Canon

imageRUNNER 2530/2525/2520 Series

Service Manual Digest



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Safety Precautions

- **CDRH** Act
- Laser Safety
- Handling of Laser System
- Turn power switch ON
- Points to Note About Turning Off the Main Power Switch
- Safety of Toner
- Notes When Handling a Lithium Battery
- Notes Before it Works
 Serving



imageRUNNER 2530/2525/2520

Series

CDRH Act

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are soled in the United States.

CANON INC.

30-2, SHIMOMARUKO, 3-CHOME, OHTA-KU, TOKYO, JAPAN

MANUFACTURED:

THIS PRODUCT CONHORMS WITH DHHS RADIATION PERFORMANCE STANDARD 21CFR CHAPTER 1 SUBCHAPTER J.

F-0-1



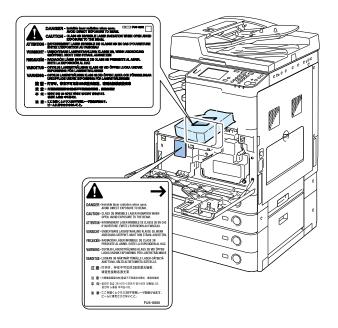
A different description may be used for a different product.

Laser Safety

When servicing the area around the laser assembly, be sure to turn off the main power. The machine's covers that can reflect laser light are identified by means of a warning label (Figure). If you must detach a cover showing the label, be sure to take extra caution during the work.

Handling of Laser System

When servicing the area around the laser assembly, be sure to turn off the main power. The machine's covers that can reflect laser light are identified by means of a warning label (Figure). If you must detach a cover showing the label, be sure to take extra caution during the work.

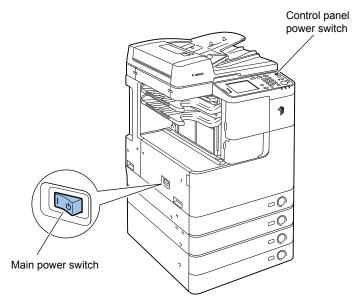


F-0-2

Turn power switch ON

The machine is equipped with 2 power switches: main power switch and control panel power switch.

The machine goes on when the main power switch is turned on (i.e., other than in low power mode, sleep mode).

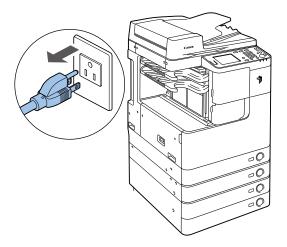


F-0-3

Power Supply



- As a general rule, do not use extension cords. Using an extension cord may
 result in a fire or electrical shock. If an extension cord must be used, however,
 use one for local rated voltage and over, untie the cord binding, and insert
 the power plug completely into the extension cord outlet to ensure a firm
 connection between the power cord and the extension cord.
- 2. The socket-outlet shall be installed near the equipment and shall be easily accessible.



F-0-4

About Toner

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.



Do not throw toner into fire. It may cause explosion.

Toner on Clothing or Skin

- If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
- Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
- Tonner is easy to react with plastic material, avoid contact with plastic.

Notes When Handling the Lithium and Ni-MH Batteries



RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

The following warnings are given to comply with Safety Principles (EN60950).



Wenn mit dem falschen Typ ausgewechselt, besteht Explosionsgefahr. Gebrauchte Batterien gemäß der Anleitung beseitigen.

Notes Before it Works Serving



At servicing, be sure to turn OFF the power source according to the specified steps and disconnect the power plug.



Periodical Service

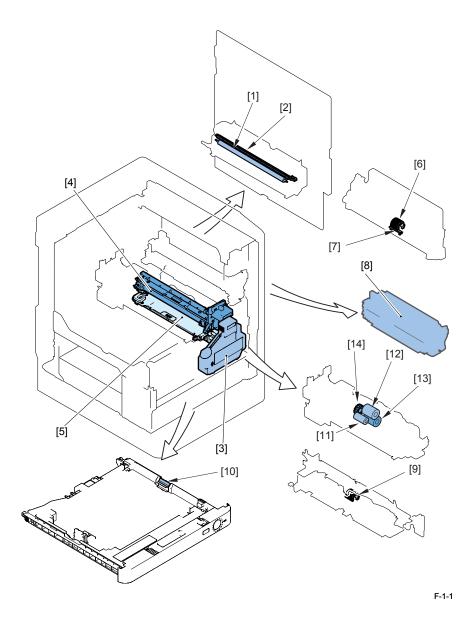
Consumable Parts and Cleaning Parts

Consumable Parts and Cleaning Parts

•:Replaced (consumables) ∆: Cleaned

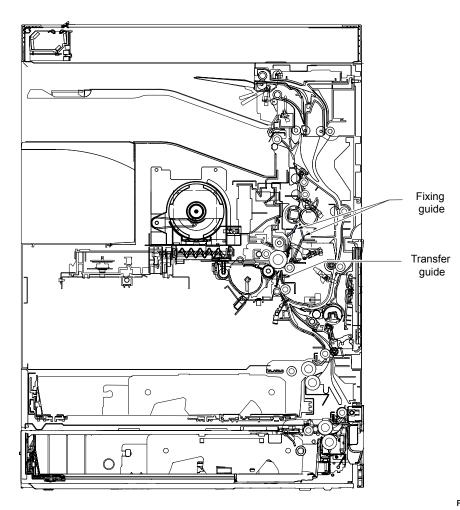
No.	System	Items	Pa	rts No.	Q'ty	Life				Inte	rval				Counter of consumables		Remarks
			iR2530/2525 (550-sheet 1st cassette type)	iR2530/2525/2520 (250-sheet 1st cassette type)			7,000 sheets	40,000 sheets	80,000 sheets	120,000 sheets	130,000 sheets	150,000 sheets	240,000 sheets	500,000 sheets			
1	Image formation	Waste toner container	FM	3-9276	1	80,000 sheets			•						DRBL-1	WST-TNR	Defined by 6% document
2	system	Transfer guide		-	1	120,000 sheets				Δ					DRBL-1	DVG-CYL	Wipe with dry cloth.
3		Transfer roller	FC	9-0693	1	150,000 sheets						•			DRBL-1	TR-ROLL	
4		Separation static charge eliminator	FM	3-9296	1	150,000 sheets						•			DRBL-1	SP-SC-EL	
5		Developing unit	FM	3-9263	1	500,000 sheets								•	DRBL-1	DVG-CYL	
6	Fixing system	Fixing inlet guide		-	1	120,000 sheets				Δ					DRBL-1	FX-UNIT	Wipe with dry cloth. If dirt cannot come off, wipe it with alcohol.
7		Fixing unit		367 (120V) 381 (230V)	1	150,000 sheets		·				•			DRBL-1	FX-UNIT	

No.	System	Items	Pa	rts No.	Q'ty	Life				Inte	rval				Counter of		Remarks
			iR2530/2525 (550-sheet 1st cassette type)	iR2530/2525/2520 (250-sheet 1st cassette type)			7,000 sheets	40,000 sheets	80,000 sheets	120,000 sheets	130,000 sheets	150,000 sheets	240,000 sheets	500,000 sheets	consu	mables	
8	Pickup feed system	Cassette pickup roller (For 550-sheet cassette)		6-3405 1 (For CHN)	*1	120,000 sheets				•					DRBL-1	1	*: Quantity indicates number of cassette.
9		Cassette transfer roller (For 550-sheet cassette)		6-7083 2 (For CHN)	*1	120,000 sheets				•					DRBL-1	-	Replace with cassette separation pad. *: Quantity indicates number of cassette.
10		Cassette separation roller (For 550-sheet cassette)	FC	6-6661	*1	120,000 sheets				•					DRBL-1		*: Quantity indicates number of cassette.
11		Cassette idler gear (Only for 550-sheet cassette for China)	FU	3-0280	*1	120,000 sheets				•					DRBL-1	-	*: Quantity indicates number of cassette.
12		Cassette pickup roller (For 250-sheet cassette)	-	FL3-1352	1	150,000 sheets						•			DRBL-1	C1-PU-RL	
13		Cassette separation pad (For 250-sheet cassette)	-	FL3-1447	1	150,000 sheets						•			DRBL-1	C1-SP-PD	
14		Manual feed pickup roller		3-1352	1	150,000 sheets						•			DRBL-1	M-PU-RL	
15		Manual feed separation pad	FL	3-3469	1	150,000 sheets						•			DRBL-1	M-SP-PD	



- [1] Transfer roller
- [2] Separation static eliminator
- [3] Waste toner container
- [4] Drum unit
- [5] Developing assembly
- [6] Manual feed pickup roller
- [7] Manual feed separation pad
- [8] Fixing unit
- [9] Cassette pickup roller (250-sheet 1st cassette model)
- [10] Cassette separation pad (250-sheet 1st cassette model)
- [11] Cassette pickup roller (550-sheet 1st cassette model)
- [12] Cassette transfer roller (550-sheet 1st cassette model)
- [13] Cassette separation roller (550-sheet 1st cassette model)
- [14] Idler gear (for China)

Cleaning Parts



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Adjustment

- Overview
- Adjustment when replacing parts
- image position adjustment

Outline



Adjustment when replacing parts

This section describes adjustment required in field service works when replacing parts. The parts are classified by function into the following 3 blocks.

Category	Replacing parts	Reference
Scanning	CIS Unit	"Action to Take after Replacing the CIS Unit"(page
System		<u>2-3).</u>
	Convincerd along	"Action to Take after Replacing the Platen
	Copyboard glass	Glass"(page 2-3).
	ADE roading glass	"Action to Take after Replacing the ADF Scan
	ADF reading glass	Glass"(page 2-4).
Controller	Main controller PCB	"Action to Take after Replacing theMain Controller
System		PCB"(page 2-4).
	DC controller PCB	Refer to page 2-4
	RAM PCB	"Action to Take after Replacing the RAM"(page 2-5).
Laser Exposure	Laser scanner unit	"Action to Take after Replacing the Laser Scanner
System		Unit"(page 2-5).

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Image position adjustment

This section describes procedures when adjusting basic image position (image margins, nonimage area, etc).

Category	Item	Reference
Margin Along the	Single-sided copy: 2.5 ± 1.5 (mm)	"Margin Along
Leading Edge	Double-sided copy: 2.5 ± 2.0 (mm)	the Leading
	2.5+/-1.5mm (2nd side of double-sided copy : 2.5+/-2.0mm) 0 2 456 8 10 12 14 16 18 20	Edge"(page 2-5).

Item	Reference
Single-sided copy: 2.5 ± 1.5 (mm)	"Left Image
Double-sided copy: 2.5 ± 2.0 (mm)	Margin"(page 2-6).
2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-2.0mm)	
	"Leading Edge
Double-sided copy: 2.5 ± 1.5 (mm) 2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-1.5mm)	Non-Image Width"(page 2-6).
0 2 456 8 10 12 14 16 18 20	
Single-sided copy: 2.5 ± 1.5 (mm)	"Left Non-Image
2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-1.5mm)	Width"(page 2-6).
	Single-sided copy: 2.5 ± 1.5 (mm) Double-sided copy: 2.5 ± 2.0 (mm) 2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-2.0mm) Single-sided copy: 2.5 ± 1.5 (mm) Double-sided copy: 2.5 ± 1.5 (mm) 2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-1.5mm) 2.5+/-1.5mm (2nd side of double-sided copy: 2.5+/-1.5mm) Single-sided copy: 2.5 ± 1.5 (mm) Double-sided copy: 2.5 ± 1.5 (mm)

Adjustment when replacing parts



Scanning System

Action to Take after Replacing the CIS Unit

After replacing the CIS unit, make the following adjustments:

CIS white level automatic adjustment

1) Enter the service mode.

SCAN > READER > FUNCTION > CCD > CCD-ADJ

2) Click the [OK] button.

When this step is complete, the contact sensor output is adjusted and parameters are set automatically.

- 3) After completion of automatic adjustment, "OK" is displayed.
- DF white level adjustment (platen board cover scan/stream reading scan)

CAUTION:

Make this adjustment when the DADF is installed.

- 1)Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL1. Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
- 2)Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL2. Read the white level in the DF mode (stream reading). (Check the transparency of the glass for stream reading.)(Read both sides of the chart.)
- 3) Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL3.
 Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
- 4) Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL4.

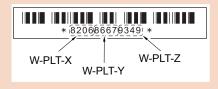
 Read the white level in the DF mode (stream reading). (Check the transparency of the

glass for stream reading.)(Read both sides of the chart.)

■ Action to Take after Replacing the Platen Glass

CAUTION:

Be sure to make the white plate data adjustment before ADF white level adjustment.



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- 1.Enter the value indicated on the platen glass in the following service mode: SCAN > READER > ADJUST > CCD > W-PLT-X/Y/Z (Input of standard white plate data) 2.Enter the service mode, and then select the following:
 - SCAN > READER > FUNCTION > CCD > DF-WLVL1/2/3/4 (DF white level adjustment)
 - Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL1.
 Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
 - 2) Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL2. Read the white level in the DF mode (stream reading). (Check the transparency of the glass for stream reading.)(Read both sides of the chart.)
 - 3) Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL3. Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
 - 4) Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL4.
 Read the white level in the DF mode (stream reading). (Check the transparency of the glass for stream reading.)(Read both sides of the chart.)

Action to Take after Replacing the ADF Scan Glass

1.Enter the service mode, and then select the following:
SCAN > READER > FUNCTION > CCD > DF-WLVL1/2/3/4 (DF white level adjustment)

- Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL1.
 Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
- 2) Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL2. Read the white level in the DF mode (stream reading). (Check the transparency of the glass for stream reading.)(Read both sides of the chart.)
- 3) Place a sheet of paper that the user usually uses on the platen glass, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DFWLVL3. Read the white level in the BOOK mode. (Check the transparency of the glass for BOOK mode.)
- 4) Place a sheet of paper that the user usually uses on the DF, enter the service mode, and then select SCAN > READER > FUNCTION > CCD > DF-WLVL4.
 Read the white level in the DF mode (stream reading). (Check the transparency of the glass for stream reading.)(Read both sides of the chart.)



■ Action to Take after Replacing the Main Controller PCB

After replacing the main controller PCB with a new one, take the following action:

- Download the latest firmware with the UST.
- Enter all values recorded on the service label affixed to the rear cover.

Action to Take when Replacing the DC Controller PCB

Print the service data list in the service mode.

REPORT > REPORT OUTPUT > SERVICE DATA LIST.

Action to Take after Replacement/RAM Clearing

- Clear the DC controller settings and counters.
 Enter the service mode, and Then select the following:
 CLEAR > ENGINE > ENGINE BKRAMCLK (Clearing of the RAM on the DC controller PCB)
- 2) Turn OFF and then ON the main power switch. (Turning OFF/ON the main power switch clears the RAM.)
- 3) If uploading of backup data fails before replacement due to the damage to the DC controller PCB, enter the values of service mode items recorded on the service label. Since the values recorded on the service label may be outdated, check the service mode item list (#SERVICE DATA LIST) printed out in advance, and then enter the latest values.
- 4) Turn OFF and then ON the main power switch. (Turning OFF/ON the main power switch allows the values entered for the service mode items to take effect.)

Action to Take after Replacing the RAM

CAUTION:

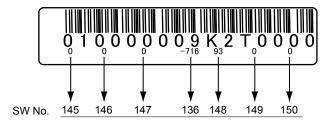
The ADRAM is powered from the secondary battery unit to back up the image memory even after the main power switch is turned OFF and the power plug is removed from the outlet.

If the SW3 on the main controller PCB is pressed with the image backed up, the entire data stored in the memory is cleared. Be sure to output the data stored in the memory before pressing the SW3.

Laser Exposure System

Action to Take after Replacing the Laser Scanner Unit

When replacing the laser unit, enter the values recorded on the label affixed to the laser unit to be replaced for the following in the service mode:



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- PRINT > Bitswitch > 136 Laser horizontal scanning direction write position adjustment(A)
- PRINT > Bitswitch > 145 Laser horizontal scanning direction magnification ratio adjustment(A-B)
- PRINT > Bitswitch > 146 Laser horizontal scanning direction magnification ratio adjustment(A-C)
- PRINT > Bitswitch > 147 Laser horizontal scanning direction magnification ratio adjustment(A-D)
- PRINT > Bitswitch > 148 Laser horizontal scanning direction write position adjustment(A-B)
- PRINT > Bitswitch > 149 Laser horizontal scanning direction write position adjustment(A-C)
- PRINT > Bitswitch > 150 Laser horizontal scanning direction write position adjustment(A-D)

Image position adjustment

Copy 10 sheets from each pickup position to check that the image margin and non-image area is within the standard.

- · Each cassette
- Pickup tray

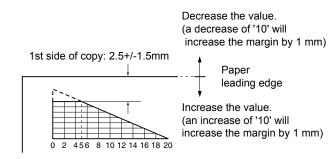
If it is not within the standard, go through the following procedures to adjust it.

CAUTION:

If changing the value of service mode item in this adjustment, enter the changed value in the service label.

Margin Along the Leading Edge

Service mode> PRINT> PRINT NUMERIC> 053

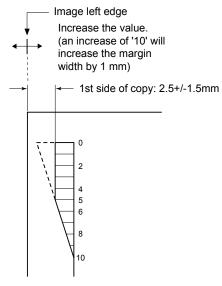


F-2-3

Left Image Margin

Service mode> PRINT> PRINT NUMERIC> 056

Decrease the value. (a decrease of '10' will decrease the margin width by 1 mm)

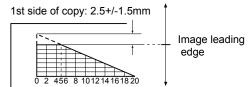


F-2-4

Leading Edge Non-Image Width

Service mode> SCAN> READER> ADJUST> ADJ-XY> ADJ-X

Decrease the value. (a decrease of '10' will decrease the non-image width by 1 mm)

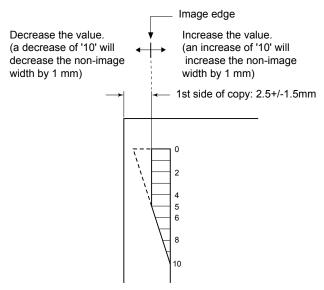


Increase the value. (an increase of '10' will increase the non-image width by 1 mm)

F-2-5

Left Non-Image Width

Service mode> SCAN> READER> ADJUST> ADJ-XY> ADJ-Y



F-2-6



Error Code

- Overview
- **Error Code**
- Jam Code
- Alarm Code

Overview



Outline

This chapter describes various codes which are displayed when a failure occurs on the product. These are classified into 3 codes as follows.

Code type	Explanation	Reference
Error code	This code is displayed when an error occurs on the machine.	Refer to
		page 3-2
Jam code	This code is displayed when a jam occurs inside the machine.	Refer to
		page 3-10
Alarm code	This code is displayed when a function of the machine is	Refer to
	malfunctioned.	page 3-14

T-3-1

Error Code



Error Code Details

Ecode	Detail	Item	Description
	Code		
E000	0001	Title	Fixing temperature abnormal rise
		Description	The temperature detected by the main thermistor does not
			rise to the specified value during startup control.
		Remedy	1.Go through the following to clear the error: CLEAR >
			ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			2.Check connection of the Connectors (Thermistor Connector and AC Connector).
			3.Replace the Fixing Main Thermistor (Film Unit).
			4.Replace the Fixing Assembly.
			5.Replace the DC Controller PCB (PCB4).
E001	0000	Title	Fixing unit temperature rise detection
		Description	The reading of the main thermistor is 250 deg C or more
		_	continuously for 200 msec.
		Remedy	1.Go through the following to clear the error: CLEAR > ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			2.Check connection of the Connectors (Thermistor Connector)
			and AC Connector).
			3.Replace the Fixing Main Thermistor (Film Unit).
			4.Replace the Fixing Assembly.
			5.Replace the DC Controller PCB (PCB4).
E001	0001	Title	Fixing unit temperature rise detection
		Description	The hardware circuit detects overheating of the main or sub thermistor for 200 msec.
		Remedy	1.Go through the following to clear the error: CLEAR >
			ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			2.Replace the DC Controller PCB (PCB4).
E001	0002	Title	Fixing unit temperature rise detection
		Description	The reading of the sub thermistor is 295 deg C or more continuously for 200 msec.
		Remedy	1.Go through the following to clear the error: CLEAR >
			ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			2.Check connection of the Connectors (Thermistor Connector
			and AC Connector).
			3.Replace the Fixing Main Thermistor (Film Unit).
			4.Replace the Fixing Assembly.
			5.Replace the DC Controller PCB (PCB4).

Ecode	Detail	Item	Description
20000	Code	1.0	Bootinpaon
E002	0000	Title	Fixing unit temperature insufficient rise
		Description	1. The reading of the main thermistor is less than 115 deg C
			continuously for 400 msec 1.3 sec after it has indicated 100
			deg C.
			2.The reading of the main thermistor is less than 150 deg C
			continuously for 400 msec 1.3 sec after it has indicated 140
		<u> </u>	deg C.
		Remedy	1.Go through the following to clear the error: CLEAR > ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			2.Check connection of the Connectors (Thermistor Connector)
			and AC Connector).
			3.Replace the Fixing Main Thermistor (Film Unit).
			4.Replace the Fixing Assembly.
			5.Replace the DC Controller PCB (PCB4).
E003	0000	Title	Low fixing temperature detection after standby
		Description	The reading of the main thermistor is less than 140 deg C
			continuously for 400 msec or more.
		Remedy	1.Go through the following to clear the error: CLEAR > ENGIN > ERRCLR; and then turn OFF and then ON the
			power.
			Check connection of the Connectors (Thermistor Connector)
			and AC Connector).
			3.Replace the Fixing Main Thermistor (Film Unit).
			4.Replace the Fixing Assembly.
			5.Replace the DC Controller PCB (PCB4).
E004	0000	Title	Thermistor disconnection detection error
		Description	When disconnection is detected with connector (J214) for 30
		Domody	sec continuously.
		Remedy	Check connection of the Connector (J214). Replace the Film Unit.
			3.Replace the Fixing Assembly.
			4.Replace the DC Controller PCB (PCB4).
E010	0001	Title	Unstable rotation of the Main Motor (M1)
		Description	Detection is executed every 100 msec after the start of motor
			rotation; however, the drive detection signal is absent for 2
			sec.
		Remedy	1.Replace the Main Motor (M1).
E0.40	0000	T:41 -	2.Replace the DC Controller PCB (PCB4).
E010	0002	Title	Unstable rotation of the Main Motor (M1)
		Description	During motor rotation, detection is executed every 100 msec;
		Pomody	however, the drive signal is absent 5 times in sequence. 1.Replace the Main Motor (M1).
		Remedy	2.Replace the Main Motor (M1). 2.Replace the DC Controller PCB (PCB4).
			12. Nepiace the DC Continuiter FCD (FCD4).

Ecode	Detail	Item	Description
	Code		
E014	0001	Title	Unstable rotation of the Fixing Motor (M2)
		Description	Detection is executed every 100 msec after the start of motor rotation; however, the drive detection signal is absent for 2 sec.
		Remedy	1.Replace the Fixing Motor (M2).
		l tomouy	2.Replace the DC Controller PCB (PCB4).
E014	0002	Title	Unstable rotation of the Fixing Motor (M2)
		Description	During motor rotation, detection is executed every 100 msec; however, the drive signal is absent 5 times in sequence.
		Remedy	"1.Replace the Fixing Motor (M2). 2.Replace the DC Controller PCB (PCB4)."
E019	0000	Title	Error in Waste Toner Sensor (S17)
		Description	Warning when the sensor goes on for 2000 consecutive sheets, and error when the sensor goes on for 100 consecutive sheets. * Error occurs after the delivery if a paper in passage exists.
		Remedy	1.Replace the Waste Toner Sensor (S17).
			2.Replace the DC Controller PCB (PCB4).
E020	0000	Title	The path between the sub hopper and the developing assembly is clogged with toner.
		Description	The Developing Assembly Toner Sensor (TS1) detects the absence of toner,while the Sub Hopper Toner Sensor (TS2) detects the presence of toner. With the Developing Cylinder Clutch (CL3) turned on, the hopper feedscrew motor (M7) is rotated for 1 sec intermittently 194 times; still, theDeveloping Assembly Toner Sensor (TS1) does not detect the presence of toner. * Error occurs after the delivery if a paper in passage exists.
		Remedy	1.Check the rotation of hopper motor gear. (If rotating, false detection by the sensor is doubted. Feed the toner to the developing unit in service mode: CLEAR>ENGIN>TNRINST.) 2.Replace the Developing Assembly Toner Sensor (TS1). 3.Replace the Sub Hopper Toner Sensor (TS2). 4.Replace the DC Controller PCB (PCB4).
E024	0000	Title	The connector (J207) of Developing Assembly Toner Sensor (TS1) is disconnected.
		Description	The Developing Assembly Toner Sensor (TS1) connection detection signal is absent for 100 msec 10 times in sequence. * Error occurs after the delivery if a paper in passage exists.
		Remedy	1.Check connection of the Connector (J207). 2.Replace the Developing Assembly Toner Sensor (TS1). 3.Replace the DC Controller PCB (PCB4).

Ecode	Detail	Item	Description
	Code		·
E024	0001	Title	The Developing Assembly Toner Sensor (TS1) is disconnected.
		Description	<at low="" speed=""> - The developing assembly toner sensor (TS1) ON counter is checked every 2.5 seconds, and the counter increments 1 count every 25 times when the sensor goes on, and 300 counts are reached. <at high="" speed=""> - The developing assembly toner sensor (TS1) ON counter is checked every 1.5 seconds, and the counter increments 1 count every 15 times when the sensor goes on, and 300 counts are reached.</at></at>
		Remedy	Check connection of the Connector (J207). Correct the cable. Replace the Developing Assembly Toner Sensor (TS1).
E025	0000	Title	The connector (J207) of Sub Hopper Toner Sensor (TS2) is disconnected.
		Description	The Sub Hopper Toner Sensor (TS2) connection detection signal is absent for 100 msec 10 times in sequence. * Error occurs after the delivery if a paper in passage exists.
		Remedy	1. Check connection of the Connector (J207). 2. Replace the Sub Hopper Toner Sensor (TS2). 3. Replace the DC Controller PCB (PCB4).
E025	0001	Title	Failure of the Bottle Motor (M6)
		Description	The bottle motor (M6) is unlocked when it goes on for 12 consecutive times at 0.1 sec. intervals. * Error occurs after the delivery if a paper in passage exists.
		Remedy	Replace the Bottle Motor (M6). Replace the DC Controller PCB (PCB4).
E110	0001	Title	Failure of the Scanner Motor (M21)
		Description	The Scanner Motor (M21) speed lock signal does not indicate a locked state a specific period of time after the Scanner Motor (M21) has been started. * The same condition is detected after the error retry is performed.
		Remedy	1.Check the cable. 2.Replace the Laser Scanner Unit. 3.Replace the DC Controller PCB (PCB4).

Ecode	Detail	Item	Description
	Code		
E110	0002	Title	Failure of the Scanner Motor (M21)
		Description	The speed lock signal indicates a deviation 10 times in
			sequence at intervals of 100 msec after the signal has
			indicated a locked state.
			* The same condition is detected after the error retry is
			performed.
		Remedy	1. Check the cable.
			2.Replace the Laser Scanner Unit.
E110	0003	Title	3.Replace the DC Controller PCB (PCB4). Failure of the Scanner Motor (M21)
	0003	Description	The scanner motor (M21) speed lock signal does not indicate
		Description	a locked state for 6.5 sec. after a switchover is made from
			low to normal speed or for 8 sec. after a switchover is made
			from normal to low speed.
			* The same condition is detected after the error retry is
			performed.
		Remedy	1.Check the cable.
			2.Replace the Laser Scanner Unit.
			3.Replace the DC Controller PCB (PCB4).
E196	0000	Title	Error in EEPROM access
		Description	20 retries failed after error occurred during communication
			with EEPROM.
			* Error occurs after the delivery if a paper in passage exists.
		Remedy	1.Replace the DC Controller PCB (PCB4).
E197	0000	Title	Error in communication of Laser Driver PCB (PCB14)
		Description	Communication error 1 with image PCB
		Remedy	1. Check the cable.
			2.Replace the Laser Scanner Unit.
E197	0001	Title	Replace the DC Controller PCB (PCB4). Error in communication of Laser Driver PCB (PCB14)
L 191	10001	Description	Communication error 2 with image PCB
		Remedy	1. Check the cable.
		remedy	2.Replace the Laser Scanner Unit.
			3.Replace the DC Controller PCB (PCB4).
E202	0000	Title	There is an error in the detection of the CIS home position.
		Description	1. The attempt to detect the home position fails when the CIS
			is moved forward.
			2. The attempt to detect the home position fails when the CIS
			is moved back.
		Remedy	1.Disconnect and then connect the flexible cable(Relay PCB
			(PCB2)-Main Controller PCB (PCB1) 64pin).
			2.Replace the flexible cable.
			3.Replace the CIS HP sensor (S31).
			4.Replace the Scanner Motor (M31).
			5.Replace the Relay PCB (PCB2).
			6.Replace the Main Controller PCB (PCB1).

Ecode	Detail	Item	Description
	Code		
E240	0000	Title	Error in controller communication
		Description	The serial communication error such as parity error or
			overrun error is constantly detected.
		Remedy	1.Check the Connectors.
			2.Replace the DC Controller PCB (PCB4).
E240	0001	Title	Error in controller communication
		Description	The serial communication error such as parity error or
			overrun error is detected while printing.
		Remedy	1.Check the Connectors.
			2.Replace the DC Controller PCB (PCB4).
E246	0000	Title	Writing to the counter PCB (FRAM) failed
		Description	-
		Remedy	-
E247	0000	Title	Mismatched checksum between the Flash Rom and the FRAM
	İ	Description	-
		Remedy	-
E261	0000	Title	Error in Zero Cross
		Description	Zero Cross failed to be detected for 500ms or more while the
			relay was ON.
			* The same condition is detected after the error retry is
			performed.
		Remedy	1.Check the Connectors.
			2.Replace the DC Controller PCB (PCB4).
E350	0000	Title	SOFT-ID PCB error
		Description	-
		Remedy	-
E354	0000	Title	Mismatched serial number for the SOFT-ID PCB
		Description	-
		Remedy	-
E355	0000	Title	Mismatched serial number between the SOFT-ID, the Flash Rom and the FRAM
		Description	-
		Remedy	-
E355	0004	Title	System information error
		Description	-
		Remedy	-
E355	0005	Title	System information error
		Description	-
		Remedy	-
E500	0000	Title	Communication error
		Description	The communication with the host machine is interrupted.
		Remedy	1.Check the cable.
		1	2.Replace the Finisher Controller PCB (PCB1).
			3.Replace the DC Controller PCB.

Ecode	Detail	Item	Description
	Code		
E505	0001	Title	EEPROM error
		Description	The checksum for the EEPROM data has an error.
		Remedy	1.Replace the Finisher Controller PCB (PCB1).
E520	0001	Title	Shift Motor (M4) error
		Description	The shift roller does not leave the shift roller home position
			when the Shift Motor (M4) has been driven for 1.2 seconds.
		Remedy	Replace the Shift Roller HP Sensor (S2).
			2.Replace the Shift Motor (M4).
			3.Replace the Finisher Controller PCB (PCB1).
E520	0002	Title	Shift Motor (M4) error
		Description	The shift roller does not return to the shift roller home position
			when the Shift Motor (M4) has been driven for 1.2 seconds.
		Remedy	1.Replace the Shift Roller HP Sensor (S2).
			2.Replace the Shift Motor (M4).
		I	3.Replace the Finisher Controller PCB (PCB1).
E531	8001	Title	Stapler Motor (M10) error
		Description	The stapler does not leave the staple home position when the
			Staple Motor (M10) has been driven for 0.5 sec.
		Remedy	1.Check the wiring between the Finisher Controller PCB and
			Stapler.
			2.Replace the Stapler.
EE24	0000	Titlo	3.Replace the Finisher Controller PCB (PCB1).
E531	8002	Title	Stapler Motor (M10) error
		Description	The stapler does not return to the staple home position when the Stapler Motor (M10) has been driven for 0.5 sec.
		Remedy	Check the wiring between the Finisher Controller PCB and
		remedy	Stapler.
			2.Replace the Stapler.
			3.Replace the Finisher Controller PCB (PCB1).
E532	0001	Title	STP Move Motor (M1) error
		Description	The stapler does not leave the stapler move home position
			when the STP Move Motor (M1) has been driven for 0.25 sec.
		Remedy	1.Replace the Stapler Move HP Sensor (S10).
		1	2.Check the wiring between the Finisher Controller PCB and
			the STP Move Motor.
			3.Check the stapler shift base.
			4.Replace the STP Move Motor (M1).
			5.Replace the Finisher Controller PCB (PCB1).

Ecode	Detail	Item	Description
	Code		
E532	0002	Title	STP Move Motor (M1) error
		Description	The stapler does not return to the stapler move home position
			when the STP Move Motor (M1) has been driven for 2.8 sec.
		Remedy	1.Replace the Stapler Move HP Sensor (S10).
			2.Check the wiring between the Finisher Controller PCB and
			the STP Move Motor.
			3.Check the stapler shift base.
			4.Replace the STP Move Motor (M1).
==			5.Replace the Finisher Controller PCB (PCB1).
E540	0001	Title	Tray Lift Motor (M11) time out error
		Description	The stack tray does not move within a specified time period.
		Remedy	1.Replace the Tray Lift Motor (M11).
			2.Replace the Finisher Controller PCB (PCB1).
E540	0005	Title	Tray Lift Motor (M11) closing detect switch error
		Description	The FG input cannot be detected when the Tray Lift Motor
		<u> </u>	(M11) has been driven for 0.1 second.
		Remedy	1.Replace the Stack Tray Clock Sensor (S13).
			2.Replace the Tray Lift Motor (M11).
EE 40	0001	Title	3.Replace the Finisher Controller PCB (PCB1).
E542	0001	Title Description	Additional Tray Lift Motor (M12) time out error
		Remedy	The stack tray does not move within a specified time period. 1.Replace the Additional Tray Lift Motor (M12).
		Remedy	2.Replace the Finisher Controller PCB (PCB1).
E542	0005	Title	Additional Tray Lift Motor (M12) closing detect switch error
E342	0005	Description	The FG input cannot be detected when the Additional Tray
		Description	Lift Motor (M12) has been driven for 0.1 second.
		Remedy	1.Replace the Additional Tray Clock Sensor (S23).
		rtemedy	2.Replace the Additional Tray Lift Motor (M12).
			3.Replace the Finisher Controller PCB (PCB1).
E567	0001	Title	Shift Roller Release Motor (M5) error
		Description	The shift roller does not leave the shift roller release home
		i .	position when the Shift Roller Release Motor (M5) has been
			driven for 0.1 sec.
		Remedy	1.Replace the Shift Roller Release Sensor (S3).
			2.Replace the Shift Roller Release Motor (M5).
			3.Replace the Finisher Controller PCB (PCB1).
E567	0002	Title	Shift Roller Release Motor (M5) error
		Description	The shift roller does not return to the shift roller release home
			position when the Shift Roller Release Motor (M5) has been
			driven for 0.06 sec.
		Remedy	1.Replace the Shift Roller Release Sensor (S3).
			2.Replace the Shift Roller Release Motor (M5).
			3.Replace the Finisher Controller PCB (PCB1).

Ecode	Detail	Item	Description
_	Code		
E571	0001	Title	Gripper Open/Close Motor (M7) error
		Description	The gripper unit does not leave the gripper unit home position when the Gripper Open/Close Motor (M7) has been driven for 0.25 seconds.
		Remedy	1.Replace the Grip Arm Sensor (S13). 2.Replace the Gripper Open/Close Motor (M7). 3.Replace the Finisher Controller PCB (PCB1).
E571	0002	Title	Gripper Open/Close Motor (M7) error
		Description	The gripper unit does not return to the gripper unit home position when the Gripper Open/Close Motor (M7) has been driven for 0.15 seconds.
		Remedy	1.Replace the Grip Arm Sensor (S13). 2.Replace the Gripper Open/Close Motor (M7). 3.Replace the Finisher Controller PCB (PCB1).
E575	0001	Title	Gripper Unit Move Motor (M2) error
		Description	The gripper unit does not leave the gripper unit home position when the Gripper Unit Move Motor (M2) has been driven for 3.8 seconds.
		Remedy	1.Replace the Gripper Unit HP Sensor (S7). 2.Replace the Gripper Unit Move Motor (M2). 3.Replace the Finisher Controller PCB (PCB1).
E575	0002	Title	Gripper Unit Move Motor (M2) error
		Description	The gripper unit does not return to the gripper unit home position when the Gripper Unit Move Motor (M2) has been driven for 0.1 seconds.
		Remedy	1.Replace the Gripper Unit HP Sensor (S7). 2.Replace the Gripper Unit Move Motor (M2). 3.Replace the Finisher Controller PCB (PCB1).
E602	0001	Title	The built-in SD card is not detected
		Description	-
		Remedy	-
E602	1105	Title	Access to the built-in SD card failed
		Description	-
		Remedy	-
E711	0001	Title	Error in UFDI communication
		Description	The communication system error (such as reception timeout or checksum error) occurred.
		Remedy	1.Check and Replace the cable.
			Replace the DC Controller PCB (PCB4). Replace the Finisher Controller PCB.
E713	0000	Title	Erroneous communication with finisher
., .,		Description	The communication does not restart by the error retry after the communication failure with the finisher.
		Remedy	1. Check the cable. 2. Replace the DC Controller PCB (PCB4). 3. Replace the Finisher Controller PCB.

Ecode	Detail	Item	Description
	Code	I.OIII	2 dod i piloti
E716	0000	Title	Erroneous communication with optional cassette or 2-way
			unit
		Description	After the presence of a cassette pedestal or a 2-way unit has
		l '	been detected, the communication fails to be normal for 5
			sec.
		Remedy	1.Check the cable.
			2.Replace the DC Controller PCB (PCB4).
			3.Replace the Cassette Pedestal Driver PCB.
			4.Replace the 2-way unit driver PCB.
E716	0010	Title	Failure of the communication with the 2-way unit
		Description	When the communication with the 2-way unit is faulty after
		<u></u>	detecting the connection with the finisher.
		Remedy	1.Install the 2-way unit.
			2. Check the cable.
			Replace the DC Controller PCB (PCB4). Replace the 2-way unit driver PCB.
F719	0000	Title	Erroneous communication with New Card Reader (serial
E7 19	10000	Title	communication)
		Description	
		Remedy	
E719	0002	Title	Erroneous communication with Coin Vendor (serial
L7 13	0002		communication)
		Description	-
		Remedy	-
E736	0000	Title	Erroneous communication between CCU and controller.
		Description	-
		Remedy	-
E744	0001	Title	Mismatched version between the language file and the
			Bootable
		Description	-
		Remedy	-
E744	0002	Title	Oversized language file in HDD
		Description	-
		Remedy	-
E744	0003	Title	Mismatched version between the language file and the
			Bootable
		Description	-
		Remedy	-
E744	0004	Title	Language file reading error
		Description	-
		Remedy	-

Ecode	Detail	Item	Description
	Code		
E804	0000	Title	Failure of the Power Supply Cooloing Fan (FAN6)
		Description	When lock signal is detected for 5 sec while the Power
			Supply Cooloing Fan (FAN6) is stopped.
			* The same condition is detected after the error retry is
			performed.
		Remedy	Disconnect and then connect the connector (J205) on the DC Controller PCB (PCB4).
			2.Replace the Power Supply Cooloing Fan (FAN6).
			3.Replace the DC Controller PCB (PCB4).
E804	0001	Title	Unstable rotation of the Power Supply Cooloing Fan (FAN6)
		Description	When lock signal failed to be detected for 5 sec while the
			Power Supply Cooloing Fan (FAN6) is driven.
			* The same condition is detected after the error retry is performed.
		Remedy	1.Disconnect and then connect the connector (J205) on the
		litomouy	DC Controller PCB (PCB4).
			2.Replace the Power Supply Cooloing Fan (FAN6).
			3.Replace the DC Controller PCB (PCB4).
E805	0000	Title	Failure of the Exhaust Fan (Rear) (FAN3)
		Description	When lock signal is detected for 5 sec while the Exhaust Fan
			(Rear) (FAN3) is stopped.
			* The same condition is detected after the error retry is
			performed.
		Remedy	1.Disconnect and then connect the connector (J206) on the DC Controller PCB (PCB4).
			2.Replace the Exhaust Fan (Rear) (FAN3).
			3.Replace the DC Controller PCB (PCB4).
E805	0001	Title	Unstable rotation of the Exhaust Fan (Rear) (FAN3) or
2000		11110	Finisher Fan 1 (M8) or Finisher Fan 2 (M9)
		Description	1.When lock signal failed to be detected for 5 sec while the
			Exhaust Fan (Rear) (FAN3) is driven.
			2. When lock signal failed to be detected for 5 sec while the
			Finisher Fan 1 (M8) is driven.
			3. When lock signal failed to be detected for 5 sec while the
			Finisher Fan 2 (M9) is driven.
			* The same condition is detected after the error retry is
		Domody	performed.
		Remedy	Disconnect and then connect the connector (J206) on the DC Controller PCB (PCB4).
			2.Replace the Exhaust Fan (Rear) (FAN3).
			3.Replace the Finisher Fan 1 (M8).
			4.Replace the Finisher Fan 2 (M9).
			5.Replace the DC Controller PCB (PCB4).

Ecode	Detail	Item	Description
	Code		
E805	0002	Title	Failure of the Exhaust Fan (Front) (FAN4)
		Description	When lock signal is detected for 5 sec while the Exhaust Fan (Front) (FAN4) is stopped.
			* The same condition is detected after the error retry is performed.
		Remedy	Disconnect and then connect the connector (J206) on the DC Controller PCB (PCB4).
			2.Replace the Exhaust Fan (Front) (FAN4).
			3.Replace the DC Controller PCB (PCB4).
E805	0003	Title	Unstable rotation of the Exhaust Fan (Front) (FAN4)
		Description	When lock signal failed to be detected for 5 sec while the Exhaust Fan (Front) (FAN4) is driven.
			* The same condition is detected after the error retry is performed.
		Remedy	1.Disconnect and then connect the connector (J206) on the
			DC Controller PCB (PCB4).
			2.Replace the Exhaust Fan (Front) (FAN4).
			3.Replace the DC Controller PCB (PCB4).

T-3-2



Outline

Error Code Outline

An error code is used to indicate a fault in a machine, and is indicated in the machine's LCD or reports, showing the nature (symptoms) of the fault. Using the errorcode, the user or the service man can readily find out how to correct the fault by simply referring to the User's Manual or service manual. An error code may be either of the following two types:

User Error Codes

A fault indicated as a user error code is one that can easily be corrected by the user, as by operating the machine. It takes the form of "# + number."

• Service Error Codes

If a fault calls for a service man for correction, it is indicated as a service man error code in the form of "## + number" or "SYSTEM ERROR E + number."

MEMO:

- A service error code expressed in the form of "## + number" will not appear on the LCD, Error Tx Report, or Activity Report while the machine remainsin factory default state. To check a service error code, shift bit 0 of service soft switch #1 SSSW SW01 to '1'.
- For the causes and countermeasures of error codes, refer to the separate G3/G4
 Facsimile Error Code List.

User Error Code

User Error Code

No.	Tx/Rx	Description	
#0001	[Tx]	An original has jammed.	
#0003	[Tx/Rx]	Time-out for copying or sending/receiving a single page has occurred.	
#0005	[Tx/Rx]	Time-out for initial identification (T0/T1) has occurred.	
#0009	[Rx]	Recording paper has jammed or is absent.	
#0012	[Tx]	Recording paper is absent at the other party.	
#0018	[Tx/Rx]	Auto call initiation has failed.	
#0037	[Rx]	Image memory overflow at time of reception has occurred.	
#0059	[Tx]	The number you dial and connected number (CSI) does not match.	
#0995/0099	[Tx/Rx]	A memory communication reservation has been cancelled.	

Service Error Code

Service Error Code

No.	Tx/Rx	Description	
##0100	[Tx]	At time of transmission, the procedural signal has been transmitted more than specified.	
##0101	[Tx/Rx]	The modem speed does not match that of the other party.	
##0102	[Tx]	At time of transmission, fall-back cannot be used.	
##0103	[Rx]	At time of reception, EOL cannot be detected for 5 sec (15 sec if CBT).	
##0104	[Tx]	At time of transmission, RTN or PIN is received.	
##0106	[Rx]	At time of reception, the procedural signal is received for 6 sec while in wait for the signal.	
##0107	[Rx]	At time of reception, the transmitting party cannot use fall-back.	
##0109	[Tx]	At time of transmission, a signal other than DIS, DTC, FTT, CFR, or CRP is received, and the procedural signal has been sent more than specified.	
##0111	[Tx/Rx]	Memory error has occurred.	
##0114	[Rx]	At time of reception, RTN is transmitted.	
##0200	[Rx]	At time of reception, no image carrier is detected for 5 sec.	
##0201	[Tx/Rx]	DCN is received outside the normal parity procedure.	
##0224	[Tx]	Communication protocol signal error.	
##0228	[Rx]	Abnormal management information of image data.	
##0232	[Tx]	Encoding error has occurred.	
##0237	[Rx]	Decoding error has occurred.	
##0261	[Tx/Rx]	System error has occurred.	
##0280	[Tx]	At time of transmission, the procedural signal has been transmitted more than specified.	
##0281	[Tx]	At time of transmission, the procedural signal has been transmitted more than specified.	
##0282	[Tx]	At time of transmission, the procedural signal has been transmitted more than specified.	
##0283	[Tx]	At time of transmission, the procedural signal has been transmitted more than specified.	
##0284	[Tx]	At time of transmission, DCN is received after transmission of TCF.	
##0285	[Tx]	At time of transmission, DCN is received after transmission of EOP.	
##0286	[Tx]	At time of transmission, DCN is received after transmission of EOM.	
##0287	[Tx]	At time of transmission, DCN is received after transmission of MPS.	
##0288	[Tx]	After transmission of EOP, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.	
##0289	[Tx]	After transmission of EOM, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.	
##0290	[Tx]	After transmission of MPS, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.	
##0670	[Tx]	At time of V.8 lAte start, the V.8 ability of DIS front the receiving party is expected to be detected, and the CI signal is expected to be transmitted in response; however, the procedure fails to advance, and the line is released because of T1 time-out.	

No.	Tx/Rx	Description	
##0671	[Rx]	At time of V.8 arrival, procedure fails to move to phase 2 after detection of CM signal from caller, causing T1 time-out and releasing line.	
##0672	[Tx]	At time of V.34 transmission, a shift in procedure from phase 2 to phase 3 and the reafter stops, causing the machine to release the line and suffer T1 timeout.	
##0673	[Rx]	At time of V.34 reception, a shift in procedure from phase 2 to phase 3 and thereafter stops, causing the machine to release the line and suffer T1 timeout.	
##0674	[Tx]	At time of V.34 transmission, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.	
##0675	[Rx]	At time of V.34 reception, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.	
##0750	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of PPS-NULL, causing the procedural signal to be transmitted more than specified.	
##0752	[Tx]	At time of ECM transmission, DCN is received after transmission of PPS-NULL	
##0753	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL, or T5 time-out (60 sec) has occurred.	
##0754	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL.	
##0755	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of PPS-MPS, causing the procedural signal to be transmitted more than specified.	
##0757	[Tx]	At time of ECM transmission, DCN is received after retransmission of PPS-MPS.	
##0758	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.	
##0759	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS.	
##0762	[Tx]	At time of ECM transmission, DCN is received after transmission of PPS-EOM.	
##0763	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.	
##0764	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOM.	
##0765	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of PPS-EOP, causing the procedural signal to be transmitted more than specified.	
##0767	[Tx]	At time of ECM transmission, DCN is received after transmission of PPS-EOP.	
##0768	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP, or T5 time-out (60 sec) has occurred.	

No.	Tx/Rx	Description	
##0769	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP, or T5 time-out (60 sec) has occurred.	
##0770	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of EOR-NULL, causing the procedural signal to be transmitted more than specified.	
##0772	[Tx]	At time of ECM transmission, DCN is received after transmission of EOR-NULL	
##0773	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-NULL, or T5 time-out (60 sec) has occurred.	
##0774	[Tx]	At time of ECM transmission, ERR is received after transmission of EOR-NULL	
##0775	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of EOR-MPS, causing the procedural signal to be transmitted more than specified.	
##0778	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission EOR-MPS, or T5 time-out (60 sec) has occurred.	
##0779	[Tx]	At time of ECM transmission, ERR is received after transmission of EOR-MPS.	
##0780	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of EOR-EOM, causing the procedural signal to be transmitted more than specified.	
##0782	[Tx]	At time of ECM transmission, DCN is received after transmission of EOR-EOM.	
##0783	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOM, or T5 time-out (60 sec) has occurred.	
##0784	[Tx]	At time of ECM transmission, no meaningful signal is received after transmission of EOR-EOP, causing the procedural signal to be transmitted more than specified.	
##0787	[Tx]	At time of ECM transmission, DCN is received after transmission of EOR-EOP.	
##0788	[Tx]	At time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOP, or T5 time-out (60 sec) has occurred.	
##0789	[Tx]	At time of ECM transmission, ERR is received after transmission of EOR-EOP.	
##0790	[Rx]	At time of ECM reception, ERR is transmitted after transmission of EOR-Q.	
##0791	[Tx]	While ECM mode procedure is under way, a signal other than a meaningful signal is received.	
##0792	[Rx]	At time of ECM reception, PPS-NULL cannot be detected over partial page processing.	
##0793	[Rx]	At time of ECM reception, no effective frame is received while high-speed signal reception is under way, thus causing time-out.	
##0794	[Tx]	At time of ECM reception, PPR with all 0s is received.	
##0795	[Tx/Rx]	A fault has occurred in code processing for communication.	

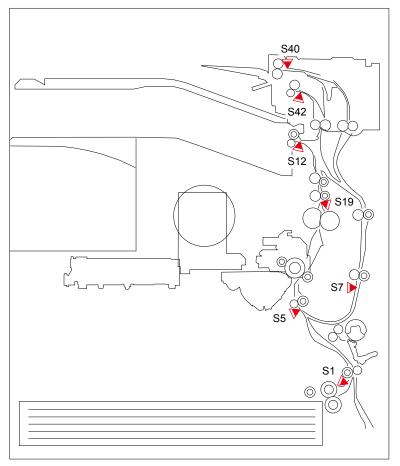
T-3-4

Jam Code

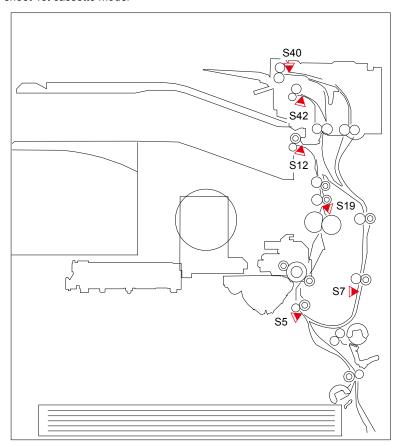


Main Unit

• 550-sheet 1st cassette model



• 250-sheet 1st cassette model

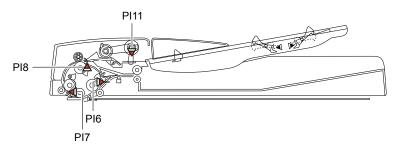


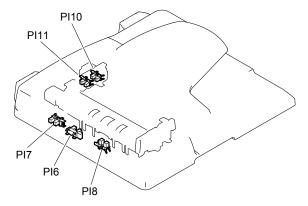
10015	I	_		
ACC ID	Jam Code	•	Sensor Name	Sensor ID
3	0101	Delay jam	Cassette 1 pickup sensor	S1
3	0102	Delay jam	Cassette 2 pickup sensor	SR2
3	0103	Delay jam	Cassette 3 pickup sensor	SR4
3	0104	Delay jam	Cassette 4 pickup sensor	SR8
3	0105	Delay jam	Pre-registration sensor	S5
3	0107	Delay jam	Fixing outlet sensor	S19
3	0108	Delay jam	No. 1 delivery sensor	S12
3	0109	Delay jam	No. 2 delivery sensor	S42
3	010A	Delay jam	Reversal sensor	S40
3	010D	Delay jam	Duplex feed sensor	S7
3	0201	Stationary jam	Cassette 1 pickup sensor	S1
3	0202	Stationary jam	Cassette 2 pickup sensor	SR2
3	0203	Stationary jam	Cassette 3 pickup sensor	SR4
3	0204	Stationary jam	Cassette 4 pickup sensor	SR8
3	0205	Stationary jam	Pre-registration sensor	S5
3	0207	Stationary jam	Fixing outlet sensor	S19
3	0208	Stationary jam	No. 1 delivery sensor	S12
3	0209	Stationary jam	No. 2 delivery sensor	S42
3	020A	Stationary jam	Reversal sensor	S40
3	020D	Stationary jam	Duplex feed sensor	S7
3	0A01	Power-on jam	Cassette 1 pickup sensor	S1
3	0A02	Power-on jam	Cassette 2 pickup sensor	SR2
3	0A03	Power-on jam	Cassette 3 pickup sensor	SR4
3	0A04	Power-on jam	Cassette 4 pickup sensor	SR8
3	0A05	Power-on jam	Pre-registration sensor	S5
3	0A07	Power-on jam	Fixing outlet sensor	S19
3	0A08	Power-on jam	No. 1 delivery sensor	S12
3	0A09	Power-on jam	No. 2 delivery sensor	S42
3	0A0A	Power-on jam	Reversal sensor	S40
3	0A0D	Power-on jam	Duplex feed sensor	S7
3	0B00	Door open jam	-	-
3	0CF1	Other jams	-	-
3	0D91	Wrong size specified	Pre-registration sensor	S5
3	FF00	Unknown jam	-	-
3	FF01	Unknown jam	-	-
3	FF02	Unknown jam	-	-
3	FF03	Unknown jam	-	-
3	FF04	Unknown jam	-	-
3	FF05	Unknown jam	-	-
3	FF07	Unknown jam	-	-
3	FF08	Unknown jam	-	-
3	FF09	Unknown jam	-	-
3	FF0A	Unknown jam	-	-
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
3	FF0D	Unknown jam	-	-
3	FF91	Unknown jam	-	-
3	FFF1	Unknown jam	-	-

T-3-5



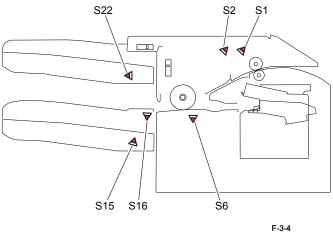


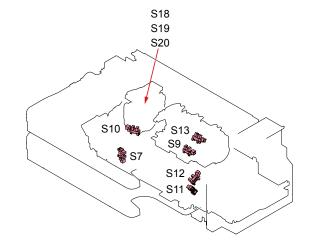


F-3-3

ACC ID	Jam Code	Туре	Sensor Name	Sensor ID
4	0003	Delay jam	Registration sensor	PI8
4	0004	Stationary jam	Registration sensor	PI8
4	0005	Delay jam	Read sensor	PI7
4	0006	Stationary jam	Read sensor	PI7
4	0007	Delay jam	Delivery reversal sensor	PI6
4	8000	Stationary jam	Delivery reversal sensor	PI6
4	0044	Stationary jam (first document)	Registration sensor	PI8
4	0045	Delay jam (first document)	Read sensor	PI7
4	0046	Stationary jam (first document)	Read sensor	PI7
4	0047	Delay jam (first document)	Delivery reversal sensor	PI6
4	0048	Stationary jam (first document)	Delivery reversal sensor	PI6
4	0071	Timing error	-	-
4	0090	ADF open jam	Copyboard cover open/closed Sensor 0	S21
4	0091	User ADF open jam	Copyboard cover open/closed Sensor 0	S21
4	0092	ADF cover open jam	Cover open/closed sensor	PI10
4	0093	User cover open jam	Cover open/closed sensor	PI10
4	0094	Initial stationary jam	Registration sensor or Read sensor or Delivery reversal sensor	PI6, PI7, PI8
4	0095	Pickup NG	Document set sensor	PI11







ACC ID	Jam Code	Туре	Sensor Name	Sensor ID
5	1001	Delay jam	Entrance sensor	S1
5	1101	Stationary jam	Entrance sensor	S1
5	1102	Stationary jam	Processing tray sensor	S6
5	1300	Power-on jam	Entrance sensor, Processing tray sensor	S1, S6
5	1400	Door open jam	Front cover switch	SW1
5	1500	STP jam	Stapler HP sensor, Stapler edging sensor	S18, S19
5	1C20	Error jam	Shift roller HP sensor	S2
5	1C32	Error jam	Stapler move HP sensor	S10
5	1C40	Error jam	Stack tray clock sensor	S14
5	1C42	Error jam	Additional tray clock sensor	S23
5	1C67	Error jam	Shift roller release sensor	S3
5	1C6F	Error jam	Entrance roller release /stopper HP sensor	S5
5	1C71	Error jam	Grip arm sensor	S13
5	1C75	Error jam	Gripper unit HP sensor	S7
5	1F00	Other jams	Entrance sensor	S1

T-3-7

Alarm Code



Alarm Code Details

Alarm Code	Title	A. Movement /B. Cause /C. Measures
85 - 0001	E355 clear	A. Movement Clear process is performed due to E355 error. B. Cause Mismatch between the serial numbers of Soft-ID, Flash ROM, and FRAM C. Measures
		None
85 - 0002	Auto-restore caused by SoftID (Service) replacement	A. Movement Automatic data restore is performed after Soft-ID PCB replacement is detected. B. Cause Soft-ID PCP is replaced. C. Measures None
85 - 0003	Auto-restore caused by FRAM (Service) replacement	A. Movement Automatic data restore is performed after FRAM PCB replacement is detected. B. Cause FRAM PCB is replaced. C. Measures None
85 - 0004	Auto-restore caused by SRAM (Service) replacement	A. Movement Automatic data restore is performed after SRAM PCB replacement is detected. B. Cause SRAM PCB is replaced. C. Measures None
85 - 0005	Auto-restore caused by SRAM (used) replacement	A. Movement Automatic data restore is performed after SRAM PCB is replaced. B. Cause SRAM PCB (used) is replaced. C. Measures None

T-3-8



Service Mode

- Overview
- Details of Service Mode

Outline



Outline of Service Mode

The items that follow may be checked/set using the machine's service mode, which is designed the way the service mode used in fax machines is designed in terms of contents and operation.

#SSSW

Use it to register/set basic fax functions (e.g., error control, echo remedy, communication error correction). Use it to make settings related counter functions.

#MENU

Use it to register/set items related to functions needed at time of installation (e.g., NL equalizer, transmission level).

#NUMERIC

These setting items are for inputting numeric parameters such as the various conditions for the RTN signal transmission.

#SPECIAL

These setting items are for telephone network control functions. Do not use.

#NCU

These setting items are for telephone network control functions such as the selection signal transmission conditions and the detection conditions, for the control signals sent from the exchange.

#FAX

Do not use.

#SCAN

These setting items are for image adjustment in scanning.

#PRINT

These setting items are for image adjustment in printer assembly and for special mode for the field-related measures.

#NETWORK

Use it to confirm the contents of the installed CA certificates.

#CODEC

This is a setting items related to CODEC.

#SYSTEM

This is a setting items related to SYSTEM.

#ACC

Register the accessories.

#COUNTER

Use it to check estimates for maintenance/parts replacement.

#LMS

Use it to set the inactivity of the transmitted license and the license inactivity without transmitting.

#E-RDS

This is a setting items related to e-RDS (Embedded RDS).

#REPORT

Use it to generate reports on various service data.

#DOWNLOAD

Use it to download firmware to the ROM of a PCB in question.

#CLEAR

Use it to reset various data to initial settings.

#DISPLAY

The error and detailed code which have happened now are displayed.

Display the engine speed of the main controller PCB.

#ROM

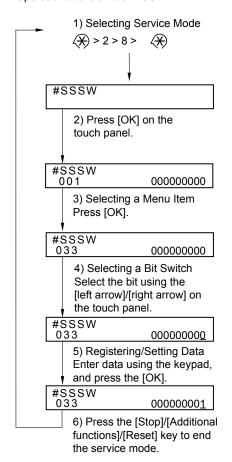
Displays ROM information, such as version numbers and checksums.

#TEST MODE

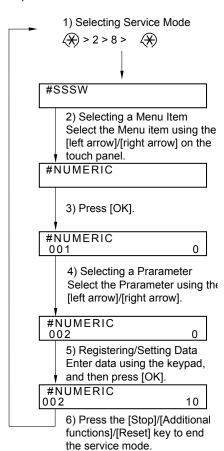
Makes various status checks, such as contact sensor, sensor and print status.

Using the Mode

<Operation at the time of Bit SW>



<Operation at the time of Parameter>

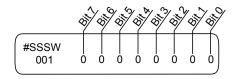


Setting of Bit Switch

Outline

Bit Switch Composition

The items registered and set by each of these switches comprise 8-bit switches. The figure below shows which numbers are assigned to which bits. Each bit has a value of either 0 or 1.



F-4-2

CAUTION:

Do not change service data identified as "not used"; they are set as initial settings.

Details of Service Mode



■ SSSW Composition

NOTE:

This document describes the default settings for the system for USA. The default settings used in the service mode vary depending on the shipping destination and model.

No.	Initial setting	Function		
SW01	00000000	error/copy control		
SW02	00010000	network connection setting		
SW03	00000000	echo remedy setting		
SW04	00000000	communication fault remedy setting		
SW05	00000000	standard function (DIS signal) setting		
SW06	10010000	read condition setting		
SW7-SW11		not used		
SW12	00000010	page timer setting		
SW13	00000000	meter/inch resolution setting		
SW14	00000001	inch/meter resolution setting		
SW15	00000000	dial-in FAX/TEL switch-over function		
SW16	00000011	settings for a No Paper display		
SW17		not used		
SW18	00000000	remedies for communication faults (2)		
SW19-21		not used		
SW22	00000000	fault remedy setting		
SW23-24		not used		
SW25	00000000	report indication resolution setting		
SW26-27		not used		
SW28	00000000	V.8/V.34 protocol settings		
SW29		not used		
SW30	00000000	Assigning a New Dial Tone Detection Method		
SW31	İ	not used		
SW32	00000000	not used		
SW33	00000000	counter function settings		
SW34	00000011	waste toner full display setting		
SW35	00001000	e-RDS function settings		
SW36 - SW50		not used		

T-4-1

Details

SSSW-SW01

List of Functions

Bit	Function	1	0
0	service error code	output	not output
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-2

Detailed Discussions of Bit 0

Selects whether or not service error codes are output. When output is selected, service error codes is report.

SSSW-SW02

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	F network silent termination service	Compatible	Not compatible

T-4-3

Detailed Discussions of Bit 7

Select whether or not the machine is compatible with the F network (facsimile communication network) silent termination service. When "Compatible" is selected, the machine automatically receives a fax upon detection of the FC signal (1300 Hz tonal signal) without generating a ringtone.

SSSW-SW03

List of Functions

Bit	Function	1	0
0	TCF criteria	Loose	Normal
1	Echo protect tone for high-speed transmission	Transmitted	Not transmitted
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	Tonal signal before CED signal transmission	Transmitted	Not transmitted

T-4-4

Detailed Discussions of Bit 0

Select whether to make the TCF criteria loose when the system with a V.34 modem receives an image using the V.17 protocol.

When "Loose" is selected, fallback hardly occurs when an image is received using the V.17 protocol.

However, since the transmission speed is fast, erroneous lines can be generated after start of image reception or the communication time can become long due to retransmission of erroneous frames.

Detailed Discussions of Bit 1

Selects whether or not the echo protect tone is transmitted for high-speed transmission (9600 or 7200 bps).

If errors due to line conditions occur frequently during fax transmission, select "Transmitted". When "Transmitted" is selected, a non-modulated carrier is transmitted as a synchronization signal before the image transmission.

MEMO:

Codes for errors that can occur during transmission because of line conditions: ##100, ##104, ##281, ##282, ##283, ##750, ##755, ##760,##765

Detailed Discussions of Bit 7

Use it to enable/disable transmission of a 1080-Hz tonal signal before transmission of the CED signal.

Select 'transmit' if errors occur frequently because of an echo when reception is from overseas.

MEMO:

Any of the following error code may be indicated because of an echo at time of reception ##0005, ##0101, ##0106, ##0107, ##0114, ##0200, ##0201, ##0790

SSSW-SW04

List of Functions

Bit	Function	1	0
0	not used	-	-
1	Check CI frequency	Yes	No
2	the number of final flag sequences of protocol signals	2	1
3	Reception mode after CFR signal transmission	high speed	high speed/low speed
4	the length of the period of ignoring low speed signals after CFR output	1500ms	700ms
5	Frequency of CI signal is checked when PBX is set.	Yes	No
6	CNG signal for manual transmission	Not transmitted	Transmitted
7	CED signal for manual reception	Not transmitted	Transmitted

T-4-5

Detailed Discussions of Bit 1

In automatic recieving, CI frequency check can be selected. If 'Yes' is selected, the upper and lower limits of the CI frequency are checked, and automatic recieving can only go ahead if both values meet German regulations.

Detailed Discussions of Bit 2

Use it to select the number of last flag sequences for a protocol signal (transmission speed at 300 bps). Select '2' if the other party fails to receive the protocol signal properly.

MEMO:

Any of the following error codes may be indicated at time of transmission ##0100, ##0280, ##0281, ##0750, ##0753, ##0754, ##0755, ##0758, ##0759, ##0760, ##0763 ##0764, ##0765, ##0768, ##0769, ##0770, ##0773, ##0775, ##0778, ##0780, ##0783, ##0785, ##0788

Detailed Discussions of Bit 3

Use it to select an appropriate reception mode after transmission of the CFR signal.

If errors occur frequently at time of reception because of the condition of the line, select 'high speed' for reception mode and, at the same time, selects 'do not receive' for 'ECM reception.'

MEMO:

Any of the following error codes may be indicated at time of reception because of line condition

##0107, ##0114, ##0201

Be sure to change bit 4 before changing this bit; if errors still occur, change this bit. When 'high speed' is selected, only high-speed signals (images) will be received after transmission of the CFR signal.

Detailed Discussions of Bit 4

Use it to select the time length during which low-speed signals are ignored after transmission of the CFR signal.

If the condition of the line is not good and, therefore, the reception of image signals is difficult, select '1500 ms.'

Detailed Discussions of Bit 5

In the countries that need approval of CI signal frequency check, no checking on frequency set at PBX when changing the frequency to PSTN setting and PBX setting for frequency checks.

Detailed Discussions of Bit 6

Selects whether or not to transmit CNG signal during manual transmission.

In manual transmitting to a fax with the FAX/TEL switching mode, if there are frequent errors due to failure to switch to fax mode, select "Transmitted" for the CNG signal.

Detailed Discussions of Bit 7

Selects whether or not to transmit CED signals during manual reception. If the other fax does not transmit even when you start manual reception, select "Transmitted" for the CED signal.

SSSW-SW05

List of Functions

Bit	Function	1	0
0	not used	-	-
1	Conversion from mm to inch (text mode)	execute	do not execute
2	Conversion from mm to inch (text/photo mode)	execute	do not execute
3	transmit bit 33 and thereafter for DIS signal	prohibit	do not prohibit
4	Recording paper length availability declared in DIS signal	A4 /B4 size	Arbitrary size
5	not used	-	-
6	not used	-	-

Bit	Function	1	0
7	not used	-	-

T-4-6

Detailed Discussions of Bit 1

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text mode.

Scanning direction in conversion follows the Bit 2 setting of SW14.

Detailed Discussions of Bit 2

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text/photo mode while bit 1 is set to '1'.

Scanning direction in conversion follows the Bit 2 setting of SW14.

Detailed Discussions of Bit 3

Use it specify whether or not to transmit bit 33 and thereafter for the DIS signal.

If 'prohibit' is selected, Super Fine reception from a non-Canon machine can no longer be used.

CAUTION:

If 'prohibit' is selected, Super Fine reception from a non-Canon machine can no longer be used.

Detailed Discussions of Bit 4

Selects whether or not the recording paper length declared in the DIS signal is A4 size. When receiving documents made up of long pages, to have the document divided into two pages at the transmitting fax, select "A4 size".

MEMO:

When "A4 size" is selected, this fax uses the DIS signal to tell the transmitting fax that it is equipped with A4 size recording paper.

The transmitting fax that receives this DIS signal divides long pages into A4 size pages before transmitting it to the receiving fax.

Some fax models do not so divide long documents.

SSSW-SW06

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	FAX stamp display setting	Displayed	Not displayed
4	original read width	LTR	A4
5	not used	-	-
6	not used	-	-
7	not used	-	-

Detailed Discussions of Bit 3

T-4-7

Select whether to display the stamp menu in the user menu after installation of the optional stamp unit.

Detailed Discussions of Bit 4

Use it to select a read width for originals.

If 'LTR' is selected, the machine will read LTR originals at LTR width (214mm).

SSSW-SW012

List of Functions

Bit	Function	1	0
0	1-page time-out length for transmission	1	0
1	not used	-	-
2	1-page time-out length for transmission (HT transmission)	1	0
3	not used	-	-
4	1-page time-out length for reception	1	0
5	not used	-	-
6	not used	-	-
7	page timer setting by transmission/reception	set	do not set

T-4-8

The machine will stop the ongoing communication if the transmission/reception of a single original page takes 32 min or more. To use the timer for a purpose other than this function, refer to the tables that follow, and select an appropriate time length.

When 'do not enable' is selected using bit 7, the time-out length for a single page for all modes will depend on the setting of bit 0 and bit 1.

Time-Out Length for Transmission/reception

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8min.	0	*	*	*	*	*	0	0
16min.	0	*	*	*	*	*	0	1
32min.	0	*	*	*	*	*	1	0
64min.	0	*	*	*	*	*	1	1

T-4-9

Time-Out Length for Transmission (text mode)

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8min.	1	*	*	*	*	*	0	0
16min.	1	*	*	*	*	*	0	1
32min.	1	*	*	*	*	*	1	0
64min.	1	*	*	*	*	*	1	1

T-4-10

Time-Out Length for Transmission (image mode other than text mode)

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8min.	1	*	*	*	0	0	*	*
16min.	1	*	*	*	0	1	*	*
32min.	1	*	*	*	1	0	*	*
64min.	1	*	*	*	1	1	*	*

T-4-11

Time-Out Length for Reception

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8min.	1	*	0	0	*	*	*	*
16min.	1	*	0	1	*	*	*	*
32min.	1	*	1	0	*	*	*	*
64min.	1	*	1	1	*	*	*	*

T-4-12

SSSW-SW013

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
	Convert "inch" into "mm" when transmitting the received image data	convert	do not convert

Bit	Function	1	0
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

Detailed Discussions of Bit 2

It converts "inch" into "mm" when transmitting the received image data.

Scanning direction in conversion follows the Bit 2 setting of SW14.

SSSW-SW014

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2		both main and sub scanning directions	
3	not used	-	-
4	inch-configuration resolution declaration	declare	do not declare
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-14

Detailed Discussions of Bit 2

Use it to specify whether to convert or not convert an inch-configuration resolution into a millimeter-configuration resolution for image read in G3 transmission:

either in sub scanning direction only or in both main and sub scanning directions. The setting is valid only when bit 1 of SW05 of #SSSW is set to '1'.

Detailed Discussions of Bit 4

Use it to specify whether to declare or not declare an inch-configuration resolution to the other machine for G3 communication: if 'declare' is selected, the machine will indicate that it reads and records at an inch-configuration resolution using the DIS, DCS, or DTC signal.

SSSW-SW15

List of Functions

Bit	Function	1	0
0	not used	•	-

Bit	Function	1	0
1	timing for storing polarity in memory	telephone line	after CI detection
2	Reception of call through caller ID display line (main unit line)	Yes	No
3	not used	-	-
4	not used	-	-
5	not used	ļ-	-
6	Detection of continuous signal at fax/tel switchover	Yes	No
7	not used	-	-

T-4-15

Detailed Discussions of Bit 1

When a dial-in fax/tel switch-cover takes place, the polarity of the telephone line is stored in memory for detection of reversal of the polarity of the telephone line. The timing may be set so that it is either after detection of CI or after release of the telephone line.

Some switchboards are known to wrongly store the polarity, which can further cause the machine to enter standby state when the telephone line is released, thus disabling communication with the other party. If such is the case, be sure to select 'after release of telephone line'.

CAUTION:

If the switch is set to 'after release of telephone line', the reversal of the polarity cannot be detected from when CI is detected to when the telephoneline is released.

Detailed Discussions of Bit 2

When a machine which is not compatible with the caller ID display/modem dial-in service is connected to the subscriber line which is compatible with that service, the "main unit line" is made ready for receiving the incoming call.

Detailed Discussions of Bit 6

Select whether to detect a continuous ROT signal at FAX/TEL switchover.

SSSW-SW16

List of Functions

Bit	Function	1	0
0	No Paper display conditions	Same size fax paper	Either one All fax paper
1	Check side cassette paper at No Paper display		Check
2	not used	-	-

Bit	Function	1	0
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

Detailed Discussions of Bit 0

Selects a No Paper display for when; either the fax paper cassette or multitray is empty, or for when the same size paper is all used up.

Detailed Discussions of Bit 1

Selects whether to check the side cassette when checking if the same size paper is all used up.

SSSW-SW18

List of Functions

Bit	Function	1	0
0	detection of carrier between DCS and TCF	detect	do not detect
1	wait time for carrier between DCS and TCF	600msec	300msec
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-17

Detailed Discussions of Bit 0

For reception, the absence of the carrier between DCS and TCF may be detected. If the machine returns FTT while the other party (PC-FAX in particular) is sending TCF to cause a reception error, be sure to set the bit to '1'. If the error still occurs, set bit 1 of #1 SSSW SW18 to '1'. This function is valid only when the machine uses an R288F modem.

Detailed Discussions of Bit 1

For reception, the length of time during which the absence of the carrier is detected between DCS and TCF may be set. This bit is valid when '1' is set to bit 0 of #1 SSSW SW18.

SSSW-SW22

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	Prohibit manual polling	Yes	No
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-18

Detailed Discussions of Bit 3

Selects whether to prohibit by manual polling (off hook key + start key).

SSSW-SW25

List of Functions

Bit	Function	1	0
0		Other fax number	Called number
1	not used	-	-
2	If void CSI has been received, handle as non-received CSI.	Yes	No
3	Menu display of message language	Display	Do not display
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-19

Detailed Discussions of Bit 0

Selects the transmission telephone number displayed on reports after the completion of transmission.

When "Called number" is selected, the telephone number the fax called is displayed on reports.

When "Other fax number" is selected, the telephone number sent from the other fax (the CSI signal data) is displayed on reports.

Detailed Discussions of Bit 2

At "1" on this Bit, ignore the void CSI if received and if the dial has been made at this point,

the dialed number will be indicated on the LCD/ Report screen.

At "0" on this Bit, even though the dialed number is acknowledged, LCD/Report screen will indicate nothing.

Detailed Discussions of Bit 3

When "Display" is selected, adds a Message Language menu to the user data "System Setting". This allows selecting different languages which to show displays and reports.

SSSW-SW28

List of Functions

Bit	Function	1	0
0	Caller V.8 protocol	No	Yes
1	Called party V.8 protocol	No	Yes
2	Caller V.8 protocol late start	No	Yes
3	Called party V.8 protocol late start	No	Yes
4	V.34 reception fallback	Prohibited	Not prohibited
5	V.34 transmission fallback	Prohibited	Not prohibited
6	not used	-	-
7	not used	-	-

T-4-20

Detailed Discussions of Bit 0

Select whether to use the V.8 protocol when calling. If NO is selected, the V.8 protocol is inhibited at calling and the V.21 protocol is used

Detailed Discussions of Bit 1

Select whether to use the V.8 protocol when called. If NO is selected, the V8 protocol is inhibited when called and the V.21 protocol is used.

Detailed Discussions of Bit 2

If ANSam signal is not received during transmission, select whether to use the V.8 protocol when the other fax machine declares the V.8 protocol in DIS signal. If NO is selected, the CI signal is not transmitted and the V.8 protocol is not used even if the DIS that specifies the V.8 protocol is received.

The V.8 late start is not executed during manual transmission regardless of this setting.

Detailed Discussions of Bit 3

Select whether to declare the V.8 protocol in DIS signal for reception. If NO is selected, the V.8 protocol cannot be used because it is not declared in DIS signal.

The V.8 late start is not executed during manual reception regardless of this setting.

Detailed Discussions of Bit 4

Select whether the receiver falls back during V.34 reception. If 'Prohibit' is selected, the receiver does not fall back.

Detailed Discussions of Bit 5

Select whether the transmitter falls beck during V.34 transmission. If 'Prohibit' is selected, teh transmitter does not fall back.

SSSW-SW30

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	New dial tone detection method	Detect with the new method.	Detect with the existing method.
6	not used	-	-
7	not used	-	-

T-4-21

Detailed Discussions of Bit 5

When "Detect with the new method" is selected, tone is detected for 3.5 seconds before call origination in order to discriminate between dial tone and voice. If dial tone is detected and the time since line seizure is 3.5 seconds or longer, call origination takes place immediately. If the time since line seizure is less than 3.5 seconds,

call origination takes place after waiting for 1 second. (If the time since line seizure reaches 3.5 seconds during the 1-second waiting period, call origination takes place immediately. By default, "Detect with a new method" is assigned for this SW.

SSSW-SW32

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-

Bit	Function	1	0
5	not used	-	-
6	not used	-	-
7	not used	-	-

SSSW-SW33

List of Functions

Bit	Function	1	0
0	count B4 (Print) as large size	Yes	No
1	not used	-	-
2	count B4 (Scan) as large size	Yes	No
3	the counter display type change in Japan and USA	Yes	No
4	not used	-	-
5	Toner cartridge replacement counter display	Yes	No
6	not used	-	-
7	not used	-	-

T-4-23

Detailed Discussions of Bit 0

Use it to specify whether B4 paper (Print) should be counted as large-size paper.

If 'yes' is selected, B4 paper will be counted as large-size paper.

If 'no' is selected, on the other hand, B4 paper will be counted as small-size paper.

Detailed Discussions of Bit 2

Use it to specify whether B4 paper (Scan) should be counted as large-size paper.

If 'yes' is selected, B4 paper will be counted as large-size paper.

If 'no' is selected, on the other hand, B4 paper will be counted as small-size paper.

Detailed Discussions of Bit 3/4

Select whether to switch the counter display type in effect in Japan and USA to the conventional or new type. Select "Yes" to display counters in the new type.

Select "No" to display counters in the conventional type.

	Bit4	Bit3
Conventional type(type1)	0	0
New type(type2)	0	1
New type(type3)	1	0
New type(type4)	1	1

T-4-24

Detailed Discussions of Bit 5

Select whether to display the toner cartridge replacement counter.

When "1" is selected, the counter is displayed.

When "0" is selected, the counter is not displayed.

SSSW-SW34

List of Functions

Bit	Function	1	0
0	Display the waste toner full warning	Yes	No
1	o milen and made terror ram manning	Drum replacement required message displayed on an operator call	E019 displayed on an service call
2	User drum replacement menu display	Yes	No
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-25

Detailed Discussions of Bit 0

You can select whether a waste toner full warning is to be displayed.

When "1" is selected, a waste toner full warning is displayed.

When "0" is selected, a waste toner full warning is not displayed.

Detailed Discussions of Bit 1

Select whether to display the waste toner full warning as a drum replacement required message or as E019 displayed on an operator call. Select 1 to display a rum replacement required message on an operator call. Select 0 to display E019 on an service call.

Detailed Discussions of Bit 2

Select whether to display the user drum replacement menu.

When "1" is selected, the menu is displayed.

When "0" is selected, the menu is not displayed.

SSSW-SW35

List of Functions

Bit	Function	1	0
0	e-RDS function ON/OFF	Yes	No
1	Call button function ON/OFF	Yes	No
2	ScanToMeia function enable/disable	enable	disable
3	MediaPrint function enable/disable	enable	disable
4	IC card authentication management function ON/OFF	Yes	No
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-26

Detailed Discussions of Bit 0

Select whether to set the e-RDS function.

When "1" is selected, the function is set.

When "0" is selected, the function is not set.

Detailed Discussions of Bit 1

Select whether to set the call button function.

When "1" is selected, the function is set.

When "0" is selected, the function is not set.

Detailed Discussions of Bit 2

Select whether to enable or disable the ScanToMeia function.

When "1" is selected, the function is enabled.

When "0" is selected, the function is disabled.

Detailed Discussions of Bit 3

Select whether to enable the MediaPrint function.

When "1" is selected, the function is enabled.

When "0" is selected, the function is disabled.

Detailed Discussions of Bit 4

Select whether to set the IC card authentication function.

When "1" is selected, the function is set.

When "0" is selected, the function is not set.



■ Menu Switch Composition

No.	Function	Range of settings
005	NL equalizer	1: ON, 0: OFF
006	Telephone line monitor	0: DIAL, 1: SERVICEMAN [1], 2: SERVICEMAN [2], 3: OFF
007	Transmission level (ATT)	From 0 to 15 (ex: 15= -15 dBm)
800	V.34 modulation speed upper limit	0: 3429, 1: 3200, 2: 3000, 3: 2800, 4: 2743, 5: 2400
009	limit	0: 33.6kbs, 1: 31.2kbs, 2: 28.8kbs, 3: 26.4kbs, 4: 24.0kbs 5: 21.6kbs, 6: 19.2kbs, 7: 16.8kbs, 8: 14.4kbs, 9: 12.0kbs 10: 9.6kbs, 11: 7.2kbs, 12: 4.8kbs, 13: 2.4kbs
010	Frequency of pseudoring signal	0: 50Hz, 1: 25Hz, 2: 17Hz

T-4-27

Deatails

<005: NL equalizer>

Use it to enable-disable the NL equalizer.

If errors occur often during communication because of the condition of the line, enable (ON) the NL equalizer.

MFMO:

Any of the following error codes may be indicated at time of transmission because of the line condition:

##100, ##101, ##102, ##104, ##201, ##281, ##282, ##283, ##750, ##755, ##765, ##774, ##779, ##784, ##789

Any of the following error codes may be indicated at time of transmission because of the line condition:

##103, ##107, ##114, ##201, ##790, ##793

<006: Telephone line monitor>

Use it to s the telephone line monitor function:

DIAL: generate the monitor sound of the telephone line using the speaker from the start of transmission to DIS.

SERVICEMAN [1]: generate the monitor sound of the telephone line using the speaker from the start of communication to the end of it.

SERVICEMAN [2]: generate the monitor sound of the telephone line2 (Option).

OFF: do not generate the monitor sound of the telephone line using the speaker.

<007: ATT transmission level>

Use it to set the transmission level (ATT).

Raise the transmission level if errors occur frequently at time of communication because of the condition of the line. (It means close to 8)

MEMO:

Any of the following error codes may be indicated at time of transmission because of the line condition:

##100, ##101, ##102, ##104, ##201, ##280, ##281, ##282, ##283, ##284, ##750, ##752, ##754, ##755, ##757, ##759, ##760, ##762, ##764, ##765,

##767, ##769, ##770, ##772, ##774, ##775, ##777, ##779, ##780, ##782, ##784, ##785, ##787, ##789

Any of the following error codes may be indicated at time of reception because of the line condition:

##103, ##106, ##107, ##201, ##793 ##103, ##106, ##107, ##201, ##793

<008: V.34 modulation speed upper limit>

Use it to set an upper limit to the modulation speed (baud rate) for the V.34 primary channel.

<009: V.34 data speed upper limit>

Use it to set an upper limit to the data transmission speed for the V.34 primary channel between 2.4K and 33.6K bps in increments of 2400 bps. (0: 2.4K to 13:33.6K bps).

<010: Frequency of the pseudo CI signal>

You may select a frequency for the pseudo CI signal.

Some types of external telephones do not ring when the fax/tel switch-over function is ON. To sound the ring, change the pseudo CI signal.



■ Numerical Parameter Composition

No.	Item	Range of settings
002	RTN transmission condition(1)	1% to 99%
003	RTN transmission condition (2)	2 to 99 item
004	RTN transmission condition (3)	1 to 99 lines
005	NCC pause time length (pre-ID code)	1 to 60 sec
006	NCC pause time length (post-ID code)	1 to 60 sec
010	line condition identification time length	0 to 9999 (10 msec)
011	T.30T1 timer (for reception)	0 to 9999 (10 msec)
013	T.30 EOL timer	500 to 3000 (10 msec)
015	hooking detection time length	0 to 999
016	time length to first response at time of fax/tel switchover	0 to 9
017	pseudo RBT signal pattern ON time length	0 to 999
018	pseudo RBT signal pattern OFF time length (short)	0 to 999
019	pseudo RBT signal pattern OFF time length (long)	0 to 999
020	pseudo CI signal pattern ON time length	0 to 999
021	pseudo CI signal pattern OFF time length (short)	0 to 999
022	pseudo CI signal pattern OFF time length (long)	0 to 999
023	CNG detection level at time of fax/tel switchover	0 to 7
024	pseudo RBT transmission level at time of fax/tel switchover	10 to 20
		0 to 20 (120/230V)
025	Answering machine connection function signal detection time	0 to 999
027	preamble detection time length for V21 low-speed flag	20 (x 10ms)
051	Hooking detection threshold	
053	Setting of DTMF call origination count at remote reception of fax	
054	Setting of busy tone output time when handset is used	
055	acquisition period of environmental log data	0 to 480 (60min)
056	display the type of soft counter 1	101 (Fixed)
057	Display the type of soft counter 2	0 to 999
058	Display the type of soft counter 3	0 to 999
059	Display the type of soft counter 4	0 to 999
060	Display the type of soft counter 5	0 to 999
061	Display the type of soft counter 6	0 to 999
074	e-RDS RGW port number	
075	Interval of transmission for e-RDS 3rd party	

T-4-28

Details

<002:RTN transmission condition (1)><003: RTN transmission condition (2)><004: RTN transmission condition (3)>

Use it to set RTN signal transmission conditions. Raise these parameters for more lenient conditions if errors occur frequently at time of reception because of transmission of the RTN signal.

MEMO:

Any of the following error codes may be indicated at time of reception because of RTN signal transmission

##0104, ##0107, ##0114, ##0201

RTN signal transmission condition (1) affects the ratio of error lines to the total number of lines per single page of received images.

RTN signal transmission condition (2) affects the standard value (*2) of burst errors (*1). RTN signal condition (3) affects the number of errors not reaching the standard value of burst errors.

*1: transmission error occurring cover several lines.

*2: for instance, if '15' is set, a single burst error will represent an error occurring continuously cover 15 lines.

If any of these lines is detected while an image signal is being received, the RTN signal will be transmitted after receiving the protocol signal of the transmitting party. Higher parameters restrict the transmission of the RTN signal.

<005:NCC pause length (pre-ID code)>

Use it to set the length of the pause automatically entered between access code and ID code when the NCC (New Common Carrier) line is used for dialing.

<006:NCC pause length (post-ID code)>

Use it to set the length of the pause automatically entered between ID code and telephone number of the other party when the NCC (New Common Carrier) line is used for dialing.

<010: line connection identification length>

Use it to set the time for identifying the line connection. Raise this parameter if errors occur frequently at time of communication because of the condition of the line.

MEMO:

Any of the following error codes may be indicated because of the condition of the line ##0005. ##0018

The line condition identification time is between when the dial signal is transmitted and when the line condition is cut for the transmitting party, while it is between when the DIS signal is transmitted and when the line is cut for the receiving party.

<011: T.30 T1 timer (for reception)>

Set the T1 timer for the receiver (wait time after DIS transmission starts until a significant signal is received).

<013:T.30 EOL timer>

Set it so that the 1-line transmission time is longer for reception to prevent reception errors caused by a long data length per line (e.g., computer FAX).

- <016: time length to first response at time of fax/tel switchover> Allows setting of the time from seizing the line till pseudo RBT is sent, when the Fax/ Tel switching function is operating.
- <017: pseudo RBT signal pattern ON time length/018: pseudo RBT signal pattern OFF time length (short)/019: pseudo RBT signal pattern OFF time length (long)>

Use it to set the pattern of the pseudo RBT signal transmitted at time of a fax/tel switchover.

<020: pseudo CI signal pattern ON time length/021: pseudo CI signal pattern OFF time length (short)/022: pseudo CI signal pattern OFF time length (long)>

Use it to set the pseudo CI signal pattern transmitted at time of a fax/tel switchover.

- <023:CNG detention level for fax/tel switchover> Use it to set the CNG detention level for a fax/tel switchover.
- <024:pseudo RBT transmission level at time of fax/tel switchover> Use it to set the pseudo transmission level for a fax/tel switchover.

<025: Answering machine connection function signal detection time>

Sets the signal detection time for the answering machine connection function operation. When the answering machine connection function is operating, if the function does not operate normally because the fax does not detect CNG signal sent from the line, raise this parameter to increase the signal detection time.

<027:V.21 low-speed flag preamble identification length>

Use it to detect the time of detection after which command analysis is started after detecting V.21 low-speed command preambles continuously for a specific period of time.

<056 - 061: Count type select >

Use it to confirm the count type indicated on the Counter Check screen, which appears in response to a press on the Counter key.

When '0' is selected, count type will not be indicated.

- 056:Use it to indicate the type of software counter 1 of the control panel. The type of soft counter 1 cannot be changed.
- 057:Use it to change the type of soft counter 2* of the control panel to suit the needs of the user.
- 058:Use it to change the type of soft counter 3* of the control panel to suit the needs of the user.
- 059:Use it to change the type of soft counter 4* of the control panel to suit the needs of the user.
- 060:Use it to change the type of soft counter 5* of the control panel to suit the needs of the user.
- 061:Use it to change the type of soft counter 6* of the control panel to suit the needs of the user.

<Soft Counter Specifications>

The soft counters are classified a follows in terms of input numbers:

100s: total 200s: copy 300s: print

400s: copy + print

500s: scan

700s: received file print

800s: report pint

900s: transmitted scan

Guide to the Table

- 1:Count sheets of all sizes by one.
- 2:Count sheets of the large size by two.
- C:full color
- Bk:black mono
- L:large size (larger than A4/LTR)
- S:small size (A4/LTR or smaller)

MEMO:

To make a change so that B4 papers (for print) will be counted as large-size, use service mode: make the following selections, and change bit 0 to '1': #SSSW>SW33.

To make a change so that B4 papers (for scan) will be counted as large-size, use service mode: make the following selections, and change bit 2 to '1': #SSSW>SW33.

Serial	Counter type	Daire	4	-4														
	Counter type	Prin	t sy	sten	1													
No. on		Bk 1	1-sid		-	Bk 1	1-sic	led S	S	Bk 2			_	Bk 2-sided S				
counter					6	PE	FA	Re	6	P	FA	Re	Ь	PE	FA	Re		
check		cal	~	×	βo	<u>ငရ</u>	<u>~</u>	×	ő	<u>ရ</u>	<u> </u>	×	ő	<u>ca</u>		X	bo	
screen		ocal copy	PDL print	FAX print	тp	ocal copy	PDL print	FAX print	ᄝ	Local copy	PDL print	FAX print	ㅁ	Local copy	PDL print	FAX print	тþ	
		\$	🕇	t	Report print	2	🗂		Report print	2	🗂	t	Report print	2	🕇	t	Report print	
101	Total1	1	1	1	1	1	1	1	1									
102	Total2	2	2	2	2	1	1	1	1									
103	Total (L)	1	1	1	1													
104	Total (S)					1	1	1	1									
108	Total (Bk1)	1	1	1	1	1	1	1	1									
109	Total (Bk2)	2	2	2	2	1	1	1	1									
112	Total (Bk/L)	1	1	1	1													
113	Total (Bk/S)					1	1	1	1									
114	Total1 (2-sided)									1	1	1	1	1	1	1	1	
115	Total2 (2-sided)									2	2	2	2	1	1	1	1	
116	L (2-sided)									1	1	1	1					
117	S (2-sided)													1	1	1	1	
126	TotalA1		1	1	1		1	1	1									
127	TotalA2		2	2	2		1	1	1									
128	TotalA (L)		1	1	1													
129	TotalA (S)						1	1	1									
132	TotalA (Bk1)		1	1	1		1	1	1									
133	TotalA (Bk2)		2	2	2		1	1	1									

^{*:} The default type settings of soft counter is different from models.

Serial	Counter type	Prin	t sy	sten	า												
No. on		Bk [′]	1-sid	led I		Bk ⁻	1-sid	led S	 S	Bk 2	2-sic	led I		Bk 2	2-sid	ed S	 S
counter							፱										
check		Local copy	PDL print	FAX print	epc	Local copy	PDL print	FAX print	epc	Local copy	PDL print	FAX print	epc	Local copy	PDL print	FAX print	epc
screen		8	prir	prir	Ă	8	prir	prir	Ă	8	prir	prir	Ĭ,	8	prir	prir	ŭ
		ğ	#	#	Report print	Ď	=	#	Report print	ğ	=	Ħ	Report print	Þγ	ıt	#	Report print
136	TotalA (Bk/L)		1	1	1												
137	TotalA (Bk/S)		<u> </u>	-	'		1	1	1								
138	TotalA1 (2-sided)						<u> </u>	<u> </u>	<u> </u>		1	1	1		1	1	1
139	TotalA2 (2-sided)					<u> </u>				_	2	2	2		1	1	1
140	L A (2-sided)					Ì	<u> </u>				1	1	1			'	-
141	S A (2-sided)										 		<u> </u>		1	1	1
150	TotalB1		1	1	1		1	1	1	\vdash					_	-	-
151	TotalB2		2	2	2	<u> </u>	1	1	1								
152	TotalB (L)		1	1	1		<u>'</u>	Ė	Ė								
153	TotalB (S)		Ė	Ė	Ė		1	1	1		\vdash						
156	TotalB (Bk1)		1	1	1		1	1	1								
157	TotalB (Bk2)		2	2	2	<u> </u>	1	1	1								
160	TotalB (Bk/L)		1	1	1				Ė								
161	TotalB (Bk/S)						1	1	1								
162	TotalB1 (2-sided)										1	1	1		1	1	1
163	TotalB2 (2-sided)										2	2	2		1	1	1
164	LB (2-sided)										1	1	1				
165	SB (2-sided)														1	1	1
201	Copy(Total1)	1				1											
202	Copy(Total2)	2				1											
203	Copy(L)	1															
204	Copy(S)					1											
205	CopyA (Total1)	1				1											
206	CopyA (Total2)	2				1											
207	CopyA (L)	1															
208	CopyA (S)					1											
209	Local copy(Total1)	1				1											
210	Local copy(Total2)	2				1											
211	Local copy(L)	1															
212	Local copy(S)					1											
221	Copy(Bk1)	1				1											
222	Copy(Bk2)	2				1											
227	Copy(Bk/L)	1															
228	Copy(Bk/S)					1											
237	Copy(Bk/L/2-sided)									1							
238	Copy(Bk/S/2-sided)													1			
249	CopyA (Bk1)	1				1											

Serial	Counter type	Prin	t sy:	sten	1															
No. on		Bk 1	1-sic	led I		Bk ′	1-sic	led (S	Bk 2	2-sic	led I		Bk 2-sided S						
counter		_	፱	Į						├—										
check		_ocal copy	PDL print	FAX print	epc	Local copy	PDL print	FAX print	မြွ	ocal copy	PDL print	FAX print	ep	Local copy	PDL print	FAX print	epc			
screen		S	prir	prir	ŭ	S	prir	pri	<u> </u>	<u>R</u>	prir	pri	Ĭ,	<u>8</u>	prir	prir	퍼			
		ğ	=	#	Report print	ğ	#	≓	Report print	ğ	≓	≓	Report print	βy	≓	≓	Report print			
050	0 A (DLO)					4			_				_							
250	CopyA (Bk2)	2				1			_	_										
255	CopyA (Bk/L)	1				_			<u> </u>	<u> </u>							Ш			
256	CopyA (Bk/S)					1			_	ļ <u>.</u>							Ш			
265	CopyA (Bk/L/2-sided)								_	1				_			Ш			
266	CopyA (Bk/S/2-sided)					_								1			Ш			
277	Local copy(Bk1)	1				1				_										
278	Local copy(Bk2)	2				1			_	_							Щ			
283	Local copy(Bk/L)	1															Ш			
284	Local copy(Bk/S)					1			_	_							Ш			
293	Local copy(Bk/L/2- sided)									1										
294	Local copy(Bk/S/2- sided)													1						
301	Print (Total1)		1		1		1		1											
302	Print (Total2)		2		2		1		1											
303	Print (L)		1		1															
304	Print (S)						1		1											
305	PrintA (Total1)		1		1		1		1											
306	PrintA (Total2)		2		2		1		1											
307	PrintA (L)		1		1															
308	PrintA (S)						1		1											
313	Print (Bk1)		1		1		1		1											
314	Print (Bk2)		2		2		1		1											
319	Print (Bk/L)		1		1															
320	Print (Bk/S)						1		1											
329	Print (Bk/L										1		1							
330	Print (Bk/S/2-sided)														1		1			
331	PDLprint (Total1)		1				1													
332	PDL print (Total2)		2				1													
333	PDL print (L)		1																	
334	PDL print (S)						1													
339	PDL print (Bk1)		1				1													
340	PDL print (Bk2)		2				1													
345	PDL print (Bk/L)		1																	
346	PDL print (Bk/S)						1													
355	PDL print (Bk/L/2- sided)										1									
356	PDL print (Bk/S)														1					

	Counter type	Prin	t sy	sten	1												
No. on		Bk 1	1-sid	led I	_	Bk '	1-sid	led S	 S	Bk 2	2-sic	led I	_	Bk 2	2-sic	led S	3
counter check screen		Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print
403	Copy+Print (Bk/L)	1	1		1												
404	Copy+Print (Bk/S)					1	1		1								
405	Copy+Print (Bk2)	2	2		2	1	1		1								
406	Copy+Print (Bk1)	1	1		1	1	1		1								
411	Copy+Print (L)	1	1		1												
412	Copy+Print (S)					1	1		1								
413	Copy+Print (2)	2	2		2	1	1		1								
414	Copy+Print (1)	1	1		1	1	1		1								
421	Copy+Print (Bk/L)									1	1		1				
422	Copy+Print (Bk/S)													1	1		1
701	Recieved print (Total1)																
702	Recieved print (Total2)																
703	Recieved print (L)																
704	Recieved print (S)																
709	Recieved print (Bk1)																
710	Recieved print (Bk2)																
715	Recieved print (Bk/L)																
716	Recieved print (Bk/S)																
725	Recieved print (Bk/L/2- sided)											1					
726	Recieved print (Bk/S/2- sided)															1	
801	Report print (Total1)																
802	Report print (Total2)																
803	Report print (L)																
804	Report print (S)								$ldsymbol{ld}}}}}}$		$ldsymbol{ld}}}}}}$						
809	Report print (Bk1)																
810	Report print (Bk2)																
815	Report print (Bk/L)																
816	Report print (Bk/S)																
825	Report print (Bk/L)												1				
826	Report print (Bk/S)																1

	Counter type	Sca	n sy	/ster	n										
No. on		Bk ⁻	1-sic	ded I		Bk ·	1-sic	led :	 S	Bk 2	2-sic	ded I	L	Bk 2-sid	ded S
counter check screen		Total scan	E-mail scan	FileShare DBscan	E-mail FileShare DB scan	FileShare DB BoxF scan	E-mail FileShare DB Box	Total scan	Total scan	E-mail scan	FileShare DB scan	E-mail FileShare DB scan	FileShare DB scan	E-mail FileShare DB BOX scan	Total scan
501	Scan (Total1)	1							1						
505	Bk scan (Total1)	1						1							
506	Bk scan (Total2)	2						1							
507	Bk scan (L)	1													
508	Bk scan (S)							1							
509	C scanTotal (1)								1						1
510	C scanTotal (2)								2						1
511	C scan (L)								1						
512	C scan (S)														1
915	Transmission scan total2 (C)													1	
916	Transmission scan total2 (Bk)						1								
917	Transmission scan total3 (C)											1			
918	Transmission scanTotal3 (Bk)				1										
921	Transmission scanTotal5 (C)										1				
922	Transmission scanTotal5 (Bk)			1											
929	Transmission scanTotal6 (C)												1		
930	Transmission scanTotal6 (Bk)					1									
945	Transmission scan/									1					



■ Setting of Scanner Functions (SCANNER)

Item1	No.	Initial	Appropriate	Description
		setting	quideline	
#SCAN SW			ľ	
#SCAN	001: - 032:			Not used
NUMERIC	033:	50		Vertical scan magnification
				correction (scanning on BOOK)
	034:	50		Horizontal scan magnification
				correction (scanning on BOOK)
	035: - 046:			Not used
	047:	50		Vertical scan magnification
				correction (scanning on ADF)
	048:	50		Horizontal scan magnification
	212 122			correction (scanning on ADF)
	049: - 192:		0.15011	Not used
	193:	0	0: LEGAL	ADF special paper, standardized
			1: FOOLSCAP	size: LGL
			2: M_OFICIO	misidentification-ready
			3: A_FOOLSCAP	
			4: FOLIO	
			5: G_LEGAL	
			6: A_OFICIO	
			7: B_OFICIO	
			8: OFICIO	
			9: E_OFICIO	
	194:	0	0: LTR	ADF special paper, standardized
			1: G_LTR	size: LTR
			2: A_LTR	misidentification-ready
	195:	0	0: LTR_R	ADF special paper, standardized
			1: FOOLSCAP	size: LTR_R
			2: OFFICIO	misidentification-ready
			3: E_OFFICIO	
			4: G_LTR_R	
			5: A_LTR_R	
	196: - 290:			Not used

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tem1	Item2	Item3	Item4	Initial	Appropriate	Description
				settina	auideline	
READER	DISPLAY	CCD	TARGET-B	J		Target value of shading for blue
			TARGET-G			Target value of shading for
						green
			TARGET-R			Target value of shading for red
			OFST			Adjustment value of offset level
						on CIS
			OFST-B			not used
			OFST-G			not used
			OFST-R			not used
			OFST-O			not used
			OFST-E			not used
			GAIN			Adjustment value of gain level
						on CIS
			GAIN-B			not used
			GAIN-G			not used
			GAIN-R			not used
			GAIN-O			not used
			GAIN-E			not used
		IO	R-CON			Firmware version of reader
						controller PCB
			FEEDER			ROM version of DADF controller
		151101	1.5.1.1			PCB
	ADJUST	ADJ-XY	ADJ-X	20	1 to 211,	Adjustment of scanning system
						image lead edge position
						(image's scan-start position in
						vertical scanning direction)
			ADJ-Y	0		Adjustment value of image
			1510		1=0.1mm	scan-start position <y-direction> Adjustment of CCD/CIS scan-</y-direction>
			ADJ-S	75		
					1=0.1mm	start cell position (image scan-
						start position in horizontal
						scanning direction)
			ADJ-Y-DF	0		Adjustment of horizontal
					1=0.1mm	scanning position at feeder
						mode
			STRD-POS	100		Adjustment of CCD/CIS scan
						position at stream-reading mode
						with DF
			ADJ-X-MG	0		Fine adjustment of magnification
					1=0.1%	ration in vertical scanning when
						scanning with reader copyboard

Item1	Item2	Item3	Item4	Initial	Appropriate	Description
				setting	quideline	
READER	ADJUST	CCD	W-PLT-X	8273	1 to 9999	White label data entry with
						standard white plate
			W-PLT-Y	8737	1 to 9999	White label data (Y) entry with
						standard white plate
			W-PLT-Z	9427	1 to 9999	White label data (Z) entry with
						standard white plate
			SH-TRGT	272	1 to 2047	Shading target value of the
						standard white plate (backup)
			50_RG			not used
			50_GB			not used
			100_RG			not used
			100_GB			not used
			50DF_RG			not used
			50DF_GB			not used
			100DF_RG			not used
			100DF_GB			not used
			DFTAR-R	292	1 to 2047	Shading target value (RED)
						entry when using DF (normal
						document scanning position)
			DFTAR-G	297	1 to 2047	Shading target value (GREEN)
						entry when using DF (normal
						document scanning position)
			DFTAR-B	294	1 to 2047	Shading target value (BLUE)
						entry when using DF (normal
						document scanning position)
			CCD-CHNG			not used
			DFTAR-K	293	1 to 2047	Black shading target value
						when using DF
			MTF3-M1			not used
			MTF3-M2			not used
			MTF3-M3			not used
			MTF3-M4			not used
			MTF3-M5		ļ	not used
			MTF3-M6		ļ	not used
			MTF3-M7		ļ	not used
			MTF3-M8		ļ	not used
			MTF3-M9		ļ	not used
			MTF3-M10		-	not used
			MTF3-M11		-	not used
			MTF3-M12		-	not used
			MTF3-S1			not used
			MTF3-S2 MTF3-S3		1	not used
			MTF3-S3 MTF3-S4			not used
					-	not used
			MTF3-S5 MTF3-S6		1	not used
			MTF3-S6 MTF3-S7	-	 	not used
					1	not used
			MTF3-S8			not used
			MTF3-S9	1	1	not used
	<u> </u>		MTF3-S10		L	not used

Item1	Item2	Item3	Item4	Initial	Appropriate	Description
				setting	guideline	
READER	ADJUST	CCD	MTF3-S11			not used
			MTF3-S12			not used
			MTF4-M1			not used
			MTF4-M2			not used
			MTF4-M3			not used
			MTF4-M4			not used
			MTF4-M5			not used
			MTF4-M6			not used
			MTF4-M7			not used
			MTF4-M8			not used
			MTF4-M9			not used
			MTF4-M10			not used
			MTF4-M11			not used
			MTF4-M12			not used
			MTF4-S1			not used
			MTF4-S2		İ	not used
			MTF4-S3			not used
			MTF4-S4			not used
			MTF4-S5			not used
			MTF4-S6			not used
			MTF4-S7			not used
			MTF4-S8			not used
			MTF4-S9			not used
			MTF4-S10			not used
			MTF4-S11			not used
			MTF4-S12			not used
		PSCAL		0	-128 to 128	Density adjustment at test print
						scanning
	FUNCTION	INSTALL	STRD-POS			Auto adjustment of CCD/CIS
						reading position in stream
						reading
		CCD	CCD-ADJ			Gain adjustment of analog
						processor block.
			DF-WLVL1			ADF white level adjustment
						(platen board cover scan/stream
						reading scan)
			DF-WLVL2			ADF white level adjustment
						(platen board cover scan/stream
						reading scan)
			MTF-CLC			not used
			DF-WLVL3			ADF white level adjustment
						(platen board cover scan)
			DF-WLVL4		İ	ADF white level adjustment (DF
						scan)
		CLEAR	R-CON			Clearing of the backup area for
						the reader in the main controller.
		MISC-R	SCANLAMP			Executing activation of the
						scanning lamp

Item1	ltem2	Item3	Item4	Initial	Appropriate	Description
				settina	quideline	
READER	OPTION	BODY	SENS-CNF	Journa	Januaria	Setting of the document
						detection sensor placement
			MODELSZ2			not used
			SZDT-SW			not used
			DFDST-L1	0	0 to 255	Dirt detection level adjustment
						(between documents) during
						ADF use
			DFDST-L2	0	0 to 255	Dirt detection level adjustment
						(upon job completion) during
						ADF use
			KSIZE-SW			not used
		USER	SIZE-DET			not used
FEEDER	ADJUST	DOCST			-50 to 50	Adjusting the original stop
						position for ADF pickup (original
						tray pickup)
		LA-			-30 to 30	Adjusting the original feeding
		SPEED				speed in stream reading
		DOC-				Correcting the paper length in
		LNGH				extra length/indeterminate mode
						with ADF
	FUNCTION	FEED-				Checking the passage of paper
		CHK				for ADF
		CL-CHK				not used
		CL-ON				not used
		FAN-CHK				Checking the ADF cooling fan
		FAN-ON				Starting the fan operation
		SL-CHK				Checking the ADF solenoid
		SL-ON				Starting the solenoid operation
		MTR-ON				Starting the motor operation
		ROLL-				ADF roller cleaning mode
		CLN			ļ	
		FEED-				Checking the passage of paper
		ON				with ADF

- Numeric Parameter Settings (Numeric Prama.)
- <033Vertical scan magnification correction>

Correct the magnification of vertical scanning of a book. The larger the adjustment value, the more the image stretches in the vertical scanning direction.

<034: Horizontal scan magnification correction>

Correct the magnification of horizontal scanning of a book. The larger the adjustment value, the more the image stretches in the horizontal scanning direction.

<047: Vertical scan magnification correction (when scanning on a document fed from ADF)>

Correct the magnification of vertical scanning of a document fed from the ADF. The larger the adjustment value, the more the image stretches in the vertical scanning direction.

<048: Horizontal scan magnification correction (when scanning on a document fed from ADF)>

Correct the magnification of horizontal scanning of a document fed from the ADF. The smaller the adjustment value, the more the image stretches in the horizontal scanning direction.

<193: ADF special standard-sized paper: LGL misidentification-ready>

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LEGAL").

- 0: LEGAL
- 1: FOOLSCAP
- 2: M_OFICIO
- 3: A_FOOLSCAP
- 4: FOLIO
- 5: G_LEGAL
- 6:A OFICIO
- 7: B_OFICIO
- 8: OFICIO
- 9 : E_OFICIO

<194: ADF special standard-sized paper: LTR misidentification-ready>

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTR").

0: LTR

1: G LTR

2: A LTR

<195: ADF special standard-sized paper: LTR_R misidentification-ready>

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTRR").

0: LTR R

1: FOOLSCAP

2: OFFICIO

3: E_OFFICIO

4: G_LTR_R

5: A_LTR_R

READER

(#SCAN> READER> DISPLAY> CCD> TARGET-B)

Target value of shading for blue

If the scanned image has some failure, check the target value of shading for blue.

If the machine continues to display 0 (minimum) or FFFF (maximum), there may be some problem on main controller PCB.

Appropriate guideline: 1 to 2047

(#SCAN> READER> DISPLAY> CCD> TARGET-G)

Target value of shading for green

If the scanned image has some failure, check the target value of shading for green.

If the machine continues to display 0 (minimum) or FFFF (maximum), there may be some problem on main controller PCB.

Appropriate guideline :1 to 2047

(#SCAN> READER> DISPLAY> CCD> TARGET-R)

Target value of shading for red

If the scanned image has some failure, check the target value of shading for red.

If the machine continues to display 0 (minimum) or FFFF (maximum), there may be some problem on main controller PCB.

Appropriate guideline :1 to 2047

(#SCAN> READER> DISPLAY> CCD> OFST)

Adjustment value of offset level on CCD/CIS

To judge if this adjustment value is correct when an image fault attributed to CCD occurs. Appropriate guideline :0 to 255

(#SCAN> READER> DISPLAY> CCD> GAIN)

Adjustment value of gain level on CCD/CIS

To judge if this adjustment value is correct when an image fault attributed to CCD/CIS occurs. Appropriate guideline :0 to 255

(#SCAN> READER> I/O> R-CON> P001)

The P001 port indication of the reader relay PCB

Display the I/O state of the sensor of the reader unit.

Bit	Name	Display contents	Remarks
Bit0	Copyboard cover open/closed sensor (rear) (S32)	1: Open	ADF open angle: 5 degrees
Bit1	CCD HP sensor (S31)	1: HP	
Bit2	Not used.	1: Open	
Bit3	Copyboard cover open/closed sensor (front) (S33)	1: Document present	ADF open angle: 25 degrees
Bit4	Document size snsor 0 (S34)	1: Document present	
Bit5	Document size snsor 1 (S35)	1: Document present	
Bit6	Document size snsor 2 (S36)	1: Document present	
Bit7	Document size snsor 3 (S37)	1: Document present	
Bit8-15	Not used.		

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(#SCAN> READER> I/O> FEEDER> P001)

The P001 port indication of the ADF driver PCB

Display the I/O state of the sensor of the ADF unit.

Bit	Name	Display contents	Remarks
Bit0	Document tray width sensor 2 (PI2)	1: Document present	

Bit	Name	Display contents	Remarks
Bit1	Document tray width sensor 1 (PI1)	1: Document present	
Bit2	Not used.		
Bit3	Not used.		
Bit4	Delivery reversal sensor (PI6)	1: Document present	
Bit5	Read sensor (PI7)	1: Document present	
Bit6	Not used.		
Bit7	Registration sensor (PI8)	1: Document present	
Bit8	Document length sensor 2 (PI5)	1: Document present	
Bit9	Document length sensor 1 (PI4)	1: Document present	
Bit10	Not used.		
Bit11	Cover open/closed sensor (PI10)	1: Open	
Bit12	Last document detection sensor (PI3)	1: Document present	
Bit13	Document set sensor (PI11)	1: Document present	

(#SCAN> READER> ADJUST> ADJ-XY> ADJ-X)

Adjustment of scanning system image lead edge position. (image's scan-start position in vertical scanning direction)

0.1mm shift of image scan-start position toward the trail edge direction by 1-increment in the setting.

Note:

Be sure to enter the value on service label when replacing the CIS unit. If changing the setting value of this item, be sure to Note the changed value on the service label.

● (#SCAN> READER> ADJUST> ADJ-XY> ADJ-Y)

Adjustment value of image scan-start position <Y-direction>

0.1mm shift of image scan-start position toward the trail edge direction by 1-increment in the setting.

Note:

Be sure to enter the value on service label when replacing the CIS unit. If changing the setting value of this item, be sure to Note the changed value on the service label.

• (#SCAN> READER> ADJUST> ADJ-XY> ADJ-S)

Adjustment of CCD/CIS scan-start cell position. (image scan-start position in horizontal scanning direction)

Adjust the position to measure data for shading correction with standard white plate. This item must not be normally used.

Note:

Be sure to enter the value on service label when replacing the CIS unit. If changing the setting value of this item, be sure to Note the changed value on the service label.

(#SCAN> READER> ADJUST> ADJ-XY> ADJ-Y-DF)

Adjustment of horizontal scanning position at feeder mode.

0.1mm shift of image scan-start position toward the front direction by 1-increment in the setting value.

Note:

Be sure to enter the value on service label when replacing the CIS unit. If changing the setting value of this item, be sure to Note the changed value on the service label.

(#SCAN> READER> ADJUST> ADJ-XY> ADJ-Y-POS)

Adjustment of CCD/CIS scan position at stream-reading mode with DF.

This item must not be normally used.

Note:

Be sure to enter the value on service label when executing RAM clear of the reader controller PCB/ replacing the reader controller PCB.

If changing the setting value of this item, be sure to Note the changed value on the reader's service label.I.

(#SCAN> READER> ADJUST> ADJ-XY> ADJ-X-MG)

Fine adjustment of magnification ration in vertical scanning when scanning with reader copyboard.

Execute fine adjustment of vertical scanning magnification ratio when scanning with reader copyboard.

0.1mm shift of image scan-start position toward the front direction by 1-increment in the setting value.

Note:

Be sure to enter the value on service label when executing RAM clear of the reader controller PCB/ replacing the reader controller PCB.

If changing the setting value of this item, be sure to Note the changed value on the reader's service label.l.

(#SCAN> READER> ADJUST> CCD> W-PLT-X)

White label data entry with standard white plate.

(#SCAN> READER> ADJUST> CCD> W-PLT-Y)

White label data (Y) entry with standard white plate.

(#SCAN> READER> ADJUST> CCD> W-PLT-Z)

White label data (Z) entry with standard white plate.

Execute this mode only when necessary. Do not execute it when unnecessary.

Note:

Be sure to enter the value on service label when replacing the CCD unit.

Be sure to enter the numeric value on copyboard glass when replacing the copyboard glass.

If changing the setting value of this item, be sure to Note the changed value on the service label.

(#SCAN> READER> ADJUST> CCD> SH-TRGT)

Shading target value of the standard white plate (backup).

This item must not be normally used.

(#SCAN> READER> ADJUST> CCD> DFTAR-R)

Shading target value (RED) entry when using DF (normal document scanning position).

(#SCAN> READER> ADJUST> CCD> DFTAR-G)

Shading target value (GREEN) entry when using DF (normal document scanning position).

• (#SCAN> READER> ADJUST> CCD> DFTAR-B)

Shading target value (BLUE) entry when using DF (normal document scanning position).

This item must not be normally used.

(#SCAN> READER> ADJUST> CCD> DFTAR-K)

Black shading target value when using DF.

This item must not be normally used.

In case of image fault (due to chart soil, etc) after executing: SCAN > READER > FUNCTION > CCD > DFWLVL1/ DF-WLVL2; enter the factory measurement value using this mode.

(#SCAN> READER> ADJUST> PASCAL> OFST-P-K)

Density adjustment at test print scanning.

Execute offset adjustment for test print scanning signal in PASCAL control at auto gradation correction (full correction)

(#SCAN> READER> FUNCTION> INSTALL> STRD-POS)

Auto adjustment of CCD reading position in stream reading.

When installing the DF, or removing the ADF and reinstalling it.

(#SCAN> READER> FUNCTION> CCD> CCD-ADJ)

Gain adjustment of analog processor block (on CCD PCB).

When installing the DF, or removing the ADF and reinstalling it.

The gain of LED of CIS is corrected to set the CIS parameter automatically. (AGC adjustment) Execute this after replacing the CIS unit.

(#SCAN> READER> FUNCTION> CCD> DF-WLVL1)

ADF white level adjustment (platen board cover scan/stream reading scan).

• (#SCAN> READER> FUNCTION> CCD> DF-WLVL2)

ADF white level adjustment (platen board cover scan/stream reading scan).

- 1) Place a paper that users normally use on the copyboard glass and execute the following item; SCAN > READER > FUNCTION > CCD > DFWLVL1/ DF-WLVL2
- : Read the white level in BOOK mode. (Check the transparency of the glass for BOOK mode.)
- $\begin{tabular}{ll} 2) Set a paper that users normally use and execute the following item; \\ \end{tabular}$

SCAN > READER > FUNCTION > CCD > DFWLVL1/ DF-WLVL2

: Read the white level in DF mode (stream reading). (Check the transparency of the glass for stream reading.) (Read the both sides of chart.) Reading the face: Calculate DFTAR-R

Note:

Be sure to execute these two items (DF-WLVL1/DF-WLVL2) simultaneously.

(#SCAN> READER> FUNCTION> CCD> DF-WLVL3)

ADF white level adjustment (platen board cover scan).

MEMO:

Scan a blank sheet on the platen and adjust the white level.

(#SCAN> READER> FUNCTION> CCD> DF-WLVL4)

ADF white level adjustment (DF scan).

MEMO:

Scan a blank sheet in stream reading mode and adjust the white level.

(#SCAN> READER> FUNCTION> CLEAR> R-CON)

Clearing of the backup area for the reader in the main controller.

Clear the backup area for the reader in the main controller.

(#SCAN> READER> FUNCTION> MISC-R> SCANLAMP)

The test checks to see if the scanning lamp is on or not.

Execute the when replacing the scanning lamp.

(#SCAN> READER> OPTION> BODY> SENS-CNF)

Setting of the document detection sensor placement

The setting of document detection size is selected in accordance with the document sensor placement.

- 0: AB type
- 1: Inch type
- 2: A type

(#SCAN> READER> OPTION> BODY> DFDST-L1)

Dirt detection level adjustment (between documents) during ADF use.

● (#SCAN> READER> OPTION> BODY> DFDST-L2)

Dirt detection level adjustment (upon job completion) during ADF use.

Increase the value when dirt fails to be detected, resulting in black streaks. However, if the value is increased too much, even small-sized dirt of the kind which does not appear on the image will also be detected, and the cleaning instruction screen may appear frequently.

Reduce the value if users complain because the cleaning instruction screen which appears when dirt is detected is displayed frequently. Conversely, if the value is reduced too much, black streaks may appear on the images.

When '0' is set, the correction control function used when dirt is detected is canceled.

(#SCAN> FEEDER> ADJUST> DOCST)

Adjusting the original stop position for ADF pickup (original tray pickup).

Delivering the original enables the setting. Be sure to press the OK key to deliver the original. When changing the setting, input the setting on the main station service label.

The larger the value, the smaller the leading edge margin.

(#SCAN> FEEDER> ADJUST> LA-SPEED)

Adjusting the original feeding speed in stream reading.

Use this mode to adjust the original feeding speed in stream reading mode.

The larger the setting, the faster the speed (the image reduced).

(#SCAN> FEEDER> FUNCTION> MTR-CHK)

Operation check for the ADF motor, etc.

Specify a paper feed mode to check passage of paper by the DF. Select #SCAN> FEEDER> FUNCTION> FEED-ON to execute this.

0:Feed motor(M1)

1:Pickup motor(M2)

(#SCAN> FEEDER> FUNCTION> FEED-CHK)

Checking the passage of paper for ADF.

Specify a paper feed mode to check passage of paper by the DF. Select #SCAN> FEEDER> FUNCTION> FEED-ON to execute this.

0:1-sided

1:2-sided

(#SCAN> FEEDER> FUNCTION> FAN-CHK)

Checking the ADF cooling fan.

Specify a fan to perform a fan check. Select #SCAN> FEEDER> FUNCTION> FAN-ON to execute this.

• (#SCAN> FEEDER> FUNCTION> FAN-ON)

Starting the fan operation.

Selecting 1 starts fan operation.

(#SCAN> FEEDER> FUNCTION> SL-CHK)

Checking the ADF solenoid.

Specify a solenoid to perform a solenoid check. Select #SCAN>FEEDER > FUNCTION > SL-ON to execute this.

- 0: Pressure solenoid (SL1)
- 1: Stamp solenoid (SL2)

• (#SCAN> FEEDER> FUNCTION> MTR-ON)

Starting the motor operation.

Selecting 1 start motor operation.

• (#SCAN> FEEDER> FUNCTION> ROLL-ON)

ADF roller cleaning mode.

Rotate the roller with the motor and attach a lint-free paper moistened with alcohol to the roller to clean it.

• (#SCAN> FEEDER> FUNCTION> FEED-ON)

Checking the passage of paper with ADF.

Selecting 1 starts checking passage of paper by the ADF.



■ Numerin Parameter Settings (Numeric Prama).

Item	No.	Default	Setting range	Function
#PRINT	SW01- SW13		, , , , , , , , , , , , , , , , , , , ,	Not used
NUMERIC	SW14:	00000100		Special mode setting
	SW15: -			Not used
	SW17:			
	SW18:	00000100		Special mode setting
	SW19: - 50:			Not used
#PRINT	01: - 30:			Not used
NUMERIC	34:	100	'-128 to 127, one	Left-end registration adjustment (manual
			unit = 0.1 mm	feed tray)
	35:	100	'-128 to 127, one	Left-end registration adjustment (cassette 1)
			unit = 0.1 mm	
	36:	100	'-128 to 127, one	Left-end registration adjustment (cassette 2)
			unit = 0.1 mm	
	37:	100	'-128 to 127, one	Left-end registration adjustment (cassette 3)
			unit = 0.1 mm	
	38:	100	'-128 to 127, one	Left-end registration adjustment (cassette 4)
			unit = 0.1 mm	
	39: - 52:			Not used
	53:	25	0 to 9999, one	Adjustment of margin at leading edge of
			unit = 0.1 mm	сору
	54:	25	0 to 9999, one	Adjustment of margin at trailing edge of
			unit = 0.1 mm	сору
	55:	25	0 to 9999, one	Adjustment of margin at right edge of copy
			unit = 0.1 mm	
	56:	25	0 to 9999, one	Adjustment of margin at left edge of copy
			unit = 0.1 mm	
	57:			Not used
	58:	145		Adjustment of the registration loop volume
	50	100	unit = 0.1 mm	(Manual tray)
	59:	163	'-128 to 127, one	Adjustment of the registration loop volume
	00:		unit = 0.1 mm	(Cassette)
	60:	4.45	1 400 to 407	Not used
	61:	145	'-128 to 127, one	Adjustment of the registration loop volume
	62:	 -	unit = 0.1 mm 0 to 14	(Duplex unit) Temperature adjustment UP/DOWN mode
	02:		0 to 14	
	63:	 7	0 to 14	(For normal paper) Temperature adjustment UP/DOWN mode.
	03.		0 10 14	
	64:	2	0 to 4	(For thick paper) Mode for preventing the end temperature
	04.	 	0 10 4	rise
	65:	0	0 to 2	Mode for reducing sand image
	66:	0	0 to 3	Temperature/ Humidity sensor fixed mode
	67:- 135:	ř	0 10 0	Not used
	136:	1000	'-512 to 512	Adjustment of the point to start writing in
	100.	1.000	-512 10 512	main scanning direction (A)
	137:- 139:	 		Not used
	140:	100	'-128 to 127, one	Left-end registration adjustment (double-
	-0.	'00	unit = 0.1 mm	sided small)
	I		μιτίι - υ. Ι ΙΙΙΙΙΙ	piucu siliaii)

Item	No.	Default	Setting range	Function
#PRINT	141:	100		Left-end registration adjustment (double-
NUMERIC			unit = 0.1 mm	sided large)
	142:	100	'-128 to 127, one	Adjustment of margin at leading edge at
			unit = 0.1 mm	normal speed (230mm/sec)
	143:	100	'-128 to 127, one	Adjustment of margin at leading edge at half
			unit = 0.1 mm	speed (137mm/sec)
	144:	100	'-128 to 127, one	Laser trail edge OFF adjustment
			unit = 0.1 mm	
	145:	1000	'-512 to 511	Adjustment of the magnification to write
				image in main scanning direction (A-B)
	146:	1000	'-512 to 511	Not used
	147:	1000	'-512 to 511	Not used
	148:	1000	'-512 to 511	Adjustment of the point to start writing in
				main scanning direction (A-B)
	149:	1000	'-512 to 511	Not used
	150:	1000	'-512 to 511	Not used
	151:	100	'-128 to 127	Developing bias offset for DC
	152:	100	'-128 to 127	Primary charge offset for DC
	153:	100	'-128 to 127	Primary charge offset for AC
	154:	100	'-128 to 127, one	Adjustment of the registration loop volume
			unit = 0.1 mm	(Thick paper)
	155:	100	'-128 to 127, one	Adjustment of the registration loop volume
			unit = 0.1 mm	(Special paper)
	156:	100		Adjustment of the registration loop volume
			unit = 0.1 mm	(Envelop cassette pickup)
	157:	7	0 to 14	Pickup timing adjustment
	158:-164:			Not used
	165:	0	0 to 3	Fixing auto cleaning frequency setting
	166:	7	0 to 14	Temperature adjustment UP/DOWN mode
				(Plain paper, manual feed tray)
	167: 172:			Not used
	173:	7	0 to 14	Temperature adjustment UP/DOWN mode
				(2nd page of double-sided printing)
	174:	0	0 to 1	Reduction in FCOT
	175:-177:			Not used
	178:	1	0 to 1	Not used
	179:	7	0 to 14	Temperature adjustment UP/DOWN mode
				(Envelop/Postcard)
	180:	7	0 to 14	Temperature adjustment UP/DOWN mode
		J		(Special mode N)

Item1	Item2	Item3	Default	Setting range	Function
#PRINT		CAS1-U1	0		
#PKIINT CST	CAST	CAS 1-01	٢		Cassette 1paper size
CSI				36: A-OFI, 24: FLSP, 25: A-FLSP,	i= · · ·
				1	size paper entry
		CAS1-U2	0	0: default 32: G-LTR-R, 34: G-LGL, 23:	
		CA31-02	٢		
		CAS1-U3	0	K-LGL-R, 0: default 22: K-LGL, 31: G-LTR, 29: A-LTR,	
		0,101.00	ľ	0: default	
		CAS1-U4	0	28: B-OFI, 0: default	İ
	CAS2	CAS1-04	0		Cassette 2 paper size
	CASZ	CA32-01	٢	36: A-OFI, 24: FLSP, 25: A-FLSP,	
				30: A-UFI, 24: FLSF, 25: A-FLSF, 30: A-LTRR, 42: FA4, 34: G-LGL	
					size paper entry
		CAS2-U2	0	0: default 32: G-LTR-R, 34: G-LGL, 23:	
		CA32-02	٢	K-LGL-R, 0: default	
		CAS2-U3	0	22: K-LGL, 31: G-LTR, 29: A-LTR,	
		07.02.00	ľ	0: default	
		CAS2-U4	0	28: B-OFI, 0: default	1
	CAS3	CAS2-04	0		Casatta 2nanar aiza
	CASS	CASS-01	٢	1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Cassette 3paper size
				36: A-OFI, 24: FLSP, 25: A-FLSP, 30: A-LTRR, 42: FA4, 34: G-LGL	0 1 1
					size paper entry
		CAS3-U2	0	0: default 32: G-LTR-R, 34: G-LGL, 23:	
		CA33-02	٢	K-LGL-R, 0: default	
		CAS3-U3	0	22: K-LGL, 31: G-LTR, 29: A-LTR,	
		OA03-03	٢	0: default	
		CAS3-U4	0	28: B-OFI, 0: default	
	CAS4	CAS4-U1	0	26: OFI, 27: E-OFI, 37: M-OFI,	Cassette 4 paper size
	CA34	CA34-01	٢	36: A-OFI, 24: FLSP, 25: A-FLSP,	
				1 ' '	size paper entry
					size paper entry
		CAS4-U2	0	0: default 32: G-LTR-R, 34: G-LGL, 23:	
		CA34-02	٢	K-LGL-R, 0: default	
		CAS4-U3	0	22: K-LGL, 31: G-LTR, 29: A-LTR,	
		0,104 00	ľ	0: default	
		CAS4-U4	0	28: B-OFI, 0: default	
	<u> </u>	0/104-04	٢	20. D-Of I, U. delault	

T-4-36

■ Service Soft Switch Settings (PRINTER)

SSSW-SW14

List of Functions

Bit	Function	1	0
0	Transfer bias pressure reduction mode	Enable	Disable
1	not used	-	F
2	Black belt addition mode	Enable	Disable
3	Post-rotation reduction mode	Enable	Disable
4	Flicker reduction mode	Enable	Disable

Bit	Function	1	0
5	not used	_	_
6	not used	-	-
7	not used	_	-

Detailed Discussions of Bit 0

Select whether to enable or disable transfer bias pressure reduction mode.

Select "Enable" to avoid image defects (black spots) produced by transfer bias leaks occurring in a low-pressure region, such as one at a high altitude. This setting regulates the transfer bias to keep it from exceeding a predetermined level during printing.

Detailed Discussions of Bit 2

Select whether to enable or disable black belt addition mode. If the user uses paper that causes fixed toner on paper to be fused and adhered to drum, selecting "Yes" will clean the drum by forming a black band on the drum surface during the reverse rotation which is performed after printing on 50 sheets.

CAUTION:

Implementation of this mode could result in a drum life falling short of its life expectancy.

Detailed Discussions of Bit 3

Select whether to enable or disable post-rotation reduction mode. Selecting "Enable" will reduce the noise caused by the polygon motor by stopping the motor immediately after post-rotation.

Discussions of Bit 4

Select whether to enable or disable flicker reduction mode. Select "Enable" and enter a count to modify fusing temperature control to cancel fluorescent flicking during printing.

CAUTION:

Implementation of this mode would degrade the throughput.

SSSW-SW18

List of Functions

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	Thin postcard mode	Enable	Disable
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

T-4-38

Detailed Discussions of Bit 2

When the postcard size is selected, "Thin postcard" can be selected in addition to "Postcard", "Return postcard", and "4 on 1card". Selecting "Enable" allows you to specify "Thin postcard".

List of Functions

<034: Left-end registration adjustment (manual feed tray)>

Adjust the left-end registration margin of paper picked from a manual feed tray. The larger the adjustment value, the wider the left-end margin of the image becomes.

<035: Left-end registration adjustment (cassette 1)>

Adjust the left-end registration margin of paper picked from cassette 1. The larger the adjustment value, the wider the left-end margin of the image becomes.

<036: Left-end registration adjustment (cassette 2)>

Adjust the left-end registration margin of paper picked from cassette 2. The larger the adjustment value, the wider the left-end margin of the image becomes.

<037: Left-end registration adjustment (cassette 3)>

Adjust the left-end registration margin of paper picked from cassette 3. The larger the adjustment value, the wider the left-end margin of the image becomes.

<038: Left-end registration adjustment (cassette 4)>

Adjust the left-end registration margin of paper picked from cassette 4. The larger the adjustment value, the wider the left-end margin of the image becomes.

<053: Margin adjustment at the leading edge of the copy>

Adjust the margin at the leading edge of the copy. Increasing the value makes the margin at the leading edge larger.

<054: Margin adjustment at the trailing edge of the copy>

Adjust the margin at the trailing edge of the copy. Increasing the value makes the margin at the trailing edge larger.

<055: Margin adjustment at the right edge of the copy>

Adjust the margin at the right edge of the copy. Increasing the value makes the margin at the right edge larger.

<056: Margin adjustment at the left edge of the copy>

Adjust the margin at the left edge of the copy. Increasing the value makes the margin at the left edge larger.

<058:: Adjustment of the registration loop volume (Manual feed tray)>

If there is a registration loop noise and abrasion while feeding the paper from the manual feed tray, registration loop noise and abrasion could be reduced by adjusting the volume of the registration loop. By making the value larger, loop volume will become bigger.

<059:Adjustment of the registration loop volume. (Cassette)>

If there is a registration loop noise and abrasion while feeding the paper from the cassette, registration loop noise and abrasion could be reduced by adjusting the volume of the registration loop. By making the value larger, loop volume will become bigger.

<061:Adjustment of the registration loop volume. (Duplex unit)>

If there is a registration loop noise and abrasion while feeding the paper from the duplex unit, registration loop noise and abrasion could be reduced by adjusting the volume of the registration loop. By making the value larger, loop volume will become bigger.

<062:Temperature adjustment UP/DOWN mode. (For plain paper)>

The temperature adjustment offset relative to the target fixing temperature of plain paper can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

Plain paper: Plain paper mode, thin paper mode, S thin paper mode, OHP mode 0 - 2: +15°C

3 - 11:+12 to -15°C (in steps of 3°C)

12- 14: -15°C

<063:Temperature adjustment UP/DOWN mode. (For rough paper)>

The temperature adjustment offset relative to the target fixing temperature of thick paper can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

Thick paper: Thick paper mode, thick paper H mode, bond mode

0 - 2°C+15°C

3 - 11°C+12 to -15°C (in steps of 3°C)

12 - 14°C-15°C

<064:Mode for preventing the temperature rise of the end>

User this parameter to reduce the frequency of entering the throughput down mode, suppress edge temperature rise, or prevent soiling due to the high temperature offset.

Add/subtract the threshold of the difference in detection temperature between the sub thermistor 1 (2) that starts the full speed operation of the end cooling fan and the sub thermistor 1 (2) that starts the down sequence to/from default threshold temperature.

0 - 4: +20 to -20°C (in steps of 10°C)

<065:Mode for reducing sand image>

Set when sand image *1 has occurred on the print image.

Restraining the scatter of the toner by increasing the electric current of the AC electrification; the sand image could be reduced.

Sand image *1: Multiple black dots and white dots appear on half tone. Or multiple black dots appear on white background.

0: Normal.

1 to 3: Reducing mode. (Same operation to set 1 to 3)

2: Make the print density lower. Set the initial rotation time for fixing to 3 seconds. Does not do it if the initial rotation elongation time has been set to 3 seconds or longer in another service mode.

<066:Temperature/ Humidity sensor fixed mode>

Changing to high-pressure environment by using the temperature/ humidity sensor. But when there is an image trouble at the point of changing the environment.

fix the temperature and the humidity and do not allow the change of the high-pressure output. 0: Normal.

1: Fixed environment of LL. (Temperature of 18 deg C and humidity of 20%)

- 2. Fixed environment of NN. (Temperature of 18-28 deg C and humidity of 20-75%)
- 3. Fixed environment of HH. (Temperature of 28 deg C and humidity of 80%)

<136: Adjustment of the point to start writing in laser's main scanning direction (A)>

When replacing the laser unit, enter the unit-specific delay value shown on the label affixed to the unit.

<140: Left-end registration adjustment (double-sided small) >

Adjust the left-end registration margin needed when the duplex feeding unit picks up paper (small paper). Incrementing the value by 1 increases the left-end margin of the image by 0.1 mm

<141: Left-end registration adjustment (double-sided large)>

Adjust the left-end registration margin needed when the duplex feeding unit picks up paper (large paper). Incrementing the value by 1 increases the left-end margin of the image by 0.1 mm.

<142: Adjustment of margin at leading edge at normal speed (230mm/sec)>

Adjust the margin at the leading edge (registration roller clutch ON timing) at normal speed (230mm/sec).

Adjust the leading-edge registration margin needed at pickup. Increasing the value makes the margin at the leading edge of the copy larger.

<144: Laser trail edge OFF adjustment>

Laser trail edge OFF adjustment input only.

<145: Adjustment of the magnification to write image in laser's main scanning direction (A-B)>

Magnification between lasers A and B.

Amount of adjustment of the magnification of laser B of the laser scanner unit. Adjust the magnification of laser B with reference to that of laser A. If the input value is inappropriate, the image quality is degraded.

<148: Adjustment of the point to start writing in main scanning</p>

direction (A-B)>

When replacing the laser, enter the delay value (laser main scanning adjustment).

<151: Developing bias offset for DC>

Enter the developing bias offset for DC.

When a fault in image occurs (foggy image or light density), enter the developing bias offset for DC. Increasing the value makes the image darker.

<152: Primary charge offset for DC>

Enter the value to adjust the primary offset 1 for DC.

<153: Primary charge offset for AC>

Enter the value to adjust the primary offset 1 for AC.

<154: Adjustment of the registration loop volume (Thick paper)>

Incrementing the value by 1 feeds the paper 0.1 mm further and increases the registration loop volume.

<155: Adjustment of the registration loop volume (Special paper)>

Incrementing the value by 1 feeds the paper 0.1 mm further and increases the registration loop volume.

<156: Adjustment of the registration loop volume (Envelop cassette pickup)>

Incrementing the value by 1 feeds the paper 0.1 mm further and increases the registration loop volume.

<157: Pickup timing adjustment>

This setting is applied to the pickup permission temperature at job start irrespective of the fixing mode. The pickup permission temperature is raised or lowered from the default temperature according to the setting value.

Use this parameter to reduce the FCOT or warm-up time.

0 - 2:+15°C

3 - 11:12 to -15°C (in steps of 3°C)

12 - 14: -15°C

<165: Fixing auto cleaning frequency setting>

Use this parameter to increase the fixing auto cleaning frequency. Incrementing the value increases the fixing auto cleaning frequency.

0: Not cleaned.

- 1: Cleaning control temperature: 225°C, Cleaning time: 60 sec, Cleaning interval: 500 sheets
- 2: Cleaning control temperature: 225°C, Cleaning time: 60 sec, Cleaning interval: 200 sheets
- 3: Cleaning control temperature: 225°C, Cleaning time: 60 sec, Cleaning interval: 100 sheets

<166: Temperature adjustment UP/DOWN mode (Plain paper, manual feed tray)>

The temperature adjustment offset relative to the target fixing temperature of plain paper fed from the manual feed paper can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

Plain paper: Plain paper mode, thin paper mode, S thin paper mode, OHP mode

0 - 2:+15°C

3 - 11:12 - -15°C (in steps of 3°C)

12 - 14:-15°C

<173: Temperature adjustment UP/DOWN mode (2nd page of double-sided printing)>

The temperature adjustment offset relative to the target fixing temperature of the second page of double-sided printing can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

Plain paper: Plain paper mode, thin paper mode, S thin paper mode, OHP mode

0 - 2:+15°C

3 - 11:12 to -15°C (in steps of 3°C)

12 - 14: -15°C

<174: Reduction in FCOT>

Set the pickup permission temperature (temperature adjustment for the fist page of printing) to -40°C before fixing.

Use this parameter to reduce the FCOT.

0:OFF

1:ON

<179: Temperature adjustment UP/DOWN mode (Envelop/Postcard)>

The temperature adjustment offset relative to the target fixing temperature of the envelope/postcard can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

Envelop/postcard: Postcard mode, S postcard mode, Envelop mode

0 - 2:+15°C

3 - 11:+12 to -15°C (in steps of 3°C)

12 - 14:-15°C

<180: Temperature adjustment UP/DOWN mode (Special mode N)>

The temperature adjustment offset relative to the target temperature of fixing in special mode N can be changed in steps of 3°C. Use this parameter when the fixing performance is low or when it is necessary to prevent the paper from slipping or being curled.

0 - 2:+15°C

3 - 11:12 to -15°C (in steps of 3°C)

12 - 14:-15°C

■ List of Functions(PRINT CST)

<#CST> CAS1> CAS1-U1>,<#CST> CAS2> CAS1-U1>,<#CST> CAS3> CAS1-U1>,<#CST> CAS4> CAS1-U1>

Setting of paper name used for paper size group 'U1'

When setting the following special size paper for U1, U2, U3, and U4 which are specified for the paper name to be used in paper size group, it becomes possible to treat the paper size in U1, U2, U3, and U4 as special size paper in universal size cassettes.

Settings 26: OFI, 27: E-OFI, 37: M-OFI, 36: A-OFI, 24: FLSP, 25: A-FLSP, 30: A-LTRR, 42: FA4, 34: G-LGL 0: default

<#CST> CAS1> CAS1-U2>,<#CST> CAS2> CAS1-U2>,<#CST> CAS3> CAS1-U2>,<#CST> CAS4> CAS1-U2>

Setting of paper name used for paper size group 'U2'

When setting the following special size paper for U1, U2, U3, and U4 which are specified for the paper name to be used in paper size group, it becomes possible to treat the paper size in U1, U2, U3, and U4 as special size paper in universal size cassettes.

Settings 32: G-LTR-R, 34: G-LGL, 23: K-LGL-R, 0: default

<#CST> CAS1> CAS1-U3>,<#CST> CAS2> CAS1-U3>,<#CST> CAS3> CAS1-U3>,<#CST> CAS4> CAS1-U3>

Setting of paper name used for paper size group 'U3'

When setting the following special size paper for U1, U2, U3, and U4 which are specified for the paper name to be used in paper size group, it becomes possible to treat the paper size in U1, U2, U3, and U4 as special size paper in universal size cassettes.

Settings 22: K-LGL, 31: G-LTR, 29: A-LTR, 0: default

<#CST> CAS1> CAS1-U4>,<#CST> CAS2> CAS1-U4>,<#CST> CAS3> CAS1-U4>,<#CST> CAS4> CAS1-U4>

Setting of paper name used for paper size group 'U4'

When setting the following special size paper for U1, U2, U3, and U4 which are specified for the paper name to be used in paper size group, it becomes possible to treat the paper size in U1, U2, U3, and U4 as special size paper in universal size cassettes.

Settings 228: B-OFI, 0: default

#NETWORK

Confirmation of contents of CA certificate

Selecting the service mode "#NETWORK>#CERTIFICATE>#CA-CERTIFICATE" enables confirmation of the contents of the installed CA certificate.

#CODEC

Configuration

Item	No.	Default	Setting range	Description
#BitSwitch	SW01- SW09			Not used
#Numeric	01: - 05:			Not used
	06:	2		Control of attribute flag addition function at reception and printing of color JPEG or E-mail image
	07:	4	1-7	Adjustment of black color recognition level at black text processing
	08: - 50:			Not used

T-4-39

Details

06: Control of attribute flag addition function at reception and printing of color JPEG or E-mail image

Set the type of the attribute flag to be added at reception of a color JPEG or E-mail image.

- 0: For PDL_text mode
- 1: For PDL_photo mode
- 2: For scan_text mode
- 3: For scan photo mode

07: Adjustment of black color recognition level at black text processing

Adjust the black color recognition level at black text processing. To improve chanses that the text color is judged as black, increase the setting value.



Configuration

Item	No.	Default	Description
#SYSTEM SW	SW01- SW04		Not used
	SW05	11001000	Inhibition of export of password in address book
	SW06- SW09		Not used
	SW10	00000000	PS data protocol menu display/nondisplay
			Extra length setting
	SW11 - SW50		Not used

T-4-40

Item	No.	Default	Setting range	Description
#SYSTEM	01: - 38:			Not used
NUMERIC	39:	4	0-5	Change of default of LDAP advanced
				search condition
	40:	1	0 or 1	eLA card touch sound
	41:	0	0-60	PS mode 1 (8bit)
	42:	0	0-60	PS mode 2 (8bit)
	43: - 56:			Not used
	57:	0	0-4	Setting of paper size group
	58: - 100:			Not used

T-4-41

Details of Bit Switch

SW05

List of Functions

Bit	Function	1	0
0		-	-
1		-	-
2		-	-
3		-	-
4		-	-
5		-	-
6		-	-
7	Inhibition of export of password in address book	Inhibited	Not inhibited

T-4-42

Detailed Discussions of Bit 7

Select whether to inhibit export of the password in the address book.

SW10

List of Functions

Bit	Function	1	0
0	PS data protocol menu display/nondisplay	Display	Nondisplay
1	Extra length setting	ON	OFF
2		-	-
3		-	-
4		-	-
5		-	-
6		-	-
7		-	-

T-4-43

- Detailed Discussions of Bit 0
 Select whether to inhibit export of the password in the address book.
- Detailed Discussions of Bit 1
 Select whether to set the extra length (expand the user-defined size range).
- Details of System Numeric
- 39: Change of default of LDAP advanced search condition Change of the default of the LDAP advanced search condition can be set.
- 40: eLA card touch sound
 The eLA card touch sound can be set.
- 41: PS mode 1(8bit)
 The PS mode 1 (8bit) can be set.
- 42: ePS mode 1(8bit)The PS mde 2 (8bit) can be set.
- 57: Setting of paper size group

A paper size group can be set.

- 1: AB (PAPER_SIZE_GROUP_AB)
- 2: A (PAPER_SIZE_GROUP_A)
- 3: INCH (PAPER_SIZE_GROUP_INCH)
- 4: AB/INCH (PAPER_SIZE_GROUP_AB_INCH)

Initialization takes place when the following service mode is executed: (CLEAR>ALL, TYPE, SERVICE DATA, TEL & USER DATA)



#ACC

Configuration

The table below gives summary description of the accessories available.

Item1	Item2	Explanation
#ACC	CARD	Card reader installation setting
		Enter a card number to use.
		(0 to 9999. One hundred cards are registered with the department
		ID beginning from the input card number in sequence.)
		*1:1,000 cards if option ROM is mounted.
		When a card number is entered, the following kinds of management
		information are initialized:
		- Card name (department ID), beginning from the input card number.
		- Password associated with the card
	CC-SPSW	Control card I/F support setting
		Set whether to support the control card I/F (CC-V) or not.
		0: Do not support.
	COIN	1: Support.
	COIN	Coin vendor change
		Set the control card set display appearing on the operator station for
		vendor use.
		0: Control card use
	CONTROL	1: Coin vendor use
	CONTROL	Set the PDL printer output control where the control card I/F (CC-V)
		is supported.
		0: Enable printing without a card mounted.
		1: Enable printing with a card mounted in position.

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#COUNTER

Counters

This copier is furnished with a maintenance/supplies counter set (DRBL-1), which can be used to gain rough measures of when to replace supplies. The counter set increments by one on counting each sheet of small-sized paper (up to A4/LTR) and by two on counting each sheet of large-sized paper (larger than A4/LTR).

Maintenance counter list

Item	Counter	Explanation	
TOTAL (Total counter)	SERVICE1	Service total counter 1	
	SERVICE2	Service total counter 2	
	TTL	Total counter	
	COPY	Total copy counter	
	PDL-PRT	PDL print counter	
	FAX-PRT	Fax print counter	
	MEDIA-PRT	Media print counter	
	RPT-PRT	Report print counter	
	2-SIDE	Double-sided copy/print counter	
	SCAN	Scan counter	
PICK-UP (Paper pickup counter)	C1	Cassette 1 jam counter	
	C2	Cassette 2 jam counter	
	C3	Cassette 3 jam counter	
	C4	Cassette 4 jam counter	
	MF	Manual feed tray pickup total counter	
	2-SIDE	Double-sided paper pickup total counter	
FEEDER (Feeder related counters)	FEED	Feeder pickup total counter	
	DFOP-CNT	ADF open/close hinge counter	
SORTER (Finisher related counters)	SORT	Finisher sort path counter	
	SADDLE	Finisher saddle operation counter	
	SDL-STPL	Finisher saddle staple operation counter	
JAM (Jam counters)	TTL	Unit total jam count	
	FEEDER	Feeder total jam count	
	SORTER	Finisher total jam count	
	2-SIDE	Duplex unit jam counter	
	MF	Manual feed tray jam counter	
	C1	Cassette 1 jam counter	
	C2	Cassette 2 jam counter	
	C3	Cassette 3 jam counter	
	C4	Cassette 4 jam counter	
MISC (Other required counter)	WST-TNR	Waste toner counter	
		T 4 4E	

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Parts counter list

Item	Counter	Explanation	Service life
DRBL-1 (Unit	TR-ROLL	Transfer roller high-voltage ON count	150,000
supplies)	SP_SC_EL	Separation static charge eliminator high-	150,000
	voltage ON count		
	DV-UNT-C	Developing assembly rotation count	500,000
	M-PU-RL	Manual feed tray pickup roller paper pass	150,000
		count	
	M-SP-PD	Manual tray separation pad paper pass count	150,000
	FX-UNIT	Fixing assembly paper pass count	iR2545/2535: 240,000
			iR2530/2525/2520:
			150,000"
	PT-DRM	Photosensitive drum rotation count	-
	WST-TNR	Waste toner count	80,000
	C1-PU-RL	Cassette1 pickup roller paper pass count	250-sheet 1st cassette
			type: 150,000
			250-sheet 1st cassette
			type: 120,000
	C2-PU-RL	Cassette2 pickup roller paper pass count	150,000
	C1-SP-RL	Cassette1 separation roller paper pass count	120,000
	C1-SP-PD	Cassette1 separation pad paper pass count	120,000 (250-sheet 1st
			cassette type only)
	C2-SP-RL	Cassette2 separation roller paper pass count	120,000
	OZ-FIL1	not used	-
DRBL-2 (Unit		ADF pickup roller paper pass count	80,000
supplies)	DF-SP-PD	ADF separation pad paper pass count	80,000
C3-PU-R		Cassette3 pickup roller paper pass count	120,000
	C4-PU-RL	Cassette4 pickup roller paper pass count	120,000
	C3-SP-RL	Cassette3 separation roller paper pass count	120,000
	C4-SP-RL	Cassette4 separation roller paper pass count	120,000
	FIN-STPR	Stapler assembly drive count	500,000

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■ Clearing Counters

- Maintenance/parts counter all clear
 Execute service mode > CLEAR > COUNTER to clear all maintenance/parts counters.
- Counter clear on parts replacement
 Press the numeric keypad key 0 after displaying the counter for a part just replaced, and the counter will be cleared individually.



Configuration

Group	Item	Default	Setting range	
INACTIVE	ST-SEND	0	0 - 1	To display installation state of SEND function
				when transfer is displayed.
	TR-SEND		i	The 24 digits of license transfer numbers are
				displayed.
	ST-BRDIM	0	0 - 1	To display installation state of BarDIMM when
				transfer is disabled.
	TR-BRDIM			The 24 digits of license transfer numbers are
				displayed.
	ST-ERDS	0	0 - 1	To display installation state of third party
				expansion function of E-RDS when transfer is
				disabled.
	TR-ERDS			The 24 digits of license transfer numbers are
				displayed.
	ST-PCL	0	0 - 1	To display installation state of PCL function
				when transfer is disabled.
	TR-PCL			The 24 digits of license transfer numbers are
				displayed.
	ST-EAM	0	0 - 1	To display installation state of EAM function
				when transfer is disabled.
	TR-EAM			The 24 digits of license transfer numbers are
				displayed.
	ST-ELA	0	0 - 1	To display installation state of ELA function
				when transfer is disabled.
	TR-ELA			The 24 digits of license transfer numbers are
				displayed.
	ST-SPDF	0	0 - 1	To display installation state of transmission
				function for SEND searchable PDF when
				transfer is disabled.
	TR-SPDF			The 24 digits of license transfer numbers are
				displayed.
	ST-PS	0	0 - 1	To display installation state of PS function when
				transfer is disabled
	TR-PS			The 24 digits of license transfer numbers are
			ļ	displayed.

Group	Item	Default	Setting range	Description
ERASE	SEND	0	0 - 1	To display installation state of SEND function
				when non-transfer is displayed.
	BRDIM	0	0 - 1	To display installation state of BarDIMM when
				non-transfer is disabled.
	ERDS	0	0 - 1	To display installation state of third party
				expansion function of E-RDS when non-transfer
				is disabled.
	PCL	0	0 - 1	To display installation state of PCL function
				when non-transfer is disabled.
	EAM	0	0 - 1	To display installation state of EAM function
				when non-transfer is disabled.
	ELA	0	0 - 1	To display installation state of ELA function
				when non-transfer is disabled.
	SPDF	0	0 - 1	To display installation state of transmission
				function for SEND searchable PDF when non-
				transfer is disabled.
	PS	0	0 - 1	To display installation state of PS function when
				non-transfer is disabled

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Outline

- 1. Validate an optional function which has been installed but has not been validated based on the license key issued by a license issue server (hereinafter called "LMS").
- 2. Invalidate the function for which a license has been already set up.

Details

- 1. Validate a license by entering the license issued by LMS via the local UI.
- 2. The license key issued by LMS cannot be entered via the remote UI.
- 3. Invalidate a license (Set the function to OFF) via the service mode.
- 4. Validate a license via the service mode.
- A license with restriction (with an expiration date, restriction in the number of licenses) is not supported. (Restriction information is not read.)
- 6. Some optional functions installed are in dependent relationship with each other. For example, when using [Function A], [Function B] should be available. In this case, [Function B] is called a slave option of [Function A]. Installation of the slave option fails when it is

found that the master option is not validated as a result of verification of the dependent relationship.

7. Decoding and verifying a license key

Decode an entered license key and examine the validity of the license information obtained. When an error occurs during verification, the error information is sent back to the local UI, which displays an error message based on the information. Verification errors are assumed to occur in the following cases.

- When a license is installed in a non-licensed device
- When an optional function included in the license does not exist in the target device
- When an optional function included in the license is a slave option and a master option is not validated
- When an incorrect license key is entered
- When a license key is illegally altered

Method of confirming license option

Confirmation could be made whether the license option is active or not in the SACTIBAT FUNCTION item by outputting the SPEC REPORT from the service mode.

Output method:

(1) Enter the service mode.

Push [Additional Functions] Key > push 2, 8 Key > push [Additional Functions] Key.

(2) Push cursors, and display [#REPORT].

Then press [OK].

(3) Push cursors, and display [#REPORT OUT PUT].

Then press [OK].

(4) Push cursors, and display [#SPEC LIST].

Then press [OK]. The 'SPEC REPORT' will be printed out.

(5) Check the items displayed under ACTIBAT FUNCTION in SPEC REPORT.

ACTIBAT FUNCTION >

- BW-SEND
- CL-SEND

Items for which ON/ON is displayed are validated.

A license option confirmation example

To check the validation of license option, see the SPEC REPORT. The details according to the list shown below.

Item Name	License Name	Status/Optional Setting
Color Universal SEND KIT	BW-SEND	ON/ON
	CL-SEND	ON/ON

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Inactivity of the transmitted license

Inactivity of the transmitted license

Situation of using this service mode

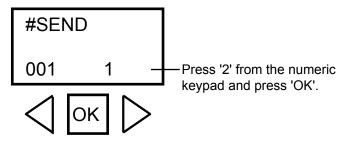
This service mode is used to invalidate a license under the assumption that, when a device is exceptionally replaced with another one due to a trouble (caused by the device), the license is transferred to another device. This operation is called "invalidating transfer of a license". Since it is possible to select the same device as a destination of the transfer, this service mode can be also used to invalidate a function on a temporary basis. Careful attention, however, is required because, if you invalidate a function by mistake, you need to contact a sales company for recovery.

Take utmost precaution when inactivating the license

When invalidating transfer of a license, it is necessary to invalidate the license by entering the service mode and issue a function invalidation certificate key, which certifies that the license has been invalidated. This operation can be executed for each optional function. At the point when a function invalidation certificate key is issued, the function is invalidated and becomes unavailable. When you report this function invalidation certificate key, the serial number of the transfer origination device, the serial number of the transfer destination device, and the reason why you need to perform the transfer to a sales company, a new license key is issued for installation for the transfer destination device. Be sure to write down the new license key when you receive it and, when it is registered in the transfer destination device successfully, inform the user of the new license key and explain him/her to keep it at hand.

Operation Procedure

- (1) Enter the service mode and display the following service mode. (Press one key at once to enter the service mode in the order of "Main, 2, 8, Main".)
- When you have entered the service mode, use the left and right arrow keys to display items, and press the OK key to fix the setting.
- (2) Display [#LMS].
- (3) Press the OK key and display [#LMS INACTIVE].
- (4) Display [ST-SEND].
- (5) Press the OK key.



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(6) Press 2 using the numeric key and press the OK key.



The 24 digits of license transfer numbers are displayed, so you take the memo.

Because it cannot maintain the number displaying with the thing of this place limit.

If you do not take the memo, the indication contents are not held when you do OFF of the main power, it is impossible for license transfer.

Even if you push the reset key and clear the indication, the indication is never display again.

License transfer example:

0743 5306 1326 8106 5575 0721

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(7) Turn OFF/ON the power of the main unit.

For Reference:

When a license option is displayed in Procedure (4), 001 1 is displayed. The last "1" shows that the license is validated by license authentication.

After the license is transferred, the last number is changed to "2".

When the option is standard, the last number shows "3" which means disable for license

transfer.

Details about the last number:

- 1: The function is validated.
- 2: The function is invalidated, or the license is transferred.
- 3: The function is invalidated, or the license does not exist.
- (8) When you contact the contact section of the sales company and report a function invalidation certificate key required for license transfer, the serial number of the transfer origination device, and the serial number of the transfer destination device, a new license key that can be registered to the transfer destination device is issued.
- (9) Register the new license key to the transfer destination device and make sure that the function is validated.

Erasing a License

Erasing a License

When you invalidate a license option on a temporary basis or when you do not use it for a long period of time, you can invalidate the function by erasing the license.

The license can be validated by registering the license number again.

Procedure to erase a license

You can erase a license by entering the service mode.

Operation Procedure:

- (1) Enter the service mode and display the following service mode. When you have entered the service mode, use the right and left arrow keys to display items, and press the OK key to fix the setting.
- (2) Display [#LMS].
- (3) Press the OK key and display [#LMS ERASE].
- (4) Display [SEND].
- (5) Press the OK key.
- (6) Turn OFF/ON the power of the main unit.

For Reference:

There is no function to display the license registration numbers in the main unit. Therefore, when there is a possibility to restore the license after erasing it, make sure that a user has written down the license registration number.

When a license option is displayed in Procedure (4), 001 1 is displayed. The last "1" shows that the license is validated by license authentication.

After the license is erased, the last number is changed to "2".

When the option is standard, the last number shows "3" which means disable for license transfer.

Details about the last number:

- 1: The function is validated.
- 2: The function is invalidated, or a license is transferred.
- 3: The function is invalidated, or the license does not exist.



Configuration

Settings related to e-RDS are described below.

Item	Default	Setting range	Description
E-RDS SWITCH	0		e-RDS OFF/ON setting (0:OFF / 1:ON)When used (ON), the counter information and error information are sent to UGW.Default: 0 (OFF)
RGW- ADDRESS		Character string length:129byte (including NULL, one-byte codes only)	URL of UGWDefault: URL of actual UGWCharacter string length: 129 bytes (including NULL, one-byte codes only)
RGW-PORT	443	1-65535	Port No. of UGW Default: 443Setting range: 1 to 65535
CNT-DATE			Setting of the date of sending the counter information to the server (Valid after input of license). Set the start date of the schedule to send the counter information to the server using a third party expansion function of E-RDS. Refer to the user mode date setting. (12 digits: YYYYMMDDHHMM) YYYY: Year MM: Month DD: Day HH: Hour MM: Minute
CNT-INTV	24	basis)	Setting of the interval of sending the counter information to the server (Valid after input of license). Set the interval of sending the counter information to the server using a third party expansion function of E-RDS.
COM-TEST			Execution of communication test An attempt is made to connect to UGW, judges whether connection is successful, and displays "COMTEST OK" or "COMTEST NG" as the judgment result.
COM-LOG			Details of communication test result. The log of errors in communication with UGW is displayed. The error information includes the error occurrence time, error code, and details of the error.Maximum log count: 5Error information length: Max. 128 characters (excluding NULL)
SCALLCMP			Repair completion process (call button function) Used when the service personnel has completed the requested repair.

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Configuration

The table below lists the kinds of reports that are supported.

Item	Explanation
SERVICE DATA LIST	"Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date)"
SYSTEM DATA LIST	"Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date) System dump list output"
SYSTEM DUMP LIST	Transmission count, reception count, record chart count, error count and other outputs
COUNTER LIST	Counter output
ERROR LOG LIST	Jam and error history output
SPEC LIST	Type setting, print speed, memory size, ROM indication, adjustment data and other outputs
SERVICE LABEL	Output of an entry format for the service label affixed to the rear cover as shipped
ERDS COM LOG LIST	Output of communication error log information related to e-RDS

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Details

System Data List

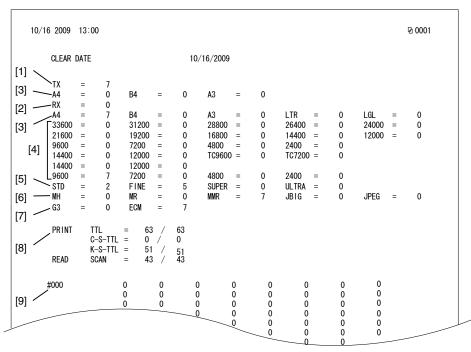
Use it to check the settings associated with the service soft switch and service parameters.

6/10 2009 14:10		***********	*****	1 000
		*** SYSTEM DATA L	IST ***	
	#SSSW			
	SW01		00000000	
	SW02		10000000	
	SW03		00000000	
	SW04	****	10000000	
	SW05	****	00000000	
	SW06	****	10000000	
	SW07		00000000	
	SW08		00000000	
	SW09		00000000	
	SW10 SW11		00000000	
	SW12		0000000	
	SW13		00000000	
	SW14		00000000	
	SW15		00000000	
	SW16	****	00000000	
	SW17	****	00000000	
	SW18	****	00000000	
	SW19		00011000	
	SW20		00000000	
	SW21		00000000	
	SW22 SW23		00000000 00000000	
	SW24		0000000	
	SW25		00000000	
	SW26		00100000	
	SW27		00000000	
	SW28	****	00000000	
	SW29	••••	00000000	
	SW30	****	00000000	
	SW31		00000000	
	SW32 SW33		00000000	
	SW34		00000000 00000000	
	SW35		00000000	
	SW36		00000000	
	SW37		00000000	
	SW38		00000000	
	SW39	****	00000000	
	SW40	****	00000000	
	SW41		00000000	
	SW42		00000000	
	SW43		00000000	
	SW44 SW45		00000000 00000000	
	SW45 SW46		00000000	
	SW47		00000000	
	SW48		00000000	
	SW49		00000000	
	SW50		00000000	
	#MENU			
	01:		0	
	02:		0	
	03:		0	
	04:		0	
	05:		0	

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System Dump List

Use it to check the history of communications, both successful and error.



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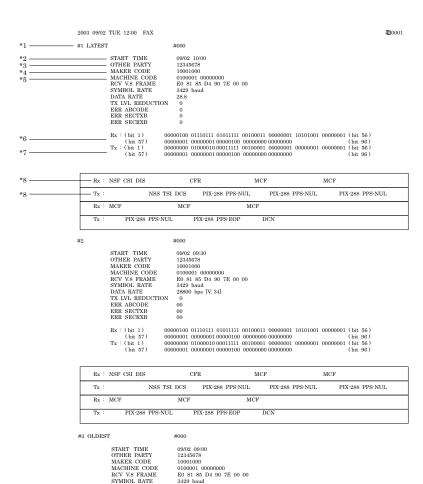
- *1: TX, number of total pages transmission.
- *2: Total number of pages transmitted/received according to original size.
- *3: RX, number of total pages reception.
- *4: Total number of pages transmitted and received for each modem speed.
- *5: Total number of pages transmitted/received in connection with different modem speeds (Standard, Fine, Super Fine, Ultra Fine).
- *6: Total number of pages transmitted and received for each coding method.
- *7: Total number of pages transmitted and received in each mode.
- *8: Total number of pages printed/scanned.
- *9: Total number of occurrences for error code.

· Indication sample

##280	1	7	3	0	0
	##280number of errors	##280number of errors	##280number of errors		

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It provides error information on the 3 most recent communications.



3429 baud

28800 bps [V. 34]

DATA RATE

TX LVL REDUCTION ERR ABCODE ERR SECTXB

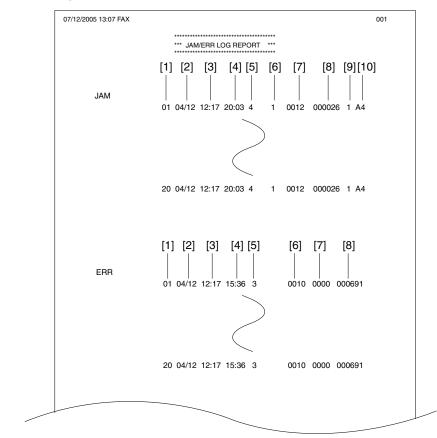
- *1: service error code.
- *2: START TIME, date and time (in 24-hr notation).
- *3: OTHER PARTY, telephone number sent by the other party.
- *4: MAKER CODE, manufacturer code.
- *5: MACHINE CODE, model code.
- *6: bit 1 through bit 96 of DIS, DCS, or DTC that has been received.
- *7: bit 1 through bit 96 of DIS, DCS, or DTC that has been transmitted.
- *8: RX, procedural signal received; TX, procedural signal transmitted.

Counter List

Explanation: Maintenance/supplies counter output.

(For more detailed information about the maintenance/supplies counter output, refer to "#COUNTER"(page 4-34)..)

Error Log List



Jam history description (JAM)

	Item	Explanation
[1]	Number	The larger the number of a jam, the more recently it has occurred.
[2]	Jam date	Date of jam occurrence
[3]	Jam time	
[4]	Jam recovery time	
[5]	Location	3: Host machine, 4: ADF, 5: Finisher
[6]	Occurrence category	0: Host machine, 1: ADF, 2: Finisher
[7]	Jam code	For a definition of the code, see the "Jam Code" (page 3-10).
[8]	Total counter display	
[9]	Pickup stage position	0: Manual feed tray, 1: Cassette 1, 2: Cassette 2, 3: Cassette 3, 4:
		Cassette 4
[10]	Paper size	

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Error history description (ERR)

	Item	Explanation
[1]	Number	The larger the number of an error, the more recently it has occurred.
[2]	Error date	Date of error occurrence
[3]	Error time	
[4]	Error recovery time	
[5]	Location	3: Main unit, 5: Finisher
[6]	Error code	Error code (4-digit code; for a definition of the code, <u>"Error Code"(page 3-2).</u>)
[7]	Detail code	Detail code of the error code (4-digit code; for a definition of the code, see the "Error Code" Chapter.)
[8]	Total counter display	

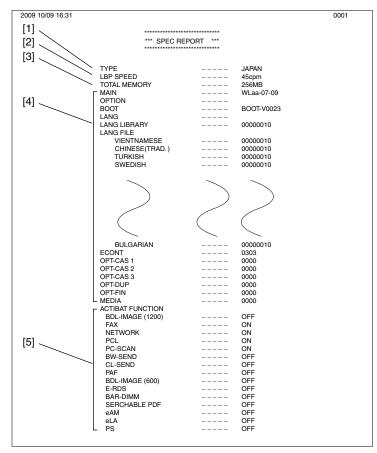
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Alarm history description(ALARM)

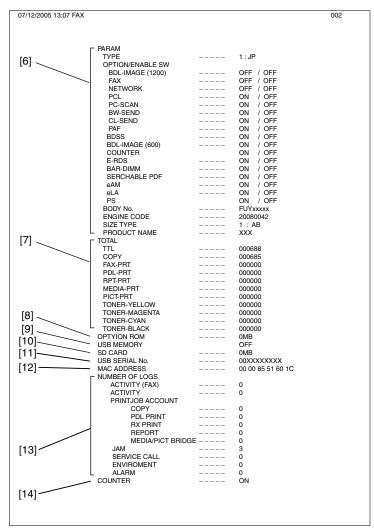
	Item	Explanation
[1]	Number	The larger the number of a alarm, the more recently it has occurred.
[2]	Alarm date	Date of alarm occurrence
[3]	Alarm time	
[4]	Alarm recovery time	
[5]	Location	
[6]	Alarm code	Alarm code (4-digit code; for a definition of the code, see the "Alarm Code"(page 3-14))
[7]	Detail code	Detail code of the alarm code (8-digit code; for a definition of the code, see the "Error Code" Chapter.)

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Spec List



F-4-9



F-4-10

- [1] Type setting
- [2] Print speed
- [3] Memory size
- [4] ROM version (MAIN/BOOT/LANG*1(language liblary/language file version)ECONT/option cassette/duplex unit/finisher)
- [5] Activation function ON/OFF
- [6] Not used
- [7] Total counter (TOTAL/COPY/FAX/PDL/REPORT record counts)
- [8] Option ROM availability

- [9] USB memory availability
- [10] SD card volume
- [11] USB serial number
- [12] MAC address
- [13] output the number of histories (communication history, copy/print/report/JOB history of the reception print, jam history, E code history, humidity log)
- [14] Counter ON/OFF



#DOWNLOAD

Download

The following parts of this unit can be upgraded by executing download mode using the service support tool (UST)

(for more information, see the "Upgrading Targets and Procedure"(page 7-2).):

Main unit

ROM mounted on the main controller PCB (BOOT+PROGRAM)

ROM mounted on the DC controller PCB (DCON)

Accessory

ROM mounted on the finisher controller PCB(FIN_CON)



Configuration

Group	Item	Description
TEL & USER DATA		Clears all user-registered and -set areas of telephone registration data and user data. (Telephone registration refers to the registration of
		codes on one-touch dialing, abbreviated dialing, and group dialing.)
SERVICE DATA		Clears theservice data. User data is not cleared.
COUNTER		Clears the maintenance counter, parts counter and mode-specific counters. Initializes the counter (numerator) in the system dump list.
SOFT-CNT		Not used
TYPE		Initializes user data and service data to suit specified destination settings.
HST	ACTIVITY	Initializes the activity report
	ACCOUNT	Clears print histories.
	JAM	Clears the jam history.
	ERR	Clear the error (error code) history.
	ALARM	Clears the alarm history.
	ENVIROMENT	Initializes the enviroment log data.
CARD		Clears department management information held in the controller before the card reader is demounted.
ERR	E719	Clears card reader errors.
PWD		Clears the system administrator's password.
FILE SYSTEM		Not used
FORMAT	USB MEMORY	Format the USB memory. (This mode is used when the USB memory error is damaged and E744 occurs.)
	LICENSE DRIVE	Clears the drive for license file.
FMT-SD	512	Format the 512MB SD card.
	1024	Format the 1204MB SD card.
	2048	Format the 2048MB SD card.
CA-KEY		Initializes an installed CA certification. (Displayed only after activation of the e-RDS function.)
ERDS-DAT		The settings related to e-RDS are cleared to the factory settings. (Displayed only after activation of the e-RDS function.)
DEPT_USER_CLEAR		Turns off the department-based ID management and user management functions.
SYSTEM_INFO_CLEAR		Clears the system management identification number.
ENGIN	ERRCLR	Clears the engine errors.
	BKRAMCLR	Clears the engine backup RAM.
	TNRINST	Supplies toner from the toner cartridge to the
		developing assembly.
EAM-DAT		Initializes the EAM Flash/SRAM data.

Group	Item	Description
ELA-DAT		Initializes the ELA Flash/SRAM data.
ALL		Clears user and service data (except for some scan parameters and print parameters), and the counter setting/registration data in the system dump list, except for the print count.

T-4-55



Configuration

An error code is displayed when a service error has occurred. The E code is displayed in the upper step, and the detail code is displayed the bottom step.

Group	Item	Description
DISPLAY	ERR	The E code and detail code of the current system error are displayed. (Multiple codes can be displayed with the left and right buttons.) SYSTEM ERROR xxx: Eyyy-zzzz Example) 001:E602-1105 xxx: History number yyy: E Code zzzz: Detail code
	JAM	The current JAM code is displayed. (Multiple JAM codes can be displayed with the left and right buttons.) Sisplay example JAM ERROR xxx:y-z-vvvv-wwww xxx: History number y: Description of position (3: Main unit (including the pickup assembly), 4: ADF, 5: Finisher) z: Cassette level (01: Manual feed tray, 1: Cassette 1, 2: Cassette 2, 3; Cassette 3,4: Cassette 4, 7: Double-sided) vvvv: JAM code
	SPDTYPE	www: paper size Display of engine speed type on controller PCB <display example=""> SPDTYPE (Line 1) 45cpm (Line 2)</display>

T-4-56



Configuration

The table below lists the items of ROM display mode that are supported.

Group	Item	Description
ROM	MAIN (Bootable)	Displays the version number of the PROGRAM ROM mounted on the main controller PCB.
	MAIN2 (Boot)	Displays the version of the ROM (BOOT) mounted on the main controller PCB.
	OPROM	Not used
	ECONT	Displays the version number of the ROM mounted on the DC controller PCB.
	OPTION CAS1	Not used
	OPTION CAS2	Not used
	OPTION CAS3	Not used
	DUPLEX	Not used
	FINISHER	Displays the version number of the Inner finisher
	READER	Not used

T-4-57



#TEST MODE

Outline

Test mode must be executed by keeping track the flow of menu items appearing on the LCD. Menu items in test mode are organized into seven blocks as described below.

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.

1. D-RAM test <(1) D-RAM TEST>

Checks to see if data can be correctly written to and read from D-RAM.

2. PG output <(3) PG>

Used to generate service test patterns.

3. MODEM test <(4) MODEM TEST>

Performs relay actuation, modem DTMF and tonal signal transmission/reception tests.

4. FUNCTION test <(6) FUNCTION TEST>

Used to verify the operations of microswitches, sensors, speakers and ADF functions.

Configuration

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.

		Item 1	Item2	Item3	Explanation
TEST MOD	E [1] - [9]				
(1) DRAM [1] - [2]				D-RAM data check
	(1) D-RAM	TEST			Write/read check
	(2) D-RAM	TEST			Read check
(3) PG					
	SELECT N	0.01			Grid
	SELECT N	0.02			HT
	SELECT N	O.03			All-black output
	SELECT N	0.04			All-white output
	SELECT N	O.05			Composite solid white + Solid black
	SELECT N	O.06		·	4dot-6space (vertical)
	SELECT N	0.07			dot-6space (horizontal)
	SELECT N	O.08			Ghost
	SELECT N	0.09			16 gray levels (monochromatic)
(4) MODEN	1 TEST [1] -	[9]			
	(1) RELAY				
		(1) RELAY	TEST 1		NCU relay (and switch) ON/OFF test
		(2) RELAY	TEST 2		230 V common NCU test
	(2) FREQ T	EST [0] - [6	<u> </u>		Frequency test
		(0) FREQ	TEST 462Hz		
		(1) FREQ	TEST 1100H	z	
		(2) FREQ	TEST 1300H	Z	
		(3) FREQ	TEST 1500H	Z	
		(4) FREQ	TSST 1650H	Z	
		(5) FREQ	TEST 1850H	Z	
		(6) FREQ	TEST 2100H	Z	
	(4) G3 SIGI	NAL TX TE	ST [0] - [8]		G3 signal transmission test
			SNAL TX TES	T 300bps	
		(1) G3 SIG	NAL TX TES	T 2400bps	
		(2) G3 SIG	NAL TX TES	T 4800bps	
			SNAL TX TES		
		<u> </u>	SNAL TX TES		
				T TC7200bps	
				T TC9600bps	
			SNAL TX TES		
			SNAL TX TES		
	(5) DTMF T				DTMF transmission test
	,		SNAL TX TES	ST 300bps	
			SNAL TX TES		
		· ·	SNAL TX TES		
		_{1,-} , 00 010			

Group	subgroup	Item 1	Item2	Item3	Explanation
		(3) G3 SIGN	AL TX TEST	7200bps	
		(4) G3 SIGN	AL TX TEST	Г 9600bps	
		(5) G3 SIGN	AL TX TEST	TC7200bps	
		(6) G3 SIGN	AL TX TEST	TC9600bps	
		(7) G3 SIGN	AL TX TEST	Г 12000bps	
		(8) G3 SIGN	AL TX TEST	T 14400bps	
		(9) G3 SIGN	AL TX TEST	TC9600bps	
		(*) G3 SIGN/			
		(#) G3 SIGN	AL TX TEST	T 14400bps	
	(6) MODEM	TEST			Tonal sign reception test
	(8) G3 V.34				V34 G3 signal transmission test
(6) FUNCTI	ON TEST [1] - [9]			
	(1) FUNCTI	ON TEST G3	3 4800bps		G3 4800 bps signal transmission test
	(2) SENS/S	W CHECK			Sensor checks
		FLAG			Sensor check with flag
		CST			Cassette check
		READER			Reader sensor check
		A/D			Analog/digital computation output sensor
		COPY			Copy confirmation sensor
		ADF			ADF sensor check
	(3) NCR sts				cardreader test
	(9) LINE TE	ST [1] - [3]			Line signal reception test

T-4-58

Details

D-RAM Test <(1) D-RAM>

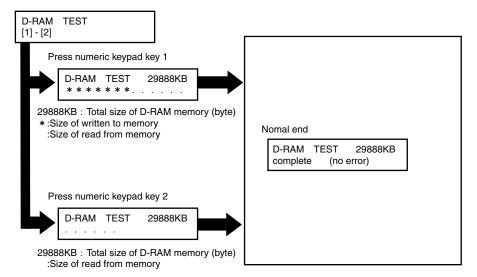
Press the numeric keypad key 1 on the test mode menu to select the D-RAM test.

Press numeric keypad keys 1 and 2 during the D-RAM test to carry out the individual tests described below.

Numeric keypad key 1
 Checks to see if data can be correctly written to and read from all areas of D-RAM (SDRAM).
 If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).

• Numeric keypad key 2

Checks to see if data can be correctly read from all areas of D-RAM (SDRAM). If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).



F-4-11

PG Output <(3) PG>

Press the numeric keypad key 3 on the test mode menu to select the PG output.

Press numeric keypad keys during the print test to generate test patterns as described below.

Nine kinds of service test patterns are available. Other test patterns are reserved for factory/ development purposes.

No.	Test pattern
SELECT NO.01	Grid
SELECT NO.02	HT
SELECT NO.03	All-black output
SELECT NO.04	All-white output
SELECT NO.05	Composite solid white + Solid black
SELECT NO.06	4dot-6space (vertical)
SELECT NO.07	dot-6space (horizontal)
SELECT NO.08	Ghost
SELECT NO.09	16 gray levels (monochromatic)

T-4-59

Procedure

- 1) Enter the PG number with numeric keys, then press the START key.
- 2) Select single-sided (SGL: 0) or double-sided (DBL: 1), then press the START key.
- 3) Enter the number of prints to be output (PG COUNT), then press the START key.
- Specify the paper drawer (main unit), then press the START key.
 Main unit cassette (ST_C: 0), 2nd cassette (OP_C: 1), Manual feed tray (MLT: 2)
- 5) Specify the paper eject slot, then press the START key.

Tray 1 (1_OUT: 0), Tray2 (2_OUT: 1)

- 6) Select a paper type, then press the OK key.
 - Plain paper (PLN: 0), Thick paper (TCK: 1), Thin paper (OHP: 2)
- 7) A test pattern is output.

MODEM Test <(4) MODEM TEST>

These tests test modem and NCU transmission and reception. The modem tests check whether signals are sent correctly from the modem by comparing the sound of the signals from the speaker with the sounds from a normal modem.

End this test by pressing the Stop key.

Keypad	Туре	Description
1	Relay Test	Use it to turn on/off a selected relay to execute a switch- over test.
2	Frequency test	The modem sends tonal signals from the modular jack and the speaker.
4	G3 signal transmission test	The modem sends G3 signals from the modular jack and the speaker.
5	DTMF signal reception test	Use it to generate the DTMF signal coming from the modem using the telephone line terminal and the speaker.
6	Tonal signal reception test	Use it to monitor a specific frequency and the DTMF signal received from the telephone line terminal by causing them to be indicated on the LCD (i.e., the presence/absence as detected). The reception signal is generated by the speaker.
8	V.34 G3 signal transmission test	The modem sends V.34 G3 signals from the modular jack and the speaker.

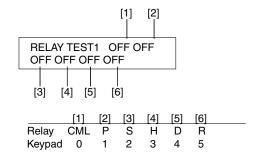
T-4-60

Relay Test

Press '1'or '2' on the keypad on the Modem test menu to select relay test mode. Use the keypad to operate the various relays of the NCU. '2' on the keypad is used for 230V machine.

Numeric keypad key 1

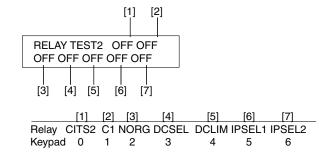
The input key and relay are shown below:



F-4-12

• Numeric keypad key 2

The input key and relay are shown below:



F-4-13

CAUTION:

The touch panel (LCD) is turned on or off in relation to the transmission of the relay operation signal as is operated on the keypad; for this reason, you cannot use the touch panel (LCD) to check a fault on a single relay.

Frequency Test

A press on '2' on the keypad from the MODEM test menu selects the frequency test. In this test, signals of the following frequencies from the modem are transmitted using the telephone line terminal and the speaker. To select a different frequency,

Keypad	Frequency
1	462Hz
2	1100Hz
3	1300Hz
4	1500Hz
5	1650Hz
6	1850Hz
7	2100Hz

T-4-61

MEMO:

The frequency and the output level of individual frequencies are in keeping with the output level set in service mode.

G3 Signal Transmission Test

A press on '4' on the keypad from the MODEM test menu selects the G3 signal transmission test. In this test, the following G3 signals from the modem are transmitted using the telephone line terminal and the speaker. To select a different transmission speed, use the keypad.

Keypad	Transmission speed
0	300bps
1	2400bps
2	4800bps
3	7200bps
4	9600bps
5	TC7200bps
6	TC9600bps
7	12000bps
8	14400bps

T-4-62

MEMO:

The output level of individual signals is in keeping with the setting made in service mode.

A press on '5' on the MODEM test menu selects the DTMF signal transmission test. In the test, the following DTMF signals from the modem are transmitted using the telephone line terminal and the speaker. The number pressed on the keypad selects a specific DTMF signal.

MEMO:

The output level of individual signals is in keeping with the setting made in service mode.

Tonal/DTMF Signal Reception Test

A press on '6' on the keypad from the MODEM test menu selects the tonal signal/DTMF signal reception 0 test. In this signal, the tonal signal/DTMF signal received from the telephone line terminal can be checked to find out if it was detected by the modem.

Tonal signal reception test

MODEM TEST OFF OFF OFF

OFF OFF

changes from '0' to '1' in response to detection of a signal of 462±25Hz.

changes from '0' to '1' in response to detection of a signal of 1100±30Hz.

changes from '0' to '1' in response to detection of a signal of 2100±25Hz.

DTMF signal reception test

MODEM TEST OFF OFF OFF 5

The received DTMF signals are indicated starting from the right using the 2nd character of the display.

F-4-14

V.34 G3 Signal Transmission Test

A press on '8' on the keypad from the MODEM test menu selectes the V.34 G3 signal transmission test. The V.34 G3 signals below are sent from the modem using the modular jack and the speaker by pressing the start key. The Baud rate can be changed with the keypad, and the Speed can be changed with the left/right arrow key.

Keypad	Baud rate
0	3429baud
1	3200baud
2	3000baud
3	2800baud
4	2743baud
5	2400baud

T-4-63

Left/right arrow key	Transmission speed
<	2400bps
>	
	4800bps
	7200bps
	9600bps
	12000bps
	14400bps
	16800bps
	19200bps
	21600bps
	24000bps
	26400bps
	28800bps
	31200bps
	33600bps

T-4-64

FUNCTION Test <(6) FUNCTION TEST>

Press the numeric keypad key 6 on the test mode menu to select the function test.

Press numeric keypad keys 1 to 4 and 9 during the function test to enter the menus listed below.

Keypad	Туре	Description
1	G3 signal transmission test	Transmits 4800-bps G3 signals to a telephone line and speaker
2	Sensor test	Sensor actuation test
3	Accessory	
4	ADF test	ADF operation test
5	Not used	
6	Not used	
7	Not used	
8	Not used	
9	Line signal reception test	NCU board signal sensor and frequency counter operation test

T-4-65

G3 signal transmission test (6-1: G3 480 bps Tx)

Press numeric keypad key 1 on the FUNCTION TEST menu to select the G3 signal transmission test.

This test transmits 4800-bps G3 signals from the telephone line connection terminal and speaker.

Sensor test (6-2: SENSOR)

This mode is used to verify the status of the unit sensors from the touch panel (LCD) indications.

Press numeric keypad key 3 on the FUNCTION TEST menu to select the sensor test.

To select a minor item, press the START key.

The touch panel (LCD) indications change as the associated sensors turn on and off.

Group	Item		Description	Detail	
(2) SENS/S	(2) SENS/SW CHECK				
	FLAG	Sensor check with flag	CT: Waste Toner Full Sensor(S17)	0/Full, 1/Available	
		(manual check)	TC: Toner Cover Open/Closed Sensor (S16)	1/Cover open, 0/Cover closed	
			MW: Manual Feeder Paper Size Sensor (S8)	0/Document presence, 1/Document absenc	
			DO: Front Cover Open/Closed Sensor (S18)	1/Cover open, 0/Cover closed	
			F1: No.1 Delivery Full Sensor (S11)	0/Document presence, 1/Document absenc	
			F2: No. 2 Delivery Full Sensor (S41)	0/Document presence, 1/Document absenc	
	CST	Cassette check	S: Cassette 1 Pickup Sensor (S1)	0/Document presence, 1/Document absenc	
			SU: Cassette 1 Paper Sensor (S2)	0/Document presence, 1/Document absenc	
				0/Document presence, 1/Document absenc	
			ZA: Cassette 1 Paper Level Sensor B(S4)	0/Document presence, 1/Document absenc	
			S1: Cassette Size Detection Switch 1 (Width) (SW6)	0/Document presence, 1/Document absenc	
			S2: Cassette Size Detection Switch 2 (Length) (SW7)	0/Document presence, 1/Document absenc	

Group	Item		Description	Detail
	READER	Reader sensor		0/Document presence, 1/Document
		check	Open/Closed Sensor	absenc
			0 (S21)	
				0/Document presence, 1/Document
			Open/Closed Sensor	absenc
			11 (S26)	
			HP: iR2545/2535:	1/HP, 0/besides HP
			CCD Hp Sensor	
			(S22)	
			iR2530/2525/2520:	
			CIS Hp Sensor (S31)	
			SIZE: Document size:	
			Paper size indicated	
			in a mix of document	
			size sensors	
			Document size	0/Document presence, 1/Document
			sensor 0/1/2/3	absenc
	A/D	Analog/digital	HOP: Developing unit	
		computation	toner sensor (TS1)	
		output sensor	output value	
			DEV: Sub hopper	
			toner sensor (TS2)	
			output value	
			TEP: Temperature	
			output value	
			HUM: Humidity output	
			value	
			MTH: Fixing main	
			thermistor (TH3)	
			output value	
			STH1: Fixing sub	
			Thermistor (rear)	
			(TH1) output value	
			STH2: Fixing sub	
			thermistor (front)	
			(TH2) output value	

Group	Item		Description	Detail
	COPY	Сору	MP: Manual Feeder	0/Document presence, 1/Document
		confirmation	Paper Sensor (S9)	absenc
		sensor	RE: Pre-Registration	0/Document presence, 1/Document
			Sensor (S5)	absenc
			RP: Loop Sensor (S6)	0/Document presence, 1/Document
				absenc
			FX: Fixing Outlet	0/Document presence, 1/Document
			Sensor (S19)	absenc
			D1/2:No.1 Delivery	0/Document presence, 1/Document
			Sensor(S12)/No. 2	absenc
			Delivery Sensor(S42)	
			TU: Reversal Sensor	0/Document presence, 1/Document
		ļ	(S40)	absenc
			DL: Duplex Feed	0/Document presence, 1/Document
			Sensor (S7)	absenc
	ADF		W1: Document width	0/Document presence, 1/Document
			sensor 1	absenc
			W2: Document width	0/Document presence, 1/Document
			sensor 2	absenc
			•	0/Document presence, 1/Document
		-	sensor 1	absenc
			L2: Document length	0/Document presence, 1/Document
			sensor 2	absenc
			LT: Last document	0/Document presence, 1/Document
		1	detection sensor	absenc
			-	0/Document presence, 1/Document
		}	sensor	absenc
			DR: Read sensor	0/Document presence, 1/Document
			DO D	absenc
			RG: Registration	0/Document presence, 1/Document
			paper sensor	absenc
			•	1/Cover open, 0/Cover closed
			sensor	0/D
			DS: Document set	0/Document presence, 1/Document
		ŀ	snsor	absenc
			RK: Release motor	1/HP, 0/besides HP
		}	HP sensor	O/Decument process 4/Decument
			TM: Timing sensor	0/Document presence, 1/Document
				absenc T-4-66

T-4-66

Card reader test <6-3: NCR sts>

Press numeric keypad key 3 on the FACULTY menu to select the card reader test. In this test, verify the successful operations of the card reader.

Press numeric keypad key 3 [1]

NCR Sts: 12345678

DPT MGN OK RDY 1234

[2] [3] [4] [5] [6]

[1] Card reader and card availability indication Card available: Eight-digit card ID

No card: Card None

No card reader available: NCR None

[2] Card type and card reader status indication

DPT: Department card PRC: Unit pricing card

MAX: Upper limit setting card

ERS: Erased card SRV: Service card (No indication): No card

[3] Card type

MGN: Magnetic card
OPT: Optical card

[4] Can status

OK: Normal scan ERR: Scan error NG: Nonstandard error (No indication): No card

[5] Equipment status

IN: Initialization in progress

RDY: Ready

[6] Card reader version indication Four-digit number

F-4-15

Line signal reception test <6-9: LINE DETECT>

Press numeric keypad key 9 on the FACULTY menu to select the line signal reception test. In this test, verify the successful operations of the NCU signal sensor and the frequency counter. Menu 1 detects the CI state, while menu 3 detects the CNG signal.

• Test menu 1

Press numeric keypad key 1 on the LINE DETECT menu to select test menu 1. When CI is detected on the telephone line connection terminal, the touch panel (LCD) display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) also displays the on-hook or off-hook state of an external telephone set as detected. The touch panel (LCD) displays, from left to right, CI, CI frequency, hook port and FC with indications of 1: ON and 0:OFF.

Test menu 2

Press numeric keypad key 2 on the LINE DETECT menu to select test menu 2. When the CNG signal is detected on the telephone line connection terminal, the touch panel (LCD)

display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 2 turns on the CML relay to detect CNG.

Test menu 3

Press numeric keypad key 3 on the LINE DETECT menu to select test menu 3. When the CNG signal is detected on the telephone line connection terminal, the touch panel (LCD) display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 3 turns off the CML relay to detect CNG.

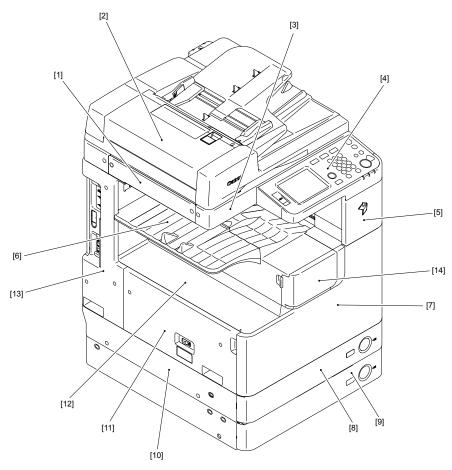


Parts Replacement and Cleaning

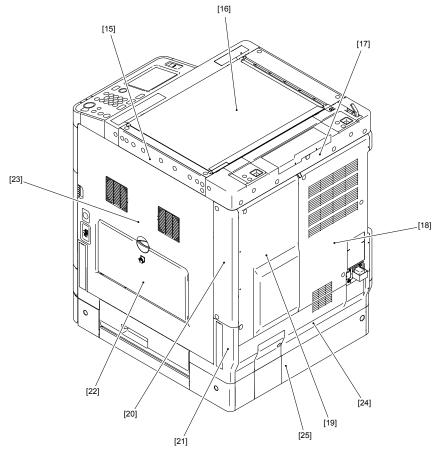
List of Parts

List of Parts

List of Covers

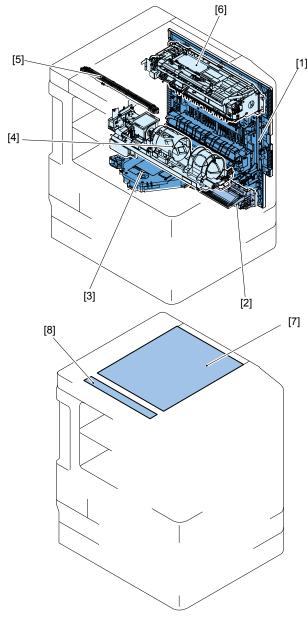


Symbol	Part name	Part number
[1]	Reader Left Cover	FC9-1641
[2]	DADF (Optional or Standard)	-
[3]	Reader Front Cover	FC9-1748
[4]	Control Panel	FM3-9356 (TW)
		FM3-9354 (UL,AU)
		FM3-9355 (CN)
		FM3-9357 (KR)
		FM3-9358 (EUR)
[5]	Support Cover	-
[6]	Delivery Tray	FC9-0513
[7]	Front Cover	FM3-9256
[8]	Cassette 1	-
[9]	Cassette 2 (Only for the Cassette	-
	2 standard model)	
[10]	Lower Left Cover	550-sheet 1st cassette type:
		FC9-0506
		250-sheet 1st cassette type :
		FC9-1001
[11]	Left Cover	FM3-9338
[12]	Inside Base Cover	FC9-0520
[13]	Rear Left Cover	FC9-0523
[14]	Toner Supply Cover	FC9-0571,FC9-0568



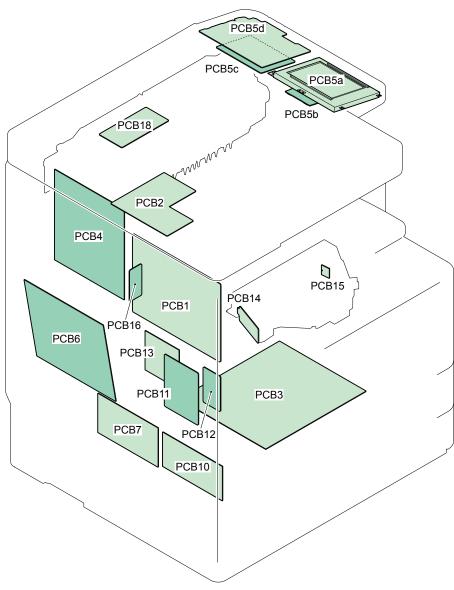
Symbol	Part name	Part number
[15]	Reader Right Cover	FC9-1640
[16]	Platen Glass	AB/INCH SIZE: FL3-3143
		A/INCH SIZE: FL3-3190
		A SIZE: FL3-3191
		AB SIZE: FL3-3155
[17]	Reader Rear Cover	FC9-1749
[18]	Rear Cover (Right)	FC9-0525
[19]	Rear Cover (Left)	FC9-0524
[20]	Right Cover (Upper Rear)	FC9-0572
[21]	Right Cover (Lower Rear)	550-sheet 1st cassette type :
		FC9-0527
		250-sheet 1st cassette type :
		FC9-1008-000
[22]	Manual Feed Pickup Tray	FM3-9285
[23]	Right Cover	FM3-9284 (With No.2 Deleivery Unit)
		FM3-9380 (Without No.2 Deleivery
		Unit)
[24]	Lower Rear Cover	550-sheet 1st cassette type:
		FC9-0507
		250-sheet 1st cassette type:
		FC9-1002
[25]	Cassette 2 Rear Cover	FC9-4682

List of Main Units / Parts



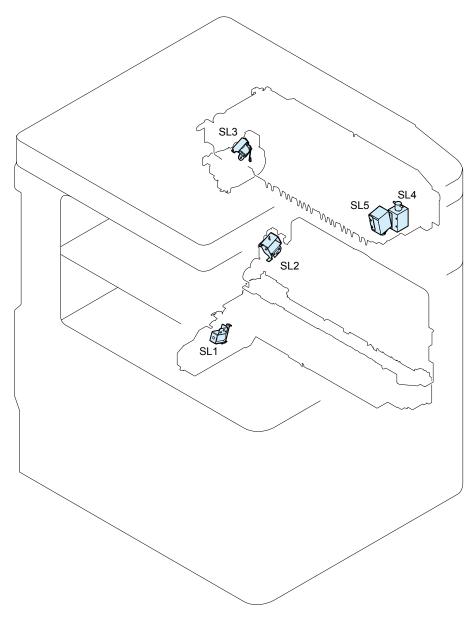
Symbol	Part name	Part number
[1]	CIS Unit	FM3-9430
[2]	Pickup Unit	FM3-9372
[3]	Laser Scanner Unit	FM3-9406
[4]	No.2 Deleivery Unit	FM3-9314
[5]	Toner Supply Unit	FM3-9428
[6]	Right Cover Unit	FM3-9284 (With No.2 Deleivery Unit)
		FM3-9380 (Without No.2 Deleivery Unit)
[7]	Platen Glass	AB/INCH SIZE: FL3-3143
		A/INCH SIZE: FL3-3190
		A SIZE: FL3-3191
		AB SIZE: FL3-3155
[8]	ADF Scan Glass	FL3-3144

List of PCBs



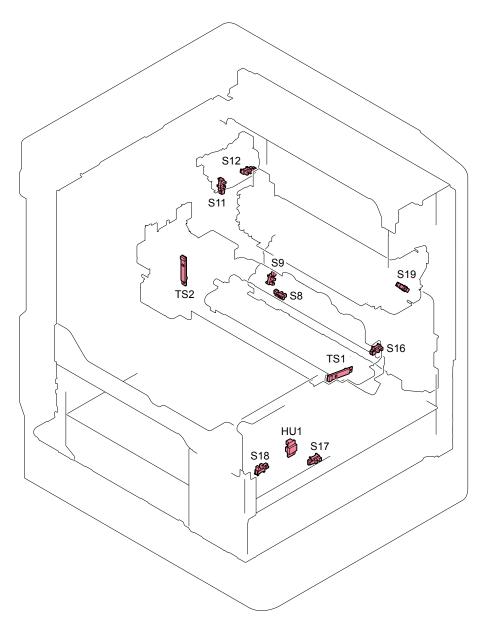
Symbol	Part name	Part number
PCB1	Main Controller PCB	iR2520: FM4-6215
		iR2525: FM4-6216
		iR2530 :FM4-6217
PCB2	Reader Relay PCB	FM4-2859
PCB3	Power Supply PCB	550-sheet 1st cassette type, 120V:
		FM4-4195
		550-sheet 1st cassette type, 230V:
		FM3-9258
		250-sheet 1st cassette type, 120V:
		FM4-3374
		250-sheet 1st cassette type, 230V:
		FM3-9361
PCB4	DC Controller PCB	550-sheet 1st cassette type: FM4-2864
		250-sheet 1st cassette type: FM4-2865
PCB5a	LCD Unit	FL3-3204
PCB5b	1/4 Inverter PCB	FM2-2753
PCB5c	Control Panel CPU PCB	FM4-2854
PCB5d	Key Top PCB Assembly	FM4-2855
PCB6	HVT PCB	FM4-2872
PCB7	Option Power Supply PCB	120V: FK2-9187
		230V: FK2-9188
PCB10	Heater PCB	120V: FM4-2857
		230V: FM4-2858
	NCU PCB	FM4-3343
PCB12	Modular PCB	FM4-3346
PCB13	Pseudo-CI PCB	FM2-7753
PCB14	Laser Driver PCB	FM4-2546
PCB15	BD PCB	FM2-4022
PCB16	RAM PCB	256MB: FM4-3349
		512MB: FM4-3350
PCB18	No.2 Delivery Reversal PCB	FM4-2886

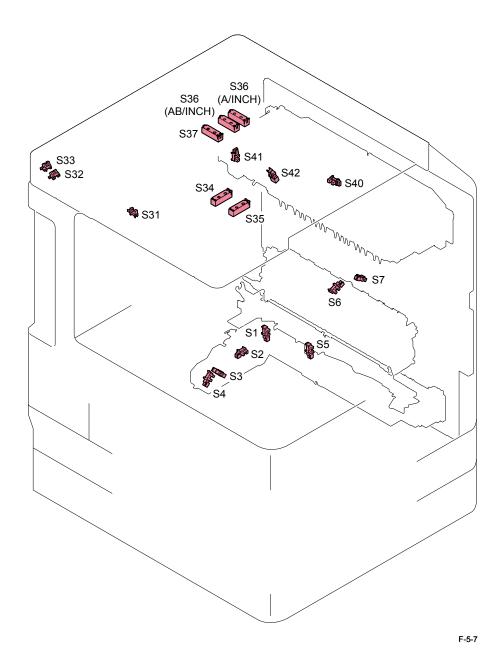
List of Solenoids



Symbol	Part name	Part number
SL1	Pickup Solenoid	FK2-0408
SL2	Manual Feed Pickup Solenoid	FK2-1410
SL3	No. 1 Delivery Reversal Solenoid	FK2-9195

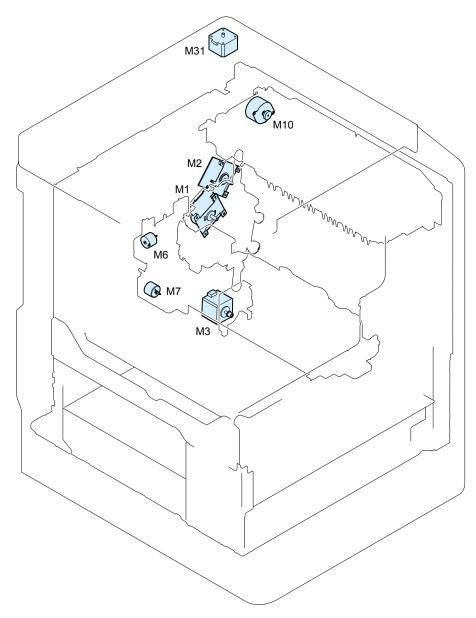
List of Sensors





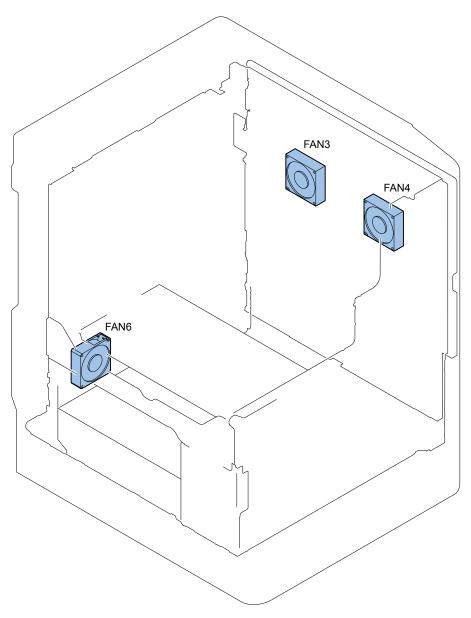
Symbol	Part ı	Part number	
	iR2530/2525	iR2530/2525/2520	
	(550-sheet 1st cassette type)	(250-sheet 1st cassette type)	
S1	Cassette 1 Pickup Sensor	-	WG8-5836
S2	Cassette 1 Paper Sensor		WG8-5836
S3	Cassette 1 Paper Level Sensor A	-	WG8-5836
S4	Cassette 1 Paper Level Sensor B	-	WG8-5836
S5	Pre-Registration Sensor		WG8-5836
S6	Loop Sensor		WG8-5836
S7	Duplex Feed Sensor		WG8-5836
S8	Manual Feeder Paper Size Ser	nsor	WG8-5836
S9	Manual Feeder Paper Sensor		WG8-5836
S11	No.1 Delivery Full Sensor		WG8-5836
S12	No.1 Delivery Sensor		WG8-5836
S16	Toner Cover Open/Closed Sen	WG8-5836	
S17	Waste Toner Full Sensor	WG8-5836	
S18	Front Cover Open/Closed Sens	WG8-5836	
S19	Fixing Outlet Sensor	WG8-5836	
S31	Cis Hp Sensor	WG8-5696	
S32	Copyboard Cover Open/Closed	d Sensor 0	WG8-5696
S33	Copyboard Cover Open/Closed	d Sensor 1	WG8-5696
S34	Original Size Sensor 0		FH7-7569
S35	Original Size Sensor 1		FH7-7569
S36	Original Size Sensor 2		FH7-7569
S37	Original Size Sensor 3		FH7-7569
S40	Reversal Sensor	WG8-5836	
S41	No. 2 Delivery Full Sensor	WG8-5836	
S42	No. 2 Delivery Sensor	WG8-5836	
HU1	Enviorment Sensor	WP2-5264	
TS1	Developing Unit Toner Sensor	WP2-5282	
TS2	Sub Hopper Toner Sensor		WP2-5282

List of Motors



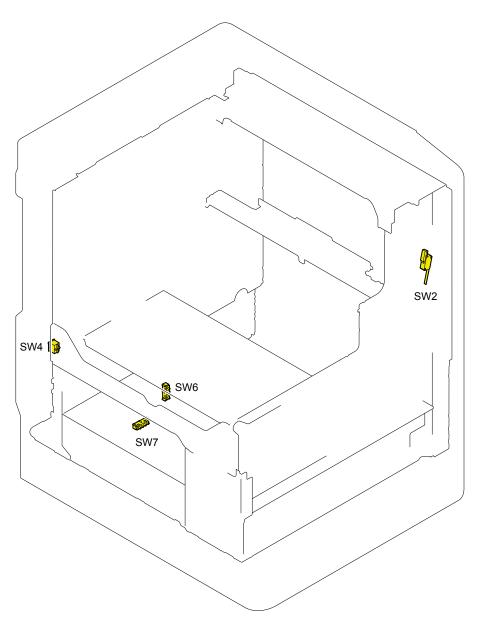
Symbol	Part name	Part number
M1	Main Motor	FK2-9141
M2	Fixing Motor	FK2-9145
M3	Cassette 1 Pickup Motor	FK2-7327
M6	Bottle Motor	FK2-9147
M7	Hopper Motor	FK2-9147
M10	Reversal Motor	FK2-9150
M31	Scanner Motor	FK2-1066

List of Fans



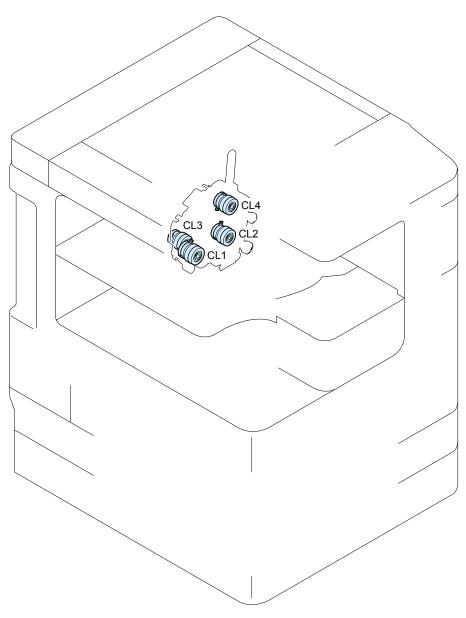
Symbol	Part name	Part number
FAN3	Exhaust Fan (Rear)	FK2-0360
FAN4	Exhaust Fan (Front)	FK2-0360
FAN6	Power Supply Cooling Fan	FK2-0360

List of Switches



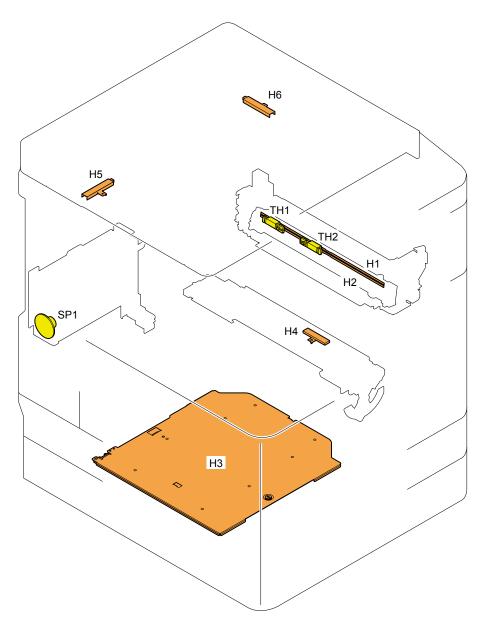
Symbol	Part name	Part number
SW2	Front Door Switch	WC4-5242
SW4	Enviorment Switch	FM4-2876
SW6	Cassette Size Detection Switch 1	WC2-5680
SW7	Cassette Size Detection Switch 2	WC2-5680

List of Clutches



Symbol	Part :	Part number	
	iR2530/2525	iR2530/2525/2520	
	(550-sheet 1st cassette type)	(250-sheet 1st cassette type)	
CL1	Registration Clutch		FK2-9154
CL2	Manual Feed Pickup Clutch	Cassette / Manual Feed Pickup Clutch	FK2-9154
CL3	Developing Cylinder Clutch		FK2-9154
CL4	Duplex Feed Clutch		FK2-9154





Symbol	Part name	Part number
TH1	Fixing Main Thermistor	120V: FM4-3367
		230V: FM3-9381
TH2	Fixing Sub Thermistor	
H1	Fixing Heater 1	
H2	Fixing Heater 2	
SP1	Speaker (Option)	FK2-9442
H3	Cassette Heater (Option)	FM3-8915
H4	Drum Heater (Option)	FK2-9157
H5	Reader Heater (Option)	120V: FK2-9468
		230V: FK2-0228



Product Overview

- Specifications
- Product lineups
- **■** Basic Configuration

Specifications



Specifications

Item	Specifications
Copyboard	Stream reading, original fixed reading
Body	Desktop
Light source type	LED (RGB)
Photosensitive medium	OPC drum (30 mm dia)
Image reading method	CIS
Reproduction method	Indirect electrostatic method
Exposure method	Laser exposure system
Charging method	Roller charge
Development method	Dry single component projection developing
Transfer method	By transfer roller
Separation method	Curvature and static eliminator
Pickup method	550 sheets cassette: Retard separation method
	250 sheets cassette: Pad separation method
	Manual feed pickup tray: Pad separation method
Fixing method	On demand
Delivery method	Face down delivery (in-body delivery)
Reproduction ratio	25% to 400%
Drum cleaning method	By cleaning blade
Toner type	Magnetic negative charge toner
Toner replenish method	Toner cartridge
Toner level detection function	Yes
Top margin	2.5 -/+ 1.5 mm
Left margin	2.5 -/+ 1.5 mm
Non-image width (leading edge)	2.5 -/+ 1.5 mm
Non-image width (left edge)	2.5 -/+ 1.5 mm
	* Using the feeder: 2.5 -/+ 2.0 mm
Warm-up time	At power ON: 30 sec or less
Number of gradations	256 gradations
Reading resolution	600 dpi x 600 dpi
Writing resolution	1200 dpi x 1200 dpi
First print time	imageRUNNER 2530i/2530/2525i/2525: 5.4 sec or less
	imageRUNNER 2520i/2520: 6.4 sec or less
Paper type (Cassette 1/3/4)	Weight: 64 g/m2 to 90 g/m2
	Type: Plain, Recycled, Color (64 g/m2 to 80 g/m2), 3-hole punch
Paper type (Cassette 2)	Weight: 64 g/m2 to 90 g/m2
	Type: Plain, Recycled, Color (64 g/m2 to 80 g/m2), 3-hole punch,
	Envelopes* (No.10 (COM10), ISO-B5, Monarch, ISO-C5, DL)
	* The optional Envelope Feeder Attachment-D1 is required.

Item	Specifications
Paper type	Weight: 64 g/m2 to 128 g/m2
(Manual feed pickup tray)	Type: Plain, Recycled, Color (64 g/m2 to 80 g/m2), 3-hole punch,
	Bond (75 g/m2 to 90 g/m2), Heavy Paper 1 (81 g/m2 to 90
	g/m2), Heavy Paper 2 (91 g/m2 to 105 g/m2), Heavy Paper 3 (106
	g/m2 to 128 g/m2), Transparencies, Labels, Envelopes (No.10
	(COM10), ISO-B5, Monarch, ISO-C5, DL)
Paper size (Cassette 1/3/4)	Standard size (A4, A4R, A3, A5R, B4, B5, B5R, LTR, LTTR, LG, 11" x 17", STMTR)
Paper size (Cassette 2)	Standard size (A4, A4R, A3, A5R, B4, B5, B5R, LTR, LTTR, LG, 11"" x 17"", STMTR)
	Envelopes* (No.10 (COM10), ISO-B5, Monarch, ISO-C5, DL)
	* The optional Envelope Feeder Attachment-D1 is required.
Paper size (Manual feed pickup tray)	Standard size (A4, A4R, A3, A5R, B4, B5, B5R, LTR, LTTR, LG, 11"" x 17"", STMTR)
(Warradi reed plokap tray)	Free size (99 mm x 297 mm to 148 mm x 432 mm)
	Envelopes (No.10 (COM10), ISO-B5, Monarch, ISO-C5, DL)
Pickup capacity	550 sheets cassette: 550 sheets (80g/m2)
	550 sheets cassette: 250 sheets (80g/m2)
	Manual feed pickup tray: 100 sheets (80g/m2)
Duplex method	Through path duplex
Acoustic noise	imageRUNNER 2530i/2530:
	operation: 69.50 dB or less *1 / stand-by: 43.00 dB or less *2 imageRUNNER 2525i/2525:
	operation: 67.75 dB or less *1 / stand-by: 43.00 dB or less *2 imageRUNNER 2520i/2520:
	operation: 66.00 dB or less / stand-by: 43.00dB or less *2
	*1 Except for china model. China model: 66.00 dB or less
	(operation)
	*2 Except for china model. China model: 43.00 dB or less (stand-
	by)
Ozone	Max: 0.035 ppm or less
Power supply rating	imageRUNNER 2530/2525 (US):
	120 - 127 V AC, 50Hz/60Hz, 6.9 A
	imageRUNNER 2520 (US):
	120 - 127 V AC, 50Hz/60Hz, 6.2 A
	imageRUNNER 2530i/2530/2525i/2525/2520i/2520 (Except US):
Manian and a superior of the s	220 - 240 V AC, 50Hz/60Hz, 3.3 A
Maximum power consumption	120 - 127 V model: Approx. 1.473 kW 220 - 240 V model: Approx. 1.542 kW
	1220 - 240 V Model. Approx. 1.342 KW

Item	Specifications
Dimensions (W x D x H)	imageRUNNER 2530i/2530/2525i/2525:
	565mm x 680mm x 806mm (with the platen cover)
	565mm x 693mm x 896mm (with the feeder)
	imageRUNNER 2520i/2520:
	565mm × 680mm × 681mm (with the platen cover and single
	cassette)
	565mm × 693mm × 771mm (with the feeder and single
	cassette)
	565mm × 680mm × 806mm (with the platen cover and double
	cassette)
	565mm × 693mm × 896mm (with the feeder and double
	cassette)
Weight	Max (with the feeder, double cassette and 2 way unit):
	Approx. 77.5 kg
	Min with the platen cover and single cassette):
	Approx. 50.5 kg





Product name	Width	Depth	Height	Weight
	(mm)	(mm)	(mm)	Approx. (kg)
imageRUNNER 2530i/2530/2525i/2525	565	680	806	50.5
(with the platen cover)				* with the single cassette
imageRUNNER 2530i/2530/2525i/2525	565	693	896	77.5
(with the feeder)				* with the double cassette
				and 2 way unit
imageRUNNER 2520i/2520	565	680	681	50.5
(with the platen cover)				* with the single cassette
imageRUNNER 2520i/2520	565	693	771	77.5
(with the feeder)				* with the double cassette
,				and 2 way unit
DADF-AB1	565	544	126	7
Inner Finisher-B1	416	554	350	12.5
2 Way Unit-B1	444	550	236	2.5
Cassette Module-W1	565	680	97	12.8
CST. Feeding Unit-AE1	565	680	248	24
Inner 2Way Tray-G1	426	413	109	0.6
Card Reader-E1	88	100	32	0.295

T-6-2

Productivity (Print speed)

Size	Mode	Paper	Paper	imageRUNNER								
		type		type basis		2530i	2530i/2530 2525i/		/2525 252		0i/2520	
			weight	Cassette	Manual	Cassette	Manual	Cassette	Manual			
			(g/m2)		feed		feed		feed			
					pickup		pickup		pickup			
					tray		tray		tray			
A4	1-sided	Plain paper	64-90	30	30	25	25	20	20			
		Heavy	91-105	-	25	-	25	-	20			
		Paper	106-128	-	7	-	7	-	7			
	2-sided (with the 2	Plain paper	64-90	28	28	23	23	18	18			
	way unit)	Heavy	91-105	-	-	-	-	-	-			
	may arme,	Paper	106-128	-	-	-	-	-	-			
	2-sided (without	Plain paper	64-90	19	19	16	16	13	13			
	the 2 way	Heavy	91-105	-	-	-	-	-	-			
	unit)	Paper	106-128	-	ı	-	-	-	1			
A3	1-sided	Plain paper	64-90	15	15	15	15	15	15			
		Heavy	91-105	-	12	-	12	-	12			
		Paper	106-128	-	6	-	6	-	6			
	2-sided (with the 2	Plain paper	64-90	14	14	14	14	14	14			
	way unit)	Heavy	91-105	-	-	-	-	-	-			
	Livay unit)	Paper	106-128		-	-	-	_	-			
	2-sided	Plain	64-90	9	9	9	9	9	9			
	(without	paper										
	the 2 way	Heavy	91-105	-	-	-	-	-	-			
	unit)	Paper	106-128	-	-	-	-	-	-			

T-6-3



For free size paper, refer to the table below.

Туре	Feeding direction (mm)	Width direction (mm)
Free size	148 to 432	99 to 297

T-6-4

Pickup

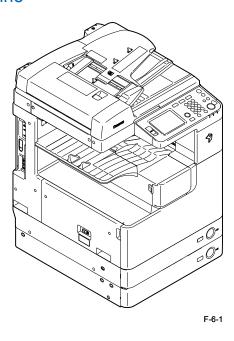
Usable paper types are shown.

Paper type	Size	Manual	Cassette	Cass	ette 2	Cassette	Cassette
(g/m2)		feed	1	with the	without	3	4
		pickup		envelope	the		
		tray		feeder	envelope		
					feeder		
- Plain (64 to 90)	A4, A4R, A3,						
- Color (64 to 90)	A5R, B4, B5,						
- Recycled (64 to	B5R, LTR,	Yes	Yes	No	Yes	Yes	Yes
90)	LTTR, LGL,	103	103	140	103	103	103
- Bond (75 to 90)	11" x 17",						
	STMTR						
- Heavy Paper	A4, A4R, A3,						
(91 to 128)"	A5R, B4, B5,						
	B5R, LTR,	Yes	No	No	No	No	No
	LTTR, LGL,	163	INO	140	INO	INO	NO
	11" x 17",						
	STMTR						
- Labels	A4, B4, LTR	Yes	No	No	No	No	No
- Transparencies		Yes	No	No	No	No	No
- 3-hole punch	LTR	Yes	Yes	Yes	Yes	Yes	Yes
- Envelopes	No.10						
	(COM10),						
	ISO-B5,	Yes	No	Yes	No	No	No
	Monarch,						
	ISO-C5, DL						
- Free size	99 mm x 297						
	mm to 148	Yes	No	No	No	No	No
	mm x 432	100	140	140	'10	140	'*0
	mm						

T-6-5

Product Lineup

Host machine



■ Host machine configuration

Host machine configuration
Reader+DADF(standard or optional)+Printer

T-6-6

■ Model type

	imageRUNNER 2530	imageRUNNER 2525	imageRUNNER 2520
Print Speed	30ppm	25ppm	20ppm
Positioning	Target machine: imageRUNNER 2025/2022/2018 Series		

T-6-7

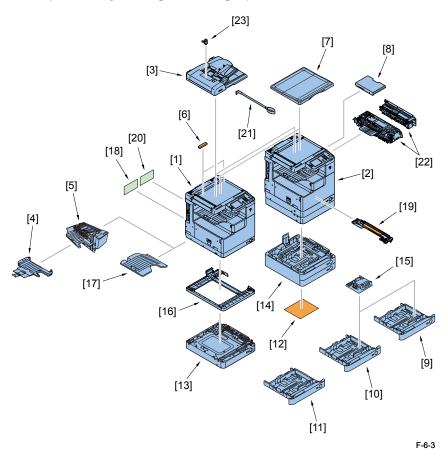
imageRUNNER 2530 / 2525 / 2520

Underlined (2-digit) numeric figures indicate print speed (ppm: print per minute).

F-6-2



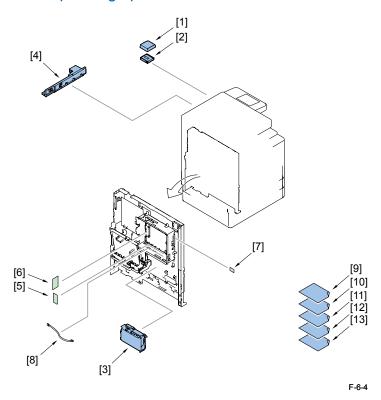
■ Pickup delivery / image reading options



No.	Product name	Remarks and condition
1	imageRUNNER 2530i/2530/2525i/2525/2520i/2520	
2	imageRUNNER 2530i/2530/2525i/2525	
3	DADF-AB1	
4	Inner Finisher Additional Tray-B1	
5	Inner Finisher-B1	Built-in finisher
		Power Supply Unit-U1 is required.
6	Reader Heater Unit-H1	Cst Heater Kit-J1 is required.
7	Platen Cover Type P	
8	Document Tray-J1	
9	FL Cassette-AJ1	
10	FL Cassette-AK1	
11	FL Cassette-AL1	
12	Cassette Heater Unit-37	Cst Heater Kit-J1 is required.
13	Cassette Module-W1	Cassette Spacer-A1 is required when installing to 250 Sheets Cassette Model.
14	CST. Feeding Unit-AE1	Cassette Spacer-A1 is required when installing to 250 Sheets Cassette Model.
15	Envelope Feeder Attachment-D1	
16	Cassette Spacer-A1	
17	Inner 2Way Tray-G1	For host machine delivery additional tray.
18	Cst Heater Kit-J1	
19	Drum Heater-C1	Cst Heater Kit-J1 is required.
20	Power Supply Unit-U1	
21	ADF Access Handle-A1	
22	2 Way Unit-B1	
23	Stamp Unit-B1	

T-6-8

■ Function expanding option



No.	Product name	Remarks and condition
1	Card Reader-E1	Card Reader Attachment-D3 is required.
2	Card Reader Attachment-D3	
3	Super G3 Fax Board-AG1	
4	USB Application 3-Port Interface Kit-A1	
5	Serial Interface Kit-J2	
6	System Upgrade RAM-C1	
7	System Upgrade SD Card-A1	
8	Copy Control Interface Cable-A1	
9	Barcode Printing Kit-B1	PCL Printer Kit-AF1 is required.
10	PCL Printer Kit-AF1	System Upgrade RAM-C1 is required.
11	PS Printer Kit-AF1	System Upgrade RAM-C1 is required.
12	Color Send Kit-Y1	System Upgrade RAM-C1 is required.
13	Color Send Searchable PDF Kit-C1	System Upgrade RAM-C1 is required.

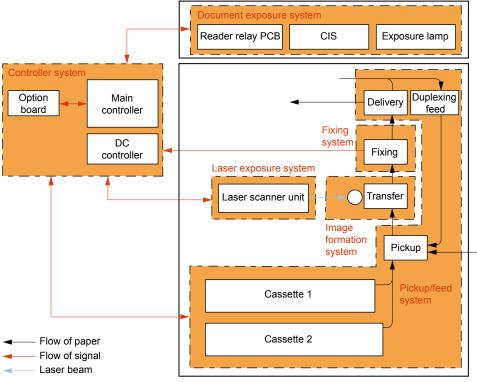
T-6-9

Basic Configuration



Functional Configuration

The machine may broadly be divided into the following functional system blocks; document exposure system block, controller system block, laser exposure system block, image formation system block, fixing system block and pickup/feed system block.

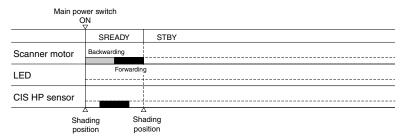


F-6-5

Basic sequence

Sequence at Power-On

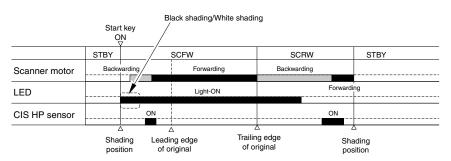
Reader



F-6-6

Print sequence

• Reader (Book mode, 1 original)



F-6-7



Version Upgrading

Upgrading Targets and Procedure

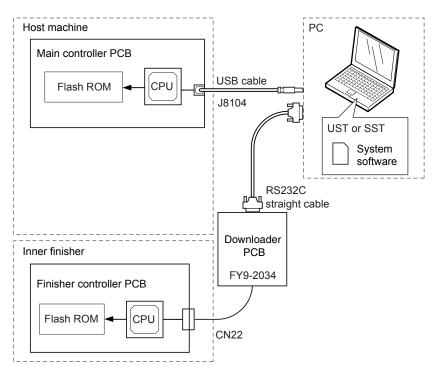
Upgrading Targets and Procedure



Outline

There are two methods to upgrade the system software.

- 1. Upgrading system software for host machine: Use the PC (UST).
- 2. Upgrading system software for inner finisher: Use the PC (SST) and downloader PCB



F-7-1

Host machine

Target PCB	Category	Target system software	File type	Remarks
Main controller PCB	iR2545/iR2535 iR2530/2525/2520	Boot Program Boot Program	BOOT vXXXX USTUPDATE_iR2545_35_ bootable lang WLaaXXXX USTUPDATE_iR2530_25_ 20_BOOT vXXXX	There are two types of main controllers. Note: When upgrading two types of firmware, Boot and Bootable lang, at the same time, upgrade Boot first.
controller PCB	iR2545/iR2535 iR2530/2525 1st cassette, 550-sheet type iR2530/2525/2520 1st cassette, 250-sheet type	DCON	XXX USTUPDATE_iR2545_35_	There are three types of DC controllers.

T-7-1

Inner finisher

Target PCB	Target system	Description	Remarks
	software	on SST	
Finisher	FIN_CON	IFN_B1	For the detailed procedure, refer to the service
controller PCB			manual for the finisher.

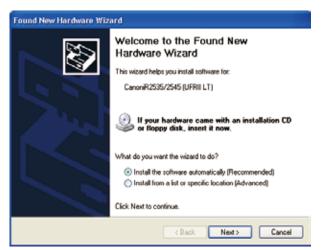
T-7-2

Procedure

MEMO:

The procedure for upgrading Boot is described below as a typical example. Use the same procedure for other firmware.

- 1) Turn ON the power switch of the PC and start up the UST.
- 2) When the power switch is turned ON, a Found New Hardware Wizard appears. Click [Cancel].



F-7-2

- 3) Enter the service mode. ($\langle x \rangle$ key > 2 Key > 8 Key > $\langle x \rangle$ key)
- 4) Select [DOWNLOAD] by pressing the arrow key, then press the [OK] key.

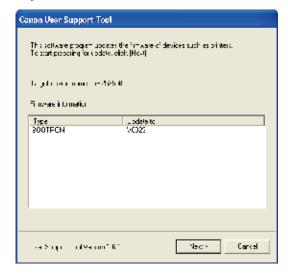
MEMO:

You can also enter the download mode from the following user mode:

> System Settings > Firmware Upgrade > Yes

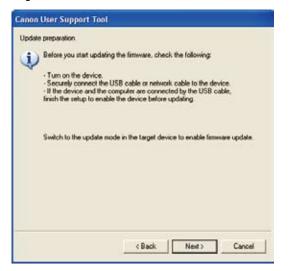
5) When "USB DOWNLOAD AVAILABLE" is displayed, start up the UST.

6) Click [Next] following the instruction shown on the screen.



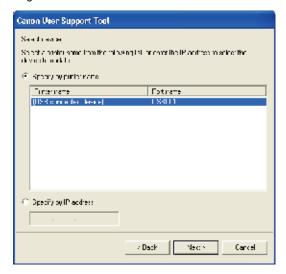
F-7-3

7) Click [Next] following the instruction shown on the screen.



F-7-4

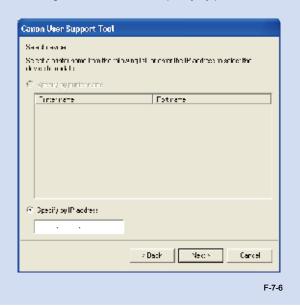
8) Click [Next] following the instruction shown on the screen.



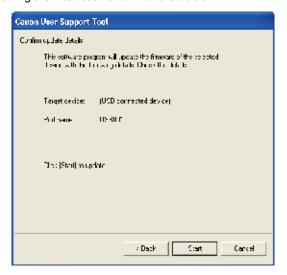
F-7-5

MEMO:

If firmware for a wrong model is selected, "Specify by printer name" is not displayed.



9) Click [Start] following the instruction shown on the screen.



F-7-7

10) Click [Yes] following the instruction shown on the screen.



F-7-

11) The following screen appears. "UPDATING FIRMWARE" is displayed on the control panel of this machine.



F-7-9

CAUTION:

Do Not Turn off the Power during Download/Write Operation in progress

Do not turn OFF the power while the system software is being downloaded or written. The machine may fail to start when the power is turned ON.

12) When upgrade is complete, the following screen appears. Turn OFF then ON the main power switch to complete the procedure.



F-7-10