	Latest pixel count/full color (K) (Toner cartridge reference)	PPC (color)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2
1630	Pixel counter	Latest pixel count/full color (Y) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2
1631	Pixel counter	Latest pixel count/full color (M) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2
1632	Pixel counter	Latest pixel count/full color (C) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2

Setting mode (08)								
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure	
1633	Pixel counter	Latest pixel count/full color (K) (Toner cartridge reference)	PRT (color)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
1634	Pixel counter	Latest pixel count/black (Toner cartridge reference)	FAX (black)	0 <0-10000>	SYS	Displays the latest pixel count in the FAX function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
1639	Pixel counter	Latest pixel count/black (Toner cartridge reference)	PPC (black)	0 <0-10000>	SYS	Displays the latest pixel count in the copy function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
1640	Pixel counter	Latest pixel count/black (Toner cartridge reference)	PRT (black)	0 <0-10000>	SYS	Displays the latest pixel count in the printer function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
1641-0	Pixel counter	Pixel count distribution/full color (Y)	0-5%	PPC (color)	<8 digits>	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14
1641-1			5.1-10%	PPC (color)	<8 digits>	SYS		14
1641-2			10.1-15%	PPC (color)	<8 digits>	SYS		14
1641-3			15.1-20%	PPC (color)	<8 digits>	SYS		14
1641-4			20.1-25%	PPC (color)	<8 digits>	SYS		14
1641-5			25.1-30%	PPC (color)	<8 digits>	SYS		14
1641-6			30.1-40%	PPC (color)	<8 digits>	SYS		14
1641-7			40.1-60%	PPC (color)	<8 digits>	SYS		14
1641-8			60.1-80%	PPC (color)	<8 digits>	SYS		14
1641-9			80.1-100%	PPC (color)	<8 digits>	SYS		14

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1642-0	Pixel counter	Pixel count distribution/full color (M)	0-5%	PPC (color)	<8 digits>	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14
1642-1			5.1-10%	PPC (color)	<8 digits>		14
1642-2			10.1-15%	PPC (color)	<8 digits>		14
1642-3			15.1-20%	PPC (color)	<8 digits>		14
1642-4			20.1-25%	PPC (color)	<8 digits>		14
1642-5			25.1-30%	PPC (color)	<8 digits>		14
1642-6			30.1-40%	PPC (color)	<8 digits>		14
1642-7			40.1-60%	PPC (color)	<8 digits>		14
1642-8			60.1-80%	PPC (color)	<8 digits>		14
1642-9			80.1-100%	PPC (color)	<8 digits>		14
1643-0	Pixel counter	Pixel count distribution/full color (C)	0-5%	PPC (color)	<8 digits>	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14
1643-1			5.1-10%	PPC (color)	<8 digits>		14
1643-2			10.1-15%	PPC (color)	<8 digits>		14
1643-3			15.1-20%	PPC (color)	<8 digits>		14
1643-4			20.1-25%	PPC (color)	<8 digits>		14
1643-5			25.1-30%	PPC (color)	<8 digits>		14
1643-6			30.1-40%	PPC (color)	<8 digits>		14
1643-7			40.1-60%	PPC (color)	<8 digits>		14
1643-8			60.1-80%	PPC (color)	<8 digits>		14
1643-9			80.1-100%	PPC (color)	<8 digits>		14

Setting mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1644-0	Pixel counter	Pixel count distribution/full color (K)	0-5%	PPC (color)	<8 digits>	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14
1644-1			5.1-10%	PPC (color)	<8 digits>	SYS		14
1644-2			10.1-15%	PPC (color)	<8 digits>	SYS		14
1644-3			15.1-20%	PPC (color)	<8 digits>	SYS		14
1644-4			20.1-25%	PPC (color)	<8 digits>	SYS		14
1644-5			25.1-30%	PPC (color)	<8 digits>	SYS		14
1644-6			30.1-40%	PPC (color)	<8 digits>	SYS		14
1644-7			40.1-60%	PPC (color)	<8 digits>	SYS		14
1644-8			60.1-80%	PPC (color)	<8 digits>	SYS		14
1644-9			80.1-100%	PPC (color)	<8 digits>	SYS		14
1645-0	Pixel counter	Pixel count distribution/full color (Y)	0-5%	PRT (color)	<8 digits>	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14
1645-1			5.1-10%	PRT (color)	<8 digits>	SYS		14
1645-2			10.1-15%	PRT (color)	<8 digits>	SYS		14
1645-3			15.1-20%	PRT (color)	<8 digits>	SYS		14
1645-4			20.1-25%	PRT (color)	<8 digits>	SYS		14
1645-5			25.1-30%	PRT (color)	<8 digits>	SYS		14
1645-6			30.1-40%	PRT (color)	<8 digits>	SYS		14
1645-7			40.1-60%	PRT (color)	<8 digits>	SYS		14
1645-8			60.1-80%	PRT (color)	<8 digits>	SYS		14
1645-9			80.1-100%	PRT (color)	<8 digits>	SYS		14

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1646-0	Pixel counter	Pixel count distribution/full color (M)	0-5%	PRT (color)	<8 digits> SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14
1646-1			5.1-10%	PRT (color)	<8 digits> SYS		14
1646-2			10.1-15%	PRT (color)	<8 digits> SYS		14
1646-3			15.1-20%	PRT (color)	<8 digits> SYS		14
1646-4			20.1-25%	PRT (color)	<8 digits> SYS		14
1646-5			25.1-30%	PRT (color)	<8 digits> SYS		14
1646-6			30.1-40%	PRT (color)	<8 digits> SYS		14
1646-7			40.1-60%	PRT (color)	<8 digits> SYS		14
1646-8			60.1-80%	PRT (color)	<8 digits> SYS		14
1646-9			80.1-100%	PRT (color)	<8 digits> SYS		14
1647-0	Pixel counter	Pixel count distribution/full color (C)	0-5%	PRT (color)	<8 digits> SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14
1647-1			5.1-10%	PRT (color)	<8 digits> SYS		14
1647-2			10.1-15%	PRT (color)	<8 digits> SYS		14
1647-3			15.1-20%	PRT (color)	<8 digits> SYS		14
1647-4			20.1-25%	PRT (color)	<8 digits> SYS		14
1647-5			25.1-30%	PRT (color)	<8 digits> SYS		14
1647-6			30.1-40%	PRT (color)	<8 digits> SYS		14
1647-7			40.1-60%	PRT (color)	<8 digits> SYS		14
1647-8			60.1-80%	PRT (color)	<8 digits> SYS		14
1647-9			80.1-100%	PRT (color)	<8 digits> SYS		14

Setting mode (08)								
Code	Classification	Items		Function	Default <Acceptable value>	RAM	Contents	Proce- dure
1648-0	Pixel counter	Pixel count distribution/full color (K)	0-5%	PRT (color)	<8 digits>	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14
1648-1			5.1-10%	PRT (color)	<8 digits>	SYS		14
1648-2			10.1-15%	PRT (color)	<8 digits>	SYS		14
1648-3			15.1-20%	PRT (color)	<8 digits>	SYS		14
1648-4			20.1-25%	PRT (color)	<8 digits>	SYS		14
1648-5			25.1-30%	PRT (color)	<8 digits>	SYS		14
1648-6			30.1-40%	PRT (color)	<8 digits>	SYS		14
1648-7			40.1-60%	PRT (color)	<8 digits>	SYS		14
1648-8			60.1-80%	PRT (color)	<8 digits>	SYS		14
1648-9			80.1-100%	PRT (color)	<8 digits>	SYS		14
1649-0	Pixel counter	Pixel count distribution/black	0-5%	PPC (black)	<8 digits>	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14
1649-1			5.1-10%	PPC (black)	<8 digits>	SYS		14
1649-2			10.1-15%	PPC (black)	<8 digits>	SYS		14
1649-3			15.1-20%	PPC (black)	<8 digits>	SYS		14
1649-4			20.1-25%	PPC (black)	<8 digits>	SYS		14
1649-5			25.1-30%	PPC (black)	<8 digits>	SYS		14
1649-6			30.1-40%	PPC (black)	<8 digits>	SYS		14
1649-7			40.1-60%	PPC (black)	<8 digits>	SYS		14
1649-8			60.1-80%	PPC (black)	<8 digits>	SYS		14
1649-9			80.1-100%	PPC (black)	<8 digits>	SYS		14

Setting mode (08)							
Code	Classification	Items	Function	Default <Acceptable value>	RAM	Contents	Procedure
1650-0	Pixel counter	Pixel count distribution/black	0-5%	PRT (black)	<8 digits>	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14
1650-1			5.1-10%	PRT (black)	<8 digits>		14
1650-2			10.1-15%	PRT (black)	<8 digits>		14
1650-3			15.1-20%	PRT (black)	<8 digits>		14
1650-4			20.1-25%	PRT (black)	<8 digits>		14
1650-5			25.1-30%	PRT (black)	<8 digits>		14
1650-6			30.1-40%	PRT (black)	<8 digits>		14
1650-7			40.1-60%	PRT (black)	<8 digits>		14
1650-8			60.1-80%	PRT (black)	<8 digits>		14
1650-9			80.1-100%	PRT (black)	<8 digits>		14
1651-0	Pixel counter	Pixel count distribution/black	0-5%	FAX (black)	<8 digits>	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14
1651-1			5.1-10%	FAX (black)	<8 digits>		14
1651-2			10.1-15%	FAX (black)	<8 digits>		14
1651-3			15.1-20%	FAX (black)	<8 digits>		14
1651-4			20.1-25%	FAX (black)	<8 digits>		14
1651-5			25.1-30%	FAX (black)	<8 digits>		14
1651-6			30.1-40%	FAX (black)	<8 digits>		14
1651-7			40.1-60%	FAX (black)	<8 digits>		14
1651-8			60.1-80%	FAX (black)	<8 digits>		14
1651-9			80.1-100%	FAX (black)	<8 digits>		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
- 1: Recommended number of output pages for replacement
- 2: Number of output pages at the last replacement
- 3: Present driving counts
- 4: Recommended driving counts to be replaced
- 5: Driving counts at the last replacement
- 6: Present output pages for control
- 7: Present driving counts for control
- 8: Number of times replaced

Notes:

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

Items	PM management setting <Procedure 4> *Indicated in 8 digits	Date of previous replacement <Procedure 2>	Remarks
Photoconductive drum	1150	1151	1150-0, 1, 2 and 6 count up when the registration sensor is ON. 1150-3, 4, 5 and 7 count the driving counts of the drum. 1150-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Photoconductive drum (Yellow)	1152	1153	1152-0, 1, 2 and 6 count up when the registration sensor is ON. 1152-3, 4, 5 and 7 count the driving counts of the developer unit Y. 1152-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of Y-ATC is detected.
Photoconductive drum (Magenta)	1154	1155	1154-0, 1, 2 and 6 count up when the registration sensor is ON. 1154-3, 4, 5 and 7 count the driving counts of the developer unit M. 1154-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of M-ATC is detected.
Photoconductive drum (Cyan)	1156	1157	1156-0, 1, 2 and 6 count up when the registration sensor is ON. 1156-3, 4, 5 and 7 count the driving counts of the developer unit C. 1156-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of C-ATC is detected.
Drum cleaning blade	1158	1159	1158-0, 1, 2 and 6 count up when the registration sensor is ON. 1158-3, 4, 5 and 7 count the driving counts of the drum. 1158-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Drum cleaner brush	1166	1167	1166-0, 1, 2 and 6 count up when the registration sensor is ON. 1166-3, 4, 5 and 7 count the driving counts of the drum. 1166-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Main charger grid	1174	1175	1174-0, 1, 2 and 6 count up when the registration sensor is ON. 1174-3, 4, 5 and 7 count the driving counts of the drum. 1174-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Main charger wire	1182	1183	1182-0, 1, 2 and 6 count up when the registration sensor is ON. 1182-3, 4, 5 and 7 count the driving counts of the drum. 1182-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Main charger wire cleaning pad	1190	1191	1190-0, 1, 2 and 6 count up when the registration sensor is ON. 1190-3, 4, 5 and 7 count the driving counts of the drum. 1190-8 counts up when entering the values 0 to 7 (incl. "0" clearing).

Items	PM management setting <Procedure 4> *Indicated in 8 digits	Date of previous replacement <Procedure 2>	Remarks
Ozone filter	1198	1199	1198-0, 1, 2 and 6 count up when the registration sensor is ON. 1198-3, 4, 5 and 7 count the driving counts of the drum. 1198-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Developer material K	1200	1201	1200-0, 1, 2 and 6 count up when the registration sensor is ON. 1200-3, 4, 5 and 7 count the driving counts of the developer unit K. 1200-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of K-ATC is detected.
Developer material Y	1202	1203	1202-0, 1, 2 and 6 count up when the registration sensor is ON. 1202-3, 4, 5 and 7 count the driving counts of the developer unit Y 1202-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of Y-ATC is detected.
Developer material M	1204	1205	1204-0, 1, 2 and 6 count up when the registration sensor is ON. 1204-3, 4, 5 and 7 count the driving counts of the developer unit M. 1204-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of M-ATC is detected.
Developer material C	1206	1207	1206-0, 1, 2 and 6 count up when the registration sensor is ON. 1206-3, 4, 5 and 7 count the driving counts of the developer unit C. 1206-8 counts up when entering the values 0 to 7 (incl. "0" clearing) and performing of C-ATC is detected.
1st transfer roller	1214	1215	1214-0, 1, 2 and 6 count up when the registration sensor is ON. 1214-3, 4, 5 and 7 count the driving counts of the drum. 1214-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Transfer belt	1228	1229	1228-0, 1, 2 and 6 count up when the registration sensor is ON. 1228-3, 4, 5 and 7 count the driving counts of the drum. 1228-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Transfer belt driving roller cleaning brush	1230	1231	1230-0, 1, 2 and 6 count up when the registration sensor is ON. 1230-3, 4, 5 and 7 count the driving counts of the drum. 1230-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Transfer belt cleaning blade	1232	1233	1232-0, 1, 2 and 6 count up when the registration sensor is ON. 1232-3, 4, 5 and 7 count the driving counts of the drum. 1232-8 counts up when entering the values 0 to 7 (incl. "0" clearing).

Items	PM management setting <Procedure 4> *Indicated in 8 digits	Date of previous replacement <Procedure 2>	Remarks
2nd transfer roller	1240	1241	1240-0, 1, 2 and 6 count up when the registration sensor is ON. 1240-3, 4, 5 and 7 count the time when the 2nd transfer roller drive clutch is ON. 1240-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
2nd transfer roller cleaning brush	1244	1245	1244-0, 1, 2 and 6 count up when the registration sensor is ON. 1244-3, 4, 5 and 7 count the time when the 2nd transfer roller drive clutch is ON. 1244-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Pressure roller	1250	1251	1250-0, 1, 2 and 6 count up when the registration sensor is ON. 1250-3, 4, 5 and 7 count the driving time of feeding. 1250-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Oil roller	1258	1259	1258-0, 1, 2 and 6 count up when the registration sensor is ON. 1258-3, 4, 5 and 7 count the driving time of feeding. 1258-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Cleaning roller	1260	1261	1260-0, 1, 2 and 6 count up when the registration sensor is ON. 1260-3, 4, 5 and 7 count the driving time of feeding. 1260-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Pressure roller separation finger	1270	1271	1270-0, 1, 2 and 6 count up when the registration sensor is ON. 1270-3, 4, 5 and 7 count the driving time of feeding. 1270-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Fuser belt	1272	1273	1272-0, 1, 2 and 6 count up when the registration sensor is ON. 1272-3, 4, 5 and 7 count the driving time of feeding. 1272-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Fuser belt guide	1276	1277	1276-0, 1, 2 and 6 count up when the registration sensor is ON. 1276-3, 4, 5 and 7 count the driving time of feeding. 1276-8 counts up when entering the values 0 to 7 (incl. "0" clearing).
Pickup roller (RADF)	1282	1283	Counts the driving time of pickup roller (RADF). 1282-3, 5 and 7 are not counted.
Feed roller (RADF)	1284	1285	Counts the driving time of feed roller (RADF). 1284-3, 5 and 7 are not counted.
Separation roller (RADF)	1286	1287	Counts the driving time of separation roller (RADF). 1286-3, 5 and 7 are not counted.
Pickup roller (Upper drawer)	1290	1291	Counts the driving time of pickup roller (upper drawer). 1290-3, 5 and 7 are not counted.

Items	PM management setting <Procedure 4> *Indicated in 8 digits	Date of previous replacement <Procedure 2>	Remarks
Pickup roller (Lower drawer)	1292	1293	Counts the driving time of pickup roller (lower drawer). 1292-3, 5 and 7 are not counted.
Pickup roller (LCF)	1294	1295	Counts the driving time of pickup roller (LCF). 1294-3, 5 and 7 are not counted.
Feed roller (Upper drawer)	1298	1299	Counts the driving time of feed roller (upper drawer). 1298-3, 5 and 7 are not counted.
Feed roller (Lower drawer)	1300	1301	Counts the driving time of feed roller (lower drawer). 1300-3, 5 and 7 are not counted.
Feed roller (LCF)	1302	1303	Counts the driving time of feed roller (LCF). 1302-3, 5 and 7 are not counted.
Separation roller (Upper drawer)	1306	1307	Counts the driving time of separation roller (upper drawer). 1306-3, 5 and 7 are not counted.
Separation roller (Lower drawer)	1308	1309	Counts the driving time of separation roller (lower drawer). 1308-3, 5 and 7 are not counted.
Separation roller (LCF)	1310	1311	Counts the driving time of separation roller (LCF). 1310-3, 5 and 7 are not counted.
Separation roller (PFP upper drawer)	1312	1313	Counts the driving time of separation roller (PFP upper drawer). 1312-3, 5 and 7 are not counted.
Separation roller (PFP lower drawer)	1314	1315	Counts the driving time of separation roller (PFP lower drawer). 1314-3, 5 and 7 are not counted.
Separation roller (Bypass unit)	1316	1317	Counts the driving time of separation roller (bypass unit). 1316-3, 5 and 7 are not counted.
Feed roller (PFP upper drawer)	1320	1321	Counts the driving time of feed roller (PFP upper drawer). 1320-3, 5 and 7 are not counted.
Feed roller (PFP lower drawer)	1322	1323	Counts the driving time of feed roller (PFP lower drawer). 1322-3, 5 and 7 are not counted.
Feed roller (Bypass unit)	1324	1325	Counts the driving time of feed roller (bypass unit). 1324-3, 5 and 7 are not counted.
Pickup roller (PFP upper drawer)	1328	1329	Counts the driving time of pickup roller (PFP upper drawer). 1328-3, 5 and 7 are not counted.
Pickup roller (PFP lower drawer)	1330	1331	Counts the driving time of pickup roller (PFP lower drawer). 1330-3, 5 and 7 are not counted.
Pickup roller (Bypass unit)	1332	1333	Counts the driving time of pickup roller (bypass unit). 1332-3, 5 and 7 are not counted.

2.2.6 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 size. This "Print ratio (%) per standard size" calls 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 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 toner consumption becomes different depending on the user.

The major factors affecting toner consumption are as follows:

- (a) Original/Data coverage
- (b) Original/Data density
- (c) Original/Print mode
- (d) 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 above 4 factors and toner consumption in copy function are as follows:

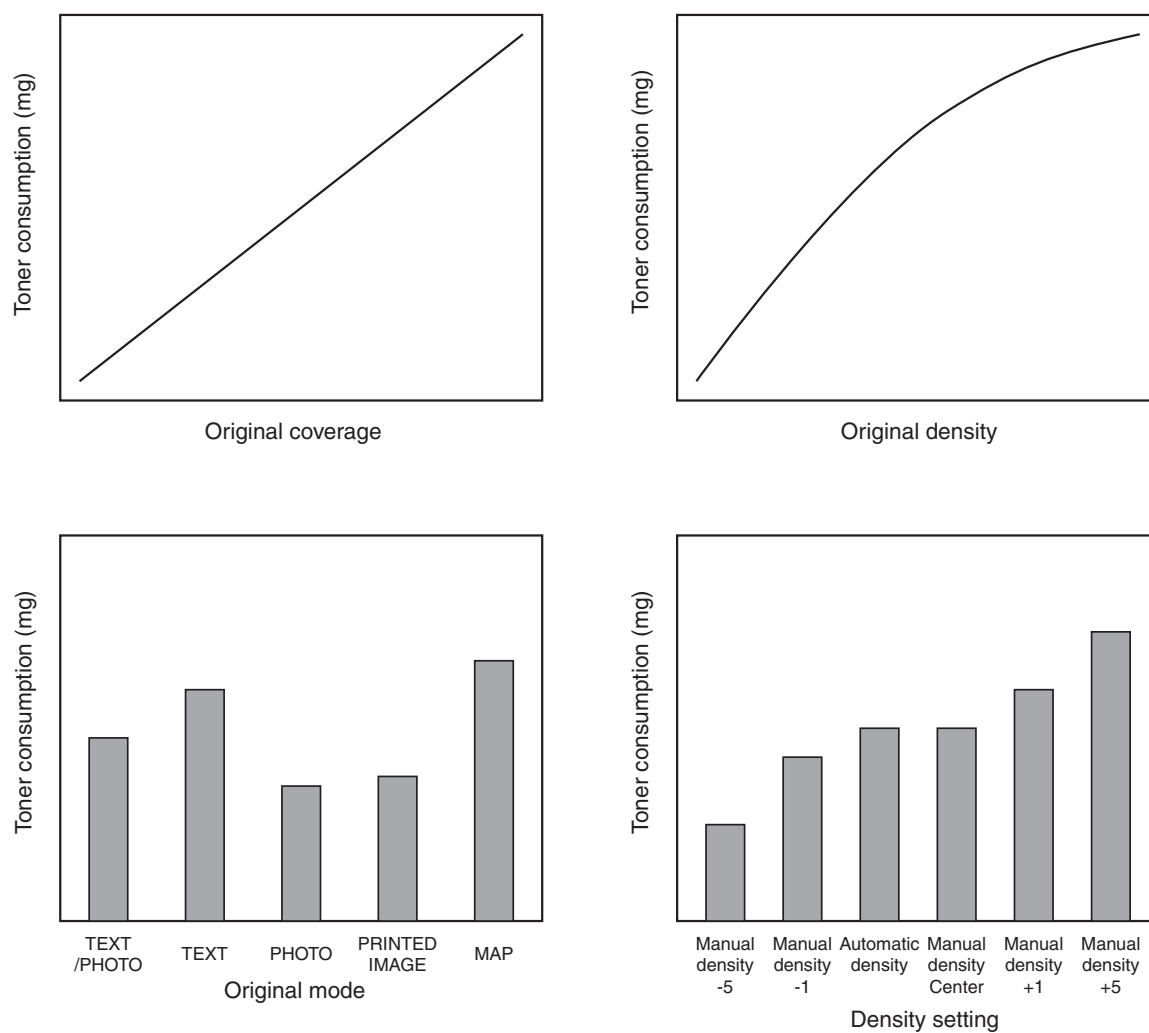


Fig. 2-203 Factors affecting toner consumption and the tendency

(3) Details of pixel counter

(a) Toner cartridge reference and service technician reference

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

- Toner cartridge reference

This is a system that integrates data between installing a new toner cartridge (when toner empty is cleared) and subsequently detecting the toner empty. When it is detected, each counter of the toner empty reference is automatically cleared. However, clearing by manual is performed with the setting mode (08-1503).

- Service technician reference

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

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

(b) 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 size (A4/LT). Printing on other than the standard size is converted by paper area ratio. The standard size is set in the setting mode (08-1500).

The examples of conversion are as follows:

- Ex.)
1. "1" is added to the print count when printing on A4/LT size.
 2. "2" is added to the print count when printing on A3/LD size. (area ratio to A4/LT: 200%)
 3. "1.49" is added to the print count when printing on B4 size. (area ratio to A4: 149%)
 4. "1.27" is added to the print count when printing on LG size. (area ratio to LT: 127%)

(c) 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.) 1. Printing 5 pages on A4/LT size with solid copy (Laser emits to all pixels.)

→ Pixel count: 100%, Print count: 5

2. Printing 5 pages on A4/LT size with blank copy (Laser never emits.)

→ Pixel count: 0%, Print count: 5

3. Printing 2 pages on A4/LT size with solid copy (Laser emits to all pixels.)

Printing 2 pages on A4/LT size with blank copy (Laser never emits.)

→ Pixel count: 50%, Print count: 4

4. Printing 3 pages on A4/LT size with 6% of laser emission

Printing 1 page on A4/LT size with 2% of laser emission

→ Pixel count: 5%, Print count: 4

5. Printing 2 pages on A3/LD size with solid copy (Laser emits to all pixels.)

→ Pixel count: 100%, Print count: 4

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

→ Pixel count: 6%, Print count: 4

(d) 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 (%).

1. Average pixel count (%)

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

2. Latest pixel count (%)

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

(e) Type of calculated data

Since this is multifunctional and color equipment, the data of pixel count is calculated for each function and color.

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)-(c) for details.

○ : With data

— : Without data

	Toner cartridge reference				Service technician reference					
					Full color/Twin color					Black
	Yellow	Magenta	Cyan	Black	Total	Yellow	Magenta	Cyan	Black	
Copy function	○	○	○	○	○	○	○	○	○	○
Printer function	○	○	○	○	○	○	○	○	○	○
FAX function	—	—	—	○	—	—	—	—	—	○
Total	○	○	○	○	○	○	○	○	○	○

Table 2-201 Type of calculated data

(f) Setting related with the pixel counter function

(f-1) Standard paper size setting

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

(f-2) Pixel counter display setting

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

(f-3) 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).

(f-4) 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:

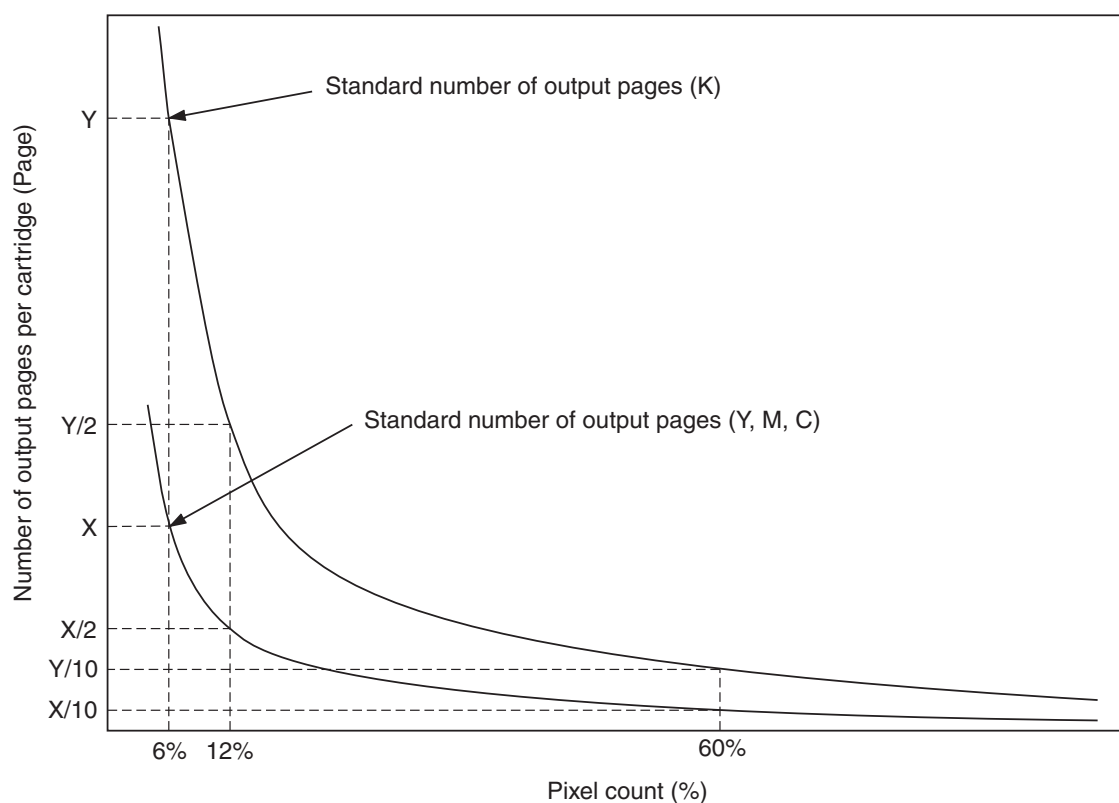


Fig. 2-204 Pixel count and number of output pages per cartridge

(5) Pixel counter confirmation

(a) 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 displayed buttons are depending on the setting of 08-1505.)

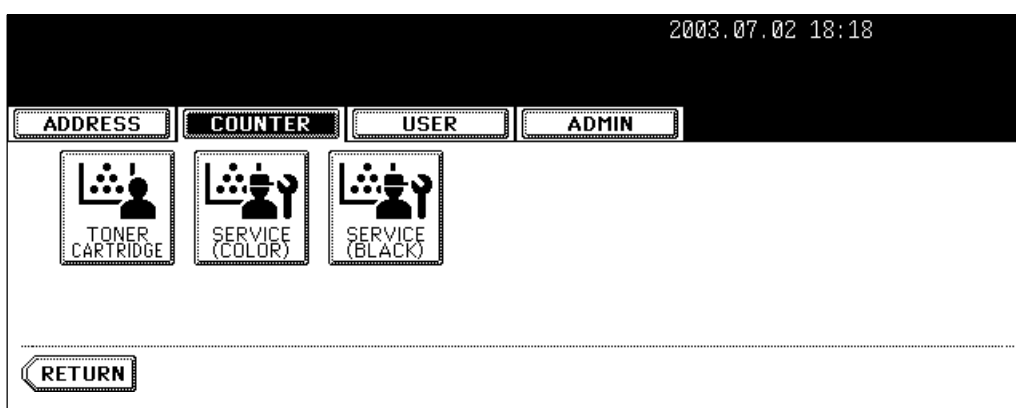


Table 2-205 Reference selection screen

When selecting and pressing the button in the above screen, each pixel counter screen is displayed.

[TONER CARTRIDGE] button: Information screen of toner cartridge reference is displayed.

[SERVICE (COLOR)] button: Information screen of service technician reference (full color) is displayed.

[SERVICE (BLACK)] button: Information screen of service technician reference (black) is displayed.

The following screen is displayed when pressing the [TONER CARTRIDGE] button.

2003.07.02 18:25

ADDRESS
COUNTER
USER
ADMIN

	Copy	Printer	Total
Print Count [LT/A4]	0	0	0
Average Pixel Count [%]	0.00	0.00	0.00
Latest Pixel Count [%]	0.00	0.00	0.00

RETURN

YELLOW(Y)

MAGENTA(M)

CYAN(C)

BLACK(K)

Table 2-206 Information screen of toner cartridge reference

The following screen is displayed when pressing the [SERVICE (COLOR)] button.

2003.07.02 18:19

ADDRESS
COUNTER
USER
ADMIN

	Copy	Printer	Total
Print Count [LT/A4]	0	0	0
Average Pixel Count [%]	0.00	0.00	0.00
Latest Pixel Count [%]	0.00	0.00	0.00

RETURN

TOTAL

YELLOW(Y)

MAGENTA(M)

CYAN(C)

BLACK(K)

Table 2-207 Information screen of service technician reference (full color)

The following screen is displayed when pressing the [SERVICE (BLACK)] button.

2003.07.02 18:19

ADDRESS
COUNTER
USER
ADMIN

	Copy	Printer	Fax	Total
Print Count [LT/A4]	299	0	0	299
Average Pixel Count [%]	0.00	0.00	0.00	0.00
Latest Pixel Count [%]	0.00	0.00	0.00	0.00

RETURN

Table 2-208 Information screen of service technician reference (black)

(b) 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.

TBD

Table 2-209 Data list of toner cartridge reference

TBD

Table 2-210 Data list of service technician reference

(c) Display in the setting mode (08)

Information of pixel count can be also checked in the setting mode (08).

For details, see “2.2.5 Setting mode (08)”.

(c-1) Print count, pixel count

		Full color/Twin color				Black	Black (at color) + Black
		Yellow	Magenta	Cyan	Black		
Copy function	Print count (page)	1557	1559	1561	1552	1553	-
	Average pixel count (%)	1609	1610	1611	1612	1613	1614
	Latest pixel count (%)	1626	1627	1628	1629	1639	-
Printer function	Print count (page)	1558	1560	1562	1554	1555	-
	Average pixel count (%)	1615	1616	1617	1618	1619	1620
	Latest pixel count (%)	1630	1631	1632	1633	1640	-
FAX function	Print count (page)	-	-	-	-	1556	-
	Average pixel count (%)	-	-	-	-	1625	-
	Latest pixel count (%)	-	-	-	-	1634	-
Total	Average pixel count (%)	1621	1622	1623	-	-	1624

Table 2-202 Pixel count code table (toner cartridge reference)

		Full color/Twin color					Black
		Total	Yellow	Magenta	Cyan	Black	
Copy function	Print count (page)	1547	-	-	-	-	1548
	Average pixel count (%)	1577	1578	1579	1580	1581	1592
	Latest pixel count (%)	1596	1597	1598	1599	1600	1606
Printer function	Print count (page)	1549	-	-	-	-	1550
	Average pixel count (%)	1582	1583	1584	1585	1586	1593
	Latest pixel count (%)	1601	1602	1603	1604	1605	1607
FAX function	Print count (page)	-	-	-	-	-	1551
	Average pixel count (%)	-	-	-	-	-	1594
	Latest pixel count (%)	-	-	-	-	-	1608
Total	Average pixel count (%)	1587	1588	1598	1590	1591	1595

Table 2-203 Pixel count code table (service technician reference)

(c-2) Pixel count distribution

		Full color/Twin color				Black
		Yellow	Magenta	Cyan	Black	
Copy function	Pixel count distribution (page)	1641	1642	1643	1644	1649
Printer function	Pixel count distribution (page)	1645	1646	1647	1648	1650
FAX function	Pixel count distribution (page)	-	-	-	-	1651

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

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

Table 2-204 Pixel count code table

(c-3) Other information

- Toner cartridge replacement counter

The toner cartridge replacement count is displayed.

08-1563: Toner cartridge Y 08-1564: Toner cartridge M
08-1565: Toner cartridge C 08-1566: Toner cartridge K

- Toner cartridge reference count started date

The toner cartridge reference count started date is displayed.

08-1515: Toner cartridge Y 05-1516: Toner cartridge M
08-1517: Toner cartridge C 05-1518: Toner cartridge K

- Service technician reference cleared date

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

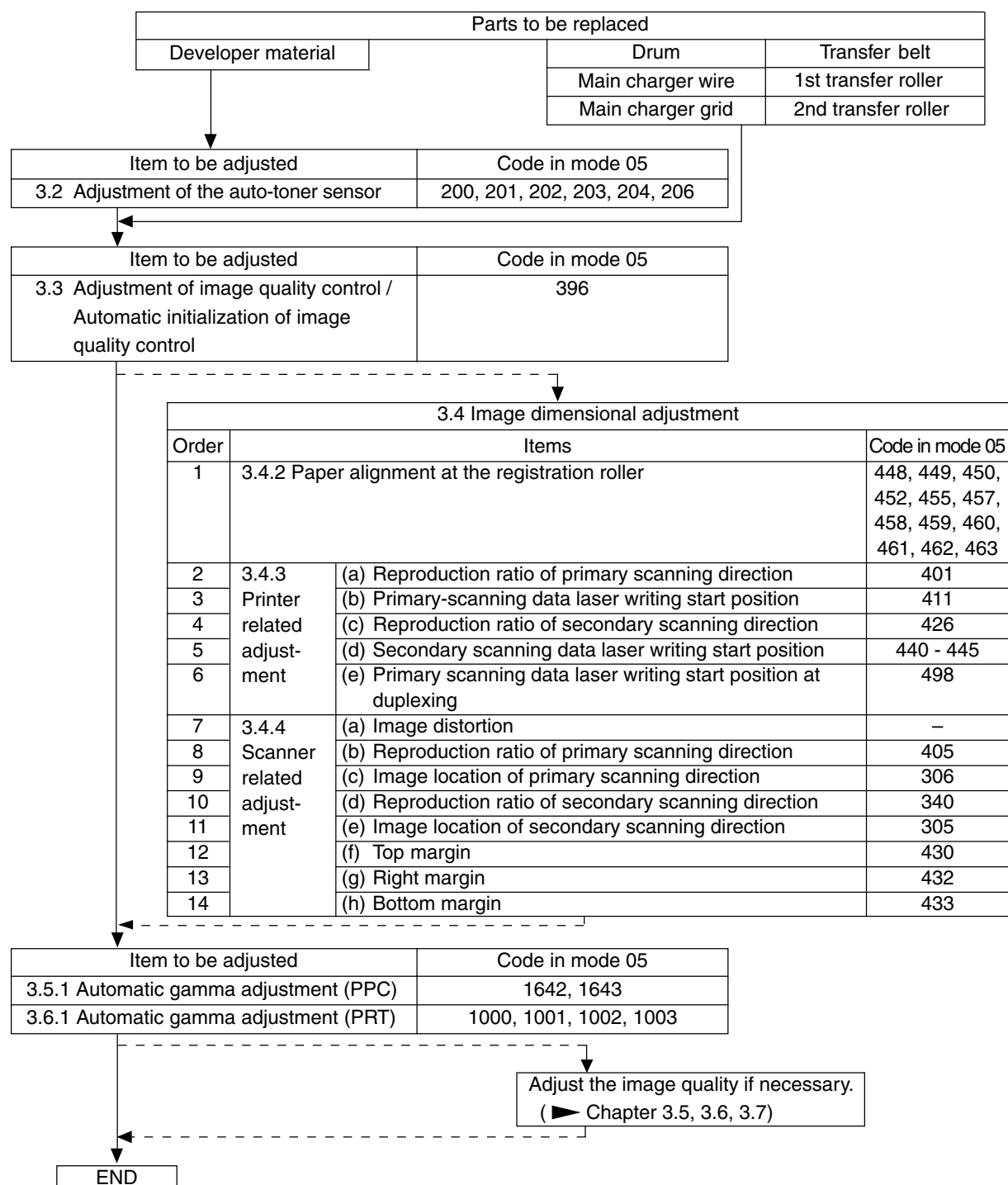
08-1511: Toner cartridge Y 05-1512: Toner cartridge M
08-1513: Toner cartridge C 05-1514: Toner cartridge K

3. ADJUSTMENT

3.1 Adjustment Order (Image Related Adjustment)

This chapter mainly explains the procedures for image related adjustment. When replacing components which have other specified instructions for adjustment, those specified instructions are to be obeyed in priority.

In the following diagram, the solid lines with arrow lead to essential adjustments, while the dotted lines lead to adjustments to be performed if necessary.



3.2 Adjustment of the Auto-Toner Sensor

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

Note:

Make sure the cleaning blade is pressed to contact with the drum before adjusting auto-toner.

- (1) Install the cleaner and developer unit.

Note:

Do not install the toner cartridge.

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

<div style="display: inline-block; vertical-align: middle;"> [0] [5] [POWER] </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">→</div>	100%	A	A3
	TEST MODE		

- (3) Key in a code and press the [START] button.

Code 200: All developer materials 201: Developer material Y 202: Developer material M
 203: Developer material C 204: Developer material K 206: Developer material Y, M, C

<div style="display: inline-block; vertical-align: middle;"> (Code) → [START] </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">→</div>	100%	200	A3
	TEST MODE		

- (4) Adjustment for “K” (Magnetometric sensor control)

- The following message will be displayed approx. 2 minutes later.

(B)	→	K: xxxV
(C)	→	
(A)	→	K: zzzV

(B): Current sensor voltages (V)

(C): No display

(A): Target values (V) for adjustment reference voltages

Note:

The current sensor voltages (V) shown in (B) automatically changes, gradually approaching the target values for adjustment reference voltages shown in (A).

- In 30 to 60 seconds, the current sensor voltages (V) in (B) are converged. Then the sensor output control values (bit values) corresponding to the initial developer material is displayed in (C).

(B)	→	K: xxxV
(C)	→	K: yyyV
(A)	→	K: zzzV

(B): Current sensor voltages (V)

(C): Sensor output control values (bit values)

(A): Target values (V) for adjustment reference voltages

Note:

Be careful that the values in (A), (B) and (C) vary with humidity.

- In case of single-color adjustment, press the [ENTER] button to store the adjustment results in memory when the control values are displayed. In case of multiple-color adjustment, it is automatically proceeded to the adjustment of next color.

(5) Adjustments for “Y”, “M” and “C” (light sensor control)

- In 15 to 45 seconds, the following message will be displayed (The time varies with the number of colors to be adjusted).

(B)	→	Y:
(C)	→	
(A)	→	Y:

(B): Current sensor voltages (V)

(C): No display

(A): Target values (V) for adjustment reference voltages

Note:

The current sensor voltages (V) shown in (B) automatically changes, gradually approaching the target values for adjustment reference voltages shown in (A).

- After approx. 5 seconds have passed, the current sensor voltages (V) in (B) are converged. Then the sensor output control values (bit values) corresponding to the initial developer material is displayed in (C).

(B)	→	Y: xxxV
(C)	→	Y: yyyV
(A)	→	Y: zzzV

(B): Current sensor voltages (V)

(C): Sensor output control values (bit values)

(A): Target values (V) for adjustment reference voltages

- In case of single-color adjustment, press the [ENTER] button to store the adjustment results in memory when the control values are displayed. In case of multiple-color adjustment, it is automatically proceeded to the adjustment of next color. When the adjustments of all colors have finished and [ENTER] is lit, press [ENTER] button to store the adjustment results in memory.

(6) Standard of adjustment value range

(A): Adjustment reference voltages (V)

Humidity(%)	K	Y	M	C
29.9 or below	2.47	1.25	1.25	1.25
30.0 - 44.9	2.49			
45.0 - 59.9	2.50			
60.0 - 74.9	2.69			
75.0 or above	2.86			

Note:

Since the adjustments for “Y”, “M” and “C” are controlled by the light sensor, the humidity correction is not performed.

(B): Current sensor voltages (V)

Humidity(%)	K	Y	M	C
29.9 or below	2.37~2.57	1.15~1.35	1.15~1.35	1.15~1.35
30.0 - 44.9	2.39~2.59			
45.0 - 59.9	2.40~2.60			
60.0 - 74.9	2.59~2.79			
75.0 or above	2.76~2.96			

Note:

Since the adjustments for “Y”, “M” and “C” are controlled by the light sensor, the humidity correction is not performed.

(7) Turn OFF the power supply.

(8) Install the toner cartridges.

3.3 Performing Image Quality Control

(1) When unpacking

Prior to image dimensional adjustment, perform the “Automatic initialization of image quality control (05-396)” procedure.

(2) When any of the following parts is replaced, be sure to perform the “Automatic initialization of image quality control (05-396)” procedure.

- Photoconductive drum
- Developer material
- Laser optical unit
- Image quality sensor
- Transfer belt
- 1st transfer roller

Note:

When performing "Automatic gamma adjustment" in addition, “Automatic initialization of image quality control (05-396)” should be done first.

(3) When performing "Automatic gamma adjustment" in cases no parts written above are replaced, do the “Forced performing of image quality closed-loop control (05-395)” procedure before "Automatic gamma adjustment".

Code	Item to be adjusted	Contents
395	Forced performing of image quality closed-loop control	<p><Procedure></p> <p>(1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment mode</p> <p>(2) Enter [395] with digital keys and press the [START] button.</p> <p>(3) "WAIT" is displayed.</p> <p>(4) When the adjustment finishes normally, the equipment returns to the initial state of adjustment mode.</p> <p>If an error has occurred, take appropriate action by referring to “5. TROUBLESHOOTING”.</p>
396	Automatic initialization of image quality control	<p><Procedure></p> <p>(1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment mode</p> <p>(2) Enter [396] with digital keys and press the [START] button.</p> <p>(3) "WAIT" is displayed.</p> <p>(4) When the adjustment finishes normally, the equipment will return to initial state of the adjustment mode.</p> <p>If an error has occurred, take appropriate action by referring to “5. TROUBLESHOOTING”.</p>

3.4 Image Dimensional Adjustment

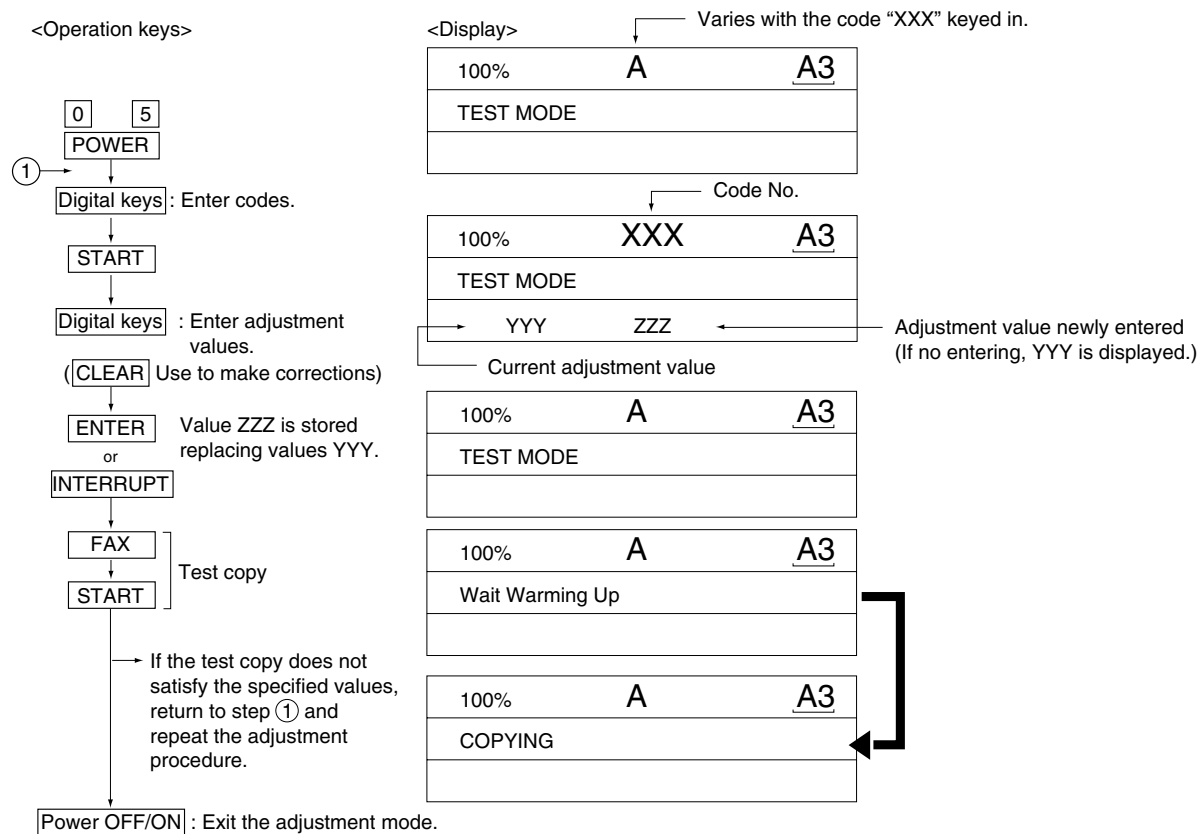
3.4.1 General description

There are several adjustment items in the image dimensional adjustment, as listed below. Prior to this image dimensional adjustment, perform the "Automatic initialization of image quality control (05-396)". When adjusting these items, the following adjustment order should strictly be observed.

Item to be adjusted		Code in mode 05
① Paper alignment at the registration roller		448, 449, 450, 452, 455, 457, 458, 459, 460, 461, 462, 463
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 transport motor rotation speed)	426
	(d) Secondary scanning data laser writing start position	440 - 445
	(e) Primary-scanning data laser writing start position at duplexing	498
③ Scanner related adjustment	(a) Image distortion	—
	(b) Reproduction ratio of primary scanning direction	405
	(c) Image location of primary scanning direction	306
	(d) Reproduction ratio of secondary scanning direction	340
	(e) Image location of secondary scanning direction	305
	(f) Image trailing edge margin	430
	(g) Right margin	432
	(h) Bottom margin	433

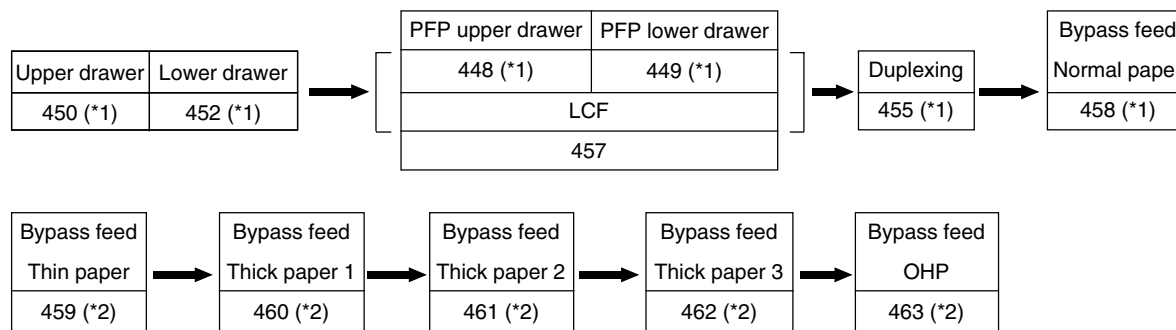
[Procedure to key in adjustment values]

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).



3.4.2 Paper alignment at the registration roller

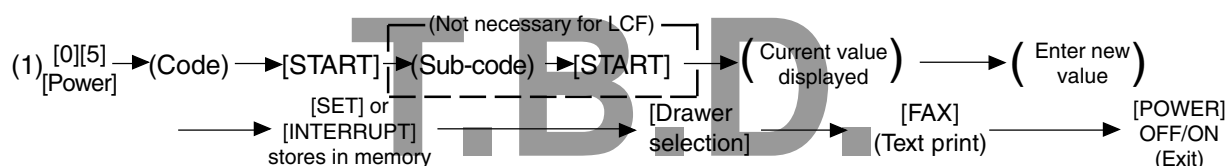
<Operation procedure> (Use codes 439 to 452 and 492 in adjustment mode (05).)



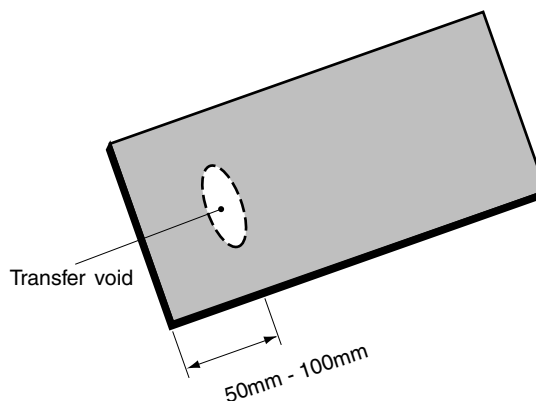
Sub-code

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

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



- (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 source.

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.

3.4.3 Printer related adjustment

(a) Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed (Printer))

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [1] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the lower drawer.)
3. 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.
<Procedure> (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. 0.5 mm/5 steps).

(b) Primary scanning data laser writing start position (Printer)

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [1] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the lower drawer.)
3. Measure the distance B from the front 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.
<Procedure> (Adjustment mode) → (Key in the code [411]) → Press [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. 0.4 mm/10 steps).
6. After the adjustment for the code 411 is completed, apply the same adjustment value for the code 410.
<Procedure> (Adjustment mode) → (Key in the code [411]) → Press [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 transport motor rotation speed (Printer))

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [1] → [FAX]. (A grid pattern with 10mm squares is printed out. Use A3/LD from the lower drawer.)
3. Measure the distance C from the 6th line at the leading edge of the paper to the 26th line of the grid pattern.
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.

<Procedure> (Adjustment mode) → (Key in code [426]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ [ENTER] or [INTERRUPT] (Stored in memory)
→ "100% A" is displayed
→ Press [1] → [FAX] → (A grid pattern is printed out.)
** The larger the adjustment value is, the longer the distance C becomes (approx. 0.5 mm/9 steps).

(d) Secondary scanning data laser writing start position

This adjustment has to be performed for each paper source.

The following table shows the order of the paper source to be adjusted, code, paper size and acceptable values.

Order for adjustment	Paper source	Code	Paper size	Acceptable value	Remarks
1	Lower drawer	441	A3/LD	0 to 255	
2	Upper drawer	440	A4/LT	0 to 40	
3	PFP or LCF	444/443	A4/LT	0 to 40	
4	Bypass feed	442	A4/LT	0 to 40	
5	Duplexing	445	A3/LD	0 to 40	Paper fed from the lower drawer

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [1] ([3] for duplexing) → [FAX]. (A grid pattern with 10mm squares is printed out.)
3. Measure the distance D from the leading edge of the paper to the 6th line of the grid pattern.
*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.
<Procedure> (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 shorter the distance D becomes (approx. 0.2 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

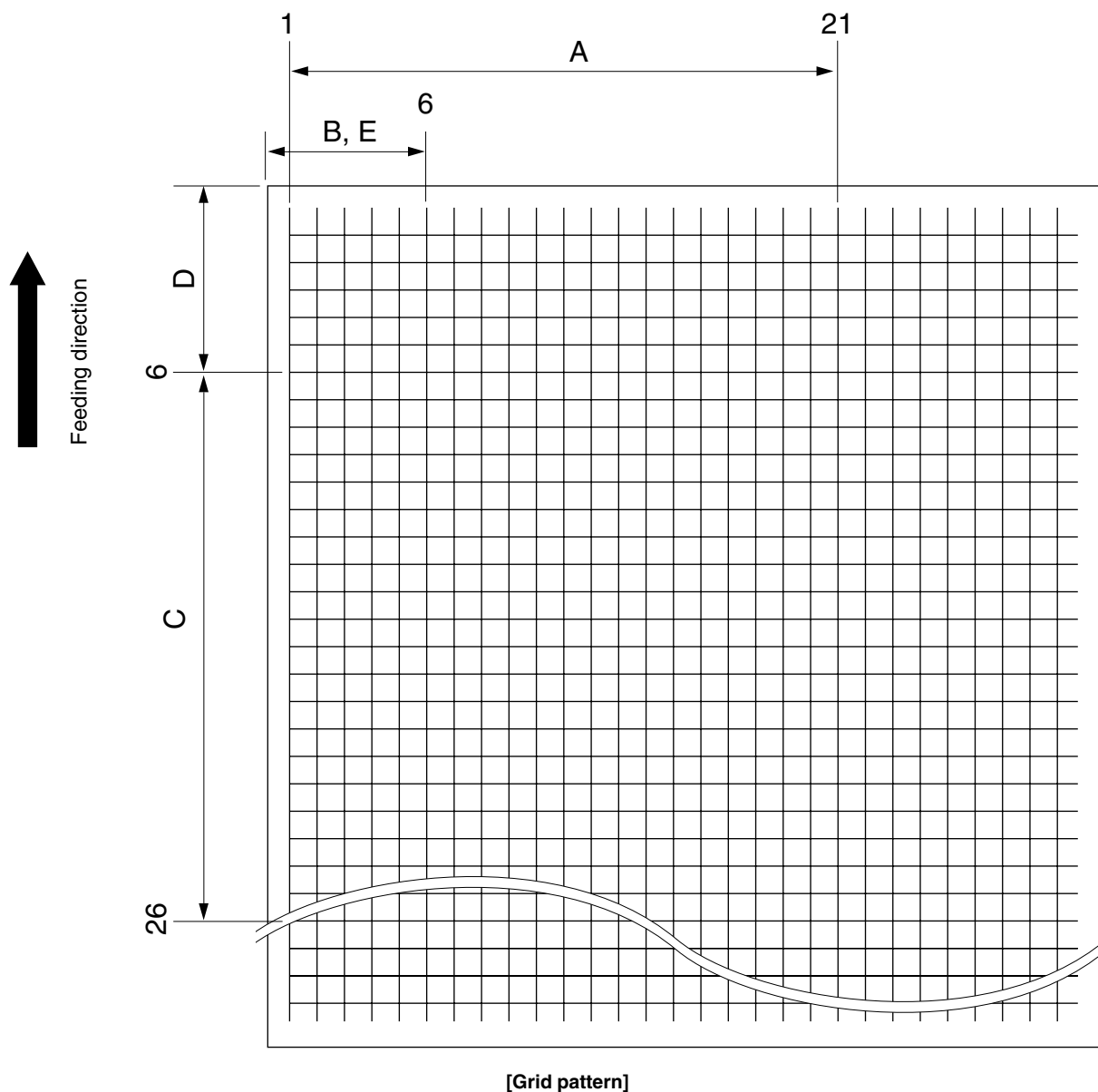
1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the lower drawer.)
3. Check the grid pattern on the test print and measure the distance E from the front edge of 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.

<Procedure> (Adjustment mode) → (Key in code [498]) → [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. 0.4 mm/10 steps).

(e-2) Adjustment for short-sized paper

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A4/LT from the upper drawer.)
3. Check the grid pattern on the test print and measure the distance E from the front 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.

<Procedure> (Adjustment mode) → (Key in the code [498]) → Press [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. 0.4 mm/10 steps).



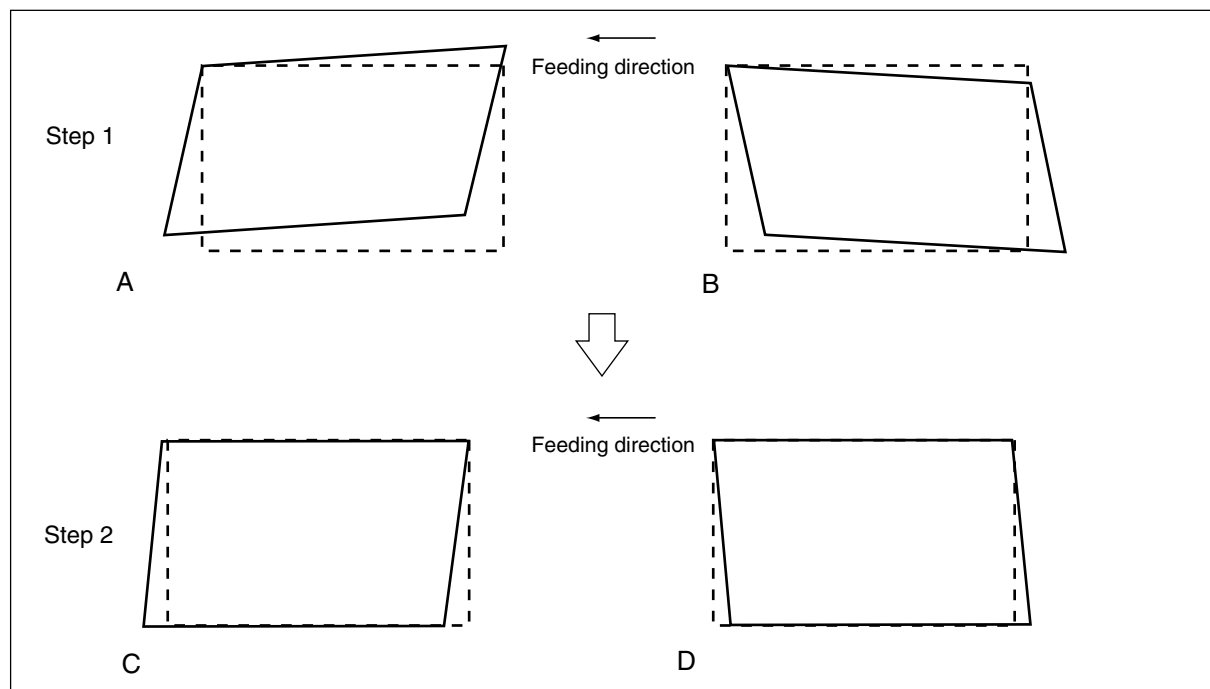
<Adjustment order>

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

- | | |
|-------------------------------------|-------------------------------------|
| A: 05-401 (Lower drawer, A3/LD) | → 200 ±0.5 mm (0.5 mm/5 steps) |
| B: 05-411 (Lower drawer, A3/LD) | → 52 ±0.5 mm (0.4 mm/10 steps) |
| | → Key in the same value for 05-410. |
| C: 05-426 (Lower drawer, A3/LD) | → 200 ±0.5 mm (0.5 mm/9 steps) |
| D: 05-440 (Upper drawer, A4/LT), | → 55 ±0.5 mm (0.2 mm/step), |
| 441 (Lower drawer, A3/LD), | |
| 442 (Bypass feed, A4/LT), | |
| 443 (LCF, A4/LT), 444 (PFP, A4/LT), | |
| 445 (Duplexing, A3/LD) | |
| E: 05-498-0 (Lower drawer, A3/LD), | → 52 ±0.5 mm (0.4 mm/10 steps) |
| 498-1 (Upper drawer, A4/LT) | |

3.4.4 Scanner related adjustment

(a) Image distortion



1. While pressing the digital keys [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).

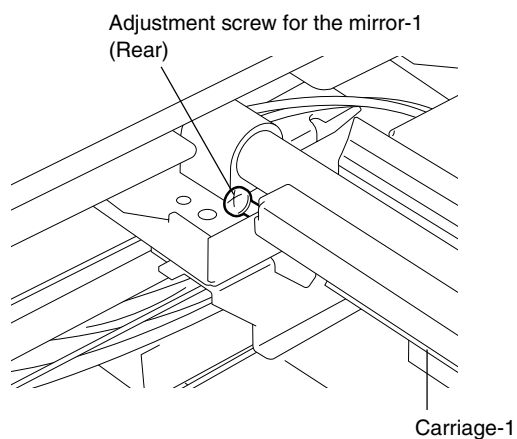
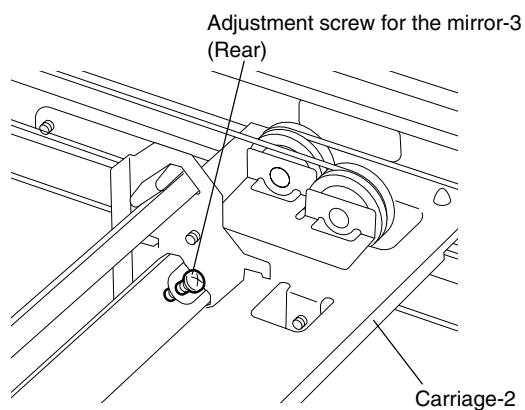
Step 2

In case of C:

Tighten the mirror-1 adjustment screw (CW).

In case of D:

Loosen the mirror-1 adjustment screw (CCW).



The following adjustments (b) to (e) should be performed with Test Chart No. TCC-1. (Refer to page 3-18.)

(b) Reproduction ratio adjustment of primary scanning direction

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
3. Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, black and text/photo.
4. Measure the distance A between M1 and M2 on the copy with a ruler.
5. Check if the distance A is within 200 ± 0.5 mm.
6. If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure> (Adjustment mode) → (Key in code [405]) → [START]
→ (Key in a value (acceptable values : 0 to 255) with digital keys)
→ [ENTER] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance A becomes (approx. 0.1 mm/step).

(c) Image location of primary scanning direction

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
3. Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, black and text/photo.
4. Measure the distance B from the left paper edge to the 5 mm line of left grid pattern on the copy with a ruler.
5. Check if the distance B is within 5 ± 0.5 mm.
6. If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure> (Adjustment mode) → (Key in code [306]) → [START]
→ (Key in a value (acceptable values : 0 to 255))
→ [ENTER] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the shorter the distance B becomes (approx. 0.04 mm/step).

(d) Reproduction ratio of secondary scanning direction

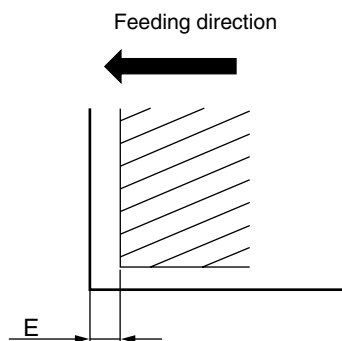
1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
3. Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, black and text/photo.
4. Measure the distance C between M3 and M4 on the copy with a ruler.
5. Check if the distance C is within 150 ± 0.5 mm.
6. If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure> (Adjustment mode) → (Key in code [340]) → [START]
→ (Key in a value (acceptable values : 0 to 255))
→ [ENTER] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance C becomes (approx. 0.22 %/step).

(e) Image location of secondary scanning direction

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
 2. Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
 3. Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, black and text/photo.
 4. Measure the distance D from the top paper edge to the 10 mm line of top grid pattern on the copy with a ruler.
 5. Check if the distance D is within 10 ± 0.5 mm.
 6. If not, use the following procedure to change values and repeat step 3. to 5. above.
- <Procedure> (Adjustment mode) → (Key in code [305]) → [START]
→ (Key in a value (acceptable values : 92 to 164))
→ [ENTER] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance D becomes (approx. 0.14/step).

(f) Top margin

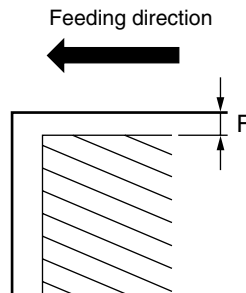
1. While pressing the digital keys [0] and [5] simultaneously, turn the power on. → (Adjustment mode)
 2. Open the platen cover or RADF.
 3. Press [FAX] → [START] to make a copy at the mode of A3/LD, 100%, black, text/photo and lower drawer.
 4. Measure the blank area E at the leading edge of the copied 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.
- <Procedure> (Adjustment mode) → (Key in the code [430]) → [START]
→ (Key in a value (acceptable values : 0 to 255))
→ Press the [ENTER] icon or the [INTERRUPT] (stored in memory).
→ ("100% A" is displayed.)
* The larger the adjustment value is, the wider the blank area becomes (approx. 0.4mm /10 steps).



(g) Right margin

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Open the platen cover or RADE.
3. Press [FAX] → [START] to make a copy at the mode of A3/LD, 100%, black, text/photo and lower 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 mm, 2-0.5 mm.
6. If not, use the following procedure to change values and repeat the steps 3 to 5 until the area falls within range.

<Procedure> (Adjustment mode) → (Key in the code [432]) → [START]
→ (Key in a value (acceptable values : 0 to 255))
→ Press the [ENTER] icon or the [INTERRUPT] (stored in memory).
→ ("100% A" is displayed.)
* The larger the adjustment value is, the wider the blank area at the right side becomes (approx. 0.4 mm/10 steps).



(h) Bottom margin

1. While pressing the digital keys [0] and [5] simultaneously, turn the power ON. → (Adjustment mode)
2. Open platen cover or RADF.
3. Press the [FAX] → [START] to make a copy at the mode of A3/LD, 100%, black, text/photo and lower 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 ± 0.5 mm.
6. If not, use the following procedure to change values and repeat the steps 2. to 4. above.

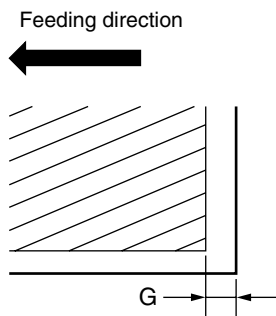
<Procedure> (Adjustment mode) → (Key in the code [433]) → [START]

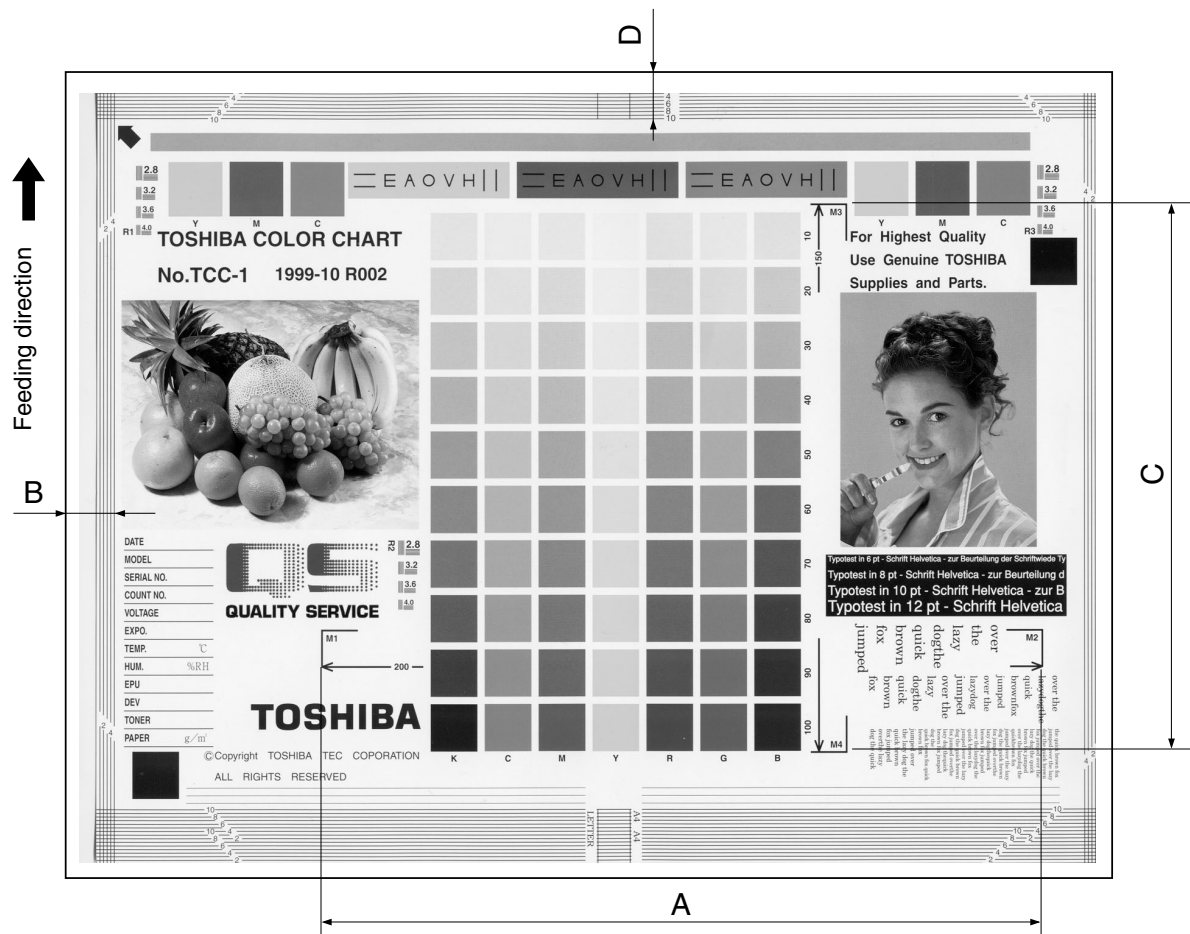
→ (Key in value (acceptable values : 0 to 255))

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

→ ("100% A" is displayed.)

* The larger the adjustment value is, the wider the blank area at the trailing edge becomes (approx. 0.4 mm/10 steps).





[Chart TCC-1]

<Adjustment order>

[0] [5] [Power ON] → (Chart TCC-1) → [FAX] → [START] (A4/LT, 100%, black and text/photo)

A: 05-405 → 200 ± 0.5 mm (0.1 mm/step)

B: 05-306 → 5 ± 0.5 mm (0.04 mm/step)

C: 05-340 → 150 ± 0.5 mm (0.22 %/step)

D: 05-305 → 10 ± 0.5 mm (0.14 mm/step)

3.5 Image Quality Adjustment (Copying Function)

3.5.1 Automatic gamma adjustment

When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment. In case the gradation reproduction of the image checked is not satisfactory, make this adjustment as described below at parts replacement.

- (1) When unpacking or any of the following parts has been or replaced, be sure to make this adjustment:
 - Laser optical unit • Photoconductive drum • Developer material
- (2) When any of the following parts are replaced or adjusted, make a copy and check the image to determine if adjustment is necessary:
 - Main charger • Transfer belt • 1st transfer roller • 2nd transfer roller

Notes:

1. Be sure that this adjustment be made after performing the image adjustment in "3.3 Adjustment of Image Quality Control" and "3.4 Image Dimensional Adjustment".
2. Normally, only the adjustment of color/black mixed pattern is needed. When the adjustment of "3.5.12 Beam level conversion setting" is made, color pattern and black pattern need to be adjusted individually.

Code	Item to be adjusted	Contents												
1642 1643 580	Automatic gamma adjustment	<p><Procedure></p> <p>(1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment mode</p> <p>(2) Select the A4/LT drawer. Key in the pattern number and press [FAX] button and output a "Patch chart for gamma adjustment".</p> <table border="1"> <thead> <tr> <th>Pattern No.</th><th>Pattern</th><th>Remarks</th></tr> </thead> <tbody> <tr> <td>3</td><td>Black</td><td>When performing code 580</td></tr> <tr> <td>4</td><td>Color/black integrated</td><td>When performing code 1642</td></tr> <tr> <td>5</td><td>Color</td><td>When performing code 1643</td></tr> </tbody> </table> <p>(3) Place the patch chart for adjustment produced in step (2) face down on the original glass, with its side, on which a black band is present, aligned against the original scale.</p> <p>(4) Enter a code with digital keys and press the [START] button. → The scanner reads the chart automatically and performs automatic gamma adjustment calculation (approx. 30 sec.).</p> <p>(5) When the adjustment has finished normally, "SET" is shown. Press the [ENTER] button to have the adjustment results reflected. (To cancel the reflection of adjustment results, press the [STOP] button.)</p> <p>In the case of an abnormal ending, "ADJUSTMENT ERROR" is shown. Press the [CLEAR] to clear the error display. When it is cleared, the control panel display will return to the ready state. Then, check if the patch chart on the original glass is placed in the wrong direction or if it is placed inclined on the original glass, and then repeat step (3) and afterward.</p>	Pattern No.	Pattern	Remarks	3	Black	When performing code 580	4	Color/black integrated	When performing code 1642	5	Color	When performing code 1643
Pattern No.	Pattern	Remarks												
3	Black	When performing code 580												
4	Color/black integrated	When performing code 1642												
5	Color	When performing code 1643												

3.5.2 Density adjustment

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

Color mode	Original mode					Item to be adjusted	Remarks
	Text/Photo	Text	Printed image	Photo	Map		
Full color	1550	1551	1552	1553	1554	Manual density mode center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255
	1560	1561	1562	1563	1564	Manual density mode dark step value	The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255
	1570	1571	1572	1573	1574	Manual density mode light step value	The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255
	1580	1581	1582	1583	1584	Automatic density mode	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Photo		
Black	503	504	501	Manual density mode center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255
	508	510	509	Manual density mode dark step value	The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255
	505	507	508	Manual density mode light step value	The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255
	514	515	512	Automatic density	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255

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

Note:

Be sure that this adjustment be made after performing "3.5.1 Automatic gamma adjustment.

<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 (acceptable values: 0 to 255).
(To correct an entered 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) Press the [FAX] button and then press the [START] button to make a test copy.
- (6) If the desired image density has not been attained, repeat step (2) to (5).

3.5.3 Color balance adjustment

The color balance is adjusted by adjusting the density of each color at full color mode. The adjustment is performed by selecting its density area from the following: low density, medium density and high density.

	Original mode					Item to be adjusted	Remarks
	Text/Photo	Text	Printed image	Photo	Map		
Yellow	1779-0	1780-0	1781-0	1782-0	1783-0	Low density	The larger the value is, the darker the color to be adjusted becomes. Acceptable values: 0 to 255.
	1779-1	1780-1	1781-1	1782-1	1783-1	Medium density	
	1779-2	1780-2	1781-2	1782-2	1783-2	High density	
Magenta	1784-0	1785-0	1786-0	1787-0	1788-0	Low density	
	1784-1	1785-1	1786-1	1787-1	1788-1	Medium density	
	1784-2	1785-2	1786-2	1787-2	1788-2	High density	
Cyan	1789-0	1790-0	1791-0	1792-0	1793-0	Low density	
	1789-1	1790-1	1791-1	1792-1	1793-1	Medium density	
	1789-2	1790-2	1791-2	1792-2	1793-2	High density	
Black	1794-0	1795-0	1796-0	1798-0	1798-0	Low density	
	1794-1	1795-1	1796-1	1798-1	1798-1	Medium density	
	1794-2	1795-2	1796-2	1798-2	1798-2	High density	

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

Note:

Be sure that this adjustment be made after performing “3.5.1 Automatic gamma adjustment”.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code of the mode to be adjusted (color and original mode) and press the [START] button.
- (3) Select the density area to be adjusted with digital keys (0, 1 or 2), and press the [START] button.
0 : Low density (L) 1 : Medium density (M) 2 : High density (H)
- (4) Key in an adjustment value.
(To correct a keyed-in value, press the [CLEAR] button.)
- (5) Press the [ENTER] button to store the value in memory. → Returns to the display in step (3).
- (6) For resetting the value, repeat step (3) to (5).
- (7) Press the [ENTER] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (8) Press the [FAX] button and then press the [START] button to make a test copy.
- (9) If the desired image density has not been attained, repeat step (2) to (8).

3.5.4 Gamma balance adjustment

The density adjustment at black mode is performed by selecting its density area from the following: low density, medium density and high density.

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Photo		
Black	590-0	591-0	592-0	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255.
	590-1	591-1	592-1	Medium density	
	590-2	591-2	592-2	High density	

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

Note:

Be sure that this adjustment be made after performing “3.5.1 Automatic gamma adjustment”.

<Procedure>

Procedure is same as that of “3.5.3 Color balance adjustment”.

3.5.5 Offsetting adjustment for background processing

The density of background and text can be adjusted as follows.

Color mode	Original mode					Item to be adjusted	Remarks
	Text/Photo	Text	Printed image	Photo	Map		
Full color	1688	1689	1690	1691	1692	Automatic density adjustment for background	The larger the value is, the darker the background becomes. (Automatic) Acceptable values: 0 to 255.
	1693	1694	1695	1696	1697	Automatic density adjustment for text	The larger the value is, the darker the text becomes. (Automatic) Acceptable values: 0 to 255.
	1698	1699	1700	1701	1702	Manual density adjustment for background	The larger the value is, the darker the background becomes. (Manual) Acceptable values: 0 to 255.
	1708	1709	1710	1711	1712	Manual density adjustment for text	The larger the value is, the darker the text becomes. (Manual) Acceptable values: 0 to 255.

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

<Procedure for automatic density adjustment>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code of the mode to be adjusted (original mode and item to be adjusted) with digital keys and press the [START] button.

<Procedure for manual density adjustment>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.6 Judgment threshold for ACS

The judgment level is adjusted for the automatic identification of whether the original set on the glass is black-and-white or color. Namely, this is to adjust the judgment level used when "Auto-color" is selected at a color mode. The adjustment is available for each of the manually-set original and the original used with the RADF.

Code	Item to be adjusted	Contents
1675	Judgment threshold for ACS when original is set manually	The larger the value is, the more an original tends to be judged as black even at an auto-color mode. The smaller value is, the more it tends to be judged as color. Acceptable values: 0 to 255.
1676	Judgment threshold for ACS when original is set on RADF	

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

<Procedure>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.7 Sharpness adjustment

If you want to make copy images look softer or sharper, perform the following adjustment. The adjustment can be made for each of the color modes and original modes independently.

Code	Color mode	Original mode	Contents
1737	Full color	Text/Photo	<ul style="list-style-type: none">The larger the value is, the sharper the image becomes; while the smaller the value is, the softer the image becomes.The smaller the value is, the less moire tends to appear.The acceptable values are 0 to 31. The center value is 16. However, 0 is equivalent to the center value.
1738		Text	
1739		Printed image	
1740		Photo	
1741		Map	
604	Black	Text/Photo	Note: You have to make adjustment by balancing between moire and sharpness.
605		Text	
606		Photo	

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

<Procedure>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.8 Setting range correction

The values of the background peak/text peak in the range correction at a black mode 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 affects the reproduction of the background density, and the values of the text peak affects that of the text density.

Original mode			Item to be adjusted	Remarks															
Text/Photo	Photo	Text																	
570	571	572	Range correction for original manually set on the original glass	The following are the default values set for each original mode. Text/Photo: 22, Photo: 12, Text: 22 Each digit stands for:															
693	694	695	Range correction for original set on the RADF	Ones place: Automatic density mode Tens place: Manual density mode The setting conditions possible are as follows: <table><tr><td></td><td>Background peak</td><td>Text peak</td></tr><tr><td>1:</td><td>fixed</td><td>fixed</td></tr><tr><td>2:</td><td>varied</td><td>fixed</td></tr><tr><td>3:</td><td>fixed</td><td>varied</td></tr><tr><td>4:</td><td>varied</td><td>varied</td></tr></table>		Background peak	Text peak	1:	fixed	fixed	2:	varied	fixed	3:	fixed	varied	4:	varied	varied
	Background peak	Text peak																	
1:	fixed	fixed																	
2:	varied	fixed																	
3:	fixed	varied																	
4:	varied	varied																	

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

<Procedure>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.9 Setting range correction (Adjustment of background peak)

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

Original mode			Item to be adjusted	Remarks
Text/Photo	Photo	Text		
532	533	534	Background peak for range correction	When the value increases, the background (low density area) of the image is not output. Accept table values: 0 to 255.

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

<Procedure>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.10 Adjustment of blurred/thin spotted text

The blurred/thin spotted text at a black mode can be set at the following codes.

Original mode		Item to be adjusted	Remarks
Text/Photo	Photo		
648		Adjustment of blurred/thin spotted text	When the value increases, the thin spotted text is improved. When the value decreases, the blurred text is improved. Accept table values: 0 to 255. 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.

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

<Procedure>

Procedure is same as that of "3.5.2 Density adjustment"

3.5.11 Adaptation to highlighter

Four modes of one touch adjustment are performed and each mode can be switched into two modes; highlighter 1 or 2. This adjustment is performed when the reproduction mode for highlighter is needed.

Code	One touch adjustment	Remarks
1769	Vivid	0: Default 1: Highlighter 1 2: Highlighter 2
1770	Clear	
1771	Warm	
1772	Cool	

Note:

The color may not always be reproduced precisely due to the characteristics of fluorescent ink.

3.5.12 Beam level conversion setting

The beam level for 4 divided smoothing is set at black mode. This adjustment enables to adjust the dot size.

Code	Item to be adjusted	Remarks
667	Beam level at black mode	The smaller the value is, the smaller the beam diameter becomes. Therefore, the smaller dot is reproduced accordingly. Acceptable values: 0 to 255.

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 “3.5.2 Density adjustment”

Notes:

1. When this adjustment is performed, “3.5.1 Automatic gamma balance (Black mode)” needs to be performed since the reproduction of density at black/white mode varies. The result of this adjustment is not reflected to color/black mixed pattern. Namely, each automatic gamma adjustment of black mode or of color mode needs to be performed individually after this adjustment.
2. After this adjustment, set “1” from 08-595 so that the correction result of black/white mode is not reflected on “User gradation correction”.

3.5.13 Maximum toner density adjustment to paper type

The maximum toner amount adhering to the paper can be controlled.

Code	Paper type	Remarks
1612	Normal paper	The smaller the value is, the toner amount adhered decreases of the high density area (ex. prevention of fusing offsetting, etc). Acceptable values : 0 to 255.
1613	Thick paper 1	
1614	Thick paper 2	
1615	Thick paper 3	
1616	OHP film	

Note:

The larger the value is, the more frequently fusing offsetting occurs.

3.6 Image Quality Adjustment (Printing Functions)

3.6.1 Automatic gamma adjustment

When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment. In case the gradation reproduction of the image checked is not satisfactory, make this adjustment as described below at parts replacement.

- (1) When unpacking or any of the following parts has been unpacked or replaced, be sure to make this adjustment:

- Laser optical unit
- Photoconductive drum
- Developer material

- (2) When any of the following parts are replaced or adjusted, make a copy and check the image to determine if adjustment is necessary:

- Main charger
- Transfer belt
- 1st transfer roller
- 2nd transfer roller

Note: Be sure that this adjustment be made after performing the image adjustment in "3.3 Adjustment of Image Quality Control" and "3.4 Image Dimensional Adjustment".

Code	Adjustment item	Contents															
1000 1001 1002 1003	Automatic gamma adjustment	<p><Procedure></p> <p>(1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment mode</p> <p>(2) Select the A4/LT drawer. Key in the pattern number and press [FAX] button and output a "Patch chart for gamma adjustment".</p> <table border="1"> <thead> <tr> <th>Pattern No.</th><th>Language/Resolution</th><th>Remarks</th></tr> </thead> <tbody> <tr> <td>47</td><td>PS/600x600dpi</td><td>When performing code 1000</td></tr> <tr> <td>48</td><td>PS/1200x600dpi</td><td>When performing code 1001</td></tr> <tr> <td>49</td><td>PCL/600x600dpi</td><td>When performing code 1002</td></tr> <tr> <td>50</td><td>PCL/1200x600dpi</td><td>When performing code 1003</td></tr> </tbody> </table> <p>(3) Place the patch chart for adjustment produced in step (2) face down on the original glass, with its side, on which a black band is present, aligned against the original scale.</p> <p>(4) Key in a code and press the [START] button. → The scanner reads the chart automatically and performs automatic gamma adjustment calculation (approx. 30 sec.).</p> <p>(5) When the adjustment has finished normally, "SCAN COMPLETE" is shown. Press the [START] button to have the adjustment results reflected. (To cancel the reflection of adjustment results, press the [STOP] button.)</p> <p>Note: After the [START] button is pressed, the printer section will operate for about 15 seconds and the density of the standard pattern for image quality control will be measured. In the case of an abnormal ending, "ADJUSTMENT ERROR" is shown. Press the [STOP] button to clear the error display. When it is cleared, the control panel display will return to the ready state. Then, check if the patch chart on the original glass is placed in the wrong direction or if it is placed inclined on the original glass, and then repeat step (3) and afterward.</p>	Pattern No.	Language/Resolution	Remarks	47	PS/600x600dpi	When performing code 1000	48	PS/1200x600dpi	When performing code 1001	49	PCL/600x600dpi	When performing code 1002	50	PCL/1200x600dpi	When performing code 1003
Pattern No.	Language/Resolution	Remarks															
47	PS/600x600dpi	When performing code 1000															
48	PS/1200x600dpi	When performing code 1001															
49	PCL/600x600dpi	When performing code 1002															
50	PCL/1200x600dpi	When performing code 1003															

3.6.2 Gamma balance adjustment

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

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

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes to be adjusted (color, language, resolution and image mode) and press the [START] button.
- (3) Key in the value corresponding to the density area to be adjusted (0, 1 or 2) and press the [START] button.
0: Low density (L) 1: Medium density (M) 2: High density (H)
- (4) Key in the adjustment value. (To correct the value once keyed-in, press [CLEAR] button.)
- (5) Press the [ENTER] button to store the value in memory. → Returns to the display in step (3).
- (6) For resetting the value, repeat step (3) to (5).
- (7) Press the [ENTER] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (8) Let the equipment restart and perform printing job.
- (9) If the desired image density has not been attained, repeat step (1) to (8).

3.6.3 Color balance adjustment

The color balance is adjusted by adjusting the density of each color. The adjustment is performed by selecting its density area from the following: low density, medium density and high density.

	PS				PCL				Density	Remarks
	600x600dpi		1200x600dpi		600x600dpi		1200x600dpi			
	Photo	Text	Photo	Text	Photo	Text	Photo	Text		
Yellow	1010-0	1014-0	1018-0	1022-0	1026-0	1030-0	1034-0	1038-0	Low	The larger the value is, the darker the color to be adjusted becomes. Acceptable values: 0 to 255.
	1010-1	1014-1	1018-1	1022-1	1026-1	1030-1	1034-1	1038-1	Medium	
	1010-2	1014-2	1018-2	1022-2	1026-2	1030-2	1034-2	1038-2	High	
Magenta	1011-0	1015-0	1019-0	1023-0	1027-0	1031-0	1035-0	1039-0	Low	
	1011-1	1015-1	1019-1	1023-1	1027-1	1031-1	1035-1	1039-1	Medium	
	1011-2	1015-2	1019-2	1023-2	1027-2	1031-2	1035-2	1039-2	High	
Cyan	1012-0	1016-0	1020-0	1024-0	1028-0	1032-0	1036-0	1040-0	Low	
	1012-1	1016-1	1020-1	1024-1	1028-1	1032-1	1036-1	1040-1	Medium	
	1012-2	1016-2	1020-2	1024-2	1028-2	1032-2	1036-2	1040-2	High	
Black	1013-0	1017-0	1021-0	1025-0	1029-0	1033-0	1037-0	1041-0	Low	
	1013-1	1017-1	1021-1	1025-1	1029-1	1033-1	1037-1	1041-1	Medium	
	1013-2	1017-2	1021-2	1025-2	1029-2	1033-2	1037-2	1041-2	High	

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

Note:

Be sure that this adjustment be made after performing "3.6.1 Automatic gamma adjustment".

<Procedure>

Procedure is same as that of "3.6.2 Gamma balance adjustment".

3.6.4 Adjustment of binary image shaving level

The binary image shaving level of text output at black mode is adjusted.

Original mode		Remarks
PS	PCL	
654	655	The larger the value is, the narrower the width of text becomes. Acceptable values: 0 to 9

<Procedure>

Procedure is same as that of “3.6.2 Gamma balance adjustment”.

3.6.5 Upper limit value at toner saving mode

The upper limit value is adjusted at toner saving mode.

Black mode		Color mode				Remarks
PS	PCL	PS	PS	PCL	PCL	
		600x600dpi	1200x600dpi	600x600dpi	1200x600dpi	
664	665	1055	1056	1057	1058	The smaller the value is, the lighter the density mode of text becomes. Acceptable values: 0 to 255.

<Procedure>

Procedure is same as that of “3.6.2 Gamma balance adjustment”.

3.7 Image Quality Adjustment (Scanning Function)

3.7.1 Gamma balance adjustment

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

Item to be adjusted	Original mode			Gray scale mode	Remarks
	Black Text/Photo	Black Text	Black Photo		
Low density	880-0	881-0	882-0	883-0	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255.
Medium density	880-1	881-1	882-1	883-1	
High density	880-2	881-2	882-2	883-2	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code corresponding to the desired original mode and press the [START] button.
- (3) Key in the value corresponding to the density area to be adjusted (0, 1 or 2) and press the [START] button.
0: Low density (L) 1: Medium density (M) 2: High density (H)
- (4) Key in the adjustment value. (To correct the value once keyed-in, press [CLEAR] button.)
- (5) Press the [ENTER] button to store the value in memory. → Returns to the display in step (3).
- (6) For resetting the value, repeat step (3) to (5).
- (7) Press the [ENTER] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (8) Let the equipment restart and perform scanning job.
- (9) If the desired image density has not been attained, repeat step (1) to (8).

3.7.2 Density adjustment (Black mode)

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

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

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

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value (acceptable values: 0 to 255).
(To correct a 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 restart and perform scanning job.
- (6) If the desired image density has not been attained, repeat step (2) to (5).

3.7.3 Background adjustment (Gray scale mode)

The adjustment level of background center value and the control of background adjustment key are adjusted.

Code	Item to be adjusted	Remarks
848	Center value	The larger the value is, the background becomes darker. The smaller the value is, the background becomes lighter. Acceptable values: 0 to 255
858	Dark step value	The larger the value is, the image of the "dark" steps becomes darker. Acceptable values: 0 to 255
853	Light step value	The larger the value is, the image of the "light" steps becomes lighter. Acceptable values: 0 to 255

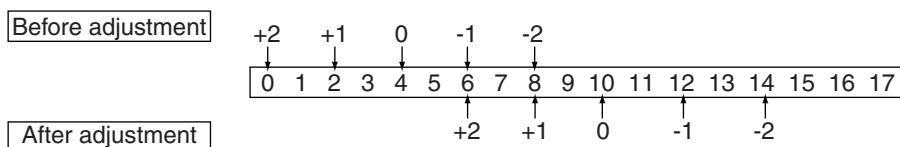
<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values : 0 to 255. (To correct the value once keyed-in, press [CLEAR] button.)
- (4) Press the [SET] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform scanning job.
- (6) If the desired image density has not been attained, repeat step (1) to (5).

3.7.4 Background adjustment (Color mode)

The adjustment level of background center value is adjusted. The control value of background adjustment key is automatically adjusted to the same level as the adjusted center value.

For example, when the control value of background adjustment key ranges from 0 to 6, the background center value (-2 to +2) is used to be the range from 6 to 14 accordingly.



Code	Original mode	Remarks
1070	Text	The larger the value is, the background becomes lighter. Acceptable values: 0 to 50
1071	Printed image	
1072	Photo	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values : 0 to 50. (To correct the value once keyed-in, press [CLEAR] button.)
- (4) Press the [ENTER] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform scanning job.
- (6) If the desired image density has not been attained, repeat step (1) to (5).

3.7.5 Judgment threshold for ACS

The judgment level is adjusted for the automatic identification of whether the original set on the glass is black or color. Namely, this is to adjust the judgment level used when "Auto color selection" is selected at a color mode. The adjustment is available for both the manually-set original and the original used with the RADF.

Code	Item to be adjusted	Contents
1065	Judgment threshold for ACS when original is set manually	The larger the value is, the more an original tends to be judged as black even at an auto-color mode. The smaller the value is, the more it tends to be judged as color. Acceptable values: 0 to 255
1066	Judgment threshold for ACS when original is set on RADF	

<Procedure>

Procedure is same as that of "3.7.2 Density adjustment (Black mode)"

3.7.6 Sharpness adjustment

If you want to make scan images look softer or sharper, perform the following adjustment. The adjustment can be made for each of the color modes and original modes independently.

Code	Color mode	Original mode	Contents
1086	Full color	Text	<ul style="list-style-type: none">• The larger the value is, the sharper the image becomes; while the smaller the value is, the softer the image becomes.• The smaller the value is, the less moire tends to appear.• The acceptable values are 0 to 31. The center value is 16. However, 0 is equivalent to the center value. Note: You have to make adjustment by balancing between moire and sharpness.
1087		Printed image	
1088		Photo	
840	Black	Text/Photo	
841		Text	
842		Photo	
843	Gray scale		

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

<Procedure>

Procedure is same as that of "3.7.2 Density adjustment (Black mode)"

3.7.7 Setting range correction

The values of the background peak / text peak in the range correction at a black mode 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 affects the reproduction of the background density and the values of the text peak affects that of the text density.

Black			Gray scale	Item to be adjusted	Remarks
Original mode					
Text/Photo	Text	Photo			
825	826	827	828	Range correction for original manually set on the original glass	The following are the default values set for each original mode. Photo/Text: 12, Text: 12, Photo: 12, Gray scale: 12 Each digit stands for: Ones place: Automatic density mode
830	831	832	833	Range correction for original set on the RADF	Tens place: Manual density mode The setting conditions possible are as follows: <div><div>Background peak</div><div>Text peak</div><div>1: fixed fixed</div><div>2: varied fixed</div><div>3: fixed varied</div><div>4: varied varied</div></div>

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

<Procedure>

Procedure is same as that of "3.7.2 Density adjustment (Black mode)"

3.7.8 Setting range correction (Adjustment of background peak)

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

Black			Gray scale	Item to be adjusted	Remarks
Original mode					
Text/Photo	Text	Photo			
835	836	837	838	Background peak for range correction	When the value increases, the back-ground (low density section) of the image is not output. Acceptable vales: 0 to 255

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

<Procedure>

Procedure is same as that of "3.7.2 Density adjustment (Black mode)"

3.7.9 Fine adjustment of black density

The density of black side on scanned image is adjusted at color-scanning.

Code	Original mode	Remarks
1075	Text	The larger the value is, the black side of the image becomes darker. Acceptable values: 0 to 255
1076	Printed image	
1077	Photo	

Note:

Be careful for the value not to be too large since gradation reproducibility error occurs in darker side.

<Procedure>

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

3.7.10 RGB conversion method selection

The color space conversion method of image to be printed out is decided at color-scanning.

Code	Original mode	Remarks
1080	Text	0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB
1081	Printed image	
1082	Photo	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values : 0 to 3. (To correct the value once keyed-in, press [CLEAR] button.)
- (4) Press the [ENTER] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform scanning job.

If the desired image density has not been attained, repeat step (1) to (5).

3.8 High-Voltage Transformer Setting

3.8.1 General description

The high-voltage transformers (PS-HVT-359) supply high-voltage to the parts related to charge, development, transfer and drum cleaning.

The main high-voltage transformer has the following high-voltage outputs.

CH1:	Main charger wire
CH2:	Main charger grid bias
CH3:	Color developer bias
CH4:	Black developer bias
CH5:	1st transfer roller bias
CH6:	2nd transfer roller bias
CH7:	Cleaning blade bias

Note: Make sure not to lose the data sheets which are attached to the high-voltage transformers.

Use these sheets for the following setting.

Never move the fixed volumes of resistors since output adjustment is performed when the devices are shipped.

3.8.2 Setting at the replacement of high-voltage transformer

After replacing a high-voltage transformer, be sure to enter the data shown on the data sheets (main charger grid bias, color/black developer biases and 1st/2nd transfer roller biases) noted above according to the following procedure.

- (1) While pressing the digital keys [0] and [5] simultaneously, turn ON the power.
- (2) Key in the adjusting codes in the table below and press the [START] button.
- (3) Key in the adjusting value corresponding to each code on the attached sheets, and then press [ENTER] or [INTERRUPT].

Adjusting code	Item to be adjusted	Adjusting value
334	Main charger grid bias lower limit value	Refer to the data sheets
335	Main charger grid bias upper limit value	
338	Color developer bias lower limit value	
339	Color developer bias upper limit value	
372	Black developer bias lower limit value	
373	Black developer bias upper limit value	
250	1st transfer roller bias lower limit value	
251	1st transfer roller bias upper limit value	
252	2nd transfer roller bias lower limit value (+)	
253	2nd transfer roller bias upper limit value (+)	
254	2nd transfer roller bias lower limit value (-)	
255	2nd transfer roller bias upper limit value (-)	

- (4) Key in all the codes in the above table by repeating (2) and (3).
- (5) Turn OFF the power.

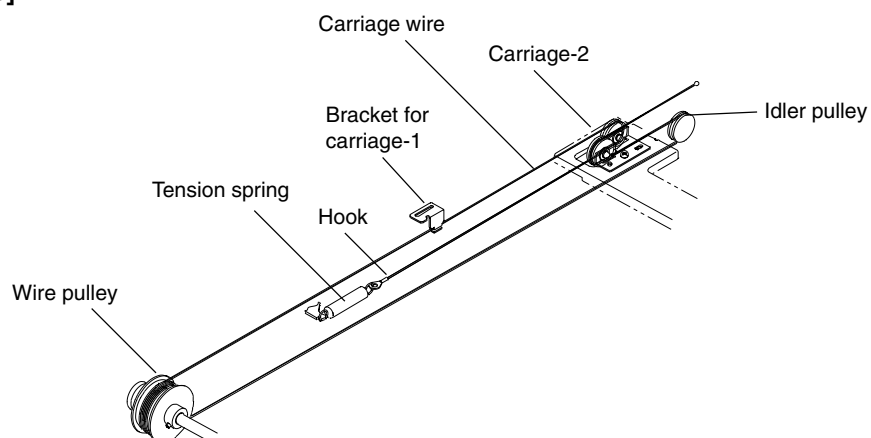
3.9 Adjustment of the Scanner Section

3.9.1 Carriages

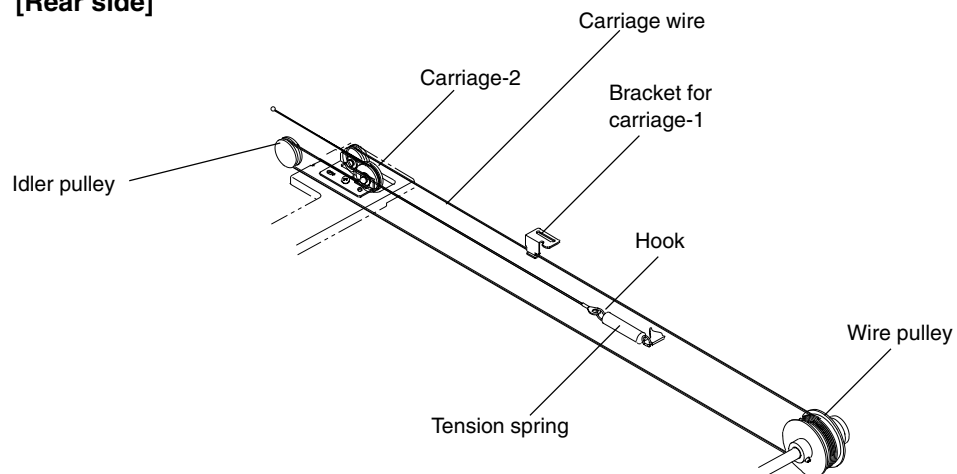
(1) Installing carriage wires

When replacing the carriage wires, refer illustrations below:

[Front side]



[Rear side]

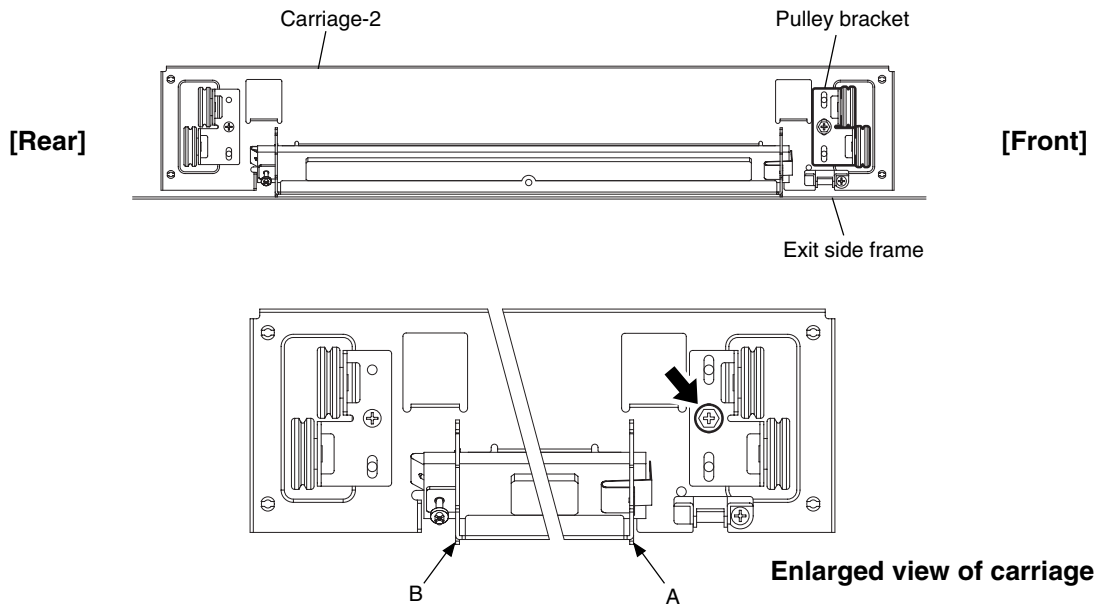


Adjustment of the carriage wire tension is not necessary since a certain tension is applied to the carriage wires by the tension springs.

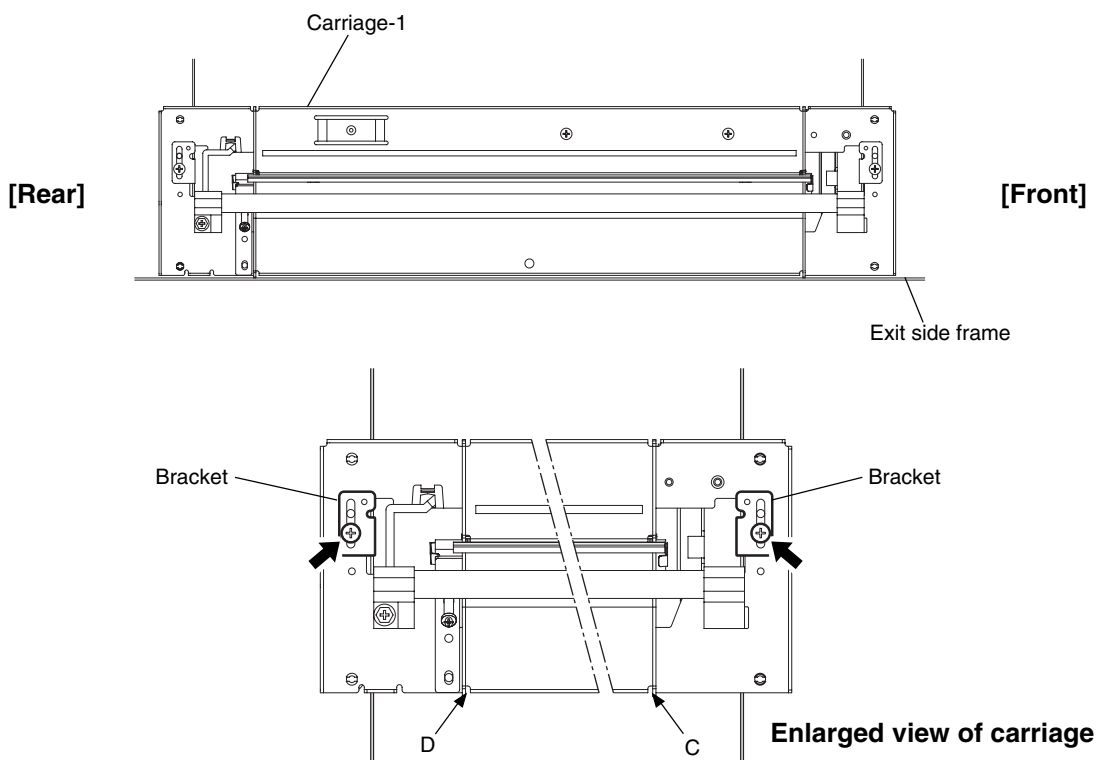
Note: Make sure the tension applied to the wire is normal.

(2) Adjusting carriages-1 and -2 positions

- a. Move the carriage-2 toward the exit side.
- b. 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.



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



(3) Assembling carriage wires

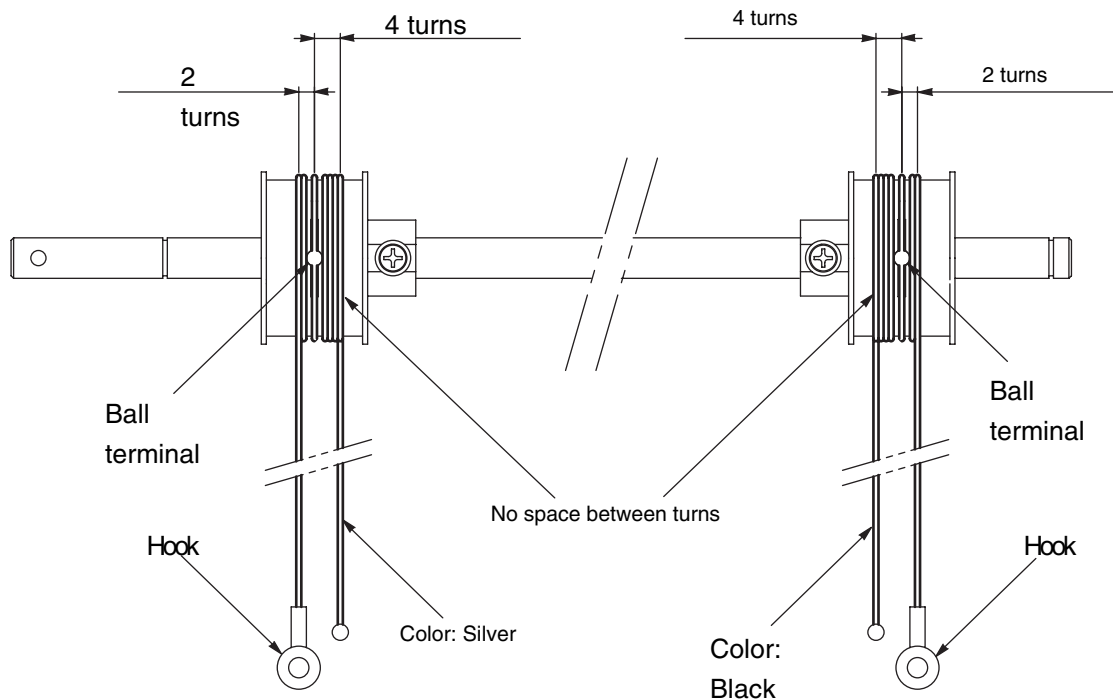
Winding the wire around the wire pulley:

- a. Pull the $\varnothing 3$ ball terminal located at the center of the wire into a hole on the wire pulley. One end of the wire with a hook attached comes to the outside.
- b. 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

Notes:

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

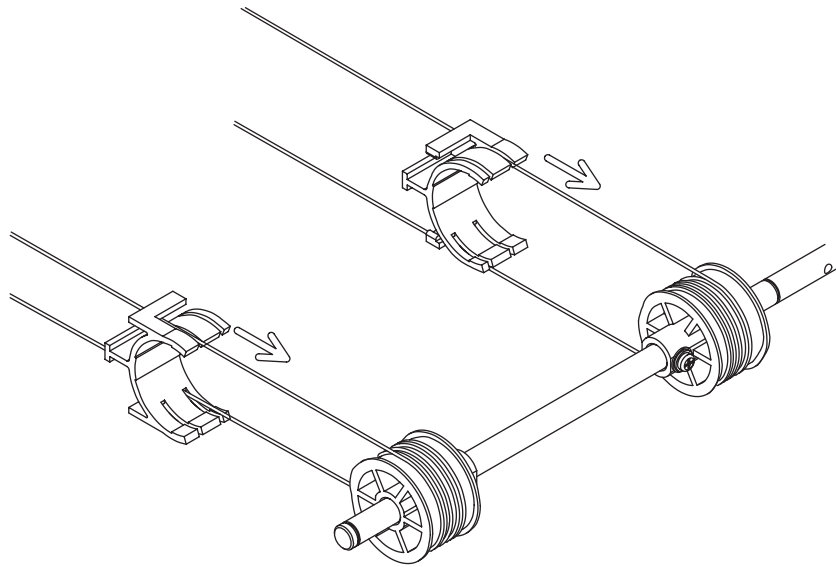
- Do not twist the wire.
- Wind the wires tightly so that they are in complete contact with the surface of the pulleys.
- Each turn should be pushed against the previously wound turn so that there is no space between them.



- c. After winding the wires around the pulleys, attach the wire holder jigs not to loosen the wires.

Notes:

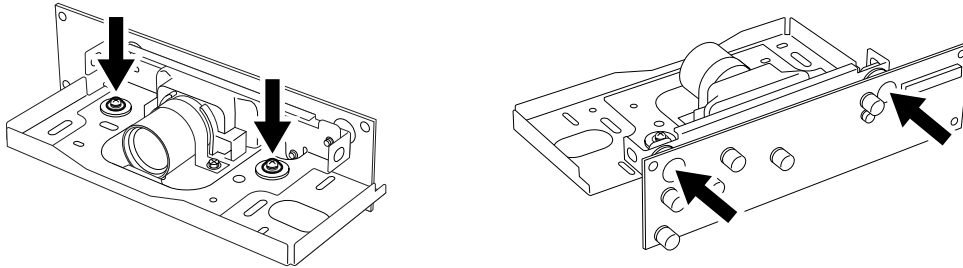
1. When the wire holder jig is attached, make sure that the wire is not shifted or loosened.
2. The wire should come out of the slot of the wire holder jig and be passed under the arm of it.



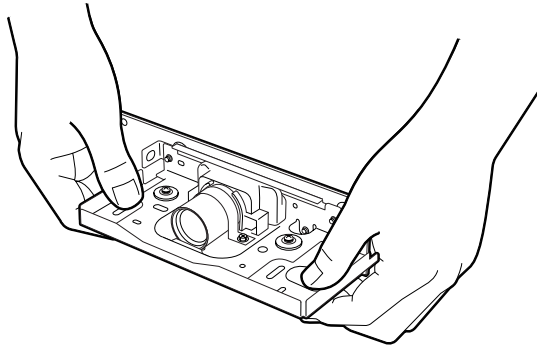
3.9.2 Lens unit

(1) Replacing the lens unit

- The lens unit and some part of its components must not be readjusted or 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).

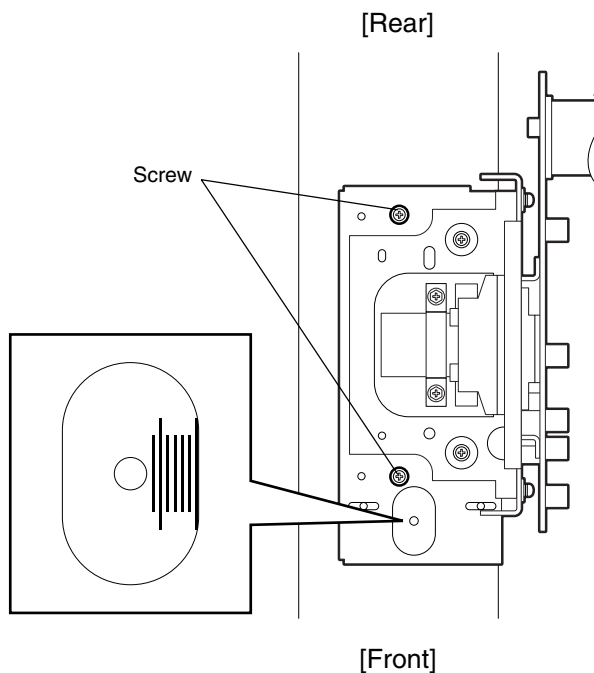


(2) Installation of lens unit

Follow the procedure below when installing and replacing the lens unit.

<Procedure>

1. Attach the lens unit and fix it temporarily with 2 screws.
2. Match the center scale of the plate in which the unit is to be installed and the rightmost scale of the adjusting hole on the lens unit plate.



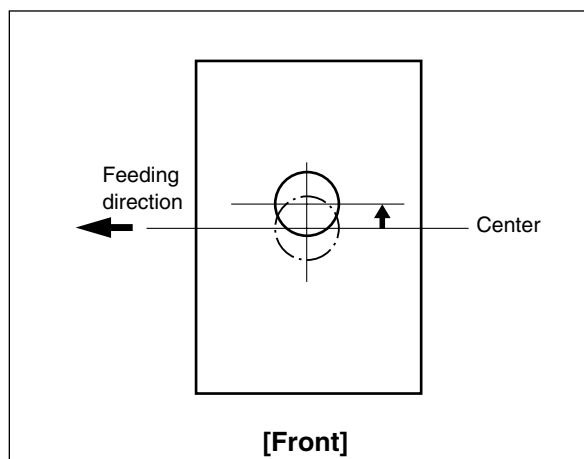
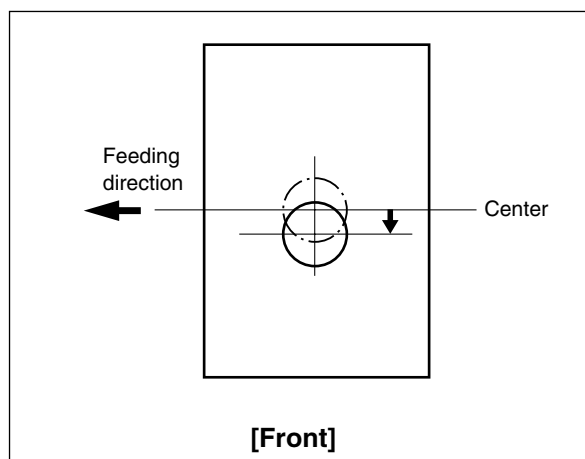
3. Tighten 2 screws securely to fix the lens unit while pushing it to the rear side.

3.10 Adjustment of the Paper Feeding System

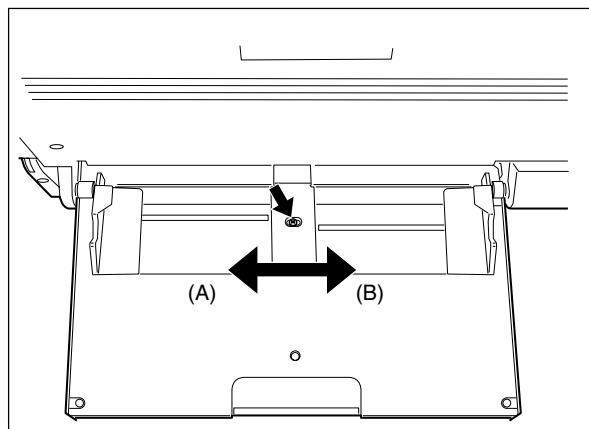
3.10.1 Sheet sideways deviation caused by paper feeding

<Procedure>

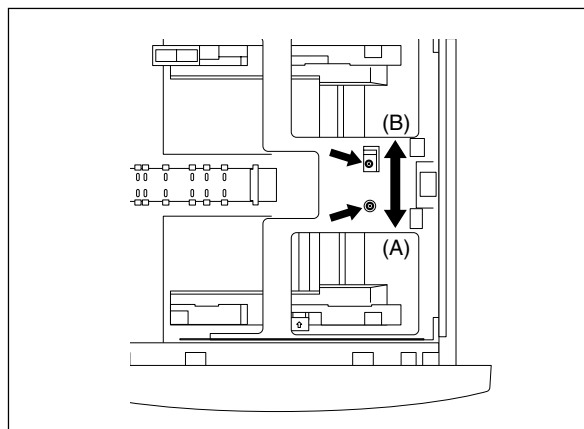
- The center of the printed image shifts to the front side. → Move the guide to the front side (Arrow (A) direction in the lower figure).
- The center of the printed image shifts to the rear side. → Move the guide to the rear side (Arrow (B) direction in the lower figure).



• Bypass feeding



• Drawer feeding



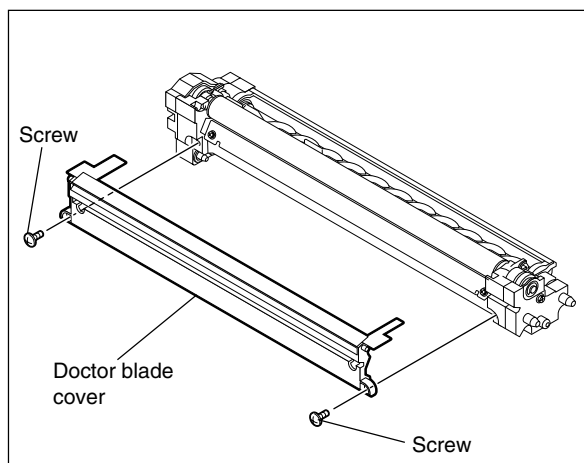
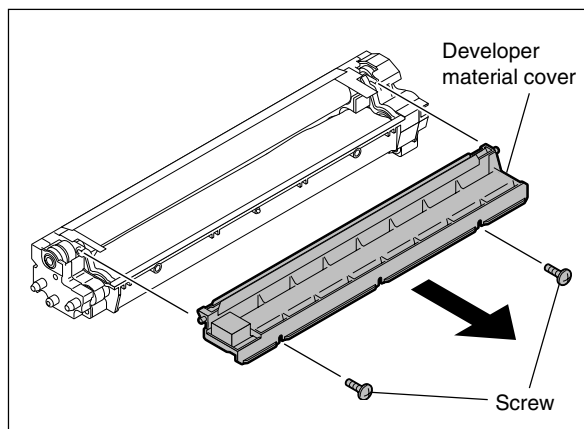
3.11 Adjustment of the Developer Unit

3.11.1 Doctor-to-sleeve gap (black developer unit)

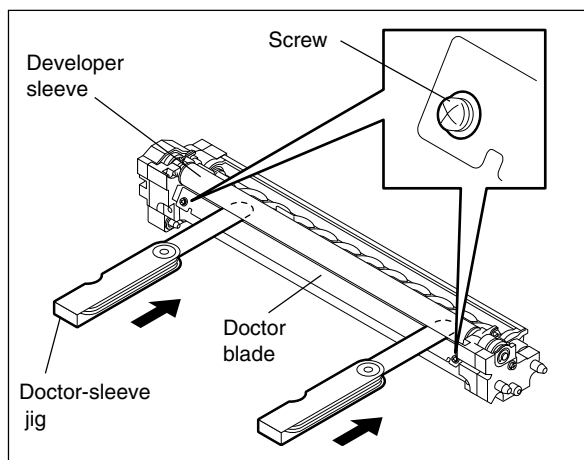
Adjustment tool to use: Doctor-sleeve jig

Adjusting procedure:

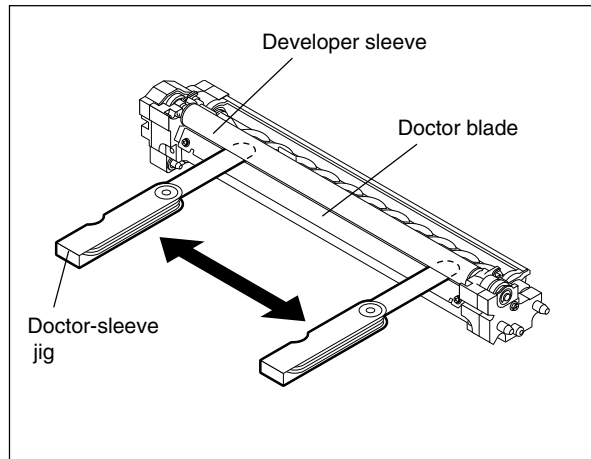
- (1) Take off the black developer unit from the equipment.
- (2) Remove 2 screws and take off the developer material cover. Then discharge the developer material.
- (3) Remove 2 screws and take off the doctor blade cover.



- (4) Loosen 2 doctor blade fixing screws. Insert the gauge "0.55" of the doctor sleeve jig between the developer sleeve and doctor blade to adjust the gap, and tighten the screws.



- (5) Insert the gauge “0.50” of the doctor sleeve jig into the gap between the developer sleeve and doctor blade and make sure that the gauge can move smoothly in the front/rear direction. In addition, confirm that the gauge “0.60” cannot be inserted into the gap.



Notes:

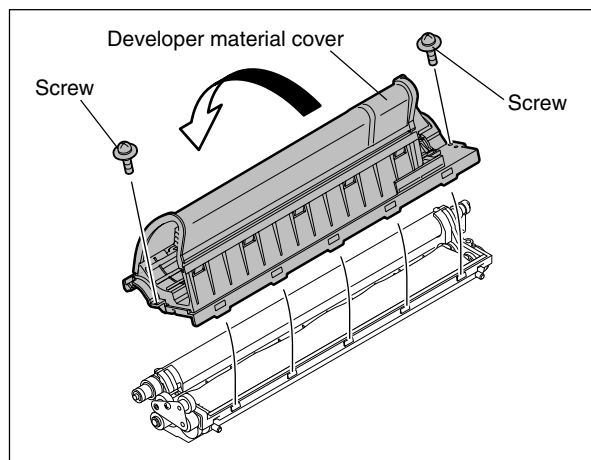
1. When confirming and adjusting the gap between the developer sleeve and the doctor blade, insert the gauges into the gap after rotating the developer sleeve so that its marking faces the doctor blade.
2. While reattaching the black developer unit cover, set the latches securely.

3.11.2 Doctor-to-sleeve gap (color developer unit)

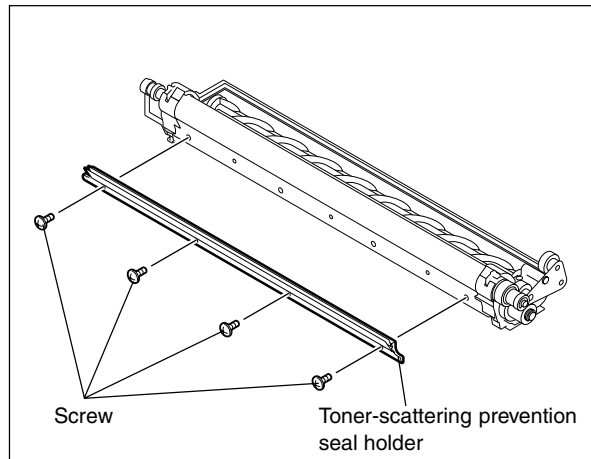
Adjustment tool to use : Doctor-sleeve jig

Adjusting procedure:

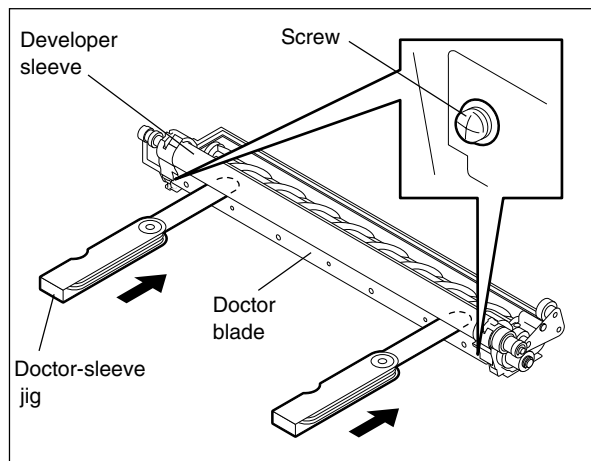
- (1) Take off the color developer unit from the equipment.
- (2) Remove 2 screws and take off the developer material cover. Then discharge the developer material.



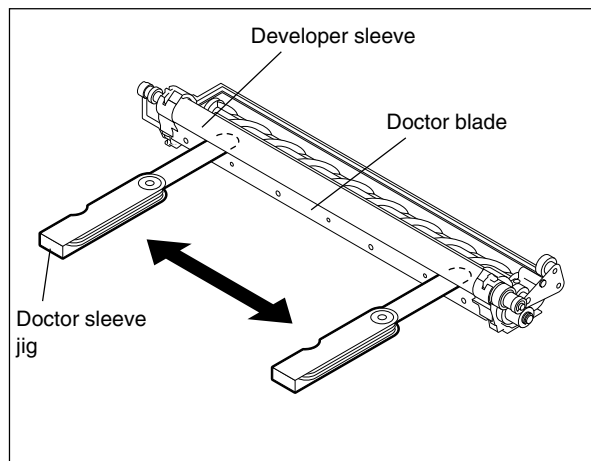
- (3) Remove 4 screws and the toner-scattering prevention seal holder.



- (4) Loosen 2 doctor blade fixing screws. Insert the gauge "0.55" of the doctor sleeve jig between the developer sleeve and doctor blade to adjust the gap, and tighten the screws.



- (5) Insert the gauge "0.50" of the doctor sleeve jig into the gap between the developer sleeve and doctor blade and make sure that the gauge can move smoothly in the front/rear direction. In addition, confirm that the gauge "0.60" cannot be inserted into the gap.



Notes:

1. When confirming and adjusting the gap between the developer sleeve and the doctor blade, insert the gauges into the gap after rotating the developer sleeve so that its marking faces the doctor blade.
2. While reattaching the color developer unit cover, set the latches securely.

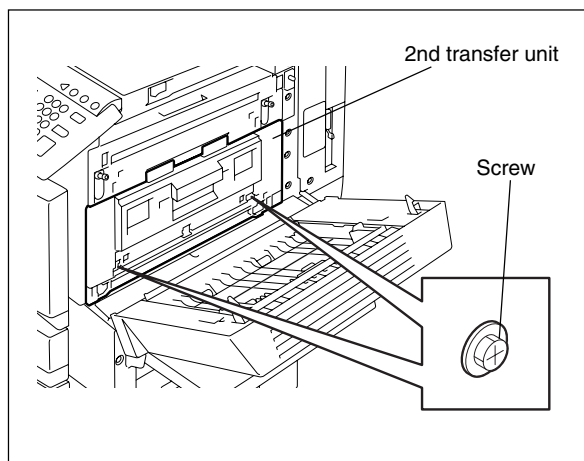
3.12 Adjustment of the Transfer Section

3.12.1 Adjusting the 2nd transfer roller contact position

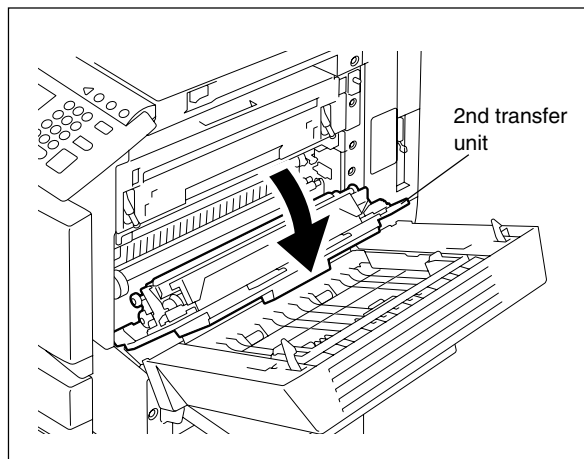
Perform this adjustment every time the transfer belt unit or 2nd transfer unit is taken off.

Adjusting procedure:

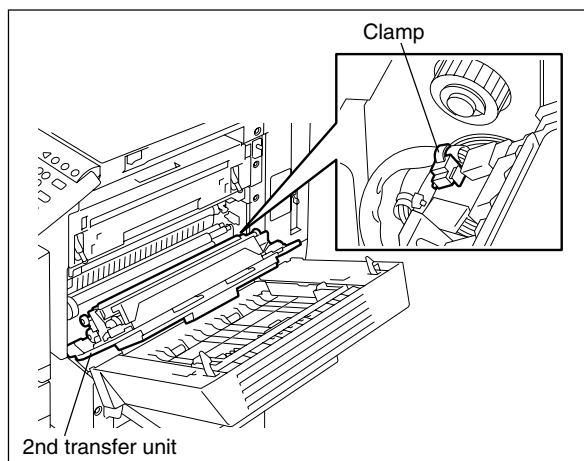
- (1) Loosen 2 screws of the 2nd transfer unit.



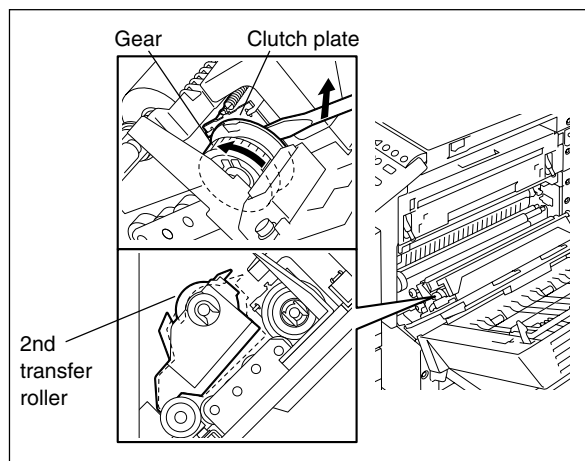
- (2) Open the 2nd transfer unit.



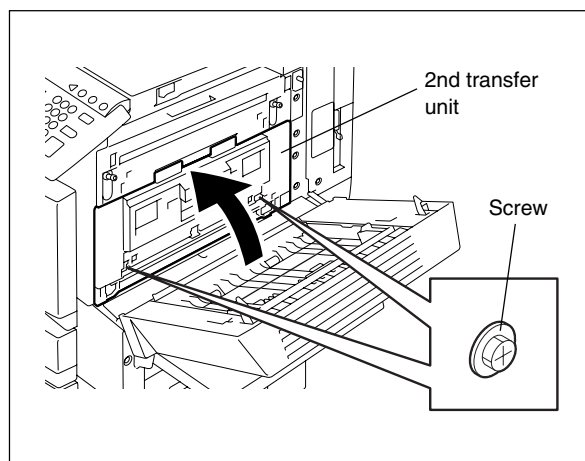
- (3) Remove the harness clamp fixing the high-voltage harness.



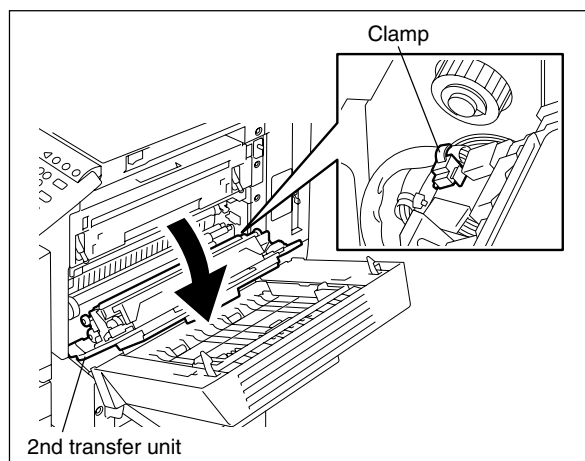
- (4) Rotate the gear and release the clutch while pushing the plate of the clutch with a flat-head screwdriver. Make the 2nd transfer roller most protruded.



- (5) Close the 2nd transfer unit and tighten 2 screws.



- (6) Open the 2nd transfer unit and fix the harness clamp released at step (3).



- (7) Close the 2nd transfer unit.

3.13 Adjustment of the RADF (MR-3015)

TBD

3.14 Adjustment of the Finisher (MJ-1022)

3.14.1 Adjusting the jogging plate width

- (1) Remove the right inner cover and the rear cover.
- (2) Adjust the front jogging plate to the home position.

- ① Set SW1 on the finisher controller PC board as shown in Fig. 3-101.
- ② Press SW2 twice on the finisher controller PC board.
 - The front jogging plate moves to the home position.

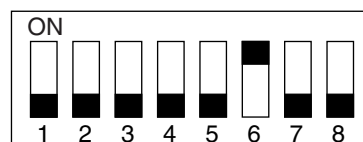


Fig. 3-101

- (3) Adjust the rear jogging plate to the home position.

- ① Set SW1 on the finisher controller PC board as shown in Fig. 3-102.
- ② Press SW2 twice on the finisher controller PC board.
 - The rear jogging plate moves to the home position.



Fig. 3-102

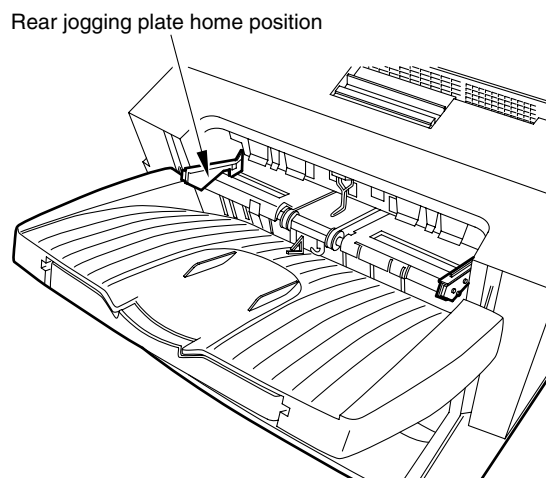


Fig. 3-103

- (4) Measure the jogging width (standard at 317 mm).
- (5) Remove the processing tray.
- (6) Loosen the screw on the home position sensor plate at the front.

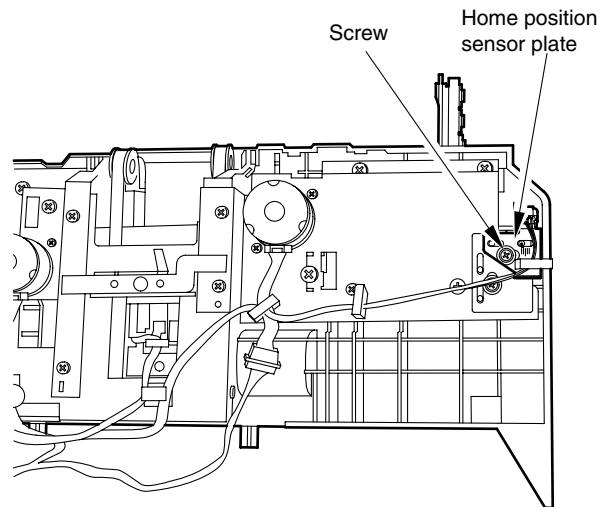


Fig. 3-104

- (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 (2), the difference from the standard is +2 mm, it requires relocation of the sensor [3] in the direction of arrow A by 2 mm.

EX. 2

If the width is 316 mm in step (2), the difference from the standard is -1 mm; it requires relocation of the sensor [3] in the direction of arrow B by 1 mm.

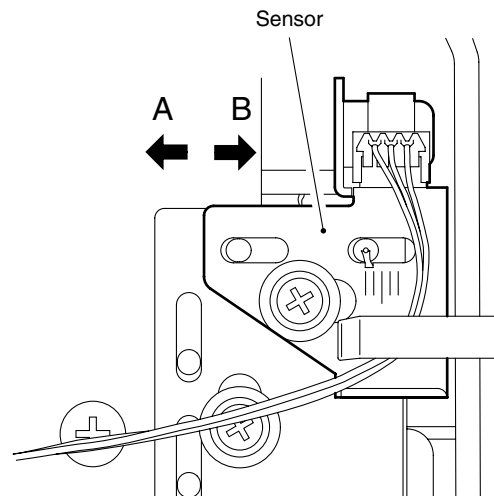


Fig. 3-105

3.14.2 Adjusting the angle of the jogging plate

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

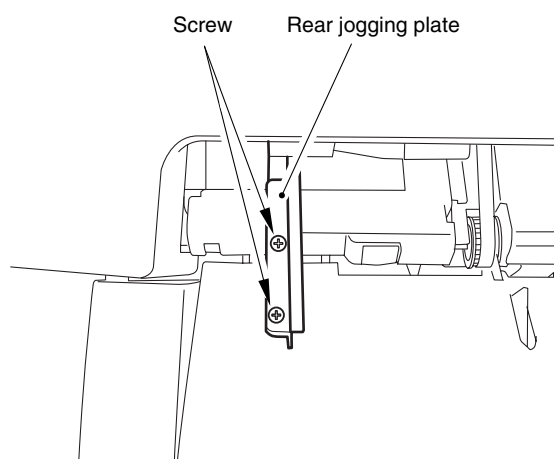


Fig. 3-106

- (2) Place several sheets of A4/LT paper on the processing tray, and adjust the rear jogging plate. (At this time, adjust the gap between the paper and the front end of the rear jogging plate so that it is 0 to 0.5 mm.)

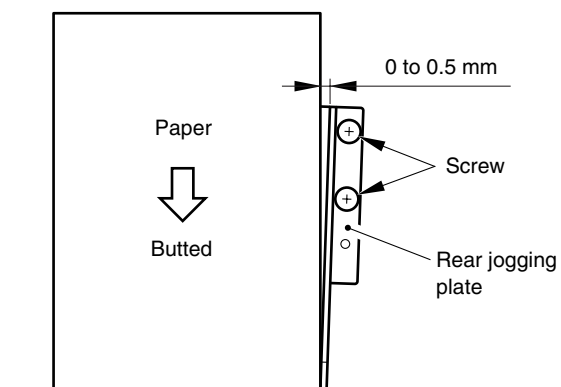


Fig. 3-107

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

3.14.3 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

- (1) Remove the processing tray unit.
- (2) Loosen the mounting screw of the front/rear jogging plate adjusting plate; then, move the adjusting plate to the left and the right.

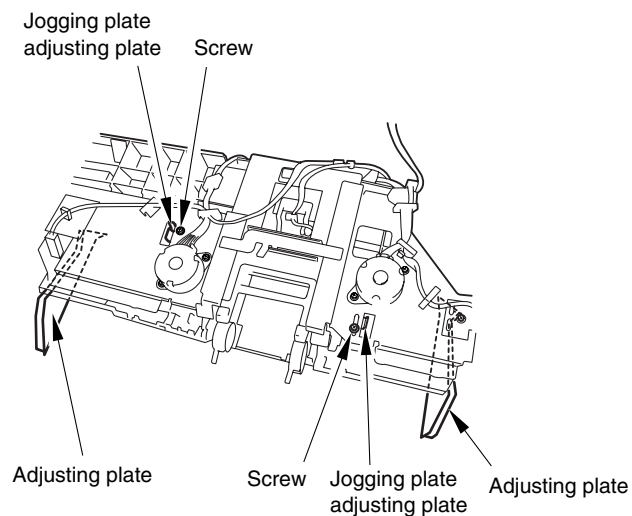


Fig. 3-108

- (3) Tighten the screw so that the overlap between the flag of the front/rear jogging rack plate and the sensor is 1.5 to 2.0 mm.

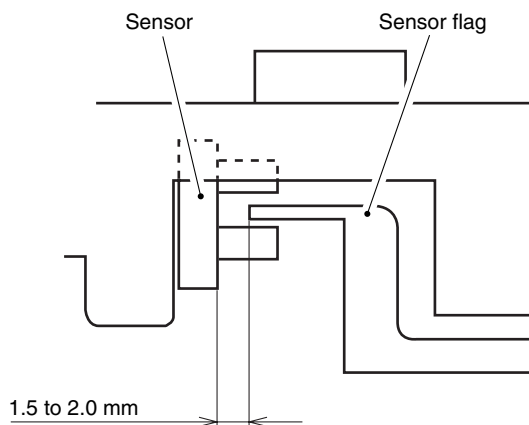


Fig. 3-109

3.14.4 Adjusting the tension of the stack processing motor belt

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

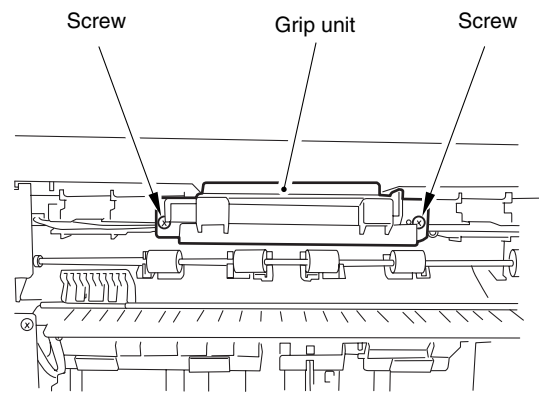


Fig. 3-110

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

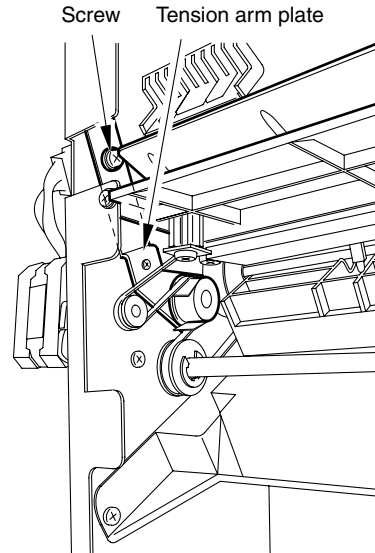


Fig. 3-111

- (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.

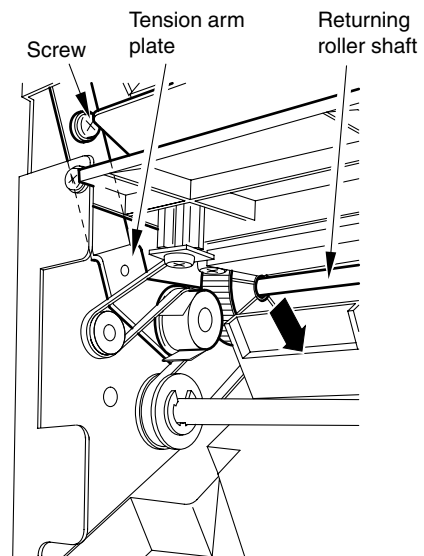


Fig. 3-112

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

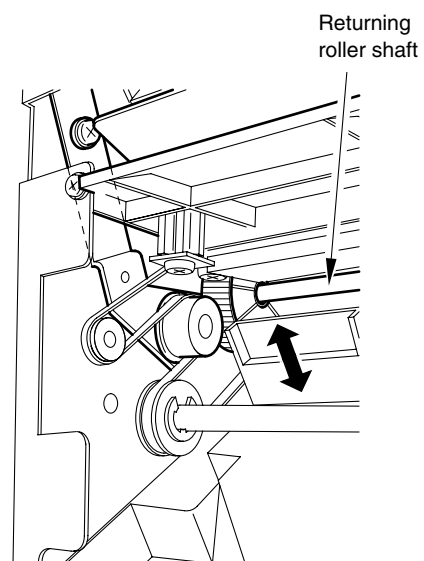


Fig. 3-113

3.14.5 Releasing the stack tray guide lever fixing plate

- (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.

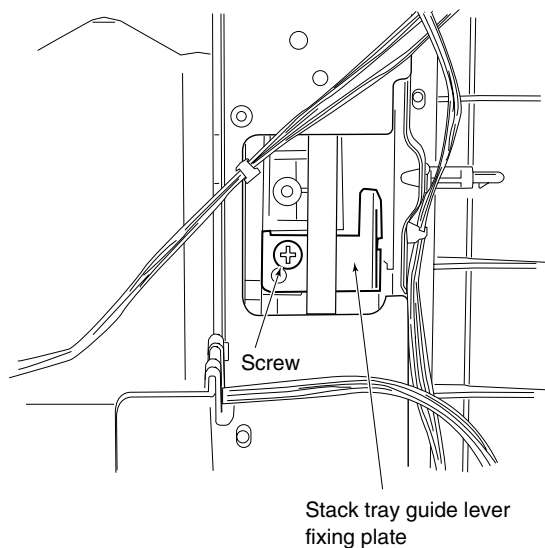


Fig. 3-114

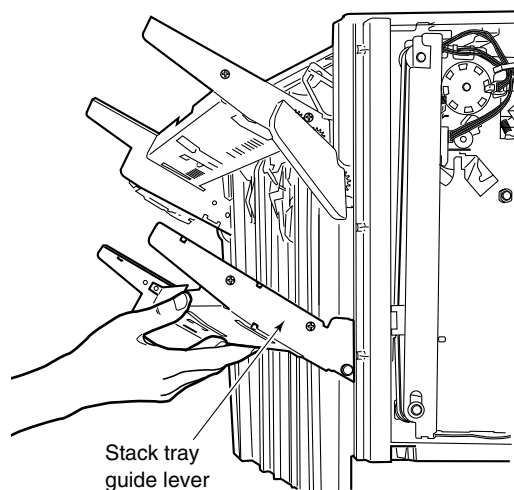


Fig. 3-115

3.14.6 Adjustment of the upper tray angle

- (1) Remove the front cover.

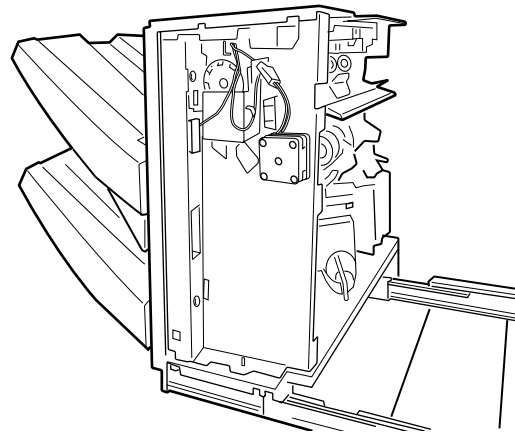


Fig. 3-116

- (2) Loosen the screw denoted with the arrow.

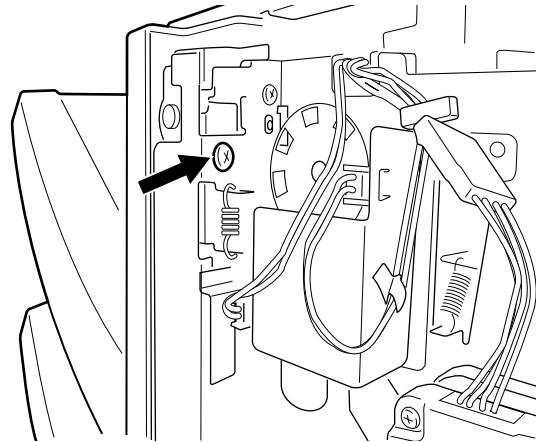


Fig. 3-117

- (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.

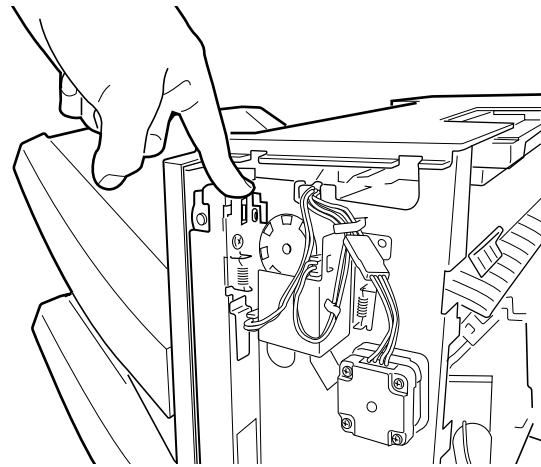


Fig. 3-118

- (4) After the height 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.

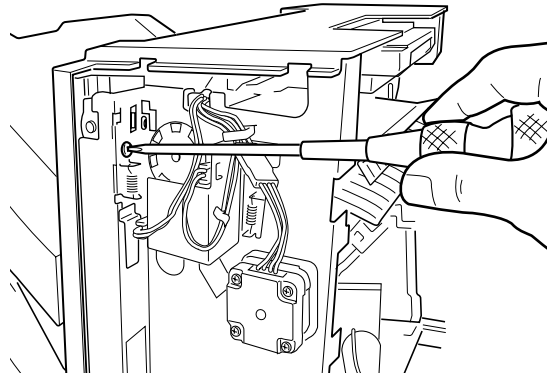


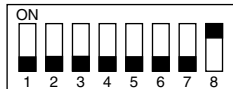
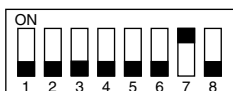
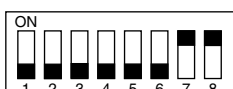




Fig. 3-119

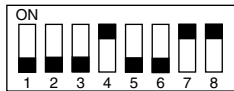
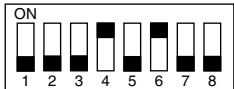
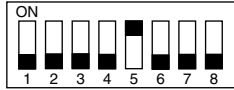
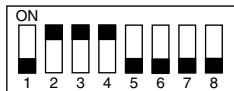
3.14.7 DIP switch functions

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 flash).
- 3) Press the pushing switch (SW2) twice to initiate the operation in question. (LED2 will remain on during operation).

Setting	Item	Operation		To stop
	Delivery motor	The delivery roller rotates in a specific speed.		<ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4).
	Stack processing motor (stack delivery lever)	The stack delivery lever moves to its home position and stops.		<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
	Stack processing motor (returning roller)	The returning roller moves to the home position and stops.		<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
	Front jogging plate motor	When not at the home position	The front jogging plate moves to its home position and stops.	<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
		When at the home position	The front jogging plate moves over a specific position and stops at the home position.	<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
	Rear jogging plate motor	When not at the home position	The rear jogging plate moves to the home position and stops.	<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
		When at the home position	The rear jogging plate moves over a specific distance and stops.	<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).
	Upper stack tray motor (up)	The upper stack tray moves up and stops when the upper stack tray upper limit sensor turns ON.		<ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4).
	Upper stack tray motor (down)	The upper stack tray moves down and stops when the lower stack tray lower limit sensor turns ON.		<ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4).

Setting	Item	Operation	To stop
	Lower stack tray motor (up)	The lower stack tray moves up and stops when the lower stack tray upper limit sensor is turned ON.	<ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4).
	Lower stack tray motor (down)	The lower stack tray moves down and stops when the lower stack tray lower limit sensor is turned ON.	<ul style="list-style-type: none"> • Press SW2 again. • Turn OFF the joint sensor (S4).
	Stapler motor	The stapler motor stops after the stapling operation.	<ul style="list-style-type: none"> • Press the stapler safety switch (S14). • Turn OFF the joint sensor (S4).
	Shipping position operation	The upper and lower stack trays move to the shipping position and stop.	<ul style="list-style-type: none"> • Turn OFF the joint sensor (S4).

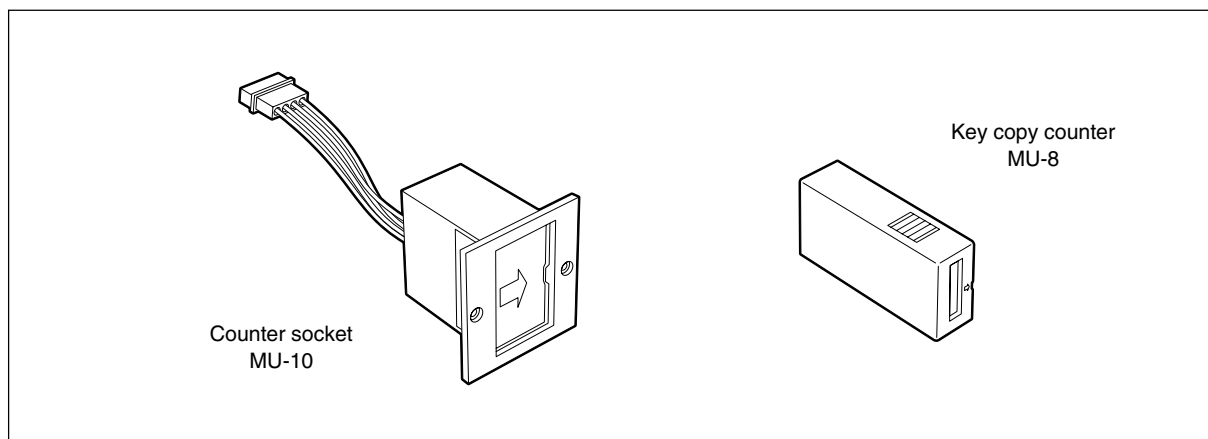
Note: Perform the shipping position operation when the finisher is packed again.

3.15 Adjustment of the Finisher (MJ-1023/24)

TBD

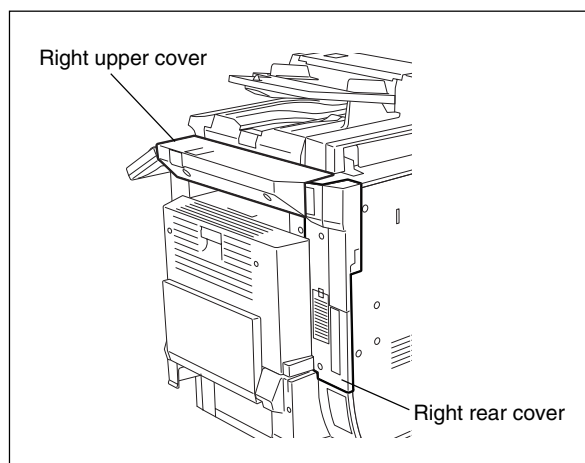
3.16 Key Copy Counter (MU-8, MU-10)

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

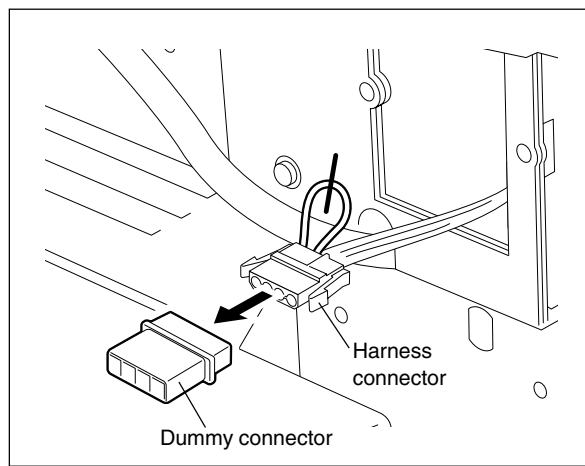


<Installation procedure>

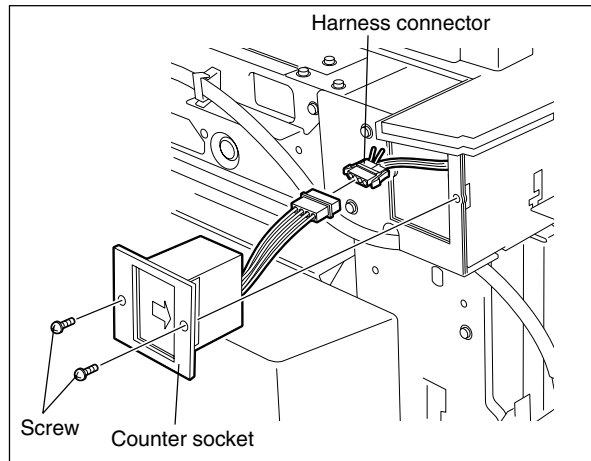
- (1) Remove the right rear cover, and cut open the window for the key copy counter.
- (2) Remove the right upper cover.



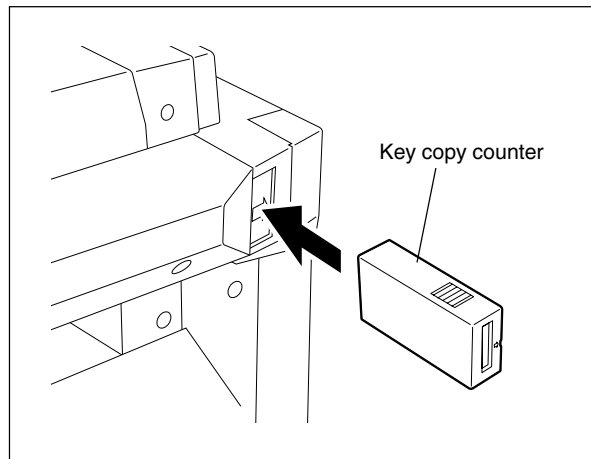
- (3) Pull out the harness connector from the hole of the machine frame, and cut the short harness of the connector. (Treat the cut harness properly to avoid it causing a short-circuit with the machine frame.) Then, disconnect the dummy connector.



- (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 M3 screws.
- (6) Reattach the cover.



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



- (8) Key in the value "3" in the setting mode (08-222).

5. TROUBLESHOOTING

<CAUTION IN REPLACING PC BOARDS>

The ID for each equipment is registered on the LGC board, the DRV board, and the SYS board. So, if their replacement is required, be sure to replace only one board at a time

If more than one of the LGC board, the DRV board and the SYS board require replacement, replace them in the following procedure.

1. First, replace one of the board to be replaced.
2. Turn the power ON and confirm that "READY" is displayed.
3. Turn the power OFF.
4. Replace another board that requires replacement.
5. Repeat steps 2 to 4.

5.1 Diagnosis and Prescription for Each Error Code

5.1.1 Paper transport jam (paper exit section)

[E010] Jam not reaching the exit sensor

[E020] Stop jam at the exit sensor

Open the jam access cover. Is there any paper on the transport path?

YES → Remove the paper.
NO ↓

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

NO →

1. Check if the connector of the exit sensor is disconnected.
2. Check if the connector CN358 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the exit sensor.
6. Replace the LGC board.

YES ↓
Is the registration clutch working? (Perform the output check: 03-108/158)

NO →

1. Check if the connector of the registration clutch is disconnected.
2. Check if the connector CN362 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the registration clutch.
6. Replace the LGC board.

YES ↓
Check the registration roller. Replace it if it is worn out.

5.1.2 Paper misfeeding

[E110] ADU misfeeding (paper not reaching the registration sensor)

Open the jam access cover. Is there any paper in front of the registration sensor?

YES → Remove the paper.

NO ↓

Is the registration sensor working? (Perform the input check: 03-[FAX]ON/[9]/[E])

NO →

1. Check if the connector of the registration sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the registration sensor.
6. Replace the LGC board.

YES ↓

Is the ADU clutch working? (Perform the output check: 03-xxx)

NO →

1. Check if the connector of the ADU clutch is disconnected.
2. Check if the connector CN340 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the ADU clutch.
6. Replace the LGC board.

YES ↓

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

[E120] Bypass misfeeding (paper not reaching the registration sensor)

Open the jam access cover. Is there any paper in front of the registration sensor?

YES → Remove the paper.

NO ↓

Is the registration sensor working? (Perform the input check in: 03-[FAX]ON/[9]/[E])

NO →

1. Check if the connector of the registration sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the registration sensor.
6. Replace the LGC board.

YES ↓

Is the bypass feed clutch working? (Perform the output check: 03-204)

NO →

1. Check if the connector of the bypass feed clutch is disconnected.
2. Check if the connector CN340 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the bypass feed clutch.
6. Replace the LGC board.

YES ↓

Check the bypass feed roller and separation pad. Replace them if they are worn out.

[E130] Upper drawer misfeeding (paper not reaching the upper drawer feed sensor)

Open the jam access cover. Is there any paper in front of the upper drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the upper drawer feed sensor working? (Perform the input check: 03-[FAX]ON/[3]/[H])

NO →

1. Check if the connector of the upper drawer feed sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the upper drawer feed sensor.
6. Replace the LGC board.

YES ↓

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

NO →

1. Check if the connector of the upper drawer feed clutch is disconnected.
2. Check if the connector CN337 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the upper drawer feed clutch.
6. Replace the LGC board.

YES ↓

Check the upper drawer feed roller and separation roller. Replace them if they are worn out.

[E140] Lower drawer misfeeding (paper not reaching the lower drawer feed sensor)

Open the side cover. Is there any paper in front of the lower drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the lower drawer feed sensor working? (Perform the input check: 03-[FAX]ON/[3]/[G])

NO →

1. Check if the connector of the lower drawer feed sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the lower drawer feed sensor.
6. Replace the LGC board.

YES ↓

Is the lower drawer feed clutch working? (Perform the output check: 03-202)

NO →

1. Check if the connector of the lower drawer feed clutch is disconnected.
2. Check if the connector CN337 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the lower drawer feed clutch.
6. Replace the LGC board.

YES ↓

Check the lower drawer feed roller and separation roller. Replace them if they are worn out.

[E150] PFP upper drawer misfeeding (paper not reaching the PFP upper drawer feed sensor)

Open the PFP side cover. Is there any paper in front of the PFP upper drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the PFP upper drawer feed sensor working? (Perform the input check: 03-[FAX]OFF/[2]/[D])

NO →

1. Check if the connector of the PFP upper drawer feed sensor is disconnected.
2. Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the PFP board and LGC board are short- or open-circuited.
6. Replace the PFP upper drawer feed sensor.
7. Replace the PFP board.
8. Replace the LGC board.

YES ↓

Is the PFP upper drawer feed clutch working? (Perform the output check: 03-226)

NO →

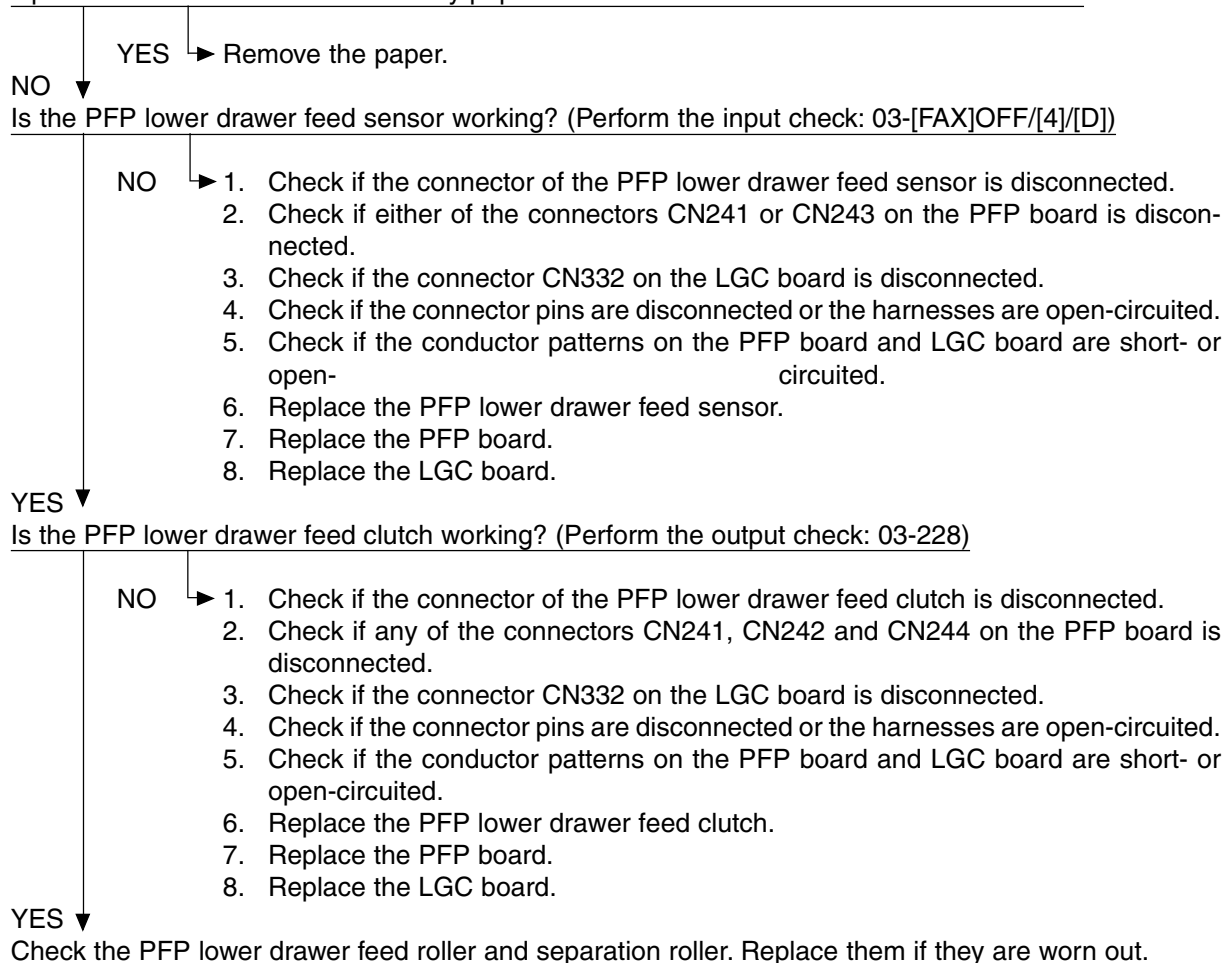
1. Check if the connector of the PFP upper drawer feed clutch is disconnected.
2. Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the PFP board and LGC board are short- or open-circuited.
6. Replace the PFP upper drawer feed clutch.
7. Replace the PFP board.
8. Replace the LGC board.

YES ↓

Check the PFP upper drawer feed roller and separation roller. Replace them if they are worn out.

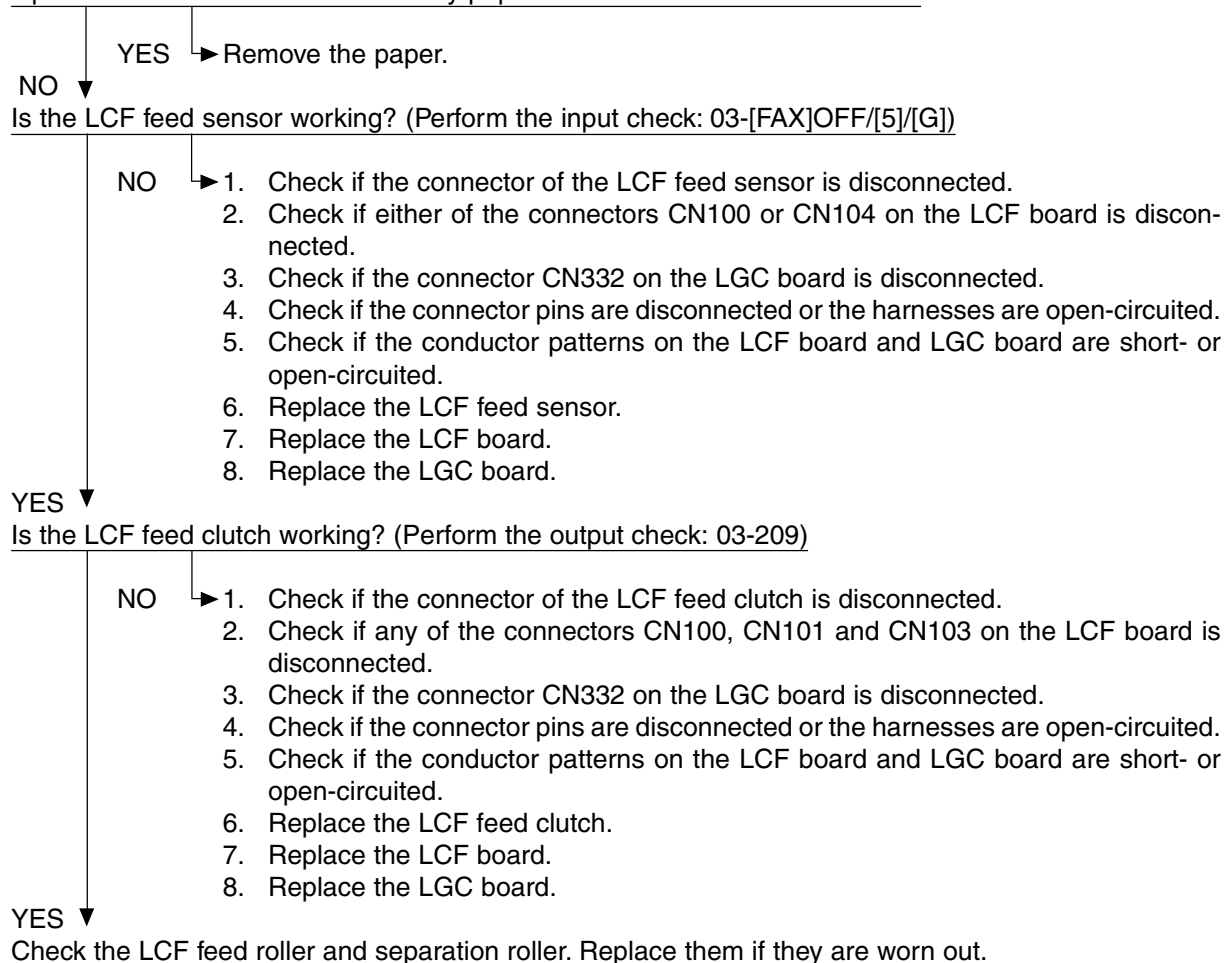
[E160] PFP lower drawer misfeeding (paper not reaching the PFP lower drawer feed sensor)

Open the PFP side cover. Is there any paper in front of the PFP lower drawer feed sensor?



[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?



5.1.3 Paper transport jam (paper pickup and transport section)

[E200] Upper drawer transport jam (not reaching the registration sensor)

Open the jam access cover. Is there any paper in front of the registration sensor?

YES → Remove the paper.

NO ↓

Is the registration sensor working? (Perform the input check: 03-[FAX]ON/[9]/[E])

NO →

1. Check if the connector of the registration sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the registration sensor.
6. Replace the LGC board.

YES ↓

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

NO →

1. Check if the connector of the upper drawer feed clutch is disconnected.
2. Check if the connector CN337 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board for short- or open-circuited.
5. Replace the upper drawer feed clutch.
6. Replace the LGC board.

YES ↓

Check the upper drawer feed roller and separation roller. Replace them if they are worn out.

[E220] Lower drawer transport jam (not reaching the registration sensor)
[E300] PFP upper drawer transport jam (not reaching the registration sensor)
[E330] PFP lower drawer transport jam (not reaching the registration sensor)
[E3C0] LCF transport jam (not reaching the registration sensor)

Open the jam access cover. Is there paper in front of the registration sensor?

YES → Remove the paper.

NO ↓

Is the registration sensor working? (Perform the input check: 03-[FAX]ON/[9]/[E])

NO →

1. Check if the connector of the registration sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the registration sensor.
6. Replace the LGC board.

YES ↓

Are the upper transport clutches (high/low speed) working?

(Perform the output check: 03-203, 205)

NO →

1. Check if the connectors of the upper transport clutches (high/low speed) are disconnected.
2. Check if the connector CN362 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the upper transport clutches (high/low speed).
6. Replace the LGC board.

YES ↓

Check the transport roller. Replace it if it is worn out.

[E210] Lower drawer transport jam (not reaching the upper drawer feed sensor)
[E310] PFP upper drawer transport jam (not reaching the upper drawer feed sensor)
[E340] PFP lower drawer transport jam (not reaching the upper drawer feed sensor)
[E3D0] LCF transport jam (not reaching the upper drawer feed sensor)

Open the jam access cover. Is there paper in front of the upper drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the upper drawer feed sensor working? (Perform the input check: 03-[FAX]ON/[3]/[H])

NO →

1. Check if the connector of the upper drawer feed sensor is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the upper drawer feed sensor.
6. Replace the LGC board.

YES ↓

Are the lower transport clutches (high/low speed) working?

(Perform the output check: 03-203, 205)

NO →

1. Check if the connectors of the lower transport clutches (high/low speed) are disconnected.
2. Check if the connector CN337 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the lower transport clutches (high/low speed).
6. Replace the LGC board.

YES ↓

Check the transport roller. Replace it if it is worn out.

[E320] PFP upper drawer transport jam (not reaching the lower drawer feed sensor)
[E350] PFP lower drawer transport jam (not reaching the lower drawer feed sensor)
[E3E0] LCF transport jam (not reaching the lower drawer feed sensor)

Open the side cover. Is there paper in front of the lower drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the lower drawer feed sensor working? (Perform the input check: 03-[FAX]ON/[3]/[G])

- NO →
1. Check if the connector of the lower drawer feed sensor is disconnected.
 2. Check if the connector CN345 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor pattern on the LGC board is short- or open-circuited.
 5. Replace the lower drawer feed sensor.
 6. Replace the LGC board.

YES ↓

Are the lower transport clutches working?

(Perform the output check: 03-203, 205)

- NO →
1. Check if the connectors of the lower transport clutches (high/low speed) are disconnected.
 2. Check if the connector CN337 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor pattern on the LGC board is short- or open-circuited.
 5. Replace the lower transport clutches (high/low speed).
 6. Replace the LGC board.

YES ↓

Check the transport roller. Replace it if it is worn out.

[E360] PFP lower drawer transport jam (not reaching the PFP upper drawer feed sensor)

Open the PFP side cover. Is there any paper in front of the PFP upper drawer feed sensor?

YES → Remove the paper.

NO ↓

Is the PFP upper feed sensor working?

(Perform the input check: 03-[FAX]OFF/[2]/[D])

NO →

1. Check if the connector of the PFP upper drawer feed sensor is disconnected.
2. Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the PFP board and LGC board are short- or open-circuited.
6. Replace the PFP upper drawer feed sensor.
7. Replace the PFP board.
8. Replace the LGC board.

YES ↓

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

NO →

1. Check if the connector of the PFP transport clutch is disconnected.
2. Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the PFP board and LGC board are short- or open-circuited.
6. Replace the PFP transport clutch.
7. Replace the PFP board.
8. Replace the LGC board.

YES ↓

Check the PFP transport roller. Replace it if it is worn out.

[E510] ADU transport stop jam

Open the ADU. Is there any paper in front of the ADU exit sensor?

YES → Remove the paper.

NO ↓

Is the ADU exit sensor working? (Perform the input check: 03-[FAX]OFF/[8]/[H])

NO →

1. Check if the connector of the ADU exit sensor is disconnected.
2. Check if either of the connectors CN211 or CN213 on the ADU board is disconnected.
3. Check if the connector CN340 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the ADU board and LGC board are short- 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: 03-xxx)

NO →

1. Check if the connector of the ADU clutch is disconnected.
2. Check if the connector CN340 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the ADU clutch.
6. Replace the LGC board.

YES ↓

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

[E520] Stop jam in the ADU

Open the ADU. Is there any paper in front of the ADU entrance sensor?

YES → Remove the paper.

NO ↓

Is the ADU entrance sensor working? (Perform the input check: 03-[FAX]OFF/[8]/[G])

NO →

1. Check if the connector of the ADU entrance sensor is disconnected.
2. Check if either of the connectors CN211 or CN214 on the ADU board is disconnected.
3. Check if the connector CN340 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the ADU board and LGC board are short- or open- circuited.
6. Replace the ADU entrance sensor.
7. Replace the ADU board.
8. Replace the LGC board.

YES ↓

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

NO →

1. Check if the connector of the exit motor is disconnected.
2. Check if the connectors CN437 and J434 on the DRV board is disconnected.
3. Check if the connector CN360 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the DRV board and LGC board are short- or open-circuited.
6. Replace the exit motor.
7. Replace the DRV board.
8. Replace the LGC board.

YES ↓

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

NO →

1. Check if the connector of the ADU motor is disconnected.
2. Check if any of the connectors CN211, CN212 and CN215 on the ADU board is disconnected.
3. Check if the connector CN340 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the ADU board and LGC board are short- or open- circuited.
6. Replace the ADU board.
7. Replace the LGC board.

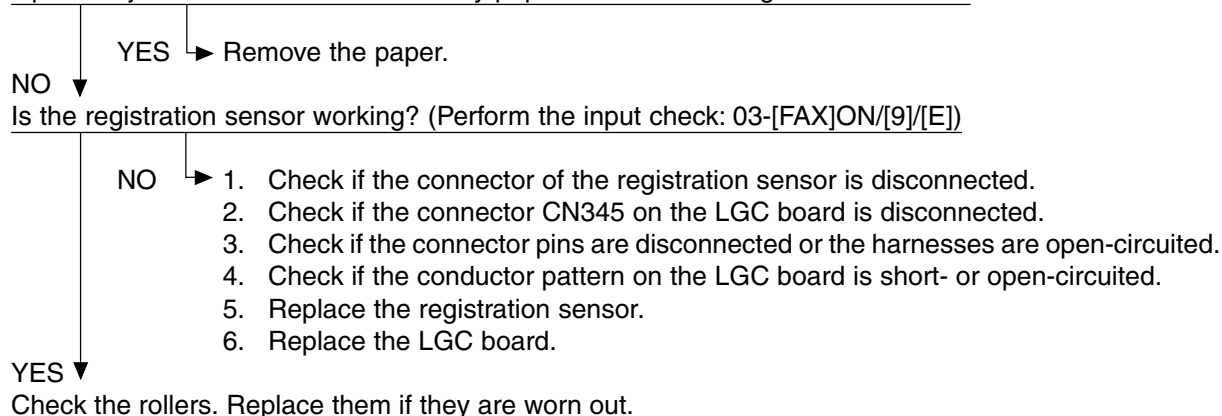
YES ↓

Check the rollers in the ADU and the exit roller of the equipment. Replace them if they are worn out.

[EB50] Paper remaining on the transport path due to multiple feeding

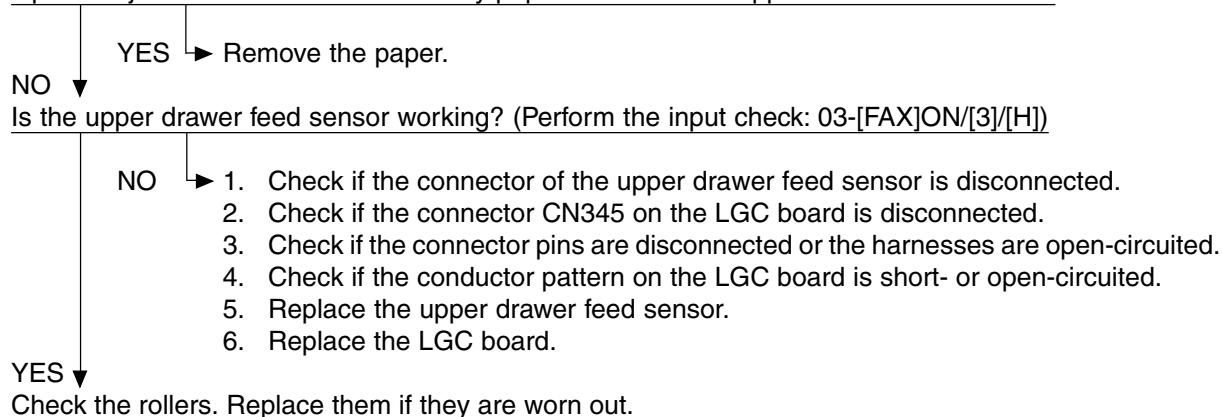
When the paper is fed from any of the upper drawer, bypass feed unit or ADU:

Open the jam access cover. Is there any paper in front of the registration sensor?



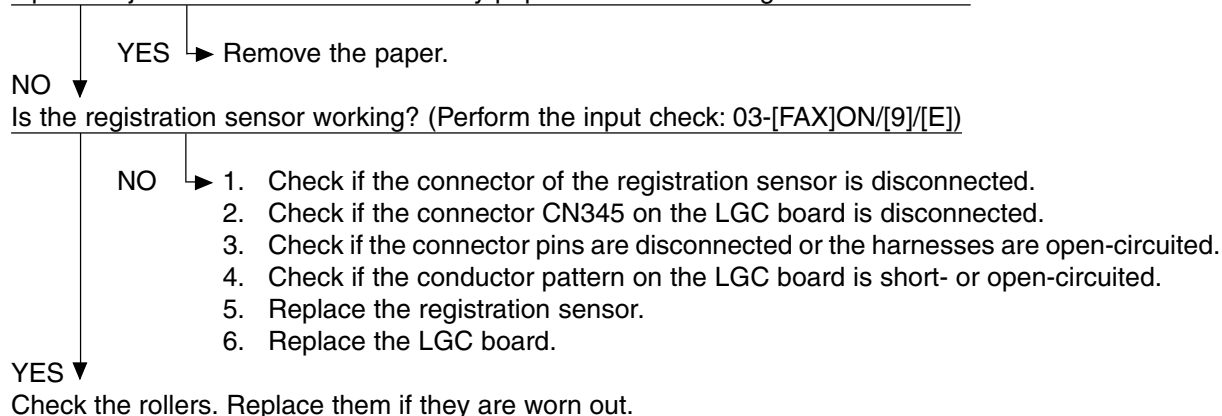
When the paper is fed from any of the lower drawer, PFP or LCF:

Open the jam access cover. Is there any paper in front of the upper drawer feed sensor?



[EB60] Paper remaining on the transport path due to multiple feeding

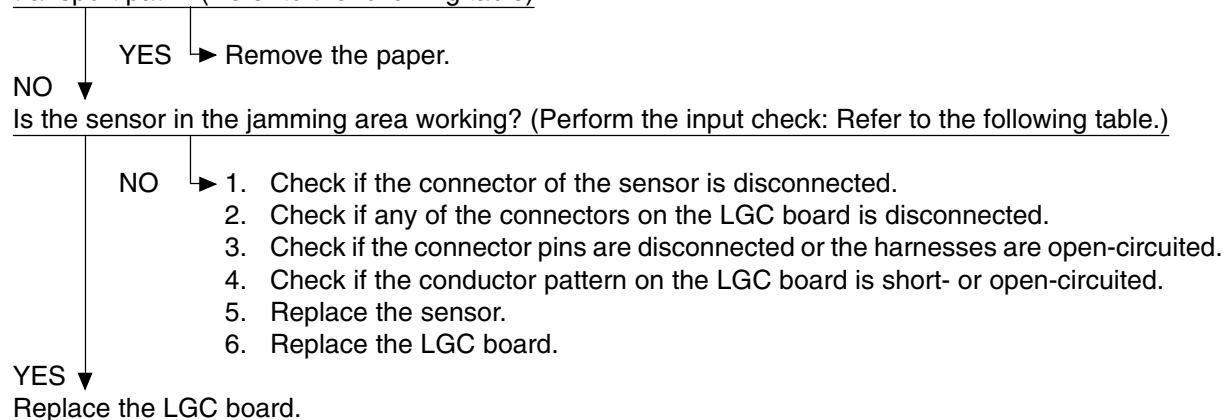
Open the jam access cover. Is there any paper in front of the registration sensor?



5.1.4 Other paper jam

[E030] Power-ON jam

Open the cover of the unit/area whose picture is flashing on the control panel. Is there any paper on the transport path? (Refer to the following table)



Relation between the jamming area and the corresponding sensors/covers
(If a jam is occurring in the ADU, LCF or PFP, check the board in each unit.)

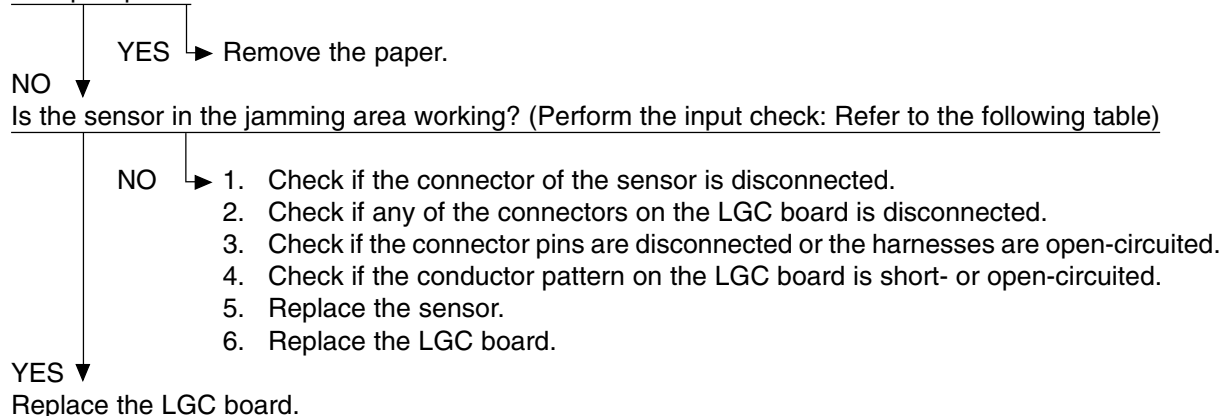
Jamming area	Cover	Sensor	Test mode/Input check
Registration area	Jam access cover	Registration sensor	03-[FAX]ON/[9]/[E]
		Upper drawer feed sensor	03-[FAX]ON/[3]/[H]
Exit area	Jam access cover	Exit sensor	03-[FAX]OFF/[7]/[H]
ADU	ADU	ADU entrance sensor	03-[FAX]OFF/[8]/[H]
		ADU exit sensor	03-[FAX]OFF/[8]/[G]
Feeding area (equipment)	Side cover	Lower drawer feed sensor	03-[FAX]ON/[3]/[G]
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/[0]/[C]
		Bridge unit transport sensor-2	03-[FAX]ON/[0]/[A]

[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 or the harnesses are open-circuited.
- (4) Replace the HDD.
- (5) Replace the SYS board.

[E550] Paper remaining on the transport path when CRUN is OFF

Open the cover of the unit/area whose picture is flashing on the control panel. Is there any paper on the transport path?



Relation between the jamming area and the corresponding sensors/covers
(If a jam is occurring in the ADU, LCF or PFP, check the board in each unit.)

Jamming area	Cover	Sensor	Test mode/Input check
Registration area	Jam access cover	Registration sensor	03-[FAX]ON/[9]/[E]
		Upper drawer feed sensor	03-[FAX]ON/[3]/[H]
Exit area	Jam access cover	Exit sensor	03-[FAX]OFF/[7]/[H]
ADU	ADU	ADU entrance sensor	03-[FAX]OFF/[8]/[H]
		ADU exit sensor	03-[FAX]OFF/[8]/[G]
Feeding area (equipment)	Side cover	Lower drawer feed sensor	03-[FAX]ON/[3]/[G]
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/[0]/[C]
		Bridge unit transport sensor-2	03-[FAX]ON/[0]/[A]
Finisher	Finisher door	Sensors in the finisher	-

5.1.5 Cover open jam

[E400] Jam access cover open

Is the jam access cover open?

YES → Remove paper if there is any, then shut the cover.

NO ↓

Is the voltage of 24V being supplied from the power supply unit?

(Perform the input check: 03-[FAX] ON/[1]/[H])

NO →

1. Check if the connector for 24V power supply is disconnected.
2. Check if the connector CN350 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the LGC board.

YES ↓

Replace the LGC board.

[E410] Front cover open jam

Is the front cover open?

YES → Shut the cover.

NO ↓

Is the voltage of 24V being supplied from the power supply unit?

(Perform the input check: 03-[FAX] ON/[1]/[H])

NO →

1. Check if the connector for 24V power supply is disconnected.
2. Check if the connector CN350 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the LGC board.

YES ↓

Is the front cover opening/closing switch working?

(Perform the input check: 03-[FAX] OFF/[7]/[F])

NO →

1. Check if the connector of the front cover opening/closing switch is disconnected.
2. Check if the connector CN343 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the front cover opening/closing switch.
6. Replace the LGC board.

YES ↓

Replace the LGC board.

[E420] PFP side cover open jam

Is the PFP side cover open?

YES → Remove the paper if there is any, then shut the cover.

NO ↓

Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX]OFF/[2]/[F])

NO →

1. Check if the connector of the PFP side cover opening/closing switch is disconnected.
2. Check if either of the connectors CN241 or CN243 on the PFP board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the PFP board and LGC board are short- or open- circuited.
6. Replace the PFP side cover opening/closing switch.
7. Replace the PFP board.
8. Replace the LGC board.

YES ↓

1. Replace the PFP board.
2. Replace the LGC board.

[E430] ADU open jam

Is the ADU open?

YES → Remove the paper if there is any, then shut the ADU.

NO ↓

Is the ADU opening/closing switch working? (Perform the input check: 03-[FAX]OFF/[8]/[F])

NO →

1. Check if the connector of the ADU opening/closing switch is disconnected.
2. Check if either of the connectors CN211 or CN217 on the ADU board is disconnected.
3. Check if the connector CN340 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the ADU board and LGC board are short- or open- circuited.
6. Replace the ADU opening/closing switch.
7. Replace the ADU board.
8. Replace the LGC board.

YES ↓

1. Replace the ADU board.
2. Replace the LGC board.

[E440] Side cover open jam

Is the side cover open?

YES → Remove the paper if there is any, then shut the cover.

NO ↓

Is the side door switch working?

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

NO →

1. Check if the connector of the side door switch is disconnected.
2. Check if the connector CN345 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the side door switch.
6. Replace the LGC board.

YES ↓

Replace the LGC board.

[E450] LCF side cover open jam

Is the LCF side cover open?

YES → Remove the paper if there is any, then shut the cover.

NO ↓

Is the LCF side cover opening/closing switch working?

(Perform the input check: 03-[FAX]OFF/[5]/[D])

NO →

1. Check if the connector of the LCF side cover opening/closing switch is disconnected.
2. Check if either of the connectors CN100 or CN106 on the LCF board is disconnected.
3. Check if the connector CN332 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor patterns on the LCF board and LGC board are short- or open- circuited.
6. Replace the LCF side cover opening/closing switch.
7. Replace the LCF board.
8. Replace the LGC board.

YES ↓

1. Replace the LCF board.
2. Replace the LGC board.

[E480] Bridge unit open jam

Is the Bridge unit open?

YES → Remove the paper if there is any, then close the unit.

NO ↓

Is the bridge unit opening/closing switch working?

(Perform the input check: 03-[FAX]ON/[0]/[B])

NO →

1. Check if the connector of the bridge unit opening/closing switch is disconnected.
2. Check if the connector CN351 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the bridge unit opening/closing switch.
6. Replace the LGC board.

YES ↓

Replace the LGC board.

5.1.6 RADF jam

Note:

When performing the RADF related troubleshooting, be sure to perform “Automatic adjustment of RADF sensor and EEPROM initialization (05-356)” at adjustment mode whenever the RADF board, original length sensor, read sensor or reverse sensor has been replaced.

[E711] Jam not reaching the original length sensor

[E712] Jam not reaching the registration sensor

[E713] Stop jam at the original length sensor

Are the pickup roller, feed roller and separation roller stained or worn out?

YES → Clean the rollers or replace them.

NO ↓

Is the original excessively curled or folded?

YES → Flatten and set it again.

NO ↓

Are the original length sensor and registration sensor working?

(Perform the input check: 03-[FAX]ON/[8]/[E], [7]/[H])

NO →

1. Check if the connectors of the original length sensor and registration sensor are disconnected.
2. Check if the connector CN3 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the original length sensor and registration sensor.
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])

NO →

1. Check if the lever of empty sensor is working normally.
2. Check if the connector of the empty sensor is disconnected.
3. Check if the connector CN5 on the RADF board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor pattern on the RADF board is short- or open-circuited.
6. Replace the empty sensor.
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?

YES → Clean the rollers.
NO ↓

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

NO →
1. Check if the connector of the read sensor are disconnected.
2. Check if the connector CN6 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the read sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E722] Jam not reaching the exit sensor (during scanning)

[E723] Jam not reaching the reverse sensor (during scanning)

Is the read roller stained?

YES → Clean the roller.
NO ↓

Are the exit sensor and reverse sensor working? (Perform the input check: 03-[FAX]ON/[7]/[E], [7]/[F])

NO →
1. Check if the connectors of the exit sensor and reverse sensor are disconnected.
2. Check if the connector CN4 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the exit sensor and reverse sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E724] Stop jam at the registration sensor

Is the registration roller stained?

YES → Clean the roller.
NO ↓

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

NO →
1. Check if the connector of the registration sensor is disconnected.
2. Check if the connector CN3 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the registration sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E725] Stop jam at the read sensor

Is the read roller stained?

YES → Clean the roller.
NO ↓

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

NO →
1. Check if the connector of the read sensor is disconnected.
2. Check if the connector CN6 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the read sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E726] Transport/exit signal reception jam

1. If the original is remained in the RADF, remove it.
2. If any paper is remained in the copier, 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- or open-circuited.
7. Replace the RADF board.
8. Check if the conductor pattern on the SLG board is short- or open-circuited.
9. Replace the SLG board.

[E731] Stop jam at the exit sensor

Is the exit roller stained?

YES → Clean the roller.
NO ↓

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

NO →
1. Check if the connector of the exit sensor is disconnected.
2. Check if the connector CN4 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the exit sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E741] Stop jam at the reverse sensor

Are the read roller and reverse roller stained?

YES → Clean the rollers.
NO ↓

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

NO →
1. Check if the connector of the reverse sensor is disconnected.
2. Check if the connector CN4 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the reverse sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E742] Jam not reaching the reverse sensor (feeding in reverse)

Is the reverse roller stained?

YES → Clean the roller.
NO ↓

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

NO →
1. Check if the connector of the reverse sensor is disconnected.
2. Check if the connector CN4 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the reverse sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E743] Jam not reaching the exit sensor (feeding in reverse)

Are the reverse roller and read roller stained?

YES → Clean the rollers.
NO ↓

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

NO →
1. Check if the connector of the exit sensor is disconnected.
2. Check if the connector CN4 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the exit sensor.
6. Replace the RADF board.
YES ↓
Replace the RADF board.

[E860] Jam access cover open

Is the jam access cover opened?

YES → Remove the original, if any, and close the jam access cover.

NO ↓

Is the jam access cover switch working? (Perform the input check: 03-[FAX]ON/[7]/[C])

NO →

1. Check if the connector of the jam access cover switch is disconnected.
2. Check if the connector CN8 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the jam access cover switch.
6. Replace the RADF board.

YES ↓
Replace the RADF board.

[E870] RADF open jam

Is the RADF opened?

YES → Remove the original, if any, and close the RADF.

NO ↓

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

NO → Adjust the RADF opening/closing sensor.

YES ↓
Is the RADF opening/closing sensor working? (Perform the input check: 03-[FAX]ON/[7]/[D])

NO →

1. Check if the connector of the RADF opening/closing sensor is disconnected.
2. Check if the connector CN6 on the RADF board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the RADF board is short- or open-circuited.
5. Replace the RADF opening/closing sensor.
6. Replace the RADF board.

YES ↓
Replace the RADF board.

5.1.7 Finisher jam

(1) Jam in bridge unit

[E910] Paper not reaching the bridge unit transport sensor-1

[E920] Paper stopping at the bridge unit transport sensor-1

[E930] Paper not reaching the bridge unit transport sensor-2

[E940] Paper stopping at the bridge unit transport sensor-2

Is there any paper remaining inside the bridge unit?

YES → Remove the paper.
NO ↓

Are the bridge unit transport sensors-1 and -2 working?

(Perform the input check: 03-[FAX]ON/[0]/[C], /[0]/[A])

NO →
1. Check if the connectors of the bridge unit transport sensors-1 and -2 are disconnected.
2. Check if the connector J510 of the bridge unit is disconnected.
3. Check if the connector CN351 on the LGC board is disconnected.
4. Check if the connector pins are disconnected or the harnesses are open-circuited.
5. Check if the conductor pattern on the LGC board is short- or open-circuited.
6. Replace the bridge unit transport sensors-1 and -2.
7. Replace the LGC board.
YES ↓

Is the bridge unit gate solenoid working? (Perform the output check: 03-232)

NO →
1. Check if the connector J510 of the bridge unit is disconnected.
2. Check if the connector CN351 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Replace the bridge unit gate solenoid.
5. Replace the LGC board.
YES ↓

Does the transport roller of the bridge unit work when the main motor is rotated?

(Perform the output check: 03-101/151)

NO → Check the drive system of the equipment and bridge unit.
YES ↓
Check if the rollers in the bridge unit are worn out.

(2) Paper jam in finisher section

[EA10] Paper transport delay jam

MJ-1022

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

YES → Remove the paper.
NO ↓

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

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

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

Replace the finisher controller PC board.

MJ-1023/1024

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

YES → Remove the paper.
NO ↓

Is the connector J708 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI33) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

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

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

Replace the finisher controller PC board.

[EA20] Paper transport stop jam

MJ-1022

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

YES → Remove the paper.

NO ↓

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

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

NO →

1. Connect the connector of the inlet sensor securely.
2. Attach the actuator securely if its shaft is out of place.
3. Replace the inlet sensor.

YES ↓

Replace the finisher controller PC board.

MJ-1023/1024

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

YES → Remove the paper.

NO ↓

Is any of the connectors (J707, J708 and J722B) on the finisher controller PC board disconnected?

Is the harness between the finisher controller PC board and each sensor (the inlet sensor [PI33], the transport path sensor [PI34], the transaction tray paper sensor [PI38]) open-circuited?

YES → Connect the connectors securely. Replace the harnesses.

NO ↓

Is each of the sensors (the inlet sensor, the transport path sensor and the transaction tray paper sensor) working properly? (Check the movement of the actuator.)

NO →

1. Connect the connectors of the sensors securely.
2. Attach the actuators securely if their shafts are out of place.
3. Replace the sensors.

YES ↓

Replace the finisher controller PC board.

[EA30] Power-ON jam

MJ-1022

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

YES → Remove the paper.

NO ↓

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

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

NO →

1. Connect the connector of the inlet sensor securely.
2. Attach the actuator securely if its shaft is out of place.
3. Replace the inlet sensor.

YES ↓

Replace the finisher controller PC board.

MJ-1023/1024

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

YES → Remove the paper.

NO ↓

Is any of the connectors J707, J708 and J722B on the finisher controller PC board disconnected?

Is the harness between the finisher controller PC board and each sensor (the inlet sensor [PI33], the transport path sensor [PI34], the transaction tray paper sensor [PI38], open-circuited?

YES → Connect the connectors securely. Replace the harnesses.

NO ↓

Is each of the sensors (the inlet sensor, the transport path sensor and the transaction tray paper sensor) working properly?

(Check the movement of the actuator.)

NO →

1. Connect the connectors of the sensors securely.
2. Attach the actuators securely if their shafts are out of place.
3. Replace the sensors.

YES ↓

Replace the finisher controller PC board.

[EA40] Finisher front door open jam

MJ-1022

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

YES → Remove the paper.

NO ↓

Is the finisher connected with the equipment?

NO → Connect the finisher with the equipment.

YES ↓

Is the connector J11 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and joint sensor (S4) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the joint sensor working properly?

NO → 1. Connect the connector of the joint sensor securely.
2. Replace the joint sensor.

YES ↓

Replace the finisher controller PC board.

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

YES → Remove the paper.

NO ↓

Is either of the covers upper or front of the finisher closed?

NO → Close the door.

YES ↓

Is any connectors J707 and J708 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and upper/front cover opening sensors (PI31 and PI32) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the upper/front cover opening sensor working properly?

NO → 1. Connect the connector of the upper/front cover opening sensor securely.
2. Replace the upper/front cover opening sensor.

YES ↓

Is the connector J719 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and front cover switch (MS31) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the front cover switch working properly?

NO → 1. Connect the connector of the front cover switch securely.
2. Replace the front cover switch.

↓

Is the connector J5 on the punch controller PC board disconnected?

Is the harness connecting the punch controller PC board and upper door switch (MS1P) open-circuited?

Is the harness connecting the punch controller PC board and front door switch (MS2P) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Are the upper and front door switches working properly?

NO → 1. Connect the connectors of the upper and front door switches securely.
2. Replace the upper/front door switches.

YES ↓

Replace the finisher controller PC board.

[EA50] Stapling jam

MJ-1022

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

YES → Remove the paper.

NO ↓

Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case?

YES → End.

NO ↓

Is the connector J8 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and stapling home position sensor (S17) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the stapling home position sensor working properly?

NO → 1. Connect the connector of the stapling home position sensor securely.
2. Replace the stapling home position sensor.

YES ↓

Replace the finisher controller PC board.

MJ-1023/1024

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

YES → Remove the paper.

NO ↓

Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case?

YES → End.

NO ↓

Is the connector J721B on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and staple home position sensor (PI40) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the staple home position sensor working properly?

NO → 1. Connect the connector of the staple home position sensor securely.
2. Replace the staple home position sensor.

YES ↓

Replace the finisher controller PC board.

[EA60] Early arrival jam

MJ-1022

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

YES → Remove the paper.

NO ↓

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (S2) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

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

NO →

1. Connect the connector of the inlet sensor securely.
2. Attach the actuator securely if its shaft is out of place.
3. Replace the inlet sensor.

YES ↓

Replace the finisher controller PC board.

MJ-1023/1024

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

YES → Remove the paper.

NO ↓

Is the connector J708 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI33) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

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

NO →

1. Connect the connector of the inlet sensor securely.
2. Attach the actuator securely if its shaft is out of place.
3. Replace the inlet sensor.

YES ↓

Replace the finisher controller PC board.

[EA70] Stack delivery jam

MJ-1022

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

YES → Remove the paper.
NO ↓

Is the connector J9 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and stack delivery lever home position sensor (S8) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

Is the stack delivery lever home position sensor working properly?

NO →
1. Connect the connector of the stack delivery lever home position sensor securely.
2. Replace the stack delivery lever home position sensor.
YES ↓
Replace the finisher controller PC board.

[EAF0] Stack return jam

MJ-1022

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

YES → Remove the paper.
NO ↓

Is the connector J10 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and returning roller home position sensor (S3) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

Is the returning roller home position sensor working properly?

NO →
1. Connect the connector of the returning roller home position sensor securely.
2. Replace the returning roller home position sensor.
YES ↓
Replace the finisher controller PC board.

(3) Paper jam in saddle stitcher section

[EA80] Stapling jam

MJ-1024

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

YES → Remove the paper.
NO ↓

Is the jam cleared by taking off the staple cartridge from the finisher and removing the staples stuck in the stapling unit?

YES → End.
NO ↓

Is the connector J8 on the saddle stitcher controller PC board disconnected?

Is the harness connecting the saddle stitcher controller PC board and stitcher home position sensor (rear: MS5S, front: MS7S) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

Are the stitcher home position sensors working properly?

NO → 1. Connect the connectors of the stitcher home position sensors securely.
2. Replace the stitcher home position sensors.
YES ↓

Replace the saddle stitcher controller PC board.

[EA90] Door open jam

MJ-1024

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

YES → Remove the paper.
NO ↓

Is the saddle stitcher door closed?

NO → Close the door.
YES ↓

Is either of the connectors J10 or J11 on saddle stitcher controller PC board disconnected?

Are the harnesses between the saddle stitcher controller PC board and cover opening sensors (front door opening sensor [PI2S], delivery cover sensor [PI3S], inlet cover sensor [PI9S]) open-circuited?

YES → Connect the connector securely. Replace the harness.
NO ↓

Is each of the sensors (front door opening sensor, delivery cover sensor, inlet cover sensor) working properly?

NO → 1. Connect the connectors of the each sensor securely.
2. Replace the sensors.
YES ↓

Replace the finisher controller PC board.

[EAA0] Power-ON jam

MJ-1024

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

YES → Remove the paper.

NO ↓

Is any of the connectors J9, J10 and J13 on the saddle stitcher controller PC board disconnected?

Is the harness between the saddle stitcher controller PC board and each sensor (No.1 paper sensor [PI19S], No.2 paper sensor [PI20S], No.3 paper sensor [PI21S], the vertical path paper sensor [PI17S] and the delivery sensor[PI11S]) open-circuited?

YES → Connect the connectors securely. Replace the harnesses.

NO ↓

Is each of the sensors (No.1 paper sensor, No.2 paper sensor, No.3 paper sensor, the vertical path paper sensor, and the delivery sensor) working properly?
(Check the movement of the actuator.)

NO →

1. Connect the connectors of the sensors securely.
2. Attach the actuators securely if their shafts are out of place.
3. Replace the sensors.

YES ↓
Replace the saddle stitcher controller PC board.

[EAB0] Paper transport stop jam

MJ-1024

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

YES → Remove the paper.

NO ↓

Is the connector J708 on finisher controller PC board disconnected?

Is the harness between the finisher controller PC board and inlet sensor [PI33] open-circuited?

Is either of the connectors J9 or J10 on the saddle stitcher controller PC board disconnected?

Is the harness between the saddle stitcher controller PC board and each sensor (No.1 paper sensor [PI19S], No.2 paper sensor [PI20S], No.3 paper sensor [PI21S] and the delivery sensor [PI11S]) open-circuited?

YES → Connect the connectors securely. Replace the harnesses.

NO ↓

Is each of the sensors (the inlet sensor, No.1 paper sensor, No.2 paper sensor, No.3 paper sensor and the delivery sensor) working properly?
(Check the movement of the actuator.)

NO →

1. Connect the connectors of the sensors securely.
2. Attach the actuators securely if their shafts are out of place.
3. Replace the sensors.

YES ↓
Replace the saddle stitcher controller PC board.

[EAC0] Transport delay jam

MJ-1024

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

YES → Remove the paper.

NO ↓

Is the connector J708 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI33) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

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

NO

1. Connect the connector of the sensor securely.
2. Attach the actuator securely if its shaft is out of place.
3. Replace the sensor.

YES ↓

Replace the finisher controller PC board.

(4) Paper jam in puncher unit

[E9F0] Punching jam

MJ-1023/1024

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

YES → Remove the paper.

NO ↓

Is the connector J1B on the punch controller PC board disconnected?

Is the harness connecting the punch controller PC board and punch home position sensor (PI3P) open-circuited?

YES → Connect the connector securely. Replace the harness.

NO ↓

Is the punch home position sensor working properly?

NO

1. Connect the connector of the punch home position sensor securely.
2. Replace the punch home position sensor.

YES ↓

Replace the punch controller PC board.

(5) Other paper jam

[EAD0] Print end command time-out jam

Is the main motor rotating normally?

NO ↓

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

[EAE0] Receiving time time-out jam

Is the finisher working?

NO ↓

YES → Replace the finisher controller PC board.

1. Check if the voltage (24V) is being supplied to the finisher.
2. Check the connection of the LGC board and IPC board.
3. Check if the harness connecting the IPC board and finisher I/F connector of the equipment side is open-circuited.
4. Check if the harness connecting the I/F connector of the finisher side and finisher controller PC board is open-circuited.
5. Replace the finisher controller PC board.

[EB30] Ready time time-out jam

Is there paper in the equipment?

YES ↓

NO → Replace the LGC board.

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

YES ↓

NO → Connect them properly.

Is the harness securely connected to the IPC board?

YES ↓

NO → Connect the harness properly.

Is any of the connector pins of the harness connecting the equipment and finisher disconnected or any of those harnesses open-circuited?

YES ↓

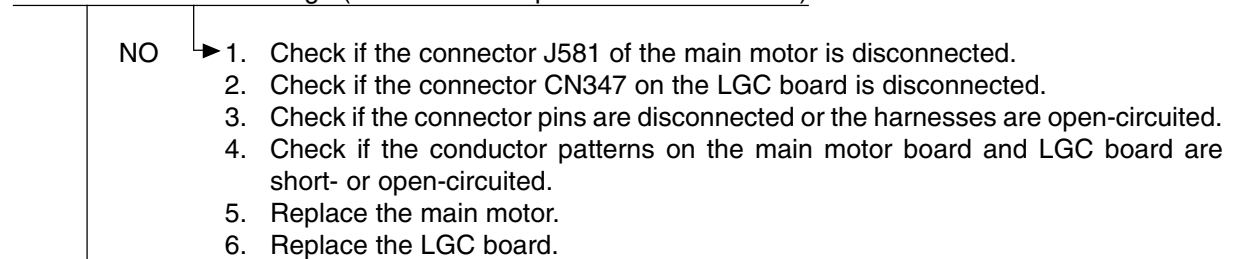
NO → Connect the pin or replace the harness.

1. Replace the IPC board.
2. Replace the LGC board.
3. Replace the finisher controller PC board.

5.1.8 Drive system related service call

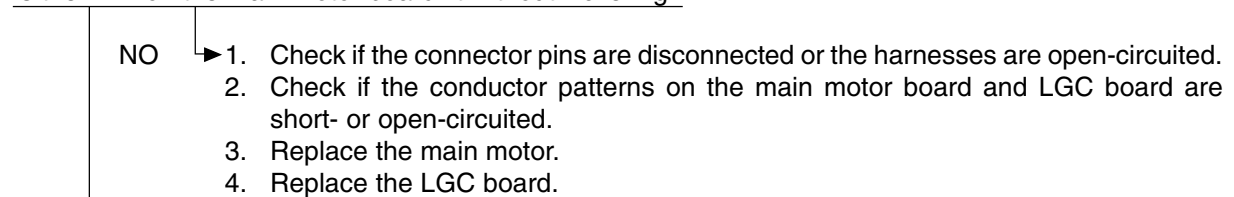
[C010] Main motor abnormality

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



YES ▼

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

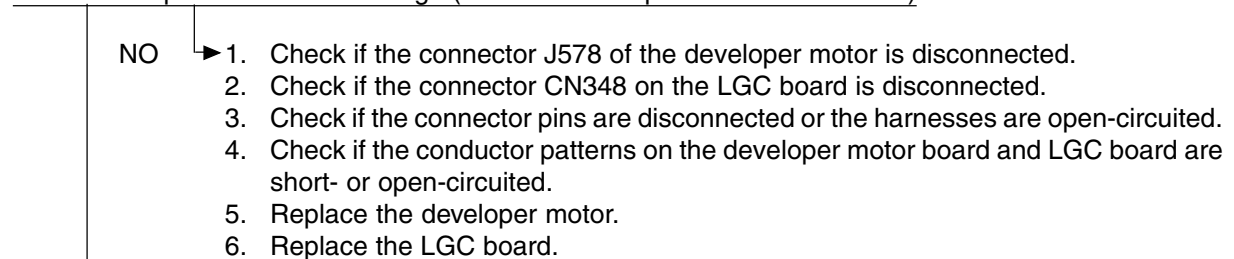


YES ▼

1. Check if the PLL lock signal CN347-8 pin output from the LGC board is always level "L".
2. Check if the voltage supplied to the microcomputer input terminal IC38-152 pin is always "L".
3. Replace the LGC board.

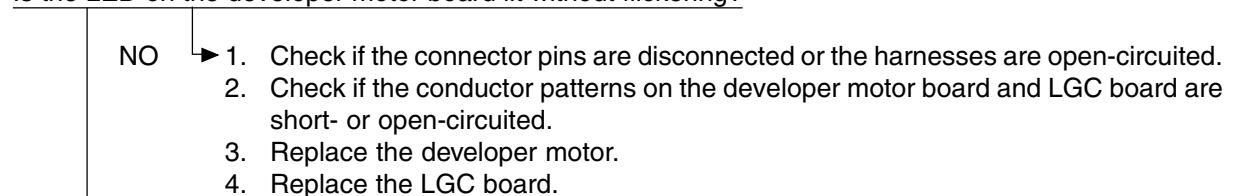
[C020] Developer motor abnormality

Is the developer unit motor working? (Perform the output check: 03-112/162)



YES ▼

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



YES ▼

1. Check if the PLL lock signal CN348-B6 pin output from the LGC board is always level "L".
2. Check if the voltage supplied to the microcomputer input terminal IC38-150 pin is always "L".
3. Replace the LGC board.

[C030] Transport motor abnormality

Is the transport motor working?

- NO →
1. Check if the connector J582 of the transport motor is disconnected.
 2. Check if the connector CN348 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor patterns on the transport motor board and LGC board are short- or open-circuited.
 5. Replace the transport motor.
 6. Replace the LGC board.

YES ↓

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

- NO →
1. Check if the connector pins are disconnected or the harnesses are open-circuited.
 2. Check if the conductor patterns on the transport motor board and LGC board are short- or open-circuited.
 3. Replace the transport motor.
 4. Replace the LGC board.

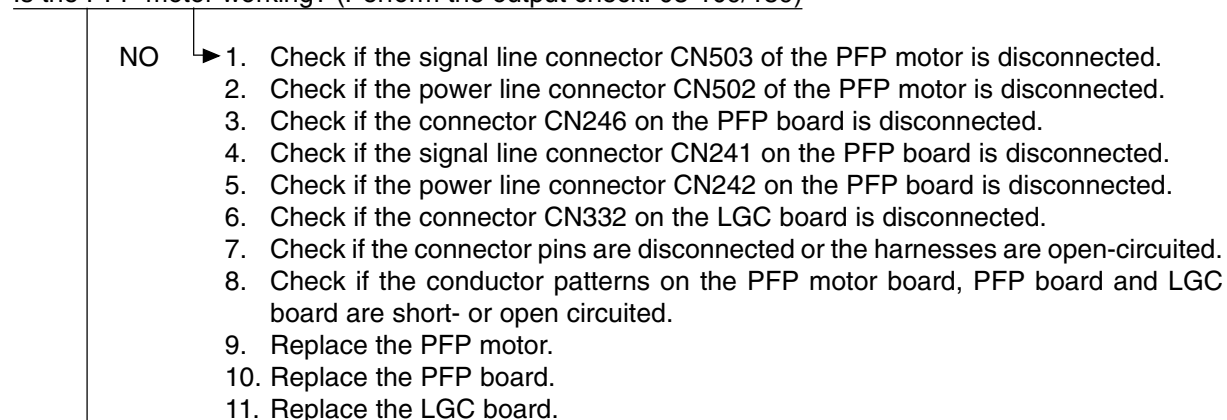
YES ↓

1. Check if the PLL lock signal CN348-A7 pin output from the LGC board is always level "L".
2. Check if the voltage supplied to the microcomputer input terminal IC38-149 pin is always "L".
3. Replace the LGC board.

5.1.9 Paper feeding system related service call

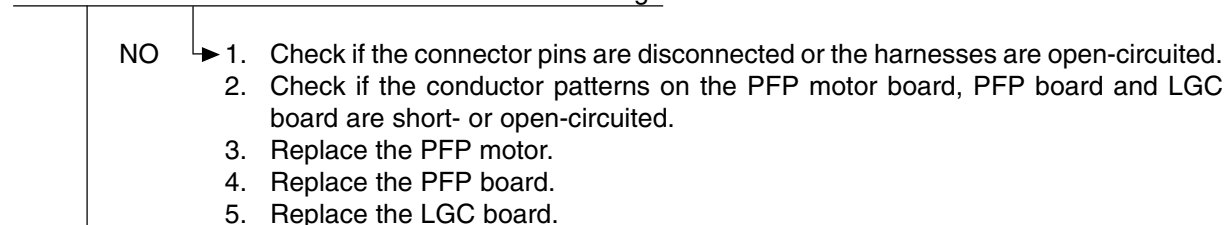
[C040] PFP motor abnormality

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



YES

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



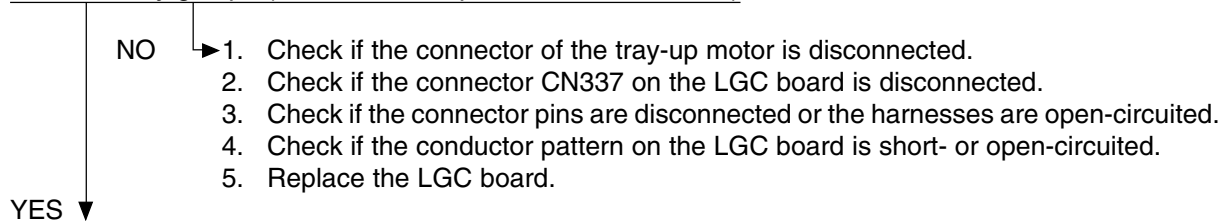
YES

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

[C130] Upper drawer tray abnormality

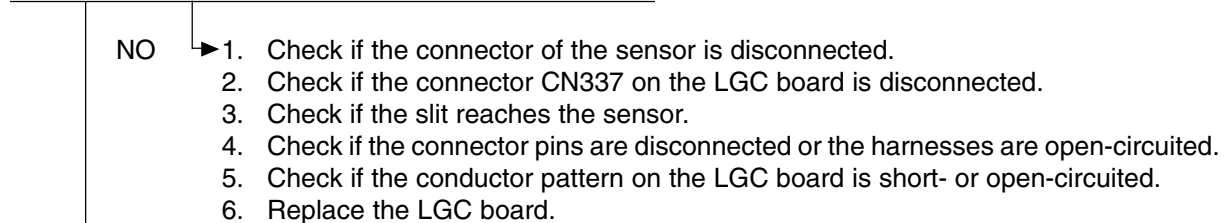
[C140] Lower drawer tray abnormality

Does the tray go up? (Perform the output check: 03-242, 243)



Is the tray-up sensor working?

(Perform the input check: 03-[FAX]OFF/[6]/[H], /[6]/[G])

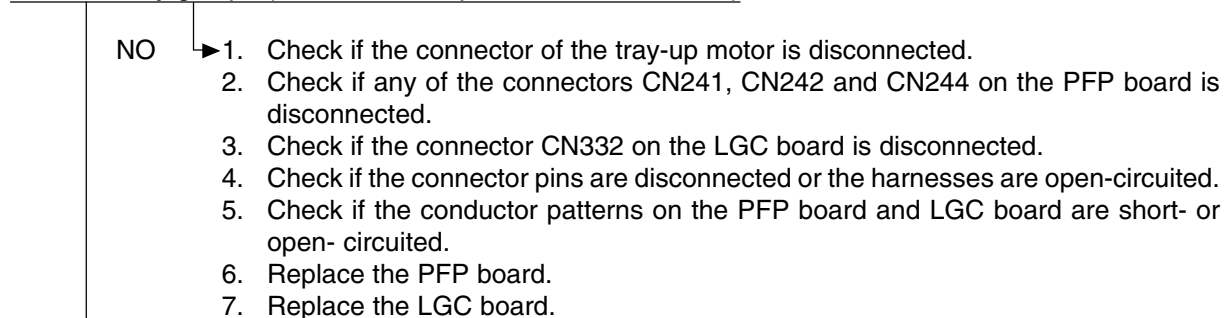


- 1. Check if the conductor pattern on the LGC board is short- or open-circuited.
- 2. Replace the LGC board.

[C150] PFP upper drawer tray abnormality

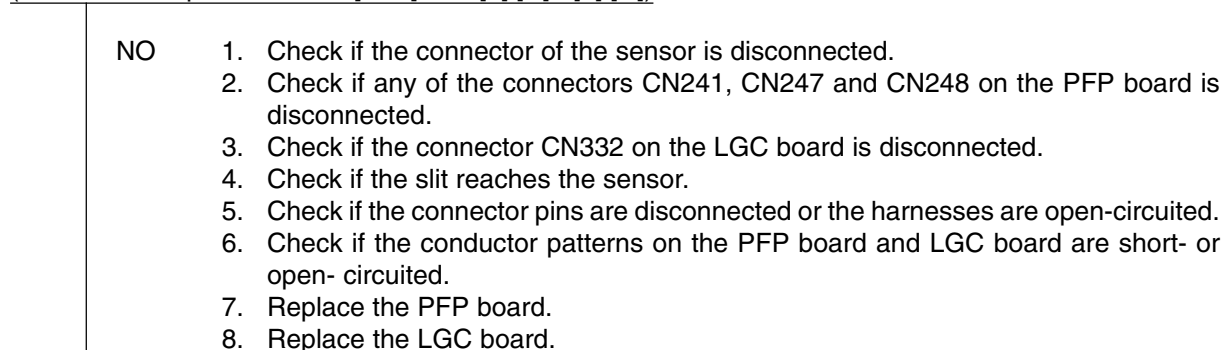
[C160] PFP lower drawer tray abnormality

Does the tray go up? (Perform the output check: 03-278, 280)



Is the tray-up sensor working?

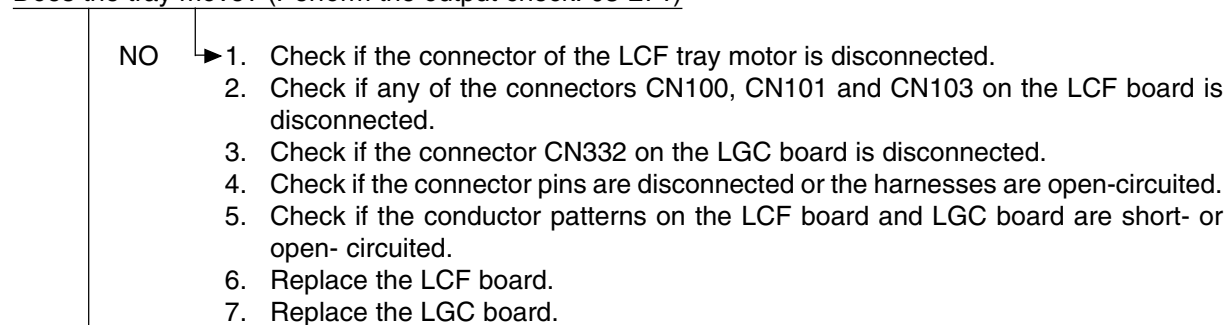
(Perform the input check: 03-[FAX]OFF/[2]/[H], /[4]/[H])



- 1. Check if the conductor pattern on the LGC board is short- or open-circuited.
- 2. Replace the LGC board.

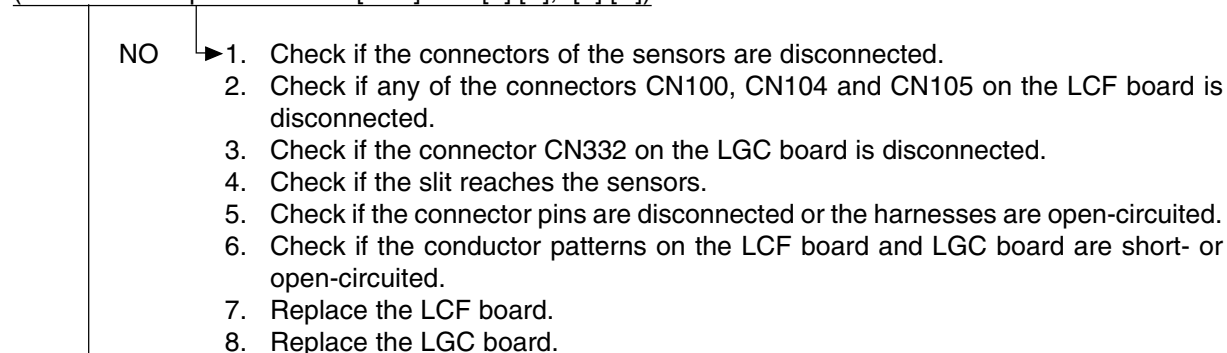
[C180] LCF tray motor abnormality

Does the tray move? (Perform the output check: 03-271)



Are the LCF tray-up sensor and LCF tray bottom sensor working?

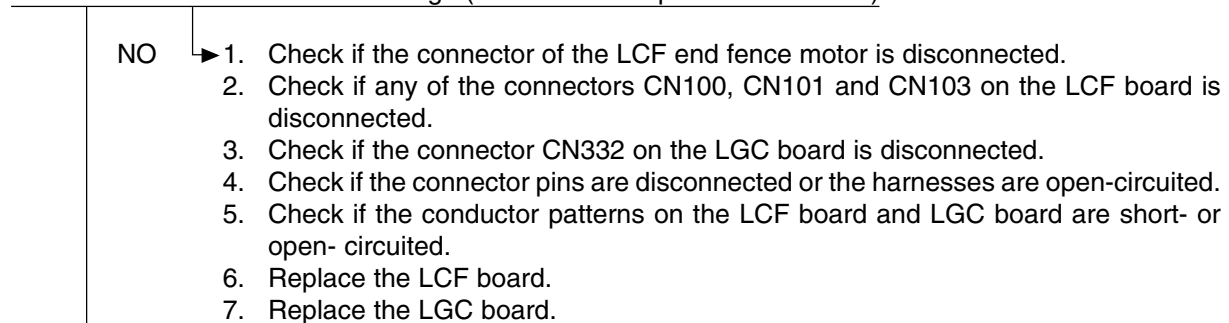
(Perform the input check: 03-[FAX]OFF/[5]/[F], /[3]/[A])



- 1. Check if the conductor pattern on the LGC board is short- or open-circuited.
- 2. Replace the LGC board.

[C1A0] LCF end fence motor abnormality

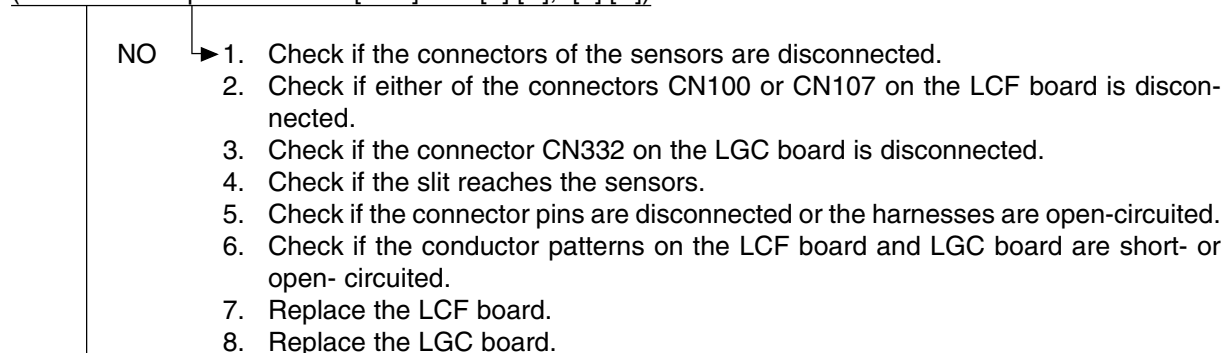
Is the LCF end fence motor working? (Perform the output check: 03-207)



YES ▼

Are the LCF end fence home/stop position sensors working?

(Perform the input check: 03-[FAX]OFF/[5]/[A], /[5]/[B])

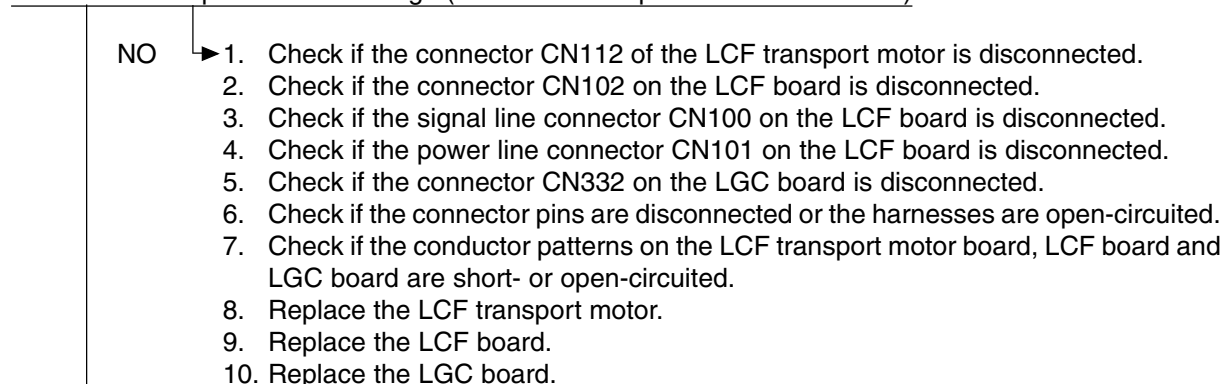


YES ▼

- 1. Check if the conductor pattern on the LGC board is short- or open-circuited.
- 2. Replace the LGC board.

[C1B0] LCF transport motor abnormality

Is the LCF transport motor working? (Perform the output check: 03-122/172)



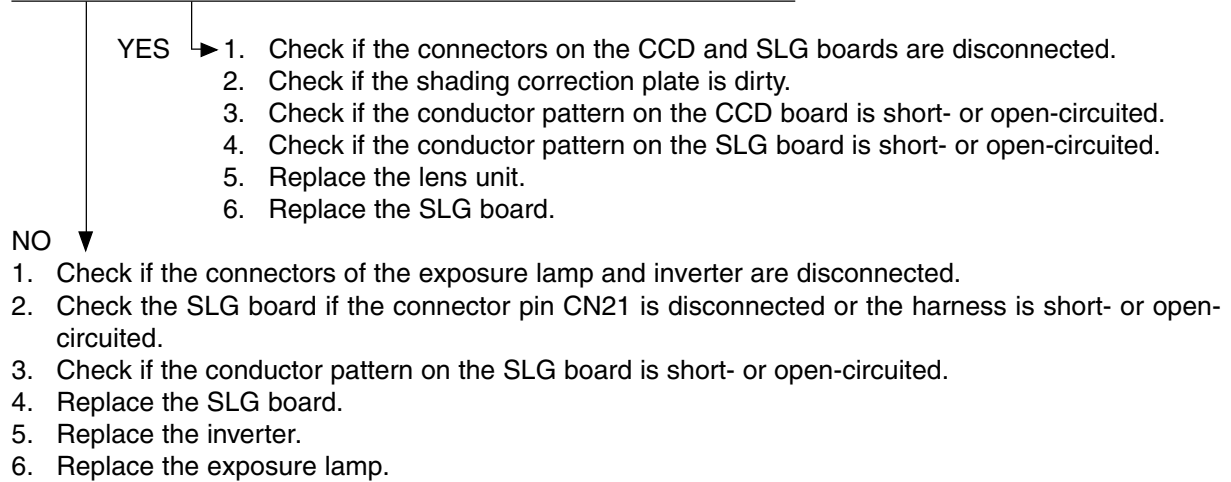
YES ▼

- 1. Check if the connector pins are disconnected or the harnesses are open-circuited.
- 2. Check if the conductor patterns on the LCF transport motor board, LCF board and LGC board are short- or open- circuited.
- 3. Check if the PLL lock signal CN102-3 pin output from the LCF board is always "L" level.
- 4. Check if the voltage supplied to the microcomputer input terminal IC103-17 pin is always "L" level.
- 5. Replace the LCF transport motor.
- 6. Replace the LCF board.
- 7. Replace the LGC board.

5.1.10 Scanning system related service call

[C260] Peak detection error

Does the exposure lamp light? (Perform the output check: 03-267)

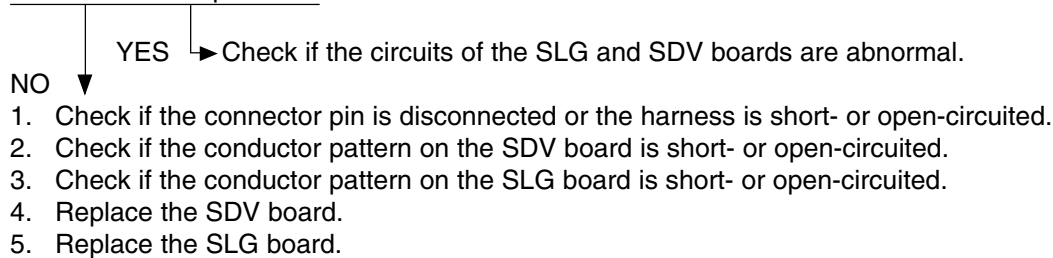


[C270] Carriage home position sensor not going OFF within a specified time

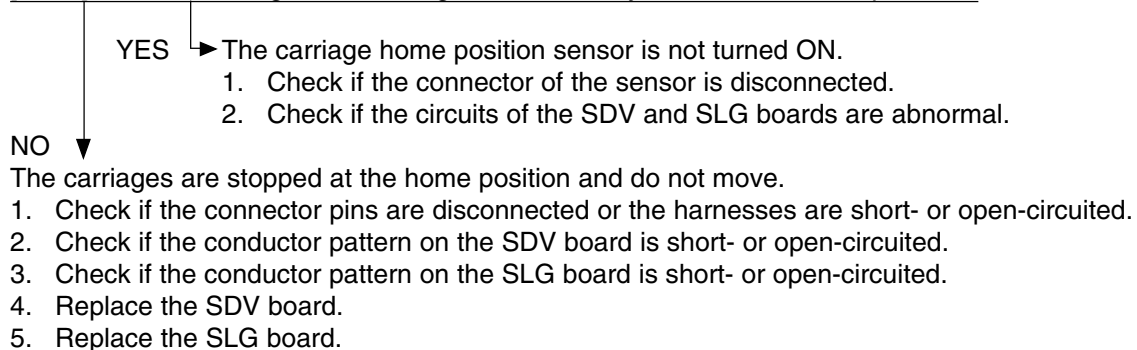
[C280] Carriage home position sensor not going ON within a specified time

Remove the original glass and move the carriages to the paper feeding side. Turn ON the power and check the following items.

[C270] Are the carriages slightly moved to the feeding direction?/Are the carriages staying at a position other than home position?



[C280] Do the carriages make a big noise after they arrive at the home position?



5.1.11 Fuser unit related service call

CAUTION:

Be sure to turn OFF the power and unplug the power cable beforehand when checking the IH control circuit and IH coil.

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 abnormality at power ON

1. Check the thermistors

- (1) Check if the connectors are disconnected.
- (2) Check if the center, rear and front thermistors are in contact with the surface of the fuser belt properly?
- (3) Check if the harnesses of the center, rear and front thermistors are open-circuited.

2. Check the IH control board and IH coil

- (1) Check if the IH coil is broken.
- (2) Check if the connector of the IH coil is disconnected.
- (3) Check if the thermostats are blown.
- (4) Check if the connectors on the IH control board are disconnected (AC input connectors CN450, 451 and LGC I/F connectors CN455, 456).
- (5) Check if the IH control board or the switching power supply unit is abnormal.

3. Check the LGC board

- (1) Check if the connector CN358 is disconnected.
- (2) Check if the conductor pattern on the LGC board is short- 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 the [START] button.
- (3) Change the current status counter value "1" or "2" to "0", then press the [ENTER] button or [INTERRUPT] button (to cancel [C410]).
- (4) Turn the power OFF and then back ON. Make sure that the equipment enters the normal ready state.

[C430] Thermistor abnormality after abnormality judgment

[C440] Heater abnormality after abnormality judgment

1.2.3. Check the thermistors, IH control board, IH coil and LGC board

Check the above components following the procedure 1, 2 and 3 for [C410].

4. Clear the status counter

Change the current status counter value (08-400) "4" to "0" for [C430] and "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 : "4" or "5"
- The error occurred after the equipment has become ready: "7"
- The temperature detected by the center thermistor is 210°C or higher: "9"
- The temperature detected by the rear thermistor is 220°C or higher: "9"

[C450] Thermistor abnormality during printing

1. Check the front thermistor

- (1) Check if the connector is disconnected.
- (2) Check if the front thermistor is in contact with the surface of the fuser belt properly.
- (3) Check if the harness of the front thermistor is open-circuited.

2. Check the LGC board

- (1) Check if the connector CN358 is disconnected.
- (2) Check if the conductor pattern on the board is short- or open-circuited.
- (3) Replace the LGC board.

3. Clear the status counter

Change the current status counter value (08-400) "6" to "0".

[C470] IH initialization or IH power voltage abnormality

1. Check the AC input voltage

Check if the AC input voltage is within the specified range.

(especially when the heater becomes ON after the power is turned ON [the equipment is warming up])

2. Check the thermostats

Check if the thermostats are blown.

3. Check the IH control board

(1) Check if the AC input connectors CN450, 451 on the IH control board or the LGC I/F connectors CN455, 456 are disconnected?

(2) Check if the fuse on the IH control board has blown.

(3) Replace the IH control board.

4. Check the LGC board

(1) Check if the connector CN358 is disconnected.

(2) Check if the conductor pattern on the board is short- or open-circuited.

(3) Replace the LGC board.

5. Clear the status counter

Change the values "10", "11", "14" or "17" of the status counter (08-400) to "0".

* The status counter value is as follows in the following cases. Change them to "0" respectively.

- The error occurred immediately after the power was turned ON: "10"
- The error occurred before the temperature of the fuser roller reaches 40°C: "11"
- The error occurred before the equipment has become ready: "14"
- The error occurred when the equipment is in the ready state: "17"

[C480] Overheating of IGBT

1. Check the operation of the IH control board cooling fan

Check if the IH control board cooling fan is rotating normally. (Is the connector securely connected?)

2. Check the IH board

- (1) Check if the IGBT or IGBT radiation plate is normal. (Is the radiation plate securely attached?)
- (2) Check if the conductor pattern on the board is short- or open-circuited.
- (3) Replace the IH board.

3. Clear the status counter

Change the values "12", "15" or "18" of the status counter (08-400) to "0".

* The status counter value is as follows in the following cases. Change them to "0" respectively.

- The error occurred before the temperature of the fuser roller reaches 40°C: "12"
- The error occurred before the equipment has become ready: "15"
- The error occurred when the equipment is in the ready state: "18"

[C490] IH control circuit or IH coil abnormality

1. Check the IH board

- (1) Check if the conductor pattern on the board is short or open-circuited.
- (2) Replace the IH board.

2. Check the IH coil

- (1) Check if the coil is broken or short out.
- (2) Replace the IH coil.

3. Clear the status counter

Change the values "13", "16" or "19" of the status counter (08-400) to "0".

* The status counter value is as follows in the following cases. Change them to "0" respectively.

- The error occurred before the temperature of the fuser roller reaches 40°C: "13"
- The error occurred before the equipment has become ready: "16"
- The error occurred when the equipment is in the ready state: "19"

When the problem is solved, [C470], [C480] and [C490] can be cleared by turning OFF and ON the main switch so the status counter does not have to be changed to "0".
The value of the status counter remains the same until the next service call overwrites the value.

5.1.12 Communication related service call

[C550] 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- or open-circuited.
- (3) Check if the conductor pattern on the SLG board is short- or open-circuited.
- (4) Replace the RADF board.
- (5) Replace the SLG board.

[C570] Communication error between Engine-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- or open-circuited.
- (3) Check if the conductor pattern on the LGC board is short- 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- or open-circuited.
- (4) Check if the conductor pattern on the finisher controller PC board is short- or open-circuited.
- (5) Replace the IPC board.
- (6) Replace the finisher controller PC board.

[F070] Communication error between System-CPU and Engine-CPU

- (1) Check if the harness connecting the SYS board and LGC board 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

- (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.

5.1.13 RADF related service call

Note:

When performing the RADF related troubleshooting, be sure to perform “Automatic adjustment of RADF sensor and EEPROM initialization (05-356)” at adjustment mode whenever the RADF board, original length sensor, read sensor or reverse sensor has been replaced.

[C730] EEPROM initialization error

- (1) Check if the conductor pattern on the RADF board is short- or open-circuited.
- (2) Replace the RADF board.

[C810] Fan motor abnormality

- (1) Check if the load on the motor shaft is normal.
- (2) Remove any foreign matter.
- (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 if the conductor pattern on the RADF board is open- or short-circuited.
- (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 if the conductor pattern on the RADF is short- or open-circuited.
- (4) Replace the read sensor.
- (5) Replace the RADF board.

[C830] Original length sensor adjustment error

- (1) Check if there are any foreign objects between the original length sensor and the 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 if the conductor pattern on the RADF board is short- or open-circuited.
- (4) Replace the original length sensor.
- (5) Replace the RADF board.

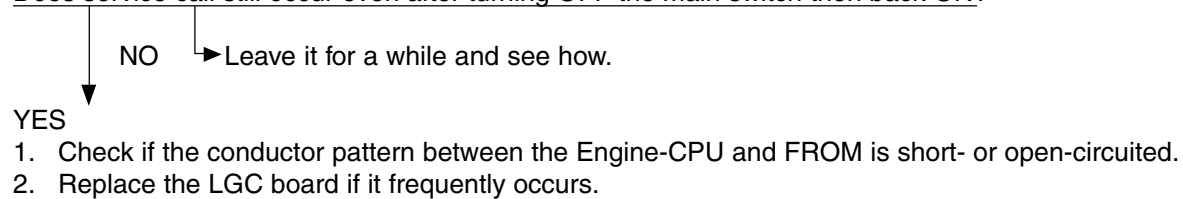
5.1.14 Circuit related service call

[C900] SLG, SYS, LGC board abnormality

T.B.D.

[C940] Engine-CPU abnormality

Does service call still occur even after turning OFF the main switch then back ON?



[C950] LGC board abnormality

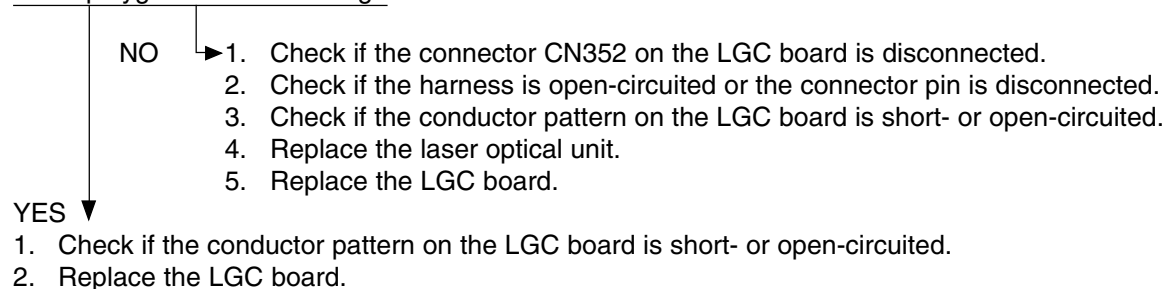
T.B.D.

T.B.D.

5.1.15 Laser optical unit related service call

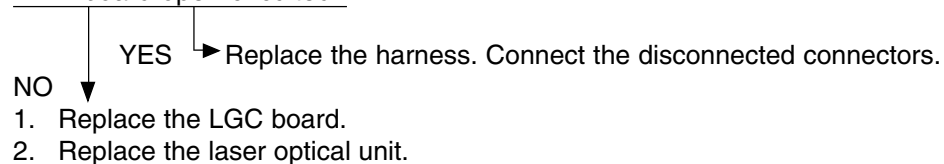
[CA10] Polygonal motor abnormality

Is the polygonal motor rotating?



[CA20] H-Sync detection error

Are the harness between the connector (CN334) on the LGC board and connector (CN201) on the LDR board open-circuited?



5.1.16 Finisher related service call

[CB20] Delivery motor abnormality

MJ-1022

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

NO → Fix the mechanism.
YES ↓

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

NO → Correct the wiring.
YES ↓

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

NO → Replace the sensor.
YES ↓

Is the problem solved by replacing the delivery motor (M1)?

NO → Replace the finisher controller PC board.
YES ↓
Replace the motor.

[CB30] Tray 1/2 shift motor abnormality

MJ-1023/1024

Are the tray 1 shift area sensors 1-3 and tray 2 shift area sensors 1-3 normal?

NO → Replace the tray 1/2 shift area sensor boards.
YES ↓

Are the wirings between the finisher controller PC board and the tray 1/2 shift motors (M37/M38) correct?

NO → Correct the wirings.
YES ↓

Is there any problem with the tray lift mechanism?

NO → Fix the lift mechanism.
YES ↓

1. Replace the tray 1/2 shift motors.
2. Replace the finisher controller PC board.

[CB40] Rear aligning plate motor abnormality

MJ-1023/1024

Is the rear aligning plate home position sensor (PI37) normal?

NO → Replace the sensor.

YES ↓

Is the wiring between the finisher controller PC board and the rear aligning plate motor (M34) correct?

NO → Correct the wiring.

YES ↓

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

NO → Fix the mechanism.

YES ↓

1. Replace the rear aligning plate motor.
2. Replace the finisher controller PC board.

[CB50] Staple motor abnormality

MJ-1022/1023/1024

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

NO → Correct the wiring.

YES ↓

1. Replace the stapler.
2. Replace the finisher controller PC board.

[CB60] Stapler unit shift motor abnormality

MJ-1023/1024

Is the stapler shift home position sensor (PI40) working normally?

NO → Replace the sensor.

YES ↓

Is the wiring between the finisher controller PC board and the stapler shift motor (M35) correct?

NO → Correct the wiring.

YES ↓

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

YES → Fix the mechanism.

NO ↓

1. Replace the stapler shift motor.
2. Replace the finisher controller PC board.

[CB80] Backup RAM data abnormality

MJ-1023/1024

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

YES → End.

NO ↓

1. Replace the finisher controller PC board.
2. Replace the punch controller PC board.

[CB90] Saddle stitcher paper pushing plate motor abnormality

MJ-1024

Are the paper pushing plate home position sensor (PI14S), paper pushing plate top position sensor (PI15S) and paper pushing plate motor clock sensor (PI1S) working normally?

NO → Replace the sensor.

YES ↓

Is the paper pushing plate drive mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replace the paper pushing plate motor (M8S).
2. Replace the saddle stitcher controller PC board.

[CBA0] Saddle stitcher stitch motor (front) abnormality

[CBB0] Saddle stitcher stitch motor (rear) abnormality

MJ-1024

Are the front and rear stitchers and their stands installed properly?

YES ↓
NO → Install them properly.

Are the stitcher home position switches (PS7S/PS5S) on the front and rear stitchers working normally?

YES ↓
NO → Replace the front or rear stitcher.

1. Replace the stitcher motor (M7S).
2. Replace the saddle stitcher controller PC board.

[CBC0] Saddle stitcher alignment motor abnormality

MJ-1024

Is the alignment plate home position sensor (PI5S) working normally?

YES ↓
NO → Replace the sensor.

Is the alignment plate drive mechanism normal?

YES ↓
NO → Fix the mechanism.

1. Replace the alignment motor (M5S).
2. Replace the saddle stitcher controller PC board.

[CBD0] Saddle stitcher guide motor abnormality

MJ-1024

Is the guide home position sensor (PI13S) working normally?

NO → Replace the sensor.

YES ↓

Is the guide plate drive mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replacing the guide motor (M3S).
2. Replace the saddle stitcher controller PC board.

[CBE0] Saddle stitcher paper folding motor abnormality

MJ-1024

Are the paper folding motor clock sensor (PI4S) and paper folding home position sensor (PI21S) working normally?

NO → Replace the sensors.

YES ↓

Is the paper folding roller drive mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replacing the paper folding motor (M2S).
2. Replace the saddle stitcher controller PC board.

[CBF0] Saddle stitcher paper positioning plate motor abnormality

MJ-1024

Is the paper positioning plate home position sensor (PI7S) working normally?

NO → Replace the sensor.

YES ↓

Is the paper positioning plate drive mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replacing the paper positioning plate motor (M4S).
2. Replace the saddle stitcher controller PC board.

[CC00] Connection abnormality in saddle stitcher sensor connector

MJ-1024

Are the guide home position sensor (PI13S), paper pushing plate home position sensor (PI14S) and paper pushing plate top position sensor (PI15S) connected to the saddle stitcher controller PC board?

NO → Connect them to the board.

YES ↓

Is the wiring between the sensors and the saddle stitcher correct?

NO → Correct the wiring.

YES ↓

Is 5V DC being supplied from the connector pins J9-7, -10 and -13 on the saddle stitcher controller PC board?

NO → Replace the saddle stitcher controller PC board.

YES ↓

Are the connector pins J9-8, -11 and -14 on the saddle stitcher controller PC board correctly connected to the ground?

NO → Replace the saddle stitcher controller PC board.

YES ↓

End.

[CC10] Saddle stitcher microswitch abnormality

MJ-1024

Are the front cover switch (MS31), inlet door switch (MS1S) and delivery door switch (MS3S) normal?

NO → Replace the switches.

YES ↓

Measure the voltage between J704-1 (+) and J704-2 (-) on the finisher controller PC board. Is it 24V?

NO → Replace the finisher controller PC board.

YES ↓

Is the wiring between Jxxx on the finisher controller PC board and Jxxx on the saddle stitcher controller PC board correct?

NO → Correct the wiring.

YES ↓

Replace the saddle stitcher controller PC board.

[CC20] Communication error between finisher and saddle stitcher

MJ-1024

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

YES → End.
NO ↓

Is the wiring between the finisher controller PC board and the saddle stitcher controller PC board connected?

NO → Connect the wiring.
YES ↓

1. Replace the finisher controller PC board.
2. Replace the saddle stitcher controller PC board.

[CC30] Stack processing motor abnormality

MJ-1022

[Procedure 1]

Is the tension of the drive belt normal?

NO → Loosen the adjustment screw to adjust its tension.
YES ↓

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

NO → Apply grease on the cut-out part of the front side frame with where the bushing contacts.
YES ↓

Is the spring of the returning roller detached?

YES → Attach the spring.
NO ↓

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

NO → Correct the wiring.
YES ↓

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

NO → Replace the sensor.
YES ↓

1. Replacing the stack processing motor.
2. Replace the finisher controller PC board.

[Procedure 2]

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

NO → Apply grease on the cut-out part of the front side frame with where the bushing contacts.

YES ↓

Is the spring of the returning roller detached?

YES → Attach the spring.

NO ↓

Is the tension of the stack processing motor drive belt normal?

NO → Loosen the adjustment screw to adjust its tension.

YES ↓

Is the returning roller home position sensor (S3) working properly?

NO → Replace the sensor.

YES ↓

Is the problem solved by replacing the stack delivery motor?

NO → Replace the finisher controller PC board.

YES ↓

End.

[CC40] Swing motor abnormality

MJ-1023/1024

Is the swing unit home position sensor (PI35) normal?

NO → Replace the sensor.

YES ↓

Is the wiring between the finisher controller PC board and the swing motor (M36) correct?

NO → Correct the wiring.

YES ↓

1. Replace the swing motor.
2. Replace the finisher controller PC board.

[CC50] Horizontal registration motor abnormality

MJ-1023/1024 (when MJ-6004 is installed)

Is the horizontal registration home position sensor (PI1S) working normally?

NO → Replace the sensor.

YES ↓

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

NO → Correct the wiring.

YES ↓

Is the horizontal registration mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replace the horizontal registration motor (M2P).
2. Replace the punch controller PC board.
3. Replace the finisher controller PC board.

[CC60] Punch motor abnormality

MJ-1023/1024 (when MJ-6004 is installed)

Are the punch home position sensor (PI3P) and punch motor clock sensor (PI2P) working normally?

NO → Replace the sensors.

YES ↓

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

NO → Correct the wiring.

YES ↓

Is the punching mechanism normal?

NO → Fix the mechanism.

YES ↓

1. Replace the punch motor (M1P).
2. Replace the punch controller PC board.
3. Replace the finisher controller PC board.

[CC80] Front jogging motor abnormality/Front aligning plate motor abnormality

MJ-1022 (Front jogging motor abnormality)

Is the front jogging plate home position sensor (S6) working properly?

NO → Replace the sensor.

YES ↓

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

NO → Correct the wiring.

YES ↓

Has the rack run over the stopper of the roll?

YES → Fix it.

NO ↓

1. Replace the front jogging motor.
2. Replace the finisher controller PC board.

MJ-1023/1024 (Front aligning plate motor abnormality)

Is the front aligning plate home position sensor (PI36) normal?

NO → Replace the sensor.

YES ↓

Is the wiring between the finisher controller PC board and the front aligning plate motor (M33) correct?

NO → Correct the wiring.

YES ↓

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

NO → Fix the mechanism.

YES ↓

1. Replace the front aligning plate motor.
2. Replace the finisher controller PC board.

[CC90] Upper stack tray lift motor abnormality

MJ-1022

Is the wiring between the finisher controller PC board and upper stack tray lift motor correct?

YES ↓
NO → Correct the wiring.

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

YES ↓
NO → Level them.

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

YES ↓
NO → Replace the sensor.

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

YES ↓
NO → Replace the sensor.

Are the upper stack tray upper limit sensor (S25), upper stack tray full sensor (S23) and stack processing safety switch (S26) working properly?

YES ↓
NO → Replace the sensor or sensor controller PC board.

Does the voltage between the pins J14-1 pin and -2 pin on the finisher controller PC board become 24V when the upper stack tray lift motor starts rotating?

YES ↓
NO → Replace the finisher controller PC board.

Check the wiring between the upper stack tray lift motor and finisher controller PC board. If there is no problem, replace the upper stack tray lift motor.

[CCA0] Lower stack tray lift motor abnormality

MJ-1022

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

NO → Correct the wiring.

YES ↓

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

NO → Level them.

YES ↓

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

NO → Replace the sensor.

YES ↓

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

NO → Replace the sensor.

YES ↓

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

NO → Replace the sensor or sensor controller PC board.

YES ↓

Does the voltage between the pins J3-1 pin and -2 pin on the finisher controller PC board become 24V when the lower stack tray lift motor starts rotating?

NO → Replace the finisher controller PC board.

YES ↓

Check the wiring between the upper stack tray lift motor and finisher controller PC board. If there is no problem, replace the motor.

[CCB0] Rear jogging motor abnormality

MJ-1022

Is the rear jogging plate home position sensor (S7) working properly?

NO → Replace the sensor.

YES ↓

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

NO → Correct the wiring.

YES ↓

Has the rack run over the stopper of the roll?

YES → Fix it.

NO ↓

1. Replace the rear jogging motor.
2. Replace the finisher controller PC board.

[CCD0] Stack ejection motor abnormality

MJ-1023/1024

Is the shutter home position sensor (PI45) normal?

YES ↓
NO → Replace the sensor.

Are the wirings between the finisher controller PC board and the stack ejection motor (M32)/shutter clutch (CL31) correct?

YES ↓
NO → Correct the wirings.

Is there any problem with the shutter mechanism?

YES → Fix the shutter mechanism.
NO ↓

1. Replace the stack ejection motor and shutter clutch.
2. Replace the finisher controller PC board.

[CCE0] Rear end assist motor abnormality

MJ-1023/1024

Is the rear end assist guide home position sensor (PI39) normal?

YES ↓
NO → Replace the sensor.

Is the wiring between the finisher controller PC board and the rear end assist motor (M39) correct?

YES ↓
NO → Correct the wiring.

Is there any problem with the rear end assist mechanism?

YES → Fix the rear end assist mechanism.
NO ↓

1. Replace the rear end assist motor.
2. Replace the finisher controller PC board.

[CCF0] Gear change motor abnormality

MJ-1023/1024

Is the gear change home position sensor (PI49) normal?

NO → Replace the sensor.
YES ↓

Is the wiring between the finisher controller PC board and the gear change motor (M40) correct?

NO → Correct the wiring.
YES ↓

Is there any problem with the gear change mechanism?

YES → Fix the gear change mechanism.
NO ↓

1. Replace the gear change motor.
2. Replace the finisher controller PC board.

[CE00] Communication error between finisher and puncher unit

MJ-1023/1024 (When MJ-6004 is installed)

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

YES → End.
NO ↓

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

NO → Correct the wiring.
YES ↓

1. Replace the finisher controller PC board.
2. Replace the punch controller PC board.

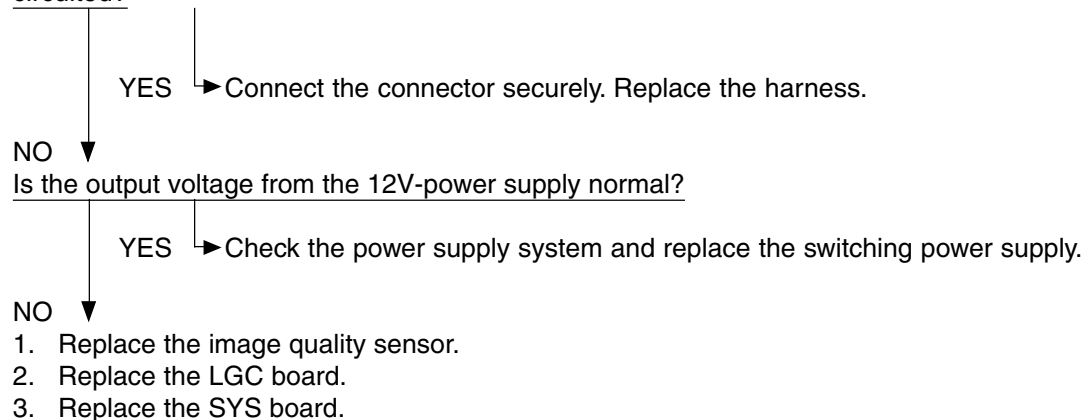
5.1.17 Image control related service call

- (1) After checking [CE10], [CE20] and [CE40], and taking appropriate action, perform the forced performing of image quality closed-loop control.
 1. While pressing [0] and [5] simultaneously, turn ON the power.
 2. Key in [395], and then press the [START] button.
 3. Turn OFF and then back ON the power, and check that the equipment becomes ready normally.
- (2) After confirming the items in (1), clear the abnormal detection counter of image quality control.
 1. While pressing [0] and [8] simultaneously, turn ON the power.
 2. Key in [573], and then press the [START] button.
 3. Rewrite the displayed status counter from "1" - "16" to "0", and then press the [ENTER] or [INTERRUPT] button.
 4. Key in [574], and then press the [START] button.
 5. Rewrite the displayed status counter from "1" - "16" to "0", and then press the [ENTER] or [INTERRUPT] button.
 6. Key in [575], and then press the [START] button.
 7. Rewrite the displayed status counter from "1" - "16" to "0", and then press the [ENTER] or [INTERRUPT] button.
 8. Key in [576], and then press the [START] button.
 9. Rewrite the displayed status counter from "1" - "16" to "0", and then press the [ENTER] or [INTERRUPT] button.
 10. Turn OFF and then back ON the power, and check that the equipment becomes ready normally.

[CE10] Image quality sensor abnormality (OFF level)

Is the connector of the image quality sensor, or the connector CN345 or CN338 on the LGC board, or the connector CN117 on the SYS board disconnected?

Is the harness between the LGC board and the image quality sensor, or the harness between the LGC board and the SYS board, or the harness between the LGC board and the switching power supply open-circuited?



[CE20] Image quality sensor abnormality (no pattern level)

1. Check if the transfer belt unit is securely locked.
2. Check if the transfer belt unit is securely inserted.
3. Check for any abnormal stain, large flaw or break on the transfer belt surface.
4. Check if the drum and the transfer belt are rotating. If any abnormality is found, correct any mechanical problem.

Is any of the connectors, CN345 and CN338 on the LGC board disconnected?

Is the connector CN117 on the SYS board disconnected?

Is the harness between the LGC board and the SYS board open-circuited?

Is the connector of the image quality sensor disconnected or stained?

Is the harness between the LGC board and the image quality sensor open-circuited?

Is the high-voltage transformer connector disconnected?

Is the harness between the LGC board and the high-voltage transformer open-circuited?

Is any of the high-voltage contact points of the transfer belt unit in faulty contact? Is any contact points stained?

Is the harness of high-voltage transformer disconnected? Is the harness open-circuited?

YES → Connect the harness securely. Replace the harness. Clean the connector and correct the contact point.

NO ↓

Is the output voltage from the 12V-power supply normal?

YES → Check the power supply system, and replace the switching power supply.

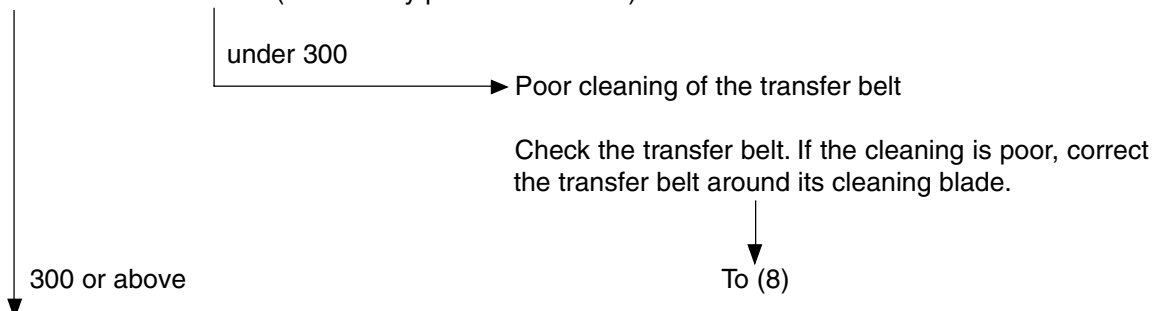
NO ↓

1. Replace the image quality sensor.
2. Replace the LGC board.
3. Replace the SYS board.

[CE40] Image quality control test pattern abnormality

- (1) Use "Image quality control abnormal detection counter Y to K display/0 clearing (08-573 to 576)" to check the abnormal occurring condition for each color.

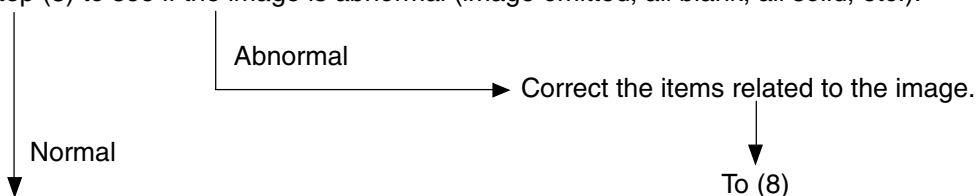
- (2) Check "Output value display of image quality sensor/Low-density pattern (05-391-0 to 3)" to confirm if the value is under 300 (low-density pattern abnormal) for each color.



- (3) Check "Output value display of image quality sensor/High-density pattern (05-390-0 to 3)" to confirm if the value is 600 or above (high-density pattern abnormal) and identify the color which pattern is abnormal.

- (4) Set the values of "Image quality open-loop control 1 (98-549)" and "Image quality open-loop control 2 (08-551)" to "0" (disabled).

- (5) Output the image quality control test pattern (04-270) and check the patch of the color identified in step (3) to see if the image is abnormal (image omitted, all blank, all solid, etc.).



- (6) Replace the image quality sensor.

- (7) Set the values of "Image quality open-loop control 1 (08-549)" and "Image quality open-loop control 2 (08-551)" to "1" (enabled).

- (8) Perform "Forced performing of image quality closed-loop control (05-395)" and make sure it is completed normally (Error [CE40] does not appear).

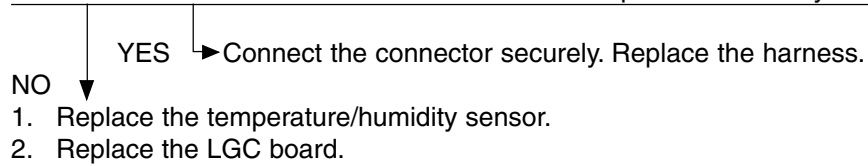
- (9) Clear all "Image quality control abnormal detection counter Y to K display/0 clearing (08-573 to 576)".

- (10) If any of the specified parts has been replaced, perform "Automatic initialization of image quality control (05-396)" (► Chapter 3.3) and then perform "Automatic gamma adjustment" (► Chapter 3.5.1 and 3.6.1).

[CE50] Temperature/humidity sensor abnormality

Is the connector CN361 on the LGC board or the connector of the temperature/humidity sensor disconnected?

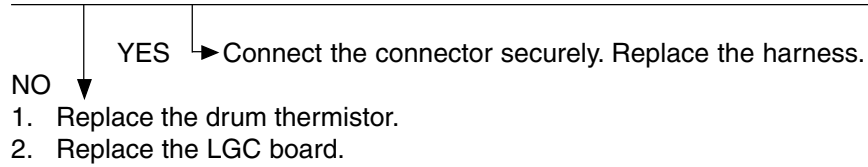
Is the harness between the LGC board and the temperature/humidity sensor disconnected ?



[CE90] Drum thermistor abnormality

Is the connector CN361 on the LGC board, or the connector of the drum thermistor disconnected?

Is the harness between the LGC board and the drum thermistor disconnected?



5.1.18 Copy process related service call

[C360] Charger cleaner motor abnormality

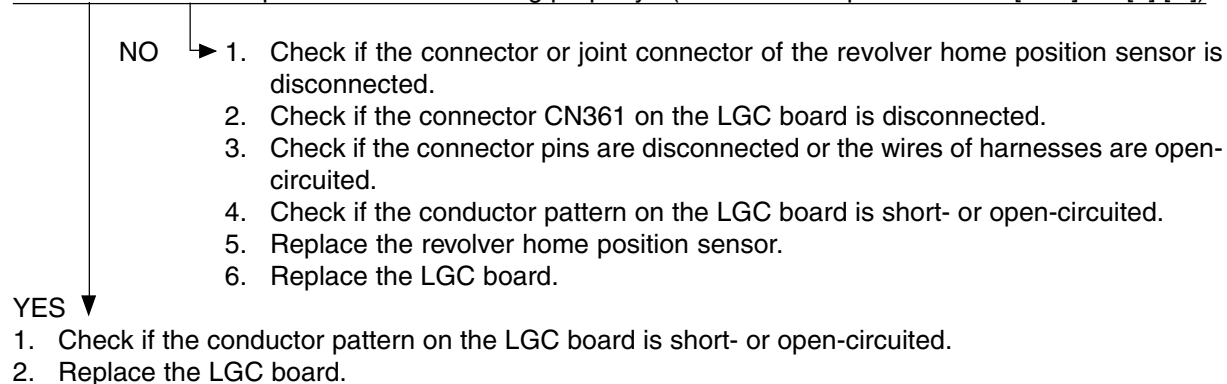
- (1) Check if the main charger is installed normally.
- (2) Check if any of the connector pins of the charger cleaner motor is disconnected.
- (3) Replace the charger cleaner motor.
- (4) Replace the LGC board.

[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 charger wire is broken or the main charger grid is deformed.
- (4) Check if any foreign matter is on the charger wire or main charger grid.

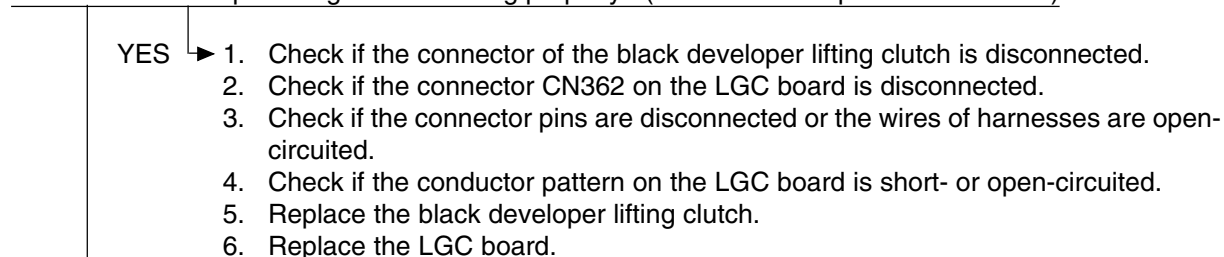
[CEA0] Revolver home position detection abnormality

Is the revolver home position sensor working properly? (Perform the input check: 03-[FAX]ON/[2]/[C])



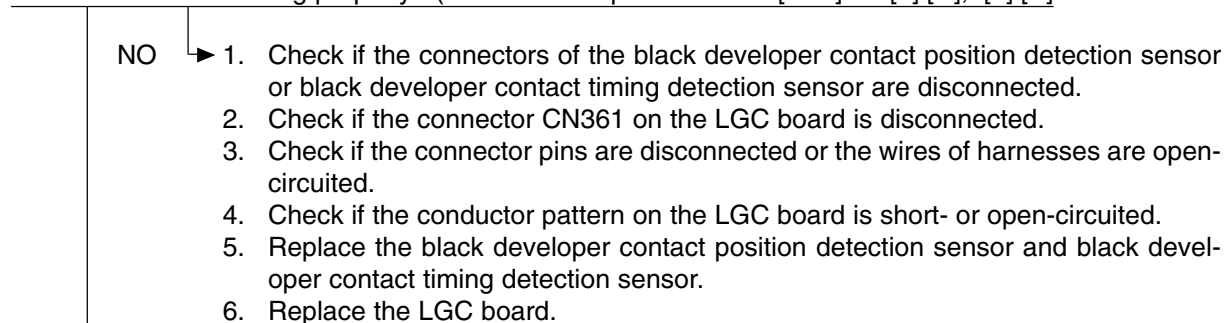
[CEB0] Black developer unit lifting movement abnormality

Is the black developer lifting clutch working properly? (Perform the output check: 03-433)



NO ↓

Are the black developer contact position detection sensor and black developer contact timing detection sensor working properly? (Perform the input check: 03-[FAX]ON/[1]/[C], /[1]/[B])

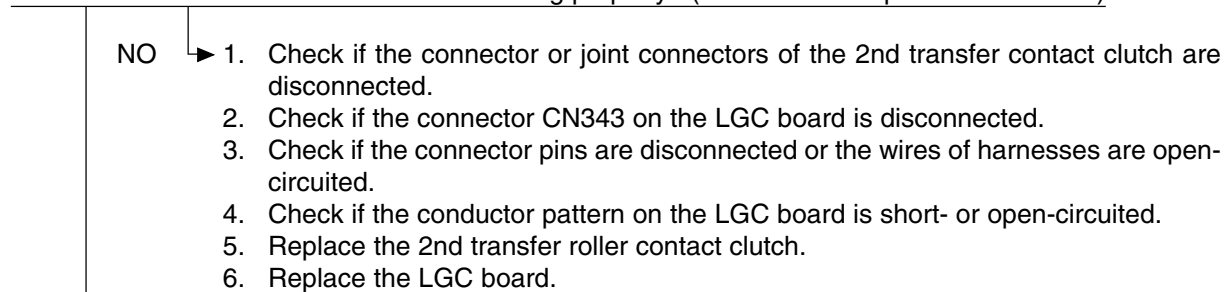


YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

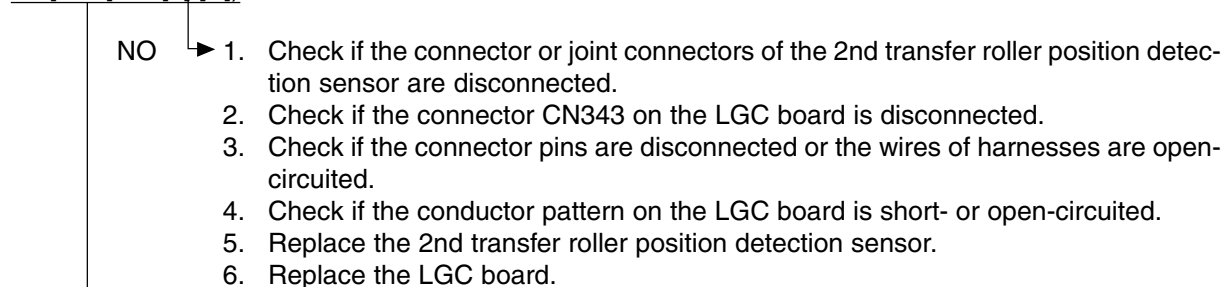
[CEC0] 2nd transfer roller position detection abnormality

Is the 2nd transfer roller contact clutch working properly? (Perform the output check: 03-435)



YES ↓

Is the 2nd transfer roller position detection sensor working properly? (Perform the input check: 03-[FAX]ON/[1]/[A])



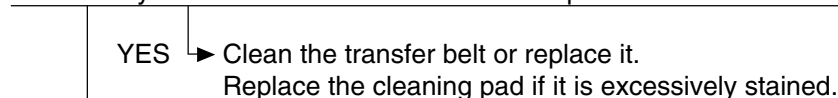
YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

[CEE0] Transfer belt position detection abnormality (Normal speed)

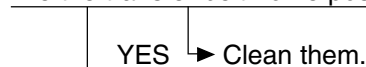
[CEE1] Transfer belt position detection abnormality (When decelerating)

Is there any stain or scratch on the reflection tape inside the transfer belt?



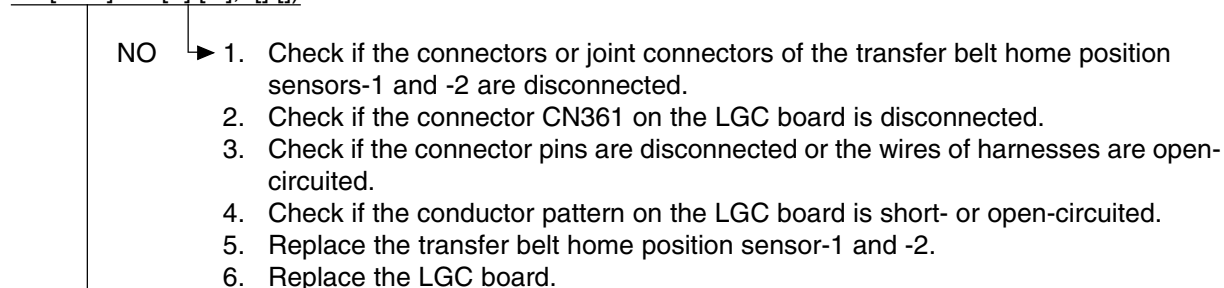
NO ↓

Are the transfer belt home position sensors-1 and -2 stained?



NO ↓

Are the transfer belt home position sensors-1 and -2 working properly? (Perform the input check: 03-[FAX]ON/[9]/[H],/[I]/[I])

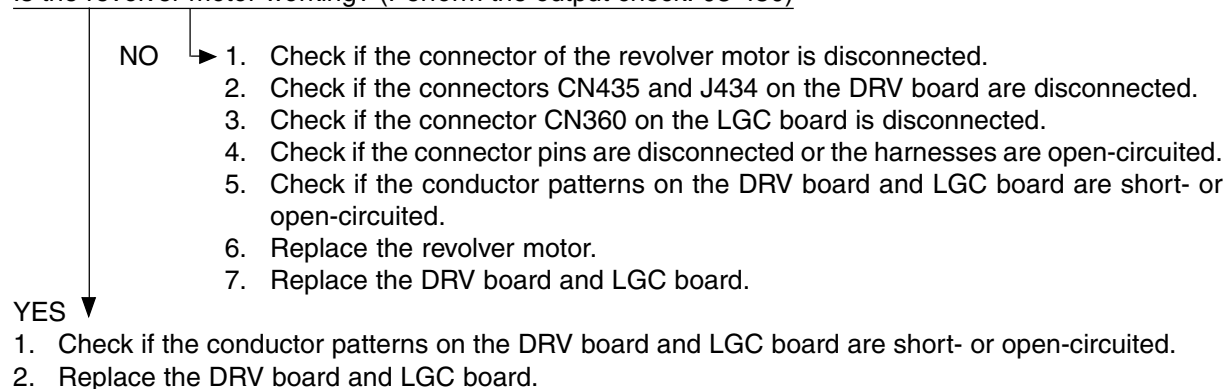


YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

[CEF0] Revolver motor abnormality

Is the revolver motor working? (Perform the output check: 03-450)



5.1.19 Toner density control related service call

[CF20] Toner density detection voltage abnormality

Is the developer material transported properly? Is the form of magnetic brush is normal?

- NO →
1. Check if the amount of the developer material is normal or any foreign matter is mixed in.
 2. Correct the transport mechanism of developer material.
 3. Check the pole position and correct if necessary.

YES ↓

Is the color auto-toner sensor stained?

- YES → Clean it.

NO ↓

Is the color auto-toner sensor shutter solenoid working normally? (Perform the output check: 03-125/175)

Is the color auto-toner sensor working?

- NO →
1. Check if the connectors or joint connectors of the color auto-toner sensor shutter solenoid and color auto-toner sensor are disconnected.
 2. Check if the connector CN356 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor pattern on the LGC board is short- or open-circuited.
 5. Replace the color auto-toner sensor shutter solenoid and color auto-toner sensor.
 6. Replace the LGC board.

YES ↓

Is the color auto-toner sensor shutter opening position correct? (Perform the output check: 03-125/175)

- NO → Adjust the install position of solenoid so that the sensor holder will touch and face the positioning component when opening the shutter.

YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

[CF30] Reference plate detection voltage abnormality

Are the reference plate and color auto-toner sensor stained?

YES → Clean them.

NO ↓

Is the color auto-toner sensor shutter solenoid working normally? (Perform the output check: 03-125/175)

Is the color auto-toner sensor working?

NO →

1. Check if the connectors or joint connectors of the color auto-toner sensor shutter solenoid and color auto-toner sensor are disconnected.
2. Check if the connector CN356 on the LGC board is disconnected.
3. Check if the connector pins are disconnected or the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the color auto-toner sensor shutter solenoid and color auto-toner sensor.
6. Replace the LGC board.

YES ↓

Is the color auto-toner sensor shutter closing position correct? (Perform the output check: 03-125/175)

NO → Adjust the install position of solenoid so that the gap between the sensor holder and stopper will be 1.0 mm when closing the shutter.

YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

[CF40] Light amount correction voltage abnormality

Is the developer unit inserted properly?

NO → Insert it properly.

YES ↓

Is the developer material transported properly? Is the form of magnetic brush is normal?

- NO →
1. Check if the amount of the developer material is normal or any foreign matter is mixed in.
 2. Correct the transport mechanism of developer material.
 3. Check the pole position and correct if necessary.

YES ↓

Is the color auto-toner sensor stained?

YES → Clean it.

NO ↓

Is the color auto-toner sensor shutter solenoid working normally? (Perform the output check: 03-125/175)

Is the color auto-toner sensor working?

- NO →
1. Check if the connectors or joint connectors of the color auto-toner sensor shutter solenoid and color auto-toner sensor are disconnected.
 2. Check if the connector CN356 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor pattern on the LGC board is short- or open-circuited.
 5. Replace the color auto-toner sensor shutter solenoid and color auto-toner sensor.
 6. Replace the LGC board.

YES ↓

Is the color auto-toner sensor shutter opening position correct? (Perform the output check: 03-125/175)

NO → Adjust the install position of solenoid so that the sensor holder will touch and face the positioning component when opening the shutter.

YES ↓

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

[CF50] Color auto-toner sensor abnormality

Are the connector of color auto-toner sensor, joint connector and connector CN356 on the LGC board connected normally?

- NO →
1. Reconnect the connectors.
 2. Correct or replace if the connector pins are disconnected or harnesses are open-circuited.

YES ↓

Are the color auto-toner sensor and reference plate stained?

- YES → Clean them.

NO ↓

Is the color auto-toner sensor shutter solenoid working normally? (Perform the output check: 03-125/175)

- NO →
1. Check if the connectors or joint connectors of the color auto-toner sensor shutter solenoid and color auto-toner sensor are disconnected.
 2. Check if the connector CN356 on the LGC board is disconnected.
 3. Check if the connector pins are disconnected or the harnesses are open-circuited.
 4. Check if the conductor pattern on the LGC board is short- or open-circuited.
 5. Replace the color auto-toner sensor shutter solenoid.
 6. Replace the LGC board.

YES ↓

Is the color auto-toner sensor shutter closing position correct? (Perform the output check: 03-125/175)

- NO → Adjust the install position of solenoid so that the gap between the sensor holder and stopper will be 1.0 mm when closing the shutter.

YES ↓

1. Replace the color auto-toner sensor.
2. Check if the conductor pattern on the LGC board is short- or open-circuited.
3. Replace the LGC board.

5.1.20 Other service call

[F100] HDD format error

- (1) Format the HDD. (Key in "2" at 08-690.)
- (2) Check if the HDD is mounted.
- (3) Check if the specified HDD is mounted.
- (4) Check if the connector pins of the HDD are bent.
- (5) Check if the connectors CN112, CN113 on the SYS board is disconnected.
- (6) Replace the HDD.
- (7) Replace the SYS board.
- (8) Replace the harness.

[F101] HDD unmounted

[F102] HDD start error

[F103] HDD transfer time-out

[F104] HDD data 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 open-circuited.
- (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.