

[11] TROUBLESHOOTING

[MAIN UNIT]

1. Outline

In case of a trouble in the machine, or when a consumable part has nearly reached or already reach the lifetime, the machine detects it, analyze it, and displays it on the display section and notifies the user and the serviceman by a voice message.

The user and the serviceman are bale to perform the proper countermeasures according to a voice message. In case of a trouble, the machine is stopped to restrict damage to a minimum in addition to a voice message.

2. Functions and purposes

- 1) Assures safety. (The machine is stopped when a trouble is detected.)
- 2) Restricts damage to a minimum. (The machine is stopped when a trouble is detected.)
- 3) By displaying the trouble content, the trouble position can be identified immediately and accurately. (An accurate repair work can be performed, improving the repair efficiency.)
- 4) By providing a preparatory warning when the lifetime of a consumable part is nearly reached, arrangement of the consumable part can be made in advance. (Stopping the machine by exhaustion of a consumable part is avoidable.)

3. Kinds of self diagnostic messages

The self diagnostic messages are classified as follows:

Class 1	User	Troubles and warning messages (paper jam, consumable part life expiration, etc.) which can be processed by the user.
	Service	Troubles and warning messages (motor trouble, maintenance, etc.) which can be processed only by a serviceman.
	Other	—
Class 2	Warning	Warning messages (consumable part life expiration, etc.) for the user, which are not directly related to any machine trouble.
	Trouble	Related to a machine trouble. The machine is stopped.
	Other	—

4. Self diagnostic operation

A. Self diagnostic operation and work flow

The machine always monitors its own status.

When the machine detects a trouble, it stops operations and displays a trouble message.

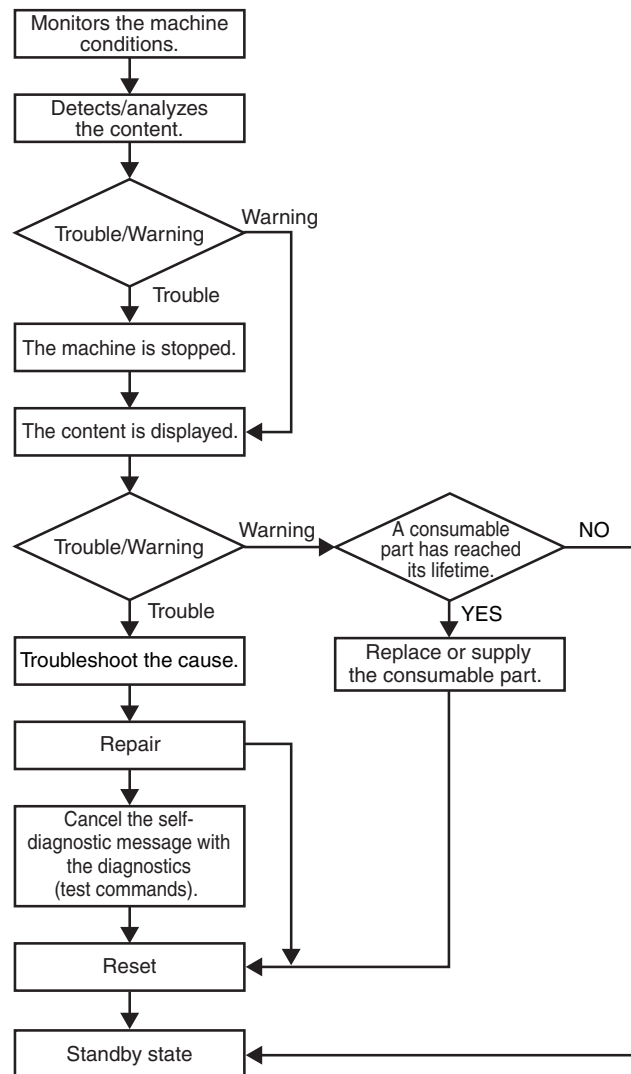
A warning message is provided mainly when a consumable part is nearly or completely exhausted.

When a warning message is provided, the machine may be stopped or may not be stopped depending on the message.

The trouble and warning messages are indicated with the LCD and lamps.

Some trouble messages may be automatically cleared after removing the trouble, and some must be cleared with the simulation.

Some warning messages of consumable parts are automatically cleared when the trouble is repaired. Some other warning messages must be cleared by a simulation.



5. List

Main code	Sub code	Content
A0	00	PCU PWB error
C2	10	Transfer charger trouble (Black)
E7	01	Image data memory trouble
	10	Shading trouble (Black correction)
	11	Shading trouble (White correction)
	20	LED controller initial trouble (Black)
	21	LED controller initial trouble (Cyan)
	22	LED controller initial trouble (Magenta)
	23	LED controller initial trouble (Yellow)
	24	LED controller output trouble (Black)
	25	LED controller output trouble (Cyan)
	26	LED controller output trouble (Magenta)
	27	LED controller output trouble (Yellow)
	28	LED control ASIC connection abnormality
	30	ICU PWB matching error
	40	Color correction data write abnormality
	41	Color correction data transfer abnormality
	80	ICU-SCN communication trouble (ICU detection)
	90	ICU-PCU communication trouble (ICU detection)
F1	00	Saddle finisher communication trouble (Machine detection)
	02	Saddle finisher transport motor trouble (Saddle finisher detection)
	03	Saddle finisher paddle motor trouble
	06	Saddle finisher slide motor trouble
	10	Saddle finisher staple motor trouble (Saddle finisher detection)
	11	Saddle finisher bundle process motor abnormality (Saddle finisher detection)
	15	Saddle finisher tray lift motor abnormality (Saddle finisher detection)
	19	Saddle finisher front alignment motor abnormality (Saddle finisher detection)
	20	Saddle finisher rear alignment motor abnormality (Saddle finisher detection)
	31	Saddle finisher fold sensor trouble
	32	Saddle finisher punch unit communication trouble
	33	Saddle finisher punch side registration motor trouble
	34	Saddle finisher punch motor trouble
	35	Saddle finisher punch side registration sensor trouble
	36	Saddle finisher punch registration sensor trouble
	37	Saddle finisher backup RAM trouble
	38	Saddle finisher punch backup RAM trouble
	39	Saddle finisher punch dust sensor trouble
	40	Saddle finisher punch power disconnection trouble
	83	Sorter push bar motor trouble
	89	Sorter bin shift motor trouble
91	Automatic adjustment trouble of the paper sensor in the sorter bin	

Main code	Sub code	Content	
F2	39	Process thermistor breakdown	
	40	Toner empty sensor abnormality (Black)	
	41	Toner empty sensor abnormality (Cyan)	
	42	Toner empty sensor abnormality (Magenta)	
	43	Toner empty sensor abnormality (Yellow)	
	44	Black image density sensor trouble (Transfer belt surface reflection ratio abnormality)	
	45	Color image density sensor trouble (Calibration plate surface reflection ratio abnormality)	
	58	Process humidity sensor breakdown	
	70	Developing unit improper cartridge detection (Black)	
	71	Developing unit improper cartridge detection (Cyan)	
	72	Developing unit improper cartridge detection (Magenta)	
	73	Developing unit improper cartridge detection (Yellow)	
	74	Developing unit CRUM trouble (Black)	
	75	Developing unit CRUM trouble (Cyan)	
	76	Developing unit CRUM trouble (Magenta)	
	77	Developing unit CRUM trouble (Yellow)	
	78	Trouble of image density sensor for registration (Transfer belt surface reflection ratio abnormality)	
	80	Half-tone process control 1st patch error (Black)	
	81	Half-tone process control 1st patch error (Cyan)	
	82	Half-tone process control 1st patch error (Magenta)	
	83	Half-tone process control 1st patch error (Yellow)	
	84	Half-tone process control 2nd patch error (Black)	
	85	Half-tone process control 2nd patch error (Cyan)	
	86	Half-tone process control 2nd patch error (Magenta)	
	87	Half-tone process control 2nd patch error (Yellow)	
	90	Half-tone process control limit error	
	F3	12	Cassette 1 lift up trouble
	F6	00	ICU-FAX communication trouble (ICU detection)
		01	FAX expansion flash memory abnormality (ICU detection)
		04	FAX MODEM operation abnormality
		20	FAX write protect release
		21	Improper combination of the TEL/LIU PWB and the FAX soft switch.
		97	The FAX-BOX PWB is not one for the AR-BC260. (FAX detection)
F7	01	Improper combination of the FAX-BOX destination data and the main unit destination data	
	01	FAX board EEPROM read/write error	
F9	00	ICU-PRT communication trouble (ICU detection)	
	01	PRT DRAM trouble	
	03	NIC port check error	
	20	HDD trouble (PRT controller detection)	
H2	00	Thermistor open (HL1)	
	01	Thermistor open (HL2)	
H3	00	Fusing section high temperature trouble (THS1)	
	01	Fusing section high temperature trouble (THS2)	
H4	00	Fusing section low temperature trouble (HL1)	
	01	Fusing section low temperature trouble (HL2)	
H5	01	Five continuous detections of POD1 not-reached jam	
L1	00	Mirror feed trouble	

Main code	Sub code	Content	
L3	00	Mirror return trouble	
L4	02	Paper feed motor lock trouble	
	06	Transfer belt lift motor trouble	
	07	Transfer belt motor trouble	
	11	Shift motor trouble	
L8	01	Full wave signal not provided	
	02	Full wave signal width abnormality	
	04	Main power switch abnormality detection	
PF	00	RIC copy inhibit signal reception	
U0	00	ICU-OPE communication trouble (ICU/OPE detection)	
U1	01	FAX battery abnormality	
	02	RTC read trouble	
U2	00	EEPROM read/write error (ICU detection)	
	11	EEPROM check sum error (ICU detection)	
	22	FAX backup SRAM memory check sum error	
	30	Production No. data discrepancy (ICU ↔ ICU)	
	80	EEPROM read/write error (SCN)	
	81	Adjustment value check sum error (SCN)	
	90	EEPROM read/write error (PCU)	
	91	Adjustment value check sum error (PCU)	
	U4	02	ADU alignment plate operation abnormality
	U6	00	Desk communication trouble
01		Desk tray 1 lift motor trouble	
02		Desk tray 2 lift motor trouble	
03		Desk tray 3 lift motor trouble	
09		LCC lift motor trouble	
10		Desk transport motor trouble	
20		LCC communication trouble	
21		LCC transport motor trouble	
22		LCC 24V power abnormality	
50		Desk incompatibility trouble	
51	LCC incompatibility trouble		
U7	00	RIC communication trouble	
UC	02	CPT-ASIC trouble (MFP PWB trouble)	

6. Details

Main code	Sub code	Title	PCU PWB error	
A0	00	Display	Lamp/Message	
	Phenomenon	Detail	Section	When the power is turned on, conformity of the PCU PWB and the PCU ROM is checked to be found that there is no conformity.
				PCU PWB
				PCU PWB trouble
	Case 1	Check & Remedy	Replace the PCU PWB.	
			Case 2	Check & Remedy
	Replace the PCU PWB.			

Main code	Sub code	Title	Transfer charger trouble (Black)	
C2	10	Display	Lamp/Message	
	Phenomenon	Detail	Section	The difference between the belt surface output and the K-color patch density output does not reach the specified level. (Judged when installing a new developing unit.)
				Transfer
				TC-K output abnormality
	Case 1	Check & Remedy	TC-K analog input/output abnormality. Replace the TC PWB.	
			Case 2	Check & Remedy
	Replace the MC PWB.			
	Case 3	Check & Remedy	Transfer unit trouble	
			Replace the transfer unit.	
	Case 4	Check & Remedy	PCU PWB trouble	
			Replace the PCU PWB.	
Case 5	Check & Remedy	Connector, harness trouble (PCU PWB, TC PWB, MC PWB, transfer unit)		
		Check contact. Replace the harness. Replace the PWB.		

Main code	Sub code	Title	Image data memory trouble	
E7	01	Display	Lamp/Message	
	Phenomenon	Detail	Section	The ICU image data memory (SDRAM) cannot be detected as 256MB or more. The required SDRAM capacity for the model is not provided.
				ICU PWB
				The SDRAM of ICU PWB is not installed. The SDRAM of ICU PWB is improperly installed.
	Case 1	Check & Remedy	Check installation of the SDRAM of ICU ASIC PWB.	
			Case 2	Check & Remedy
	Use SIM 22-10 to check the capacity of the SDRAM. Replace the SDRAM of ICU PWB.			
	Case 3	Check & Remedy	ICU PWB abnormality	
			Replace the ICU PWB.	

Main code	Sub code	Title	Shading trouble (Black correction)	
E7	10	Display	Lamp/Message	
		Phenomenon	Detail	CCD black reading level abnormality when the copy lamp is off.
			Section	CCD unit
		Case 1	Cause	Improper installation of the flat cable to the CCD unit.
			Check & Remedy	Check installation of the flat cable to the CCD unit.
		Case 2	Cause	CCD unit abnormality
			Check & Remedy	Check the CCD unit.
		Case 3	Cause	MFP PWB abnormality
			Check & Remedy	Check the MFP PWB.

Main code	Sub code	Title	Shading trouble (White correction)	
E7	11	Display	Lamp/Message	
		Phenomenon	Detail	CCD white reading level abnormality when the copy lamp is on.
			Section	CCD unit
		Case 1	Cause	Improper installation of the flat cable to the CCD unit.
			Check & Remedy	Check installation of the flat cable to the CCD unit.
		Case 2	Cause	Dirt on the mirror, the lens, or the reference white plate.
			Check & Remedy	Clean the mirror, the lens, or the reference white plate.
		Case 3	Cause	CCD unit abnormality
			Check & Remedy	Check the CCD unit.
		Case 4	Cause	MFP PWB abnormality
			Check & Remedy	Check the MFP PWB.

Main code	Sub code	Title	LED controller initial trouble (Black)	
E7	20	Display	Lamp/Message	
		Phenomenon	Detail	The initial process of the LED controller cannot be completed properly.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller initial trouble (Cyan)	
E7	21	Display	Lamp/Message	
		Phenomenon	Detail	The initial process of the LED controller cannot be completed properly.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller initial trouble (Magenta)	
E7	22	Display	Lamp/Message	
		Phenomenon	Detail	The initial process of the LED controller cannot be completed properly.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller initial trouble (Yellow)	
E7	23	Display	Lamp/Message	
		Phenomenon	Detail	The initial process of the LED controller cannot be completed properly.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller output trouble (Black)	
E7	24	Display	Lamp/Message	
		Phenomenon	Detail	When printing, the print end signal for each page is not properly provided.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller output trouble (Yellow)	
E7	27	Display	Lamp/Message	
		Phenomenon	Detail	When printing, the print end signal for each page is not properly provided.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED controller output trouble (Cyan)	
E7	25	Display	Lamp/Message	
		Phenomenon	Detail	When printing, the print end signal for each page is not properly provided.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	LED control ASIC connection abnormality	
E7	28	Display	Lamp/Message	
		Phenomenon	Detail	Access error between the PCU PWB CPU and the LED control ASIC
			Section	ICU/PCU PWB
		Case 1	Cause	Disconnection of the ICU/PCU PWB communication connector
			Check & Remedy	Check connection of the ICU/PCU PWB communication connector
		Case 2	Cause	ICU/PCU PWB communication harness trouble.
			Check & Remedy	Check the ICU/PCU PWB communication harness.
		Case 3	Cause	ICU PWB/PCU PWB trouble
			Check & Remedy	Check grounding of the machine. Replace the ICU PWB or the PCU PWB.

Main code	Sub code	Title	LED controller output trouble (Magenta)	
E7	26	Display	Lamp/Message	
		Phenomenon	Detail	When printing, the print end signal for each page is not properly provided.
			Section	LED/ICU PWB
		Case 1	Cause	Disconnection of the LED head connector.
			Check & Remedy	Check connection of the LED head connector.
		Case 2	Cause	Disconnection of the harness inside the LED head.
			Check & Remedy	Replace the LED head unit.
		Case 3	Cause	ICU PWB abnormality
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title	ICU PWB matching error	
E7	30	Display	Lamp/Message	
		Phenomenon	Detail	Check matching between the machine and the ICU PWB (by the identification port) when the power is turned on. If matching is improper, it is judged as a trouble.
			Section	ICU PWB
		Case 1	Cause	An ICU PWB for the AR-C170M is installed to the AR-BC260.
			Check & Remedy	Replace the ICU PWB.
		Case 2	Cause	ICU PWB abnormality (When the identification port is abnormal)
			Check & Remedy	Replace the ICU PWB.

Main code	Sub code	Title		Color correction data write abnormality
E7	40	Display		Lamp/Message
		Phenomenon	Detail	Data write error to the Nand-Flash for holding color correction data
			Section	MFP PWB
		Case 1	Cause	Color correction data rewrite error
			Check & Remedy	Perform rewriting of color correction data again.
		Case 2	Cause	MFP PWB trouble
			Check & Remedy	Replace the MFP PWB.

Main code	Sub code	Title		Color correction data transfer abnormality
E7	41	Display		Lamp/Message
		Phenomenon	Detail	Data transfer error from the Nand-Flash for holding color correction data to the FC-RAM for holding color correction image process
			Section	MFP PWB
		Case 1	Cause	MFP PWB trouble
			Check & Remedy	Replace the MFP PWB.

Main code	Sub code	Title		ICU-SCN communication trouble (ICU detection)
E7	80	Display		Lamp/Message
		Phenomenon	Detail	Communication establishment error, framing, parity, protocol error
			Section	ICU/MFP PWB
		Case 1	Cause	Disconnection of the ICU/MFP PWB scanner communication connector. Defective harness of the ICU PWB and the MFP PWB.
			Check & Remedy	Check connection of the ICU PWB and the MFP PWB. Check the harness.
		Case 2	Cause	ICU/MFP PWB trouble
			Check & Remedy	Check grounding of the machine. Replace the ICU PWB or the MFP PWB.

Main code	Sub code	Title		ICU-PCU communication trouble (ICU detection)
E7	90	Display		Lamp/Message
		Phenomenon	Detail	Communication establishment error, framing, parity, protocol error
			Section	ICU/PCU PWB
		Case 1	Cause	Disconnection of the ICU/PCU PWB scanner communication connector. Defective harness of the ICU PWB and the PCU PWB.
			Check & Remedy	Check connection of the ICU PWB and the PCU PWB. Check the harness.
		Case 2	Cause	ICU/PCU PWB trouble
			Check & Remedy	Check grounding of the machine. Replace the ICU PWB or the PCU PWB.

Main code	Sub code	Title		Saddle finisher communication trouble (Machine detection)
F1	00	Display		Lamp/Message
		Phenomenon	Detail	Communication line test error when turning on the power or after canceling the exclusive simulation. Communication error with the saddle finisher.
			Section	PCU PWB and saddle finisher
		Case 1	Cause	Disconnection of the PCU-saddle finisher connector, defective contact or disconnection of the harness.
			Check & Remedy	Check the connector and the harness of the communication line.
		Case 2	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Replace the saddle finisher control PWB.
		Case 3	Cause	Control PWB (PCU) trouble
			Check & Remedy	Replace the PCU PWB.
		Case 4	Cause	Malfunctions by noises
			Check & Remedy	—
		Common	Cancel method	Can be canceled by turning OFF/ON the power.

Main code	Sub code	Title		Saddle finisher transport motor trouble (Saddle finisher detection)	
F1	02	Display	Lamp/Message		
		Phenomenon	Detail	Transport motor drive trouble	
			Section	Transport	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the transport motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher staple motor trouble (Saddle finisher detection)	
F1	10	Display	Lamp/Message		
		Phenomenon	Detail	Stapling operation trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the staple motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher paddle motor trouble	
F1	03	Display	Lamp/Message		
		Phenomenon	Detail	Paddle motor operation trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher bundle process motor abnormality (Saddle finisher detection)	
F1	11	Display	Lamp/Message		
		Phenomenon	Detail	Bundle process motor trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the bundle process motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher slide motor trouble	
F1	06	Display	Lamp/Message		
		Phenomenon	Detail	Slide motor operation trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher tray lift motor abnormality (Saddle finisher detection)	
F1	15	Display	Lamp/Message		
		Phenomenon	Detail	Lift motor trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the tray lift motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title	Saddle finisher front alignment motor abnormality (Saddle finisher detection)	
F1	19	Display	Lamp/Message	
		Phenomenon	Detail	Front alignment motor trouble
			Section	Saddle finisher
		Case 1	Cause	Motor lock
			Check & Remedy	Use SIM 3-3 to check the front alignment motor operation.
		Case 2	Cause	Motor RPM abnormality
			Check & Remedy	Same as Case 1.
		Case 3	Cause	Over current to the motor
			Check & Remedy	Same as Case 1.
		Case 4	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Same as Case 1.

Main code	Sub code	Title	Saddle finisher rear alignment motor abnormality (Saddle finisher detection)	
F1	20	Display	Lamp/Message	
		Phenomenon	Detail	Rear alignment motor trouble
			Section	Saddle finisher
		Case 1	Cause	Motor lock
			Check & Remedy	Use SIM 3-3 to check the rear alignment motor operation.
		Case 2	Cause	Motor RPM abnormality
			Check & Remedy	Same as Case 1.
		Case 3	Cause	Over current to the motor
			Check & Remedy	Same as Case 1.
		Case 4	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Same as Case 1.

Main code	Sub code	Title	Saddle finisher fold sensor trouble	
F1	31	Display	Lamp/Message	
		Phenomenon	Detail	Sensor input value abnormality
			Section	Saddle finisher
		Case 1	Cause	Sensor breakage
			Check & Remedy	Use SIM 3-2 to check the sensor operation.
		Case 2	Cause	Harness disconnection
			Check & Remedy	Same as case 1.
		Case 3	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Same as Case 1.

Main code	Sub code	Title	Saddle finisher punch unit communication trouble	
F1	32	Display	Lamp/Message	
		Phenomenon	Detail	Communication error between the saddle finisher and the punch unit
			Section	Saddle finisher
		Case 1	Cause	Improper connection or disconnection of the connector and the harness of the saddle finisher and the punch unit.
			Check & Remedy	Check the connector and the harness of the communication line.
		Case 2	Cause	Control PWB (PCU) trouble
			Check & Remedy	Replace the PCU PWB.
		Case 3	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Replace the saddle finisher control PWB.
		Case 4	Cause	Malfunction by noises
			Check & Remedy	—
		Common	Cancel method	Can be canceled by turning OFF/ON the power.

Main code	Sub code	Title	Saddle finisher punch side registration motor trouble	
F1	33	Display	Lamp/Message	
		Phenomenon	Detail	Punch side registration motor operation trouble
			Section	Saddle finisher
		Case 1	Cause	Motor lock
			Check & Remedy	Use SIM 3-3 to check the punch side registration motor operation.
		Case 2	Cause	Motor RPM abnormality
			Check & Remedy	Same as Case 1.
		Case 3	Cause	Over current to the motor
			Check & Remedy	Same as Case 1.
		Case 4	Cause	Saddle finisher control PWB trouble
			Check & Remedy	Same as Case 1.

Main code	Sub code	Title		Saddle finisher punch motor trouble	
F1	34	Display	Lamp/Message		
		Phenomenon	Detail	Punch motor operation trouble	
			Section	Saddle finisher	
		Case 1	Cause	Motor lock	
			Check & Remedy	Use SIM 3-3 to check the punch motor operation.	
		Case 2	Cause	Motor RPM abnormality	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Over current to the motor	
			Check & Remedy	Same as Case 1.	
		Case 4	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher punch side registration sensor trouble	
F1	35	Display	Lamp/Message		
		Phenomenon	Detail	Sensor input value abnormality	
			Section	Saddle finisher	
		Case 1	Cause	Sensor breakage	
			Check & Remedy	Use SIM 3-2 to check the sensor operation.	
		Case 2	Cause	Harness disconnection	
			Check & Remedy	Same as case 1.	
		Case 3	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher punch registration sensor trouble	
F1	36	Display	Lamp/Message		
		Phenomenon	Detail	Sensor input value abnormality	
			Section	Saddle finisher	
		Case 1	Cause	Sensor breakage	
			Check & Remedy	Use SIM 3-2 to check the sensor operation.	
		Case 2	Cause	Harness disconnection	
			Check & Remedy	Same as case 1.	
		Case 3	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher backup RAM trouble	
F1	37	Display	Lamp/Message		
		Phenomenon	Detail	Writing to the backup RAM is started but not completed in 250msec. When writing to the backup RAM, if the write data do not coincide with the read data, writing is performed again. However, the write data still do not coincide with the read data.	
			Section	Saddle finisher	
		Case 1	Cause	Saddle finisher control PWB, backup RAM trouble	
			Check & Remedy	Replace the saddle finisher control PWB.	
		Case 2	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Malfunction caused by noises	
			Check & Remedy	Turn off the machine power, and turn it on again.	

Main code	Sub code	Title		Saddle finisher punch backup RAM trouble	
F1	38	Display	Lamp/Message		
		Phenomenon	Detail	Abnormal transformation of punch unit backup RAM contents	
			Section	Saddle finisher	
		Case 1	Cause	Punch control PWB trouble	
			Check & Remedy	Replace the punch control PWB.	
		Case 2	Cause	Malfunction caused by noises	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher punch dust sensor trouble	
F1	39	Display	Lamp/Message		
		Phenomenon	Detail	Punch dust sensor detection trouble	
			Section	Saddle finisher	
		Case 1	Cause	Sensor breakage	
			Check & Remedy	Use SIM 3-2 to check the sensor operation.	
		Case 2	Cause	Harness disconnection	
			Check & Remedy	Same as Case 1.	
		Case 3	Cause	Saddle finisher control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Saddle finisher punch power disconnection trouble	
F1	40	Display		Lamp/Message	
		Phenomenon	Detail	The power disconnection of the punch unit is detected.	
			Section	Saddle finisher	
		Case 1	Cause	Harness disconnection	
			Check & Remedy	Use SIM 3-3 to check the punching operation.	
		Case 2	Cause	Punch control PWB trouble	
			Check & Remedy	Same as Case 1.	

Main code	Sub code	Title		Sorter push bar motor trouble	
F1	83	Display		Lamp/Message	
		Phenomenon	Detail	The push bar home position signal is not acknowledged within 2sec from the start of initializing. The home position sensor remains ON after 20 pulses of shift operation of the push bar from its home position.	
			Section	Sorter	
		Common	Check	Execute SIM 3-2 and 3-3 to check the push bar drive motor operations and the sensor operations.	
		Case 1	Cause	Push bar motor trouble	
			Check & Remedy	Replace the push bar motor.	
		Case 2	Cause	Push bar home position sensor trouble	
			Check & Remedy	Replace the push bar home position sensor.	
		Case 3	Cause	The circuit breaker (CB1) is operating.	
			Check & Remedy	Remove the cause for operation of the circuit breaker, and reset the circuit breaker.	
		Case 4	Cause	There is a mechanical bur in the push bar shifting path.	
			Check & Remedy	Repair the mechanism to remove the bur.	
		Case 5	Cause	Sorter controller PWB trouble	
			Check & Remedy	Replace the sorter controller PWB, and perform the bin paper sensor sensitivity adjustment and the guide bar motor oscillating range adjustment.	

Main code	Sub code	Title		Sorter bin shift motor trouble	
F1	89	Display		Lamp/Message	
		Phenomenon	Detail	The lead cam position sensor signal is not acknowledged within 3.4sec (2.4sec) from the bin shift motor ON signal. The operation is not completed within 30sec from the start of bin's shift operation to its home position. The rotation sensor output signal is not detected within 0.25sec from output of the bin shift motor ON signal.	
			Section	Sorter	
		Common	Check	Execute SIM 3-2 and 3-3 to check the guide bar drive motor operations and the sensor operations. (Case 1, 2) Check the voltage (about 24V) between J8-1 and J8-2 on the bin shift motor driver PWB at the timing of the bin shift motor. (Case 3 to 5)	
		Case 1	Cause	Cable trouble between the bin shift motor and the sorter controller PWB.	
			Check & Remedy	Check and connect the cable properly between the bin shift motor and the sorter controller PWB.	
		Case 2	Cause	The circuit breaker (CB1) is operating.	
			Check & Remedy	Remove the cause for operation of the circuit breaker, and reset the circuit breaker.	
		Case 3	Cause	Wiring trouble of the bin shift motor (M1).	
			Check & Remedy	Correct wiring of the bin shift motor.	
		Case 4	Cause	Bin shift motor trouble	
			Check & Remedy	Replace the bin shift motor.	
		Case 5	Cause	Sorter controller PWB trouble	
			Check & Remedy	Replace the sorter controller PWB, and perform the bin paper sensor sensitivity adjustment and the guide bar motor oscillating range adjustment.	
		Case 6	Cause	Bin shift mechanism trouble	
			Check & Remedy	Repair the mechanism.	

Main code	Sub code	Title		Automatic adjustment trouble of the paper sensor in the sorter bin
F1	91	Display	Lamp/Message	
		Phenomenon	Detail	Sensor output abnormality when adjusting the sensor detection level.
			Section	Sorter
		Common	Check	Execute SIM 3-2 to check the sensor output.
		Case 1	Cause	Trouble of the paper sensor in the bin.
			Check & Remedy	Replace the paper sensor in the bin.
		Case 2	Cause	Sorter controller PWB trouble
			Check & Remedy	Replace the sorter controller PWB, and perform the sensor sensitivity adjustment in the bin and the guide bar motor oscillation range adjustment.

Main code	Sub code	Title		Process thermistor breakdown
F2	39	Display	Lamp/Message	
		Phenomenon	Detail	Process thermistor open
			Section	Drum cartridge
		Case 1	Cause	Process thermistor trouble
			Check & Remedy	Replace the process thermistor.
		Case 2	Cause	Disconnection of the process thermistor harness.
			Check & Remedy	Check connection of the connector and the harness of the process thermistor.
		Case 3	Cause	PCU PWB trouble
			Check & Remedy	Replace the PCU PWB.

Main code	Sub code	Title		Toner empty sensor abnormality (Black)
F2	40	Display	Lamp/Message	
		Phenomenon	Detail	Toner empty sensor output abnormality
			Section	Cartridge
		Case 1	Cause	Connector harness trouble, connector disconnection
			Check & Remedy	<ol style="list-style-type: none"> 1. Check connection of the toner empty sensor. → Connect it properly. 2. Check connection of the connector harness to the PCU PWB. → Connect it properly. 3. Check connection of the cartridge. → Connect it properly. 4. Check for disconnection of the harness. → Replace the harness.
		Case 2	Cause	Cartridge trouble
			Check & Remedy	Replace the cartridge.

Main code	Sub code	Title		Toner empty sensor abnormality (Cyan)
F2	41	Display	Lamp/Message	
		Phenomenon	Detail	Toner empty sensor output abnormality
			Section	Cartridge
		Case 1	Cause	Connector harness trouble, connector disconnection
			Check & Remedy	<ol style="list-style-type: none"> 1. Check connection of the toner empty sensor. → Connect it properly. 2. Check connection of the connector harness to the PCU PWB. → Connect it properly. 3. Check connection of the cartridge. → Connect it properly. 4. Check for disconnection of the harness. → Replace the harness.
		Case 2	Cause	Cartridge trouble
			Check & Remedy	Replace the cartridge.

Main code	Sub code	Title		Toner empty sensor abnormality (Magenta)
F2	42	Display	Lamp/Message	
		Phenomenon	Detail	Toner empty sensor output abnormality
			Section	Cartridge
		Case 1	Cause	Connector harness trouble, connector disconnection
			Check & Remedy	<ol style="list-style-type: none"> 1. Check connection of the toner empty sensor. → Connect it properly. 2. Check connection of the connector harness to the PCU PWB. → Connect it properly. 3. Check connection of the cartridge. → Connect it properly. 4. Check for disconnection of the harness. → Replace the harness.
		Case 2	Cause	Cartridge trouble
			Check & Remedy	Replace the cartridge.

Main code	Sub code	Title		Toner empty sensor abnormality (Yellow)
F2	43	Display		Lamp/Message
		Phenomenon	Detail	Toner empty sensor output abnormality
			Section	Cartridge
		Case 1	Cause	Connector harness trouble, connector disconnection
			Check & Remedy	1. Check connection of the toner empty sensor. → Connect it properly. 2. Check connection of the connector harness to the PCU PWB. → Connect it properly. 3. Check connection of the cartridge. → Connect it properly. 4. Check for disconnection of the harness. → Replace the harness.
		Case 2	Cause	Cartridge trouble
			Check & Remedy	Replace the cartridge.

Main code	Sub code	Title		Black image density sensor trouble (Transfer belt surface reflection ratio abnormality)
F2	44	Display		Lamp/Message
		Phenomenon	Detail	Before starting process control, the transfer belt surface is scanned with the image density sensor to adjust the sensor gain so that the output becomes a fixed value. However, when the sensor gain is changed, the output is not within the specified range.
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in SIM 44-2: 1. Dirt/defect of the image density sensor 2. Disconnection of the harness between the PCU PWB and the image density sensor 3. Calibration plate solenoid operation trouble
			Check & Remedy	1. Clean/replace the image density sensor. 2. Connect/replace the harness between the PCU PWB and the image density sensor. 3. Replace the calibration plate solenoid.
		Case 2	Cause	When SIM 44-2 is completed: 1. Insufficient cleaning of the transfer belt.
			Check & Remedy	1. Check the transfer belt surface.

Main code	Sub code	Title		Color image density sensor trouble (Calibration plate surface reflection ratio abnormality)
F2	45	Display		Lamp/Message
		Phenomenon	Detail	Before starting process control, the calibration plate surface is scanned with the image density sensor to adjust the sensor gain so that the output becomes a fixed value. However, when the sensor gain is changed, the output is not within the specified range.
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in SIM 44-2: 1. Dirt/defect of the image density sensor 2. Disconnection of the harness between the PCU PWB and the image density sensor
			Check & Remedy	1. Clean/replace the image density sensor. 2. Connect/replace the harness between the PCU PWB and the image density sensor.
		Case 2	Cause	When SIM 44-2 is completed: 1. Dirt on the calibration plate, calibration plate solenoid operation trouble
			Check & Remedy	1. Clean the calibration plate. Replace the calibration plate solenoid.

Main code	Sub code	Title		Process humidity sensor breakdown
F2	58	Display		Lamp/Message
		Phenomenon	Detail	Process humidity sensor open
			Section	Process
		Case 1	Cause	Process humidity sensor harness disconnection
			Check & Remedy	Check connection of the connector and the harness of the process humidity sensor.
		Case 2	Cause	Process humidity sensor trouble
			Check & Remedy	Replace the process humidity sensor.
		Case 3	Cause	PCU PWB trouble
			Check & Remedy	Replace the PCU PWB.

Main code	Sub code	Title		Developing unit improper cartridge detection (Black)	
F2	70	Display		Lamp/Message	
		Phenomenon	Detail	When detecting the normal CRUM of the cartridge, improper data are detected in the CRUM contents.	
			Section	Developing	
		Case 1	Cause	Insertion of an improper cartridge. Developing unit trouble	
			Check & Remedy	Replace the developing unit.	

Main code	Sub code	Title		Developing unit improper cartridge detection (Cyan)	
F2	71	Display		Lamp/Message	
		Phenomenon	Detail	When detecting the normal CRUM of the cartridge, improper data are detected in the CRUM contents.	
			Section	Developing	
		Case 1	Cause	Insertion of an improper cartridge. Developing unit trouble	
			Check & Remedy	Replace the developing unit.	

Main code	Sub code	Title		Developing unit improper cartridge detection (Magenta)	
F2	72	Display		Lamp/Message	
		Phenomenon	Detail	When detecting the normal CRUM of the cartridge, improper data are detected in the CRUM contents.	
			Section	Developing	
		Case 1	Cause	Insertion of an improper cartridge. Developing unit trouble	
			Check & Remedy	Replace the developing unit.	

Main code	Sub code	Title		Developing unit improper cartridge detection (Yellow)	
F2	73	Display		Lamp/Message	
		Phenomenon	Detail	When detecting the normal CRUM of the cartridge, improper data are detected in the CRUM contents.	
			Section	Developing	
		Case 1	Cause	Insertion of an improper cartridge. Developing unit trouble	
			Check & Remedy	Replace the developing unit.	

Main code	Sub code	Title		Developing unit CRUM trouble (Black)	
F2	74	Display		Lamp/Message	
		Phenomenon	Detail	CRUM read/write error	
			Section	Developing	
		Case 1	Cause	Improper connection or disconnection of the connector and the harness between the PCU and the CRUM.	
			Check & Remedy	Check the connector and the harness between the PCU and the CRUM.	
		Case 2	Cause	Developing unit trouble	
			Check & Remedy	Replace the developing unit.	
		Case 3	Cause	Control PWB (PCU) trouble	
			Check & Remedy	Replace the PCU PWB.	

Main code	Sub code	Title		Developing unit CRUM trouble (Cyan)	
F2	75	Display		Lamp/Message	
		Phenomenon	Detail	CRUM read/write error	
			Section	Developing	
		Case 1	Cause	Improper connection or disconnection of the connector and the harness between the PCU and the CRUM.	
			Check & Remedy	Check the connector and the harness between the PCU and the CRUM.	
		Case 2	Cause	Developing unit trouble	
			Check & Remedy	Replace the developing unit.	
		Case 3	Cause	Control PWB (PCU) trouble	
			Check & Remedy	Replace the PCU PWB.	

Main code	Sub code	Title		Developing unit CRUM trouble (Magenta)	
F2	76	Display		Lamp/Message	
		Phenomenon	Detail	CRUM read/write error	
			Section	Developing	
		Case 1	Cause	Improper connection or disconnection of the connector and the harness between the PCU and the CRUM.	
			Check & Remedy	Check the connector and the harness between the PCU and the CRUM.	
		Case 2	Cause	Developing unit trouble	
			Check & Remedy	Replace the developing unit.	
		Case 3	Cause	Control PWB (PCU) trouble	
			Check & Remedy	Replace the PCU PWB.	

Main code	Sub code	Title	Developing unit CRUM trouble (Yellow)	
F2	77	Display	Lamp/Message	
		Phenomenon	Detail	CRUM read/write error
			Section	Developing
		Case 1	Cause	Improper connection or disconnection of the connector and the harness between the PCU and the CRUM.
			Check & Remedy	Check the connector and the harness between the PCU and the CRUM.
		Case 2	Cause	Developing unit trouble
			Check & Remedy	Replace the developing unit.
		Case 3	Cause	Control PWB (PCU) trouble
			Check & Remedy	Replace the PCU PWB.

Main code	Sub code	Title	Trouble of image density sensor for registration (Transfer belt surface reflection ratio abnormality)	
F2	78	Display	Lamp/Message	
		Phenomenon	Detail	Before starting registration, the transfer belt surface is scanned with the image density sensor to adjust the sensor gain so that the output becomes a fixed value. However, when the sensor gain is changed, the value is not within the specified range.
			Section	—
		Case 1	Cause	Image density sensor trouble, disconnection of the harness between the PCU PWB and the image density sensor, dirt on the image density sensor.
			Check & Remedy	Check the sensor and the harness.
		Case 2	Cause	Calibration plate solenoid operation trouble
			Check & Remedy	Check the calibration plate solenoid operation.
		Case 3	Cause	Insufficient cleaning of the transfer belt.
			Check & Remedy	Check the transfer belt surface.

Main code	Sub code	Title	Half-tone process control 1st patch error (Black)	
F2	80	Display	Lamp/Message	
		Phenomenon	Detail	1st step of execution of half-tone process control. The low-density rising point or the high-density rising point cannot be calculated from the linear approximation formula of the ratio of the sensor output for the print gradation value obtained from the patch print result. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 1st patch error (Cyan)	
F2	81	Display	Lamp/Message	
		Phenomenon	Detail	1st step of execution of half-tone process control. The low-density rising point or the high-density rising point cannot be calculated from the linear approximation formula of the ratio of the sensor output for the print gradation value obtained from the patch print result. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.

Main code	Sub code	Title	Half-tone process control 1st patch error (Cyan)	
F2	81	Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 1st patch error (Magenta)	
F2	82	Display	Lamp/Message	
		Phenomenon	Detail	1st step of execution of half-tone process control. The low-density rising point or the high-density rising point cannot be calculated from the linear approximation formula of the ratio of the sensor output for the print gradation value obtained from the patch print result. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.

Main code	Sub code	Title	Half-tone process control 1st patch error (Magenta)	
F2	82	Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 1st patch error (Yellow)	
F2	83	Display	Lamp/Message	
		Phenomenon	Detail	1st step of execution of half-tone process control. The low-density rising point or the high-density rising point cannot be calculated from the linear approximation formula of the ratio of the sensor output for the print gradation value obtained from the patch print result. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 2nd patch error (Black)	
F2	84	Display	Lamp/Message	
		Phenomenon	Detail	2nd step of execution of half-tone process control. When connecting the approximation formula (the relationship of sensor output ratios for the print gradation values) in the low-density section and that in the high-density section obtained from the patch print result, DUTY1 for 20% of output ratio in the low-density section is greater than DUTY2 for 25% of output ratio in the high-density section. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 2nd patch error (Cyan)	
F2	85	Display	Lamp/Message	
		Phenomenon	Detail	2nd step of execution of half-tone process control. When connecting the approximation formula (the relationship of sensor output ratios for the print gradation values) in the low-density section and that in the high-density section obtained from the patch print result, DUTY1 for 20% of output ratio in the low-density section is greater than DUTY2 for 25% of output ratio in the high-density section. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble.
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 2nd patch error (Magenta)	
F2	86	Display	Lamp/Message	
		Phenomenon	Detail	2nd step of execution of half-tone process control. When connecting the approximation formula (the relationship of sensor output ratios for the print gradation values) in the low-density section and that in the high-density section obtained from the patch print result, DUTY1 for 20% of output ratio in the low-density section is greater than DUTY2 for 25% of output ratio in the high-density section. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble.
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title	Half-tone process control 2nd patch error (Yellow)	
F2	87	Display	Lamp/Message	
		Phenomenon	Detail	2nd step of execution of half-tone process control. When connecting the approximation formula (the relationship of sensor output ratios for the print gradation values) in the low-density section and that in the high-density section obtained from the patch print result, DUTY1 for 20% of output ratio in the low-density section is greater than DUTY2 for 25% of output ratio in the high-density section. <The trouble is saved in the trouble history, but F2 trouble is not displayed. The operation is made with the previous correction value.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
		Case 1	Cause	When "Error" occurs in the gain adjustment of SIM 44-2: 1. Disconnection of the harness between the PCU PWB and the image density sensor. 2. Image density sensor dirt/trouble.
			Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
		Case 2	Cause	When SIM 44-2 gain adjustment is completed: Insufficient cleaning of the transfer belt, calibration plate solenoid operation trouble
			Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title		
F2	90	Display	Lamp/Message	
		Phenomenon	Detail	The difference between the correction value after execution of half-tone process control and the previous correction value exceeds the specified max. value of each color. <The error is recorded in the trouble history, but F2 trouble is not indicated on the display and the previous correction value is remained.>
			Section	—
		Common	Check	Use SIM 44-2 to adjust the process control sensor gain.
			Case 1	Cause
		Case 1	Check & Remedy	1. Check connection of the harness between the PCU PWB and the image density sensor. 2. Clean/replace the image density sensor.
			Case 2	Cause
		Case 2	Check & Remedy	Check the drum surface and the belt surface.

Main code	Sub code	Title		
F3	12	Display	Lamp/Message	
		Phenomenon	Detail	LUD1 does not turn on within the specified time.
			Section	—
		Case 1	Cause	LUD1 sensor trouble, disconnection of harness among the PCU PWB, the lift-up unit, and the paper feed unit.
			Check & Remedy	Check LUD1, its harness, and the connector.
		Case 2	Cause	Cassette 1 lift-up motor trouble
			Check & Remedy	Check the lift-up unit.

Main code	Sub code	Title		
F6	00	Display	Lamp/Message	
		Phenomenon	Detail	Communication establishment error, framing, parity, protocol error
			Section	FAX
		Case 1	Cause	Slave unit PWB connector connection trouble. Slave unit PWB-ICU PWB harness trouble
			Check & Remedy	Check connection between the slave unit PWB and the ICU PWB, and check the harness.
		Case 2	Cause	Broken pin of the mother board connector of the slave unit PWB
			Check & Remedy	Check the connector of the slave unit PWB.
		Case 3	Cause	Slave unit ROM trouble/ No ROM/ Improper insertion of ROM/ ROM pin breakage
			Check & Remedy	Check grounding of the main unit. Check the ROM of the slave unit PWB.

Main code	Sub code	Title		
F6	01	Display	Lamp/Message	
		Phenomenon	Detail	An expansion flash memory with SRAM backup data in it is installed.
			Section	FAX
		Case 1	Cause	SRAM backup data are detected in the expansion flash memory. The simulation function (SIM 66-19) is provided to save SRAM backup data into an expansion flash memory. This trouble occurs when an expansion flash memory to which SRAM backup data are saved with the above function is installed.
			Check & Remedy	Use SIM 66-20 to restore the backup data to the SRAM, and use SIM 66-10 to clear the expansion flash memory. If the data are unnecessary, simply clear the expansion memory with SIM 66-10.

Main code	Sub code	Title		FAX MODEM operation abnormality
F6	04	Display	Lamp/Message	
		Phenomenon	Detail	FAX PWB MODEM chip operation trouble
			Section	FAX
		Case 1	Cause	Normal operation is made with the FAX PWB SW101 on the BOOT side. FAX PWB MODEM chip operation trouble
			Check & Remedy	Set the FAX PWB SW101 to the other side than the BOOT side, and supply power again. Replace the FAX PWB.

Main code	Sub code	Title		FAX write protect release
F6	20	Display	Lamp/Message	
		Phenomenon	Detail	The write protect JP of the ICU PWB is released.
			Section	FAX
		Case 1	Cause	The FAX write protect pin is set to Write Enable.
			Check & Remedy	Check the write protect pin of the ICU PWB.
		Case 2	Cause	ICU PWB trouble
			Check & Remedy	Replace the ICU PWB.
		Case 3	Cause	FAX PWB trouble
			Check & Remedy	Replace the FAX PWB.

Main code	Sub code	Title		Improper combination of the TEL/LIU PWB and the FAX soft switch.
F6	21	Display	Lamp/Message	
		Phenomenon	Detail	Improper combination of the TEL/LIU PWB and the FAX PWB information (soft switch)
			Section	FAX
		Case 1	Cause	The destination of the installed TEL/LIU PWB differs.
			Check & Remedy	Check the destination of the TEL/LIU PWB.
		Case 2	Cause	The FAX PWB information (soft switch) differs.
			Check & Remedy	Check the FAX PWB information (soft switch).
		Case 3	Cause	TEL/LIU PWB abnormality
			Check & Remedy	Replace the TEL/LIU PWB.

Main code	Sub code	Title		The FAX-BOX PWB is not one for the AR-BC260. (FAX detection)
F6	97	Display	Lamp/Message	
		Phenomenon	Detail	The Modem controller of the FAX-BOX is not one for the AR-BC260.
			Section	FAX
		Case 1	Cause	The FAX-BOX Modem controller PWB information (hard detection) is not for the AR-BC260. (A Modem controller PWB for the AR-FX5/FX6 or the AR-FX8 is used.)
			Check & Remedy	1. Check the FAX-BOX MODEM controller. 2. Replace the MODEM controller PWB with one for the AR-BC260.

Main code	Sub code	Title		Improper combination of the FAX-BOX destination data and the main unit destination data
F6	98	Display	Lamp/Message	
		Phenomenon	Detail	Improper combination of the FAX-BOX destination data and the main unit destination data
			Section	FAX
		Case 1	Cause	Improper combination of the destination written in the EEPROM on the FAX-BOX PWB and the main unit destination data (set with SIM 26-6).
			Check & Remedy	1. Check the destination of the FAX-BOX. 2. Check the destination of the main unit with SIM 26-6. 3. Use a proper combination of the main unit and the FAX-BOX.

Main code	Sub code	Title		FAX board EEPROM read/write error
F7	01	Display	Lamp/Message	
		Phenomenon	Detail	FAX board EEPROM read/write error
			Section	FAX
		Common	Check	Check with SIM 66-3 (memory check).
		Case 1	Cause	EEPROM trouble, FAX PWB EEPROM access circuit trouble
			Check & Remedy	When NG in SIM 66-3 EEPROM. 1. Replace the EEPROM. 2. Use SIM 66-1 to enter an adjustment value of the soft switch. 3. After entering an adjustment value, use SIM 66-4/5 (signal send level) and SIM 66-14/15/16 (dial test) to make adjustments.

Main code	Sub code	Title		ICU-PRT communication trouble (ICU detection)
F9	00	Display	Lamp/Message	
		Phenomenon	Detail	Communication establishment error, framing, parity, protocol error
			Section	ICU/PRT PWB
		Case 1	Cause	Defective connection of the ICU/PRT PWB communication connector, defective harness between the ICU PWB and the PRT PWB
			Check & Remedy	Check connection and the harness between the ICU PWB and the MFP PWB. Check the machine earth.
		Case 2	Cause	Defective ICU PWB/PRT PWB
			Check & Remedy	Replace the ICU or the PRT PWB.

Main code	Sub code	Title		PRT DRAM trouble
F9	01	Display	Lamp/Message	
		Phenomenon	Detail	DRAM in the PRT PWB cannot be accessed.
			Section	PRT PWB
		Case 1	Cause	Defective installation of the DRAM
			Check & Remedy	Check connection of the DRAM.
		Case 2	Cause	Defective DRAM
			Check & Remedy	Replace the DRAM.

Main code	Sub code	Title		NIC port check error
F9	03	Display	Lamp/Message	
		Phenomenon	Detail	NIC port check error
			Section	—
		Case 1	Cause	Defective connection of the NIC connector.
			Check & Remedy	Check the NIC connector again.
		Case 2	Cause	Defective NIC PWB
			Check & Remedy	Replace the NIC.
		Case 3	Cause	Defective PRT PWB
			Check & Remedy	Replace the PRT PWB.

Main code	Sub code	Title		HDD trouble (PRT controller detection)
F9	20	Display	Lamp/Message	
		Phenomenon	Detail	The HDD (option) does not operate normally in the machine with the HDD.
			Section	HDD
		Case 1	Cause	Defective connection of the HDD connector.
			Check & Remedy	Check the HDD connector again.
		Case 2	Cause	Defective HDD
			Check & Remedy	Replace the HDD.
		Case 3	Cause	Defective PRT PWB
			Check & Remedy	Replace the PRT PWB.

Main code	Sub code	Title		Thermistor open (HL1)
H2	00	Display	Lamp/Message	
		Phenomenon	Detail	Thermistor open
			Section	Fusing
		Case 1	Cause	Disconnection of the fusing section connector
			Check & Remedy	Check the connector and the harness between the thermistor and the control PWB.
		Case 2	Cause	The fusing unit is not installed.
			Check & Remedy	Install the fusing unit.
		Case 3	Cause	Thermistor trouble, control PWB trouble, AC power supply trouble
			Check & Remedy	Replace the thermistor or the control PWB. Check the AC power supply.

Main code	Sub code	Title		Thermistor open (HL2)
H2	01	Display	Lamp/Message	
		Phenomenon	Detail	Thermistor open
			Section	Fusing
		Case 1	Cause	Disconnection of the fusing section connector
			Check & Remedy	Check the connector and the harness between the thermistor and the control PWB.
		Case 2	Cause	The fusing unit is not installed.
			Check & Remedy	Install the fusing unit.
		Case 3	Cause	Thermistor trouble, control PWB trouble, AC power supply trouble
			Check & Remedy	Replace the thermistor or the control PWB. Check the AC power supply.

Main code	Sub code	Title	Fusing section high temperature trouble (THS1)	
H3	00	Display	Lamp/Message	
		Phenomenon	Detail	The fusing temperature exceeds 230°C.
			Section	Fusing
		Common	Check	Use SIM 5-2 to check the heater lamp flashing operation.
		Case 1	Cause	The heater lamp flashes properly with SIM 5-2. Thermistor trouble, disconnection of the fusing section connector
			Check & Remedy	Check the thermistor and its harness. Cancel the error with SIM 14.
		Case 2	Cause	The heater lamp keeps ON with SIM 5-2. Control PWB trouble, AC power supply trouble
			Check & Remedy	Check the AC PWB and the control PWB lamp control circuit. Cancel the error with SIM 14.

Main code	Sub code	Title	Fusing section high temperature trouble (THS2)	
H3	01	Display	Lamp/Message	
		Phenomenon	Detail	The fusing temperature exceeds 230°C.
			Section	Fusing
		Common	Check	Use SIM 5-2 to check the heater lamp flashing operation.
		Case 1	Cause	The heater lamp flashes properly with SIM 5-2. Thermistor trouble, disconnection of the fusing section connector
			Check & Remedy	Check the thermistor and its harness. Cancel the error with SIM 14.
		Case 2	Cause	The heater lamp keeps ON with SIM 5-2. AC power supply trouble, control PWB trouble
			Check & Remedy	Check the AC PWB and the control PWB lamp control circuit. Cancel the error with SIM 14.

Main code	Sub code	Title	Fusing section low temperature trouble (HL1)	
H4	00	Display	Lamp/Message	
		Phenomenon	Detail	The fusing temperature is not reached within the specified time after turning on the power relay.
			Section	Fusing
		Common	Check	Use SIM 5-2 to check the heater lamp flashing operation.
		Case 1	Cause	The heater lamp flashes properly with SIM 5-2. Thermistor trouble, PCU PWB (thermistor input circuit) trouble
			Check & Remedy	Check the thermistor and its harness. Check the PCU PWB thermistor input circuit. Cancel the error with SIM 14.
		Case 2	Cause	The heater lamp keeps ON with SIM 5-2. Heater lamp trouble, thermostat trouble, interlock switch trouble, AC power supply trouble, PCU PWB (lamp control circuit) trouble
			Check & Remedy	Check for disconnection of the heater lamp and the thermostat. Check the interlock switch. Check the AC PWB and the PUC PWB lamp control circuit. Cancel the error with SIM 14.

Main code	Sub code	Title	Fusing section low temperature trouble (HL2)	
H4	01	Display	Lamp/Message	
		Phenomenon	Detail	The fusing temperature is not reached within the specified time after turning on the power relay.
			Section	Fusing
		Common	Check	Use SIM 5-2 to check the heater lamp flashing operation.
		Case 1	Cause	The heater lamp flashes properly with SIM 5-2. Thermistor trouble, PCU PWB (thermistor input circuit) trouble
			Check & Remedy	Check the thermistor and its harness. Check the PCU PWB thermistor input circuit. Cancel the error with SIM 14.

Main code	Sub code	Title	Fusing section low temperature trouble (HL2)	
H4	01	Case 2	Cause	The heater lamp keeps ON with SIM 5-2. Heater lamp trouble, thermostat trouble, interlock switch trouble, AC power supply trouble, PCU PWB (lamp control circuit) trouble
			Check & Remedy	Check for disconnection of the heater lamp and the thermostat. Check the interlock switch. Check the AC PWB and the PUC PWB lamp control circuit. Cancel the error with SIM 14.

Main code	Sub code	Title	Five continuous detections of POD1 not-reached jam	
H5	01	Display	Lamp/Message	
		Phenomenon	Detail	POD1 not-reached jams are detected for five times continuously.
			Section	Fusing
		Case 1	Cause	A fusing jam is not canceled completely. (Jam paper remains inside the machine.)
			Check & Remedy	Check remaining jam paper (winding). Cancel the error with SIM 14.
		Case 2	Cause	POD1 sensor trouble, or harness disconnection
			Check & Remedy	Check POD1 sensor harness. Cancel the error with SIM 14.
		Case 3	Cause	Improper installation of the fusing unit
			Check & Remedy	Check installation of the fusing unit. Cancel the error with SIM 14.

Main code	Sub code	Title	Mirror feed trouble	
L1	00	Display	Lamp/Message	
		Phenomenon	Detail	Mirror feed is not completed within the specified time.
			Section	—
		Case 1	Cause	Mirror unit trouble, mirror wire breakage
			Check & Remedy	Use SIM 1-1 to check the mirror operation.

Main code	Sub code	Title	Mirror return trouble	
L3	00	Display	Lamp/Message	
		Phenomenon	Detail	Mirror return is not completed within the specified time.
			Section	—
		Case 1	Cause	Mirror unit trouble, mirror wire breakage
			Check & Remedy	Use SIM 1-1 to check the mirror operation.

Main code	Sub code	Title	Paper feed motor lock trouble	
L4	02	Display	Lamp/Message	
		Phenomenon	Detail	In warm-up, or in canceling a jam, the paper feed motor is rotated, and the lock signal is not detected within 1sec.
			Section	Paper feed
		Case 1	Cause	Paper feed motor trouble, disconnection of the harness between the PCU PWB and the paper feed motor, control circuit trouble
			Check & Remedy	Use SIM 6-1 to check the paper feed motor operation. Check the harness and the connector between the PCU PWB and the paper feed motor.

Main code	Sub code	Title	Transfer belt lift motor trouble	
L4	06	Display	Lamp/Message	
		Phenomenon	Detail	When the belt motor lifts up or down, the change in the belt home position sensor characteristics is not detected within the specified time. (When the motor lifts up, the lower limit sensor remains ON after the specified time.) (When the motor lifts down, the lower limit sensor does not turn on after the specified time.)
			Section	Paper feed
		Case 1	Cause	Belt lift motor trouble, disconnection of the harness between the PCU PWB and the belt lift motor, control circuit trouble
			Check & Remedy	Use SIM 6-1 to check the belt lift motor operation. Check the harness and the connector between the PCU PWB and the belt lift motor.

Main code	Sub code	Title	
L4	07	Display	Lamp/Message
		Phenomenon	<p>Detail</p> <p>1. Before driving the drum, the calibration plate is opened with the process control BK sensor, and light is emitted with the gain value of 0 and with the light emitting quantity fixed to 120. The average of ten light quantities repeats to be 5 or less for 3 times continuously.</p> <p>2. Immediately after driving the drum, the calibration plate is opened with the process control BK sensor, and one whole turn of the belt surface is scanned with the gain value of 0 and with the light emitting quantity at the optimum value (120 – 50). The difference between the max. value and the min. value of the scanned data is 5 or less.</p> <p>Section</p> <p>Paper feed</p>
		Case 1	<p>Cause</p> <p>Transfer belt motor connector disconnection, defective connection of the harness between the PCU PWB and the transfer belt motor</p> <p>Check & Remedy</p> <p>Check the transfer belt motor operation with SIM25-1. Check the harness and the connector between the PCU PWB and the transfer belt motor.</p>
		Case 2	<p>Cause</p> <p>Process control sensor connector disconnection, process control BK sensor defect</p> <p>Check & Remedy</p> <p>Check the process control sensor operation with SIM44-2. Check the harness and the connector between the PCU PWB and the transfer belt motor.</p>
		Case 3	<p>Cause</p> <p>Defective control circuit</p> <p>Check & Remedy</p> <p>Check the control circuit.</p>

Main code	Sub code	Title	
L4	11	Display	Lamp/Message
		Phenomenon	<p>Detail</p> <p>When initializing the shift motor, the change in the shift motor home position sensor characteristics is not detected within the specified time.</p> <p>Section</p> <p>Paper feed</p>
		Case 1	<p>Cause</p> <p>Shift motor trouble, disconnection of the harness between the PCU PWB and the shift motor, control circuit trouble</p> <p>Check & Remedy</p> <p>Use SIM 6-1 to check the shift motor operation. Use SIM 30-1 to check the shift motor home position sensor. Check the harness and the connector between the PCU PWB and the shift motor.</p>

Main code	Sub code	Title	
L8	01	Display	Lamp/Message
		Phenomenon	<p>Detail</p> <p>The full wave signal is not provided.</p> <p>Section</p> <p>—</p>
		Case 1	<p>Cause</p> <p>PCU PWB trouble</p> <p>Check & Remedy</p> <p>Replace the PCU PWB.</p>
		Case 2	<p>Cause</p> <p>Power supply unit trouble</p> <p>Check & Remedy</p> <p>Replace the power supply unit.</p>
		Case 3	<p>Cause</p> <p>Harness trouble</p> <p>Check & Remedy</p> <p>Check connection of the harness and the connector.</p>

Main code	Sub code	Title	
L8	02	Display	Lamp/Message
		Phenomenon	<p>Detail</p> <p>An abnormality of the full wave signal frequency is detected. (The detected frequency is 65kHz or above, or 45kHz or below.)</p> <p>Section</p> <p>—</p>
		Case 1	<p>Cause</p> <p>PCU PWB trouble</p> <p>Check & Remedy</p> <p>Replace the PCU PWB.</p>
		Case 2	<p>Cause</p> <p>Power supply unit trouble</p> <p>Check & Remedy</p> <p>Replace the power supply unit.</p>
		Case 3	<p>Cause</p> <p>Harness trouble</p> <p>Check & Remedy</p> <p>Check connection of the harness and the connector.</p>

Main code	Sub code	Title	Main power switch abnormality detection	
L8	04	Display	Lamp/Message	
		Phenomenon	Detail	Though the PCU program is operating (the power is supplied), the main power switch OFF is detected.
			Section	—
		Case 1	Cause	Main power switch trouble
			Check & Remedy	Replace the main power switch.
		Case 2	Cause	Power supply unit trouble
			Check & Remedy	Replace the power supply unit.
		Case 3	Cause	Harness trouble
			Check & Remedy	Check connection of the harness and the connector.

Main code	Sub code	Title	RIC copy inhibit signal reception	
PF	00	Display	Lamp/Message	
		Phenomenon	Detail	The copy inhibit signal from RIC (host) is received.
			Section	—
		Case 1	Cause	Depends on a judgment by the host.
			Check & Remedy	Make notification to the host. Use SIM 27-1 to ignore.

Main code	Sub code	Title	ICU-OPE communication trouble (ICU/OPE detection)	
U0	00	Display	Lamp/Message	
		Phenomenon	Detail	Communication establishment error, framing/parity/protocol error. ROM version phase shift.
			Section	—
		Case 1	Cause	Disconnection of the operation panel communication connector of the ICU/MFP PWB, harness trouble between the ICU PWB and the MFP PWB.
			Check & Remedy	Check the connector and the harness between the ICU PWB and the MFP PWB.
		Case 2	Cause	ICU/MFP PWB trouble
			Check & Remedy	Check grounding of the machine. Replace the ICU PWB or the MFP PWB.
		Case 3	Cause	When the OPE-ROM without security functions is installed for the ICU-ROM with security kit functions.
			Check & Remedy	Check the ROM version, and replace it if necessary.

Main code	Sub code	Title	FAX battery abnormality	
U1	01	Display	Lamp/Message	
		Phenomenon	Detail	FAX backup SRAM battery voltage fall
			Section	FAX
		Case 1	Cause	Battery life
			Check & Remedy	Check to insure that the battery voltage is about 2.5V or above.
		Case 2	Cause	Battery circuit abnormality.
			Check & Remedy	Check the battery circuit.

Main code	Sub code	Title	RTC read trouble	
U1	02	Display	Lamp/Message	
		Phenomenon	Detail	Abnormal value is read from the RTC on the ICU PWB.
			Section	—
		Case 1	Cause	RTC circuit abnormality
			Check & Remedy	Set the time again with the key operation, and check that time advances properly. Check the RTC circuit.
		Case 2	Cause	Battery voltage fall. Battery circuit abnormality.
			Check & Remedy	Check to insure that the battery voltage is about 2.5V or above. Check the battery circuit.

Main code	Sub code	Title	EEPROM read/write error (ICU detection)	
U2	00	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM version error EEPROM write error
			Section	—
		Case 1	Cause	EEPROM trouble. EEPROM is not initialized.
			Check & Remedy	1. Check that the EEPROM is properly set. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	ICU PWB EEPROM access circuit trouble
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the ICU PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title	EEPROM check sum error (ICU detection)	
U2	11	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM (ICU) check sum error
			Section	—
		Case 1	Cause	EEPROM trouble
			Check & Remedy	1. Check that the EEPROM is properly set. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	Control circuit freeze by noises. ICU PWB EEPROM access circuit trouble.
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the ICU PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title	EEPROM read/write error (SCN)	
U2	80	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM version error EEPROM write error
			Section	—
		Case 1	Cause	EEPROM trouble, Insertion of EEPROM which is not initialized or defective.
			Check & Remedy	1. Check that the EEPROM is properly inserted. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	SCN PWB EEPROM access circuit trouble
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the SCN PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title	FAX backup SRAM memory check sum error	
U2	22	Display	Lamp/Message	
		Phenomenon	Detail	FAX backup SRAM memory check sum error
			Section	FAX
		Case 1	Cause	SRAM trouble
			Check & Remedy	Initialize the one-touch dial and the FAX soft switch registered in the SRAM. Cancel the trouble with SIM 16.
		Case 2	Cause	Control circuit freeze by noises. Access circuit trouble.
			Check & Remedy	Replace the FAX PWB. Use SIM 16 to cancel the error.

Main code	Sub code	Title	Adjustment value check sum error (SCN)	
U2	81	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM (SCN) check sum error
			Section	—
		Case 1	Cause	EEPROM trouble
			Check & Remedy	1. Check that the EEPROM is properly inserted. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	SCN PWB EEPROM access circuit trouble
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the SCN PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title	Production No. data discrepancy	
U2	30	Display	Lamp/Message	
		Phenomenon	Detail	The production No. recorded in the PCU differs from that recorded in the ICU.
			Section	—
		Case 1	Cause	EEPROM is not exchanged when replacing the PCU/ICU PWB.
			Check & Remedy	Check that the EEPROM is properly installed. When replacement, check that the EEPROM before replacement is inserted to the board after replacement.

Main code	Sub code	Title		EEPROM read/write error (PCU)
U2	90	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM version error EEPROM write error
			Section	—
		Case 1	Cause	EEPROM trouble, Insertion of EEPROM which is not initialized or defective.
			Check & Remedy	1. Check that the EEPROM is properly inserted. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	PCU PWB EEPROM access circuit trouble
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the PCU PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title		Adjustment value check sum error (PCU)
U2	91	Display	Lamp/Message	
		Phenomenon	Detail	EEPROM (PCU) check sum error
			Section	—
		Case 1	Cause	EEPROM trouble
			Check & Remedy	1. Check that the EEPROM is properly inserted. 2. Use SIM 16 to cancel the error.
		Case 2	Cause	Control circuit freeze caused by noises, PCU PWB EEPROM access circuit trouble
			Check & Remedy	1. To prevent against deletion of the counter data and the adjustment data, record them with the simulation. (When a printer option is installed, use SIM 22-1 to record the counter data and the adjustment data.) 2. Replace the PCU PWB. 3. Use SIM 16 to cancel the error.

Main code	Sub code	Title		ADU alignment plate operation abnormality
U4	02	Display	Lamp/Message	
		Phenomenon	Detail	The alignment plate does not move from the home position within 1sec when it must move. Return to the home position is not detected for 5sec or more.
			Section	ADU
		Case 1	Cause	Home position sensor trouble
			Check & Remedy	Use SIM 9-2 to detect the home position sensor.
		Case 2	Cause	Alignment plate shift motor trouble
			Check & Remedy	Use SIM 9-4 to check the alignment plate operation.
		Case 3	Cause	Disconnection of the harness between the ADU control PWB and the motor sensor.
			Check & Remedy	Check connection of the harness between the ADU control PWB and the motor sensor.
		Case 4	Cause	Alignment plate operation belt, gear breakage or improper adjustment
			Check & Remedy	Remove the ADU, and check for breakage of the gear and the belt.

Main code	Sub code	Title		Desk communication trouble
U6	00	Display	Lamp/Message	
		Phenomenon	Detail	Desk communication error, communication test error when turning on the power or after canceling the exclusive simulation.
			Section	Desk
		Case 1	Cause	Improper connection or disconnection of the connector and the harness.
			Check & Remedy	Check the connector and the harness in the communication line. Turn OFF/ON the power to cancel the error.
		Case 2	Cause	Desk control PWB trouble, control PWB (PCU) trouble, malfunction caused by noises
			Check & Remedy	Turn OFF/ON the power to cancel the error.

Main code	Sub code	Title		Desk tray 1 lift motor trouble
U6	01	Display	Lamp/Message	
		Phenomenon	Detail	DLUD1 does not turn on within the specified time.
			Section	Desk
		Case 1	Cause	DLUD1 sensor trouble, paper feed unit harness disconnection
			Check & Remedy	Check DLUD1 and the harness and the connector.
		Case 2	Cause	Cassette 1 lift-up motor trouble, desk PWB, lift-up unit trouble
			Check & Remedy	Check the lift-up unit.

Main code	Sub code	Title		Desk tray 2 lift motor trouble
U6	02	Display	Lamp/Message	
		Phenomenon	Detail	DLUD2 does not turn on within the specified time.
			Section	Desk
		Case 1	Cause	DLUD2 sensor trouble, paper feed unit harness disconnection
			Check & Remedy	Check DLUD2 and the harness and the connector.
		Case 2	Cause	Desk cassette 2 lift-up motor trouble, desk PWB, lift-up unit trouble
			Check & Remedy	Check the lift-up unit.

Main code	Sub code	Title		Desk tray 3 lift motor trouble
U6	03	Display	Lamp/Message	
		Phenomenon	Detail	DLUD3 does not turn on within the specified time.
			Section	Desk
		Case 1	Cause	DLUD3 sensor trouble, paper feed unit harness disconnection
			Check & Remedy	Check DLUD3 and the harness and the connector.
		Case 2	Cause	Desk cassette 3 lift-up motor trouble, desk PWB, lift-up unit trouble
			Check & Remedy	Check the lift-up unit.

Main code	Sub code	Title		LCC lift motor trouble
U6	09	Display	Lamp/Message	
		Phenomenon	Detail	<ul style="list-style-type: none"> The encoder input value does not change in 0.13sec (first time)/0.5sec (second time or later) after rotation of the motor. The motor is rotated for 18sec or more. The encoder changes after the specified time from termination of the motor. (2sec and 10 counts or more)
			Section	LCC
		Common	Check	Use SIM 4-2 and 4-3 to check the sensor operation and the lift motor operation. Cancel the trouble with SIM 15.
		Case 1	Cause	Sensor trouble
			Check & Remedy	Replace the sensor.
		Case 2	Cause	LCC control PWB trouble
			Check & Remedy	Replace the LCC control PWB.
		Case 3	Cause	Gear breakage
			Check & Remedy	Replace the gear.
		Case 4	Cause	Lift motor trouble
			Check & Remedy	Replace the lift motor.

Main code	Sub code	Title		Desk transport motor trouble
U6	10	Display	Lamp/Message	
		Phenomenon	Detail	Desk transport motor operation trouble
			Section	—
		Case 1	Cause	Motor lock, motor RPM abnormality, Over current to the motor, saddle finisher control PWB trouble
			Check & Remedy	Use SIM 4-3 to check the desk transport motor operation.

Main code	Sub code	Title		LCC communication trouble
U6	20	Display	Lamp/Message	
		Phenomenon	Detail	Communication error with the LCC. Communication line test error after turning on the power or canceling an exclusive simulation. Discrepancy of the model code between the LCC and the machine.
			Section	—
		Common	Turn OFF/ON the power to cancel the error.	

Main code	Sub code	Title		LCC communication trouble	
U6	20	Case 1		Cause	Improper connection or disconnection of the connector and the harness.
				Check & Remedy	Check the connector and the harness in the communication line.
		Case 2		Cause	LCC control PWB trouble
				Check & Remedy	Replace the LCC control PWB.
		Case 3		Cause	Control PWB (PCU) trouble
				Check & Remedy	Replace the control PWB (PCU).
		Case 4		Cause	Malfunction caused by noises
				Check & Remedy	Turn OFF/ON the power to cancel the error.

Main code	Sub code	Title		LCC transport motor trouble	
U6	21	Display		Lamp/Message	
		Phenomenon	Detail	<ul style="list-style-type: none"> The encoder input value does not change in 0.06sec after turning on the motor. The encoder input changes after the specified time from turning off the motor. (100 or more counts are made in 0.1sec after 5sec.) 	
			Section	—	
		Case 1	Cause	Motor lock, motor RPM abnormality. Over current to the motor, saddle finisher control PWB trouble	
			Check & Remedy	Use SIM 4-3 to check the transport motor operation.	

Main code	Sub code	Title		LCC 24V power abnormality	
U6	22	Display		Lamp/Message	
		Phenomenon	Detail	DC 24V is not supplied to the LCC.	
			Section	—	
		Case 1	Cause	Improper connection or disconnection of the connector and the harness.	
			Check & Remedy	Check the connector and the harness in the power line. Turn OFF/ON the power to cancel the error.	
		Case 2	Cause	LCC control PWB trouble	
			Check & Remedy	Turn OFF/ON the power to cancel the error.	
		Case 3	Cause	Power supply unit trouble	
			Check & Remedy	Turn OFF/ON the power to cancel the error.	

Main code	Sub code	Title		Desk incompatibility trouble	
U6	50	Display		Lamp/Message	
		Phenomenon	Detail	Connection of a desk which is not compatible with the AR-BC260 is detected.	
			Section	Desk	
		Case 1	Cause	Connection of a desk (AR-D17/AR-D18/AR-D19) which is not compatible with the AR-BC260 is detected.	
			Check & Remedy	Connect the AR-D18N/AR-D19N.	

Main code	Sub code	Title		LCC incompatibility trouble	
U6	51	Display		Lamp/Message	
		Phenomenon	Detail	Connection of LCC which is not compatible with the AR-BC260 is detected.	
			Section	LCC	
		Case 1	Cause	Connection of the AR-LC5 which is not compatible with the AR-BC260 is detected.	
			Check & Remedy	Connect the AR-LC8.	

Main code	Sub code	Title		RIC communication trouble	
U7	00	Display		Lamp/Message	
		Phenomenon	Detail	RIC communication error, communication test error when turning on the power or after canceling the exclusive simulation.	
			Section	RIC	
		Case 1	Cause	Improper connection or disconnection of the connector and the harness. RIC control PWB trouble, control PWB (PCU) trouble, malfunction caused by noises.	
			Check & Remedy	Turn OFF/ON the power to cancel the error. Check the connector and the harness in the communication line.	

Main code	Sub code	Title		CPT-ASIC trouble (MFP PWB trouble)	
UC	02	Display		Lamp/Message	
		Phenomenon	Detail	Access abnormality to CPT-ASIC (ASIC does not operate normally.)	
			Section	MFP PWB	
		Case 1	Cause	CPT-ASIC abnormality MFP PWB abnormality	
			Check & Remedy	Turn OFF/ON repeatedly. If the trouble is not canceled, replace the MFP PWB.	