

# [9] SELF DIAG MESSAGE AND TROUBLESHOOTING

## [Error code]

### 1. General

When a trouble occurs in the machine or when the life of a consumable part is nearly expired or when the life is expired, the machine detects and displays it on the display section. This allows the user and the serviceman to take the suitable action. In case of a trouble, this feature notifies the occurrence of a trouble and stops the machine to minimize the damage.

### 2. Function and purpose

- 1) Securing safety. (The machine is stopped on detection of a trouble.)
- 2) The damage to the machine is minimized. (The machine is stopped on detection of a trouble.)
- 3) By displaying the trouble content, the trouble position can be quickly identified. (This allows to perform an accurate repair, improving the repair efficiency.)
- 4) Preliminary warning of running out of consumable parts allows to arrange for new parts in advance of running out. (This avoids stopping of the machine due to running out the a consumable part.)

### 3. Self diag message kinds

The self diag messages are classified as shown in the table below.

Class 1	User	Warning of troubles which can be recovered by the user. (Paper jam, consumable part life expiration, etc.)
	Service man	Warning of troubles which can be recovered only by a serviceman. (Motor trouble, maintenance, etc.)
	Other	—
Class 2	Warning	Warning to the user, not a machine trouble (Preliminary warning of life expiration of a consumable part, etc.)
	Trouble	Warning of a machine trouble. The machine is stopped.
	Other	—

### 4. Self diag operation

#### A. Self diag operation and related work flow

The machine always monitors its own state.

When the machine recognizes a trouble, it stops the operation and displays the trouble message.

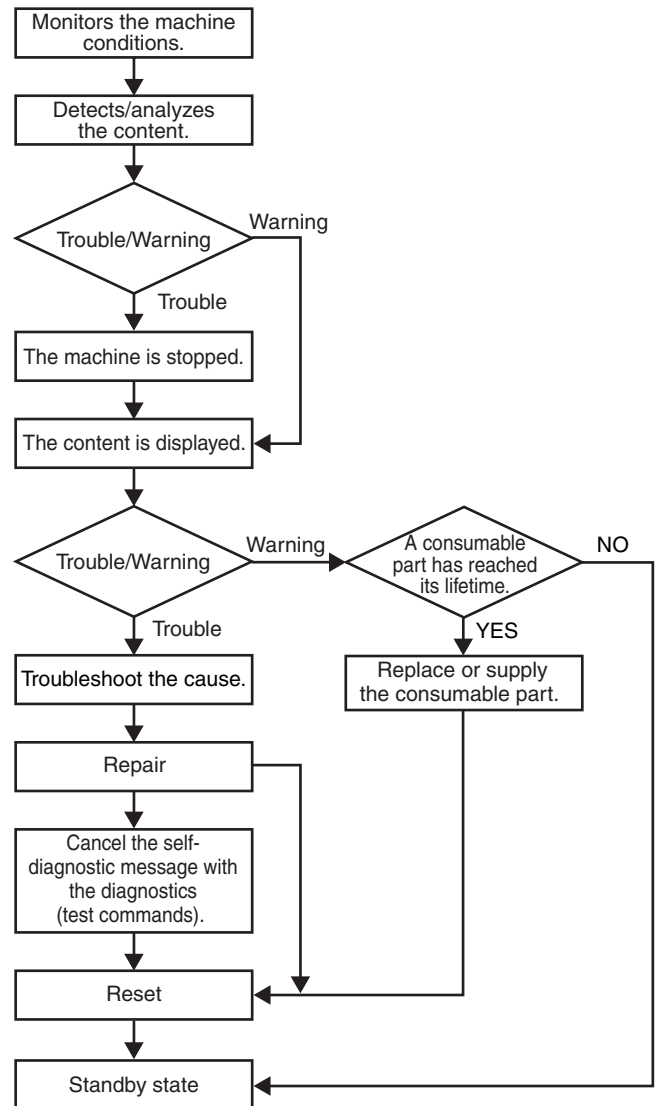
A warning message is displayed when a consumable part life is nearly expired or is expired.

When a warning message is displayed, the machine may be or may not be stopped.

The trouble messages and the warning messages are displayed by the LCD.

Some trouble messages are automatically cleared when the trouble is repaired. Some other troubles must be cleared by a 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.



**SHARP TROUBLE & ERROR CODES**  
**AR-M550N, AR-M550U, AR-M620N,**  
**AR-M620U, AR-M700N, AR-M700U**

## 5. Breakdown sequence

### A. Breakdown mode process

#### (1) Breakdown mode list

There are following cases of the breakdown mode.

(The machine can be operated under some conditions.)	Judgment block	Trouble code	Operation enable mode						
			Copy read (including interrupt)	FAX send	Email receive	FAX print	Print	List print	Notification to FASThost
(SPF breakdown)	Scanner	U5	Δ1	Δ1	Δ1	○	○	○	○
Scanner section breakdowns (Mirror motor, lens, copy lamp)	Scanner	L1, L3, U2 (80, 81)	×	×	×	○	○	○	○
FAX board breakdown	MFP control/FAX	F6, F7	○	×	○	×	○	○	×
FAX power OFF	MFP control		○	×	○	×	○	○	×
Network error	MFP control	CE	○	○	×	○	○	○	×
Staple breakdown	PCU	F1 (10)	Δ2	○	○	Δ2	Δ2	Δ2	○
Paper feed tray breakdown	PCU	F3, U6 (LCC)	Δ3	○	○	Δ3	Δ3	Δ3	○
(Process control breakdown)	PCU	F2 (31, 32, 37)	Δ4	○	○	Δ4	Δ4	Δ4	○
PCU section breakdowns (Motor, fusing section, etc.)	PCU	C1, C2, C3, H2, H3, H4, H5, L4 (excluding L4-30), L8, U2 (90, 91), F2, F4	×	○	○	×	×	×	○
After-process breakdown	PCU	F1	Δ5	○	○	Δ5	Δ5	Δ5	○
Insertor trouble (excluding communication trouble)	PCU	F1 (61, 62)	Δ7	○	○	Δ7	Δ7	Δ7	○
Laser breakdown	PCU	E7 (02 only), L6	×	○	○	×	×	×	○
HDD breakdown	MFP control	E7 (03)	×	×	×	×	×	×	○
CCD breakdowns (Shading, etc.)	Scanner	E7 (10, 11, 12, 14)	×	×	×	○	○	○	○
CIS breakdowns (Shading, etc.)	Scanner	E6 (10, 11, 14)	Δ6	Δ6	Δ6	○	○	○	○
Scanner communication trouble	MFP control	E7 (80)	×	×	×	○	○	○	○
PCU communication trouble	MFP control	E7 (90)	×	×	×	×	×	×	○
FAX backup battery voltage fall	MFP control	U1 (01, 02)	○	×	×	○	○	○	○
HDD registration data sum error	MFP control	U2 (50)	○	×	×	○	○	○	○
Thermistor trouble (trouble history)	PCU	F2 (39, 46, 47, 48)	○	○	○	○	○	○	○

(The machine cannot be operated.)

Memory	MFP control	U2 (00, 11, 12, 22, 23)	×	×	×	×	×	×	○
External communication disable (RICA)	MFP control	U7, PF	×	×	×	×	×	×	○
Image memory trouble, decode error	MFP control	E7 (01, 06)	×	×	×	×	×	×	○
Incompatibility check error	MFP control/PCU	E7 (50, 55, 56, 57, 60, 65, 66, 67)	×	×	×	×	×	×	×
Controller fan motor trouble	MFP control	L4-30	×	×	×	×	×	×	×

\* For FAX communication, refer to the sheet of "Call request and Call-in."

\* The machine may be operated under some conditions.

Δ1: When detected except when in a job, the machine can be operated in the OC mode.

Δ2: Can be operated except in the staple mode.

Δ3: When detected except in a job, the machine can be operated except with the breakdown tray.

Δ4: Can be operated with some restriction on the image quality depending on the destination. (Low density print) \* Refer to the process control trouble operation table below.

Δ5: When detected except in a job, can be operated except in the trouble paper exit section.

Δ6: When detected except in a job, can be operated in the single surface scan mode.

Δ7: Can be operated except in the inserter tray, if the error is detected in the standby mode.

\* Process control trouble operation table

Trouble code	Error content	Japan/SEC	Europe/Others
F2-31	Process control sensor gain adjustment failure	Machine stop	Low density copy
F2-32	Mark detection failure	Low density copy	Low density copy
F2-37	Mark sensor gain adjustment failure	Machine stop	Low density copy

**(2) Trouble mode process**

The machine can be operated under some conditions. Operations except for the trouble mode are enabled (READY). For the modes which cannot be operated, only setting is enabled and a message is given to show the operations are disabled. (NOT READY in this case)  
 (Display)  
 When a trouble occurs, a dialog is shown. In the mode where the operation is enabled, the OK button is added to the message. In the mode where the operation is disabled, the OK button is not shown and the display is kept until the trouble is canceled.

**(3) Writing to the trouble memory**

In case of a same trouble in this machine, selection is made with the simulation to write into the trouble memory or not. If this simulation is set, any trouble is written into the trouble memory unconditionally. (SIMULATION. 26-35)  
 0: A same trouble as the previous one is not written. (Default)  
 1: Any trouble is written into the trouble memory unconditionally.

**B. Power ON trouble detection sequence.**

- When the power is turned ON, if H3, H4, H5, U1, U2, PF, L4-31, F3-12/22, or U6 (LCC-related sub code 09 only) is saved, a trouble code is immediately displayed. E7 (50, 55, 56, 57, 60, 65, 66, 67) trouble is not saved.

**(Power ON sequence)**

- H3, H4, U1, U2, U6 PF trouble check

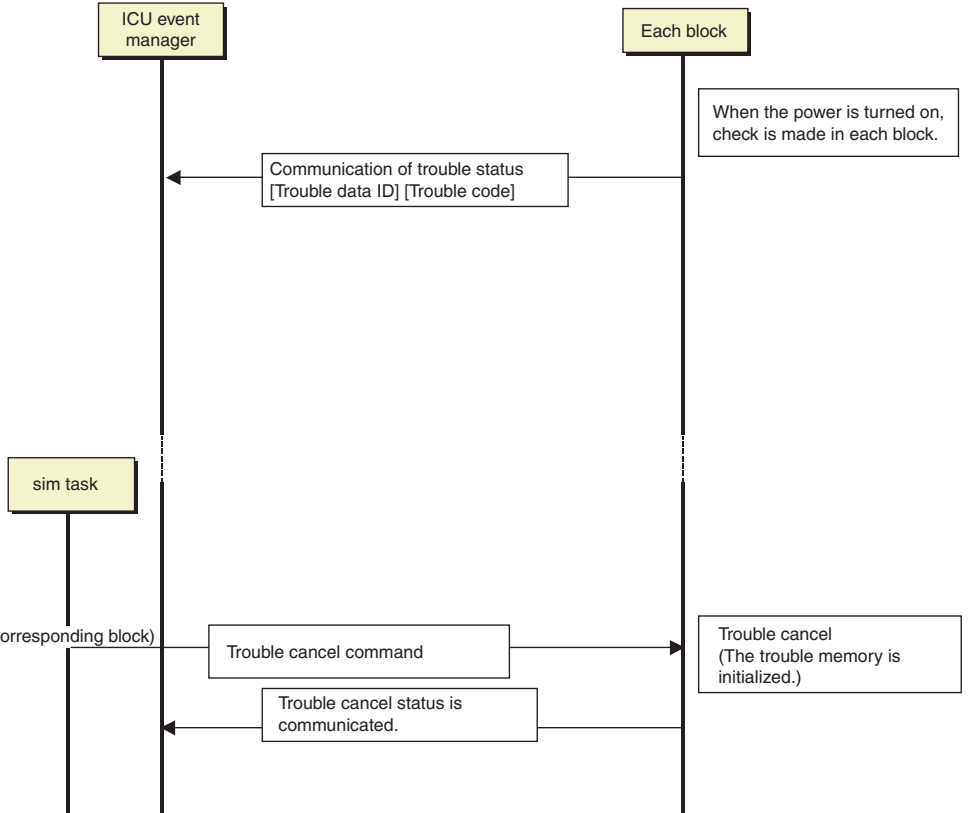
Trouble check is made in each block when initializing and data are sent to the ICU.  
 H3, H4, H5, L4-31, F3-12/22: Saved in the PCU.  
 U1: Saved in the ICU.  
 U2: Saved in each block.  
 PF: Saved in the ICU.  
 U6-09: Saved in the PCU.

**(Trouble cancel sequence)**

- When executing SIM 13, 14, 15, 16, 17

- SIM 13: U1 trouble cancel
- SIM 14: H3, H4, H5, L4-31 trouble cancel
- SIM 15: LCC (U6), Tray 1, 2 (F3-12, 22) ▲  
 F3-12/22 trouble cancel
- SIM 16: U2 trouble cancel
- SIM 17: PF trouble cancel

(To the corresponding block)



## 6. Communication in trouble

### A. FAX call request/call-in specifications

Trouble	Send reservation	Print	Call request	Call-in	Precaution
PCU breakdowns (Incompatibility check error: E7 (50, 56, 57, 65, 66, 67))	○	×	○	Note	There is a risk that the memory is full.
F3, U6 (Paper feed tray breakdown)	○	Δ2	○	○	
F1 (Paper exit section breakdown)	○	Δ4	○	○	
Scanner breakdowns	×	○	○	○	
F6, F7 (FAX breakdown)	×	×	×	×	
E7 (01, 06) (MFP control breakdown)	×	×	×	×	
U2 (00, 11, 12, 22, 23, 50) (MFP control memory error)	×	×	×	×	
U7 (RIC external communication disable), PF	×	×	×	×	Inhibition of use by a customer having outstanding fee
U1 (Backup battery voltage fall)	×	Δ3	×	Note	Transfer enable
E7 (50, 55, 56, 57, 60, 65, 66, 67) (Incompatibility check error)	×	×	×	×	
L4-30 (Controller fan motor trouble)	×	×	×	×	
Door open	○	×	○	○Note	There is a risk that the memory is full.
Toner empty	○	×	○	○Note	There is a risk that the memory is full.
Process cartridge uninstalled, etc.	○	×	○	○Note	There is a risk that the memory is full.
Paper empty	○	×	○	○Note	There is a risk that the memory is full.
Paper JAM	○	×	○	○Note	There is a risk that the memory is full.
Document JAM	×	○	○	○	
Simulation	×	×	×	×	
Key operation (Communication disable)	×	×	×	×	

Δ2: Enable except for the trouble tray

\* When, however, a paper feed tray trouble is detected during a job, the engine is stopped and printing is disabled.

Δ3: The display goes to the FAX status check menu and the list can be printed.: The received document is outputted.

Δ4: Paper exit is enabled except for the trouble paper exit tray

\* When, however, a paper feed tray trouble is detected during a job, the engine is stopped and printing is disabled.

## 7. Trouble kind

Trouble code	Trouble content		Remarks	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
	Main code	Sub code							
C1	00	MC trouble		PCU			●		
CE	00	Another communication error occurs.		Network					
CE	01	The network card is not installed or broken.		Network					
CE	02	The specified mail server or the FTP server is not found.		Network					
CE	03	The specified server suspends response during transmission of images.		Network					
CE	04	The entered account name of the FTP server or the password for authentication is invalid.		Network					
CE	05	The entered directory of the FTP server is invalid.		Network					
CE	06	The specified mail server (POP3) is not found.		Network					
CE	07	The entered account name of the POP3 server or the password for authentication is invalid.		Network					
CE	08	The specified mail server (POP3) suspends response.		Network					
CH	–	Door open (CH ON)		PCU					
E6	11	CIS shading trouble (White correction)		Scanner			●		
E6	14	CIS-ASIC communication trouble		Scanner			●		
E7	01	System data trouble		MFP control	–	–	–	–	–
E7	02	Laser trouble		PCU			●		
E7	03	HDD trouble		MFP control			●		
E7	06	Decode error trouble		MFP control			●		
E7	10	CCD shading trouble (Black correction)		Scanner			●		
E7	11	CCD shading trouble (White correction)		Scanner			●		
E7	12	CCD shading trouble (White correction center adjustment)		Scanner			●		
E7	14	CCD-ASIC communication trouble		Scanner			●		
E7	50	LSU connection trouble		PCU			●		
E7	55	Incompatibility check (Engine (PCU) detection)		PCU			●		

Trouble code		Trouble content	Remarks	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
Main code	Sub code								
E7	56	Incompatibility check (Engine (PCU) detection)		PCU			●		
E7	57	Incompatibility check (Engine (PCU) detection)		PCU			●		
E7	60	Controller connection trouble		MFP control			●		
E7	65	Incompatibility check (MFP controller detection)		MFP control			●		
E7	66	Incompatibility check (MFP controller detection)		MFP control			●		
E7	67	Incompatibility check (MFP controller detection)		MFP control			●		
E7	80	Scanner PWB communication trouble		MFP control			●		
E7	90	PCU PWB communication trouble		MFP control			●		
EE	EL	Auto developer adjustment trouble (Overtone error)	During SIM only	PCU					●
EE	EU	Auto developer adjustment trouble (Undertone error)	During SIM only	PCU					●
F1	00	Finisher communication trouble		PCU		●			
F1	02	Finisher transport motor abnormality		PCU		●			
F1	03	Finisher oscillation motor trouble		PCU		●			
F1	08	Finisher staple shift motor trouble		PCU		●			
F1	09	Finisher load capacity sensor trouble		PCU		●			
F1	10	Finisher/staple motor trouble		PCU		●			
F1	11	Finisher/pusher motor trouble		PCU		●			
F1	15	Finisher elevator motor trouble		PCU		●			
F1	19	Finisher/jogger motor trouble		PCU		●			
F1	31	Finisher saddle folding motor trouble		PCU		●			
F1	32	Finisher-saddle communication trouble		PCU		●			
F1	33	Finisher/punch shift motor trouble		PCU		●			
F1	34	Finisher/punch motor trouble		PCU		●			
F1	37	Finisher/backup RAM data trouble		PCU		●			
F1	38	Finisher/punch backup RAM data trouble		PCU		●			
F1	41	Finisher/saddle positioning plate motor trouble		PCU		●			
F1	42	Finisher/saddle guide motor trouble		PCU		●			
F1	43	Finisher/saddle alignment motor trouble		PCU		●			
F1	44	Finisher/saddle rear staple motor trouble		PCU		●			
F1	45	Finisher/saddle front staple motor trouble		PCU		●			
F1	46	Finisher/saddle push motor trouble		PCU		●			
F1	51	Finisher/sensor connector connection trouble		PCU		●			
F1	52	Finisher/micro switch trouble		PCU		●			
F1	60	Finisher-inserter communication trouble		PCU		●			
F1	61	Inserter/EEPROM trouble		PCU		●			
F1	62	Inserter/reverse sensor trouble		PCU		●			
F2	00	Toner concentration sensor open		PCU					●
F2	02	Toner supply abnormality		PCU					●
F2	04	Improper cartridge (Destination error, life cycle error)		PCU					●
F2	05	CRUM error		PCU					●
F2	31	Process control trouble (Photoconductor surface reflection rate abnormality)		PCU					●
F2	32	Process control trouble (Drum marking scan failure)		PCU					●
F2	37	Drum marking sensor gain adjustment error		PCU					●
F2	39	Process thermistor breakdown		PCU					●
F2	46	Developing thermistor breakdown		PCU					●
F2	48	Developing humidity sensor break down		PCU					●
F3	12	Tray 1 lift-up trouble		PCU	●				
F3	22	Tray 2 lift-up trouble		PCU	●				
F3	32	Tray 3 lift-up trouble		PCU	●				
F3	42	Tray 4 lift-up trouble		PCU	●				
F4	38	38 (V) voltage trouble		PCU			●		
F6	00	FAX board communication trouble		MFP control				●	
F6	01	FAX expansion flash ROM abnormality		MFP control				●	
F6	04	FAX modem operation abnormality		FAX				●	
F6	20	FAX write protect cancel		FAX				●	
F6	21	Combination error of TEL/LIU PWB and software		FAX				●	

Trouble code		Trouble content	Remarks	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
Main code	Sub code								
F6	97	FAX-BOX incompatibility trouble		FAX				●	
F6	98	Combination error of the FAX-BOX destination information and the machine destination information		FAX				●	
F7	01	FAX board EEPROM read/write error		FAX				●	
F9	02	PRT centro port check error		MFP control			●		
H2	00	Thermistor open (HL1)		PCU	●				
H2	01	Thermistor open (HL2)		PCU	●				
H2	02	Thermistor open (HL3)		PCU	●				
H3	00	Heat roller high temperature detection (HL1)		PCU	●				
H3	01	Heat roller high temperature detection (HL2)		PCU	●				
H3	02	Heat roller high temperature detection (HL3)		PCU	●				
H4	00	Heat roller low temperature detection (HL1)		PCU	●				
H4	01	Heat roller low temperature detection (HL2)		PCU	●				
H4	02	Heat roller low temperature detection (HL3)		PCU	●				
H5	01	5-time continuous POD not-reached JAM detection		PCU	●				
L1	00	Scanner feed trouble		Scanner	●				
L3	00	Scanner return trouble		Scanner	●				
L4	01	Main motor lock detection		PCU			●		
L4	02	Drum motor lock detection		PCU			●		
L4	03	Fusing motor lock detection		PCU			●		
L4	04	Developing motor lock detection		PCU			●		
L4	06	Transfer belt separation motor trouble		PCU			●		
L4	30	Controller fan motor trouble		MFP control			●		
L4	31	Paper discharging fan trouble		MFP control			●		
L6	10	Polygon motor lock detection		PCU			●		
L8	01	No full wave signal		PCU			●		
PC	-	Personal counter uninstalled		MFP control					
PF	00	RIC copy inhibit comcommand receive		MFP control			●		
U1	01	FAX battery abnormality		MFP control				●	
U1	02	RTC read error (combined use as FAX, on MFP control PWB)		MFP control				●	
U2	00	EEPROM read/write error (MFP control)		MFP control			●		
U2	11	Counter check sum error (MFP control EEPROM)		MFP control			●		
U2	12	Adjustment value check sum error (MFP control EEPROM)		MFP control			●		
U2	22	MFPC section SRAM memory check sum error		MFP control				●	
U2	23	MFPC section SRAM memory individual data check sum error		MFP control				●	
U2	50	HDD section individual data check sum error		MFP control				●	
U2	80	Scanner section EEPROM read/write error		Scanner			●		
U2	81	Scanner section memory sum check error		Scanner			●		
U2	90	PCU section EEPROM read/write error		PCU			●		
U2	91	PCU section memory sum check error		PCU			●		
U5	30	SPF tray lift-up trouble		Scanner	●				
U5	31	SPF tray lift-down trouble		Scanner	●				
U6	09	LCC lift motor trouble		PCU		●			
U6	20	LCC communication trouble		PCU		●			
U6	21	LCC transport motor trouble		PCU		●			
U6	22	LCC 24V power abnormality addition		PCU		●			
U7	00	PC/Modem communication trouble		MFP control			●		
--	-	Auditor NOT READY		MFP control					

## 8. Details

Main code	Sub code	Title	MC trouble		
C1	00	Phenomenon	Display	Lamp	
				Message	
			Details	MC trouble Three successive MHV-T signals are detected during operation of MHV. Main charger output abnormality (Output open) A trouble signal is outputted from the high voltage transformer.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	The main charger is not installed properly. The main charger is not assembled properly.
				Remedy	Use SIM 8-2 to check the main charger output. Main charger disconnection check
				Note	
			Case 2	Trouble position/ Cause	The high voltage transformer connector is disconnected. The high voltage harness is disconnected or broken.
				Remedy	Connection check
				Note	
			Case 3	Trouble position/ Cause	High voltage unit trouble
				Remedy	Replace the high voltage unit.
				Note	

Main code	Sub code	Title	Another communication error occurs.		
CE	00	Phenomenon	Display	Lamp	
				Message	
			Details	Communication error	
			Section		
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection of the network cable
				Remedy	Check the connection of the network cable.
				Note	

Main code	Sub code	Title	The network card is not installed or broken.		
CE	01	Phenomenon	Display	Lamp	
				Message	
			Details	Network card connection trouble	
			Section		
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	The network card is not installed on the controller.
				Remedy	Check that the network card is installed on the controller.
				Note	
			Case 2	Trouble position/ Cause	Network card control PWB trouble
				Remedy	1. Output the NIC Config. Page to check the NIC version. 2. Replace the NIC.
				Note	

Main code	Sub code	Title	The specified mail server or the FTP server is not found.		
CE	02	Phenomenon	Display	Lamp	
				Message	
			Details	The specified mail server or the FTP server is not found.	
			Section		
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection of the network cable
				Remedy	Check that the network cable is properly connected.
				Note	
			Case 2	Trouble position/ Cause	Network setup trouble
				Remedy	1. Check that the connected network supports TCP/IP protocol. 2. As Primary/Secondary E-mail Server Address or Destination from Web Page 3. When the above address is described with the Hostname, check that the DNS server is properly set or not.
				Note	

Main code	Sub code	Title	The specified mail server or the FTP server is not found.	
<b>CE</b>	<b>02</b>	Case 3	Trouble position/ Cause	An error occurs in the SMTP server/ FTP server/ NTS.
			Remedy	Check the SMTP server/ FTP server/ NTS for any trouble.
			Note	

Main code	Sub code	Title	The specified server suspends response during transmission of images.	
<b>CE</b>	<b>03</b>	Phenomenon	Display	Lamp Message
			Details	The specified server suspends response during transmission of images.
			Section	
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Improper connection of the network cable
			Remedy	Check that the network cable is properly connected.
			Note	
		Case 2	Trouble position/ Cause	An error occurs in the SMTP server/ FTP server/ NTS.
			Remedy	Check the SMTP server/ FTP server/ NTS for any trouble.
			Note	

Main code	Sub code	Title	The entered account name of the FTP server or the password for authentication is invalid.	
<b>CE</b>	<b>04</b>	Phenomenon	Display	Lamp Message
			Details	The entered account name of the FTP server or the password for authentication is invalid.
			Section	
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Improper connection of the network cable
			Remedy	Check that the network cable is properly connected.
			Note	
		Case 2	Trouble position/ Cause	Improper registration of the account name or improper password registered in the FTP server as the destination
			Remedy	Check the account name or the password registered in the FTP server as the destination.
			Note	

Main code	Sub code	Title	The entered directory of the FTP server is invalid.	
<b>CE</b>	<b>05</b>	Phenomenon	Display	Lamp Message
			Details	The entered directory of the FTP server is invalid.
			Section	
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Improper connection of the network cable
			Remedy	Check that the network cable is properly connected.
			Note	
		Case 2	Trouble position/ Cause	Check for existence of the directory name in the FTP server registered as the destination.
			Remedy	Check for existence of the directory name in the FTP server registered as the destination.
			Note	

Main code	Sub code	Title	The specified mail server (POP3) is not found.	
<b>CE</b>	<b>06</b>	Phenomenon	Display	Lamp Message
			Details	The specified mail server (POP3) is not found. POP3 server access error
			Section	
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Improper connection of the network cable
			Remedy	Check connection of the network cable.
			Note	
		Case 2	Trouble position/ Cause	Network setup trouble
			Remedy	1. Check that the connected network supports TCP/IP protocol. 2. Check on the Web page that the POP3 server address is correctly set. 3. When the above address is described with the Hostname, check that the DNS server is properly set or not.
			Note	
		Case 3	Trouble position/ Cause	An error occurs in the POP3 server.
			Remedy	Check for any error in the POP3 server.
			Note	



Main code	Sub code	Title	The entered account name of the POP3 server or the password for authentication is invalid.		
<b>CE</b>	<b>07</b>	Phenomenon	Display	Lamp	
				Message	
			Details	The entered account name of the POP3 server or the password for authentication is invalid. POP3 server authentication check error	
			Section		
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection of the network cable
				Remedy	Check connection of the network cable.
				Note	
			Case 2	Trouble position/ Cause	Improper account name or password registered in the POP3 server
				Remedy	Check that the account name or the password registered for the POP3 server is correct.
				Note	

Main code	Sub code	Title	The specified mail server (POP3) suspends response.		
<b>CE</b>	<b>08</b>	Phenomenon	Display	Lamp	
				Message	
			Details	The specified mail server (POP3) suspends response. POP3 server time-out error	
			Section		
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection of the network cable
				Remedy	Check connection of the network cable.
				Note	
			Case 2	Trouble position/ Cause	
				Remedy	An error occurs in the POP3 server.
				Note	Check for any error in the POP3 server.

Main code	Sub code	Title	CIS shading trouble (White correction)		
<b>E6</b>	<b>11</b>	Phenomenon	Display	Lamp	
				Message	
			Details	CIS shading trouble (White correction) When the power is turned on or when the proper gain setup value is not obtained with SIM 63-2 CIS shading (Retry number: 256 times): CIS white reference plate scan level is abnormal when the lamp is lighted.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Defective installation of the harness to the CIS unit CIS unit abnormality
				Remedy	CIS unit harness check
				Note	
			Case 2	Trouble position/ Cause	Reference white plate dirt
				Remedy	Clean the reference white plate.
				Note	
			Case 3	Trouble position/ Cause	CIS lighting trouble
				Remedy	Use SIM 5-3 to check the light quantity of CIS.
				Note	
			Case 4	Trouble position/ Cause	Scanner PWB abnormality
				Remedy	Scanner PWB check
				Note	

Main code	Sub code	Title	CIS communication trouble		
<b>E6</b>	<b>14</b>	Phenomenon	Display	Lamp	
				Message	
			Details	CIS communication trouble When an error occurs in an access check to the CIS-ASIC on turning on the power or closing the DSFP cover. (Retry number: 5 times) Communication trouble between the scanner PWB and the CIS-ASIC. (Clock synchronization)	
			Section	Scanner	
			Operation mode		
			Note		

Main code	Sub code	Title	CIS communication trouble	
E6	14	Case 1	Trouble position/ Cause	Defective installation of the harness to the CIS unit
			Remedy	Check the harness connected to the CIS unit.
			Note	
		Case 2	Trouble position/ Cause	CIS unit abnormality
			Remedy	CIS unit check
			Note	
		Case 3	Trouble position/ Cause	Scanner PWB abnormality
			Remedy	Scanner PWB check
			Note	

Main code	Sub code	Title	System data trouble			
E7	01	Phenomenon	Display	Lamp		
				Message		
			Details	While reading/writing the HDD system area data, the HDD returns an error response or no response at all for longer than 30 seconds.		
			Section	Controller		
			Operation mode			
			Note			
			Case 1	Trouble position/ Cause	No HDD is installed on the MFP control PWB.	
				Remedy	Check installation status of the HDD on the MFP control PWB.	
				Note		
			Case 2	Trouble position/ Cause	HDD does not properly function.	
		Remedy		<ul style="list-style-type: none"> <li>• CHECK connection between the HDD and MFP control.</li> <li>• Perform an HDD read/write test using SIM 62-2/3.</li> <li>• Replace HDD.</li> </ul>		
		Note				
		Case 3	Trouble position/ Cause	MFP control PWB abnormality		
			Remedy	Replace the MFP control PWB.		
			Note			

Main code	Sub code	Title	Laser trouble			
E7	02	Phenomenon	Display	Lamp		
				Message		
			Details	Laser trouble The BD signal from the LSU is kept OFF or ON. When the polygon motor rotation is started and three successive BDT signals of I/O ASIC are detected after forced lighting of laser.		
			Section	Engine		
			Operation mode			
			Note			
			Case 1	Trouble position/ Cause	The connector to the LSU or the harness in the LSU is disconnected or broken.	
				Remedy	Check for disconnection of the connector to the LSU.	
				Note		
			Case 2	Trouble position/ Cause	The polygon motor does not rotate properly.	
		Remedy		Check that the polygon motor rotated properly or not.		
		Note				
		Case 3	Trouble position/ Cause	The position of the laser home position sensor in the LSU is shifted.		
			Remedy	Use SIM 61-1 to check the LSU operation.		
			Note			
		Case 4	Trouble position/ Cause	A proper voltage is not supplied to the power line of the laser.		
			Remedy	Replace the LSU unit.		
			Note			
		Case 5	Trouble position/ Cause	Defective lighting of the laser emitting diode		
			Remedy	Check lighting of the laser emitting diode.		
			Note			
		Case 6	Trouble position/ Cause	PCU PWB abnormality		
			Remedy	Replace the PCU PWB.		
			Note			
		Case 7	Trouble position/ Cause	MFP control ASIC PWB abnormality		
			Remedy	Replace the MFP control PWB.		
			Note			

Main code	Sub code	Title		HDD trouble	
<b>E7</b>	<b>03</b>	Phenomenon		Display	Lamp Message
				Details	HDD trouble Data abnormality in the HDD file management area (cluster chain corrupted) The HDD sends an error response or does not respond for 30 sec.
				Section	Controller
				Operation mode	
				Note	
		Case 1		Trouble position/ Cause	The HDD is not installed properly to the MFP control PWB.
				Remedy	Check installation of the HDD to the MFP control PWB.
				Note	
		Case 2		Trouble position/ Cause	The HDD of the MFP control PWB does not operate properly.
				Remedy	Check connection of the harness to the HDD of the MFP control PWB. Use SIM 62-2, -3 to check read/write of the HDD. Replace the HDD.
				Note	
		Case 3		Trouble position/ Cause	MFP control ASIC PWB abnormality
				Remedy	Replace the MFP control PWB.
				Note	

Main code	Sub code	Title		Decode error trouble	
<b>E7</b>	<b>06</b>	Phenomenon		Display	Lamp Message
				Details	Decode error trouble A decode error occurs in making an image.
				Section	Controller
				Operation mode	
				Note	
		Case 1		Trouble position/ Cause	Garbled data in input from PCI to PM DM trouble Data are garbled in image compression/transfer.
				Remedy	Check installation of the PWB. (PCI bus) If the job at occurrence is FAX, check installation of the FAX PWB. For the other cases, check the MFP control PWB.
				Note	
		Case 2		Trouble position/ Cause	MFP control ASIC PWB abnormality
				Remedy	Replace the MFP control PWB.

Main code	Sub code	Title		CCD shading trouble (Black correction)	
<b>E7</b>	<b>10</b>	Phenomenon		Display	Lamp Message
				Details	Shading trouble (Black correction) CCD black scan level abnormality when the copy lamp is turned off. When the proper offset setup value is not obtained at turning on the power or CCD shading with SIM 63-2.
				Section	Scanner
				Operation mode	
				Note	
		Case 1		Trouble position/ Cause	Defective installation of the flat cable to the CCD unit
				Remedy	Check installation of the flat cable to the CCD unit.
				Note	
		Case 2		Trouble position/ Cause	CCD unit abnormality
				Remedy	CCD unit check
				Note	
		Case 3		Trouble position/ Cause	Scanner PWB abnormality
				Remedy	Scanner PWB check
				Note	

Main code	Sub code	Title	CCD shading trouble (White correction all pixel adjustment)		
E7	11	Phenomenon	Display	Lamp Message	
			Details	Shading trouble (White correction all pixel adjustment) The CCD white reference plate scan level abnormality when lighting the copy lamp When the proper gain setup value is not obtained at turning on the power or CCD shading with SIM 63-2.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/Cause	Mirror, lens, reference white plate dirt
				Remedy	Clean the mirror, the lens, and the reference white plate.
				Note	
			Case 2	Trouble position/Cause	Copy lamp lighting abnormality
				Remedy	Check the light quantity and lighting of the copy lamp. (SIM 5-3)
		Note			
		Case 3	Trouble position/Cause	Defective installation of the flat cable to the CCD unit Improper installation of the CCD unit CCD unit abnormality	
			Remedy	CCD unit check	
			Note		
			Case 4	Trouble position/Cause	Scanner PWB abnormality
				Remedy	Scanner PWB check
		Note			

Main code	Sub code	Title	CCD shading trouble (White correction center adjustment)	
E7	12	Phenomenon	Display	Lamp Message
			Details	Shading trouble (White correction center adjustment) The CCD white reference plate scan level abnormality when lighting the copy lamp When the proper gain setup value is not obtained at turning on the power or CCD shading with SIM 63-2.
			Section	Scanner
			Operation mode	
			Note	

Main code	Sub code	Title	CCD shading trouble (White correction center adjustment)	
E7	12	Case 1	Trouble position/Cause	Mirror, lens, reference white plate dirt
			Remedy	Clean the mirror, the lens, and the reference white plate.
			Note	
		Case 2	Trouble position/Cause	Copy lamp lighting abnormality
			Remedy	Check the light quantity and lighting of the copy lamp. (SIM 5-3)
			Note	
		Case 3	Trouble position/Cause	Defective installation of the flat cable to the CCD unit Improper installation of the CCD unit CCD unit abnormality
			Remedy	CCD unit check
			Note	
		Case 4	Trouble position/Cause	Scanner PWB abnormality
			Remedy	Scanner PWB check
			Note	

Main code	Sub code	Title	CCD communication trouble		
E7	14	Phenomenon	Display	Lamp Message	
			Details	CCD communication trouble Communication trouble between the scanner PWB and the CCD-ASIC. (Clock synchronization) When an error occurs in the access check to the CCD-ASIC executed at turning on the power.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/Cause	Defective installation of the harness connected to the CCD unit
				Remedy	Check the harness connected to the CCD unit.
				Note	
			Case 2	Trouble position/Cause	CCD unit abnormality
				Remedy	CCD unit check
		Note			
		Case 3	Trouble position/Cause	Scanner PWB abnormality	
			Remedy	Scanner PWB check	
			Note		

Main code	Sub code	Title	LSU connection trouble		
E7	50	Phenomenon	Display	Lamp	
				Message	
			Details	LSU connection trouble The LSU connected does not conform to the machine specifications. When the combination of the pattern of an input port on the PCU and the pattern of a port connected to the LSU is not proper.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	LSU connection trouble
				Remedy	Check connection between the PCU and the LSU and the harness.
				Note	
			Case 2	Trouble position/ Cause	PCU PWB trouble LSU trouble
				Remedy	Check the LSU. Check the PCU.
				Note	

Main code	Sub code	Title	Incompatibility check (Engine (PCU) detection)		
E7	55	Phenomenon	Display	Lamp	
				Message	
			Details	Incompatibility check trouble An error is detected in the internal incompatibility check in the engine (PCU).	
			Section	Engine (PCU)	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	PCU PWB trouble or a improper PCU PWB has been installed.
				Remedy	Check the PCU PWB.
				Note	

Main code	Sub code	Title	Controller connection trouble	
E7	60	Phenomenon	Display	Lamp
				Message
			Details	Controller connection trouble Incompatibility trouble between the controller and the engine
			Section	Controller
			Operation mode	
			Note	

Main code	Sub code	Title	Controller connection trouble	
E7	60	Case 1	Trouble position/ Cause	Improper combination of the controller PWB and the engine
			Remedy	Check the controller PWB. Check combination of the controller PWB and the engine.
			Note	

Main code	Sub code	Title	Incompatibility check (MFP controller detection)		
E7	65	Phenomenon	Display	Lamp	
				Message	
			Details	Incompatibility check trouble An error is detected in the internal incompatibility check in the MFP control PWB.	
			Section	MFP control PWB	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	MFP control PWB trouble or a improper MFP control PWB has been installed.
				Remedy	Check the MFP control PWB and repair it as required.
				Note	

Main code	Sub code	Title	Communication trouble between the MFP control and the scanner (MFP control detection)	
E7	80	Phenomenon	Display	Lamp
				Message
			Details	Communication trouble between the MFP control and the scanner (MFP control detection) Communication establishment error/ framing/ parity/ protocol error Follows the communication protocol specifications. Communication error, timing abnormality of the communication data and the communication signal line
			Section	Controller
			Operation mode	
			Note	

Main code	Sub code	Title	Communication trouble between the MFP control and the scanner (MFP control detection)	
<b>E7</b>	<b>80</b>	Case 1	Trouble position/ Cause	Defective connection of the slave unit PWB connector Defective harness between the slave unit PWB and the MFP control PWB Slave unit PWB mother board connector pin breakage
			Remedy	Check connection of the connector between the slave unit PWB and the MFP control PWB and the harness. Check grounding of the machine.
			Note	

Main code	Sub code	Title	MFP control-PCU communication trouble (MFP control detection)	
<b>E7</b>	<b>90</b>	Phenomenon	Display	Lamp Message
			Details	MFP control-PCU communication trouble (MFP control detection) Communication establishment error/ framing/ parity/ protocol error Follows the communication protocol specifications. Communication error, timing abnormality of the communication data and the communication signal line
			Section	Controller
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Defective connection of the slave unit PWB connector Defective harness between the slave unit PWB and the MFP control PWB Slave unit PWB mother board connector pin breakage
			Remedy	Check connection of the connector between the slave unit PWB and the MFP control PWB and the harness. Check grounding of the machine.
			Note	

Main code	Sub code	Title	Auto developer adjustment trouble (Overtoner error)	
<b>EE</b>	<b>EL</b>	Phenomenon	Display	Lamp Message
			Details	Auto developer adjustment trouble (Overtoner error) When executing the automatic development adjustment, toner concentration sensor output level is 1.5V or below.
			Section	Engine
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Toner density sensor trouble Charging voltage and developing voltage trouble Toner density trouble Developing unit trouble PCU PWB trouble
			Remedy	Use SIM 25-2 to perform the automatic developing adjustment.
			Note	

Main code	Sub code	Title	Auto developer adjustment trouble (Undertoner error)	
<b>EE</b>	<b>EU</b>	Phenomenon	Display	Lamp Message
			Details	Auto developer adjustment trouble (Undertoner error) When executing the automatic development adjustment, toner concentration sensor output level is 3.5V or above.
			Section	Engine
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	Toner density sensor trouble Charging voltage and developing voltage trouble Toner density trouble Developing unit trouble PCU PWB trouble
			Remedy	Use SIM 25-2 to perform the automatic developing adjustment.
			Note	

Main code	Sub code	Title	Finisher communication trouble	
<b>F1</b>	<b>00</b>	Phenomenon	Display	Lamp Message
			Details	Finisher communication trouble An error in the communication line test after turning on the power or canceling the simulation Communication error with the finisher Follows the communication protocol specifications. Communication error, timing abnormality of the communication data and the communication signal line
			Section	Engine
			Operation mode	
			Note	
	Case 1		Trouble position/ Cause	Improper connection or disconnection of the connector or harness between the machine and the finisher
			Remedy	Check the connector and the harness in the communication line.
			Note	
	Case 2		Trouble position/ Cause	Finisher control PWB trouble Control PWB (PCU) trouble
			Remedy	Replace the finisher control PWB or the PCU PWB.
			Note	
	Case 3		Trouble position/ Cause	Malfunction caused by noises
			Remedy	Canceled by turning ON/OFF the power.
		Note		

Main code	Sub code	Title	Finisher transport motor abnormality	
<b>F1</b>	<b>02</b>	Phenomenon	Display	Lamp Message
			Details	Finisher transport motor abnormality When opening the shutter unit, the opening process is not completed in 1 sec. When closing the shutter unit, the closing process is not completed in 1 sec. When the tray lift unit is operating in the dangerous area, "Not closed state" of the shutter close sensor is detected.
			Section	Finisher
			Operation mode	
			Note	
	Case 1		Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble
			Remedy	Use SIM 3-3 to check the transport motor operation.
			Note	

Main code	Sub code	Title	Finisher oscillation motor trouble	
<b>F1</b>	<b>03</b>	Phenomenon	Display	Lamp Message
			Details	Finisher oscillation motor trouble When opening the oscillation unit, the opening process is not completed in 1sec. When closing the oscillation unit, the closing operation is not completed in 3sec. When the tray lift unit is operating in the dangerous area, "Not closed state" of the oscillation unit close sensor is detected. When controlling the oscillation unit speed, the encoder input cannot be detected within a specified time.
			Section	Finisher
			Operation mode	
			Note	
	Case 1		Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble
			Remedy	Use SIM 3-3 to check the motor operation.
			Note	

Main code	Sub code	Title			
<b>F1</b>	<b>08</b>	<b>Finisher staple shift motor trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Finisher staple shift motor trouble When the stapler shift motor does not move from the home position in 4sec when operating the stapler shift motor. When the stapler shift motor does not return to the home position in 4sec when operating the stapler shift motor.	
			Section	Finisher	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble	
			Remedy	Use SIM 3-3 to check the staple shift motor operation.	
			Note		

Main code	Sub code	Title			
<b>F1</b>	<b>10</b>	<b>Finisher/staple motor trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Finisher/staple motor trouble When the staple unit does not shift from HP within 0.5sec in staple process. When a stapler jam is detected and the staple motor is reversed, the staple motor does not return to HP in 0.5sec.	
			Section	Finisher	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble	
			Remedy	Use SIM 3-3 to check the staple shift motor operation.	
			Note		

Main code	Sub code	Title			
<b>F1</b>	<b>09</b>	<b>Finisher load capacity sensor trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Finisher load capacity sensor trouble When the received data on performing the sensor test at turning on the power are outside the specified range. When the detected data on calculation of the correction value are outside the specified range.	
			Section	Finisher	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Sensor breakage Harness disconnection Console finisher control PWB trouble	
			Remedy	Use SIM 3-2 to check the sensor operation.	
			Note		

Main code	Sub code	Title			
<b>F1</b>	<b>11</b>	<b>Finisher/pusher motor trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Finisher/pusher motor trouble When learning the paper exit roller speed, the process is not completed in 10sec. When controlling the paper exit roller speed, an encoder input is not detected in a specified time.	
			Section	Finisher	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble	
			Remedy	Use SIM 3-3 to check the pusher motor operation and the paddle solenoid operation, or use SIM 3-2 to check the boomerang rotations sensor.	
			Note		



Main code	Sub code	Title	Finisher tray lift motor trouble		
<b>F1</b>	<b>15</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher tray lift motor trouble When operating the tray lift unit, the process is not completed in 12sec. When the tray lift unit is lifting, the tray lift unit upper limit sensor ON is detected. When operating the tray lift unit, an encoder input is not detected in 0.2sec.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble
				Remedy	Use SIM 3-3 to check the elevator motor operation.
				Note	

Main code	Sub code	Title	Finisher saddle folding sensor trouble		
<b>F1</b>	<b>31</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher saddle folding sensor trouble When the motor rotation speed (linear velocity) at every 200msec falls below the specified level. When moving to the home position, the home position sensor does not turn on within the specified time. When shifting from the home position to the lead edge, the home position sensor does not turn off within the specified time.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Sensor breakage Harness disconnection Console finisher control PWB trouble
				Remedy	Use SIM 3-2 to check the sensor operation.
				Note	

Main code	Sub code	Title	Finisher/alignment motor trouble		
<b>F1</b>	<b>19</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/alignment motor trouble When operating the alignment motor, it does not move from the home position in 2sec. When operating the alignment motor, it does not return to the home position in 2sec.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble
				Remedy	Use SIM 3-3 to check the motor operation.
				Note	

Main code	Sub code	Title	Finisher-saddle communication trouble	
<b>F1</b>	<b>32</b>	Phenomenon	Display	Lamp Message
			Details	Communication error between the finisher and the saddle When the motor rotation speed (linear velocity) at every 200msec falls below the specified level. When moving to the home position, the home position sensor does not turn on within the specified time. When shifting from the home position to the lead edge, the home position sensor does not turn off within the specified time.
			Section	Finisher
			Operation mode	
			Note	

Main code	Sub code	Title	Finisher-saddle communication trouble			
<b>F1</b>	<b>32</b>	Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness between the finisher and the saddle unit.		
				Remedy	Check the connector and the harness in the communication line.	
				Note		
			Case 2	Trouble position/ Cause	Finisher control PWB trouble Control PWB (PCU) trouble	
					Remedy	Replace the finisher control PWB.
					Note	
			Case 3	Trouble position/ Cause	Malfunction caused by noises	
					Remedy	Canceled by turning ON/OFF the power.
					Note	

Main code	Sub code	Title	Finisher/punch shift motor trouble			
<b>F1</b>	<b>33</b>	Phenomenon	Display	Lamp		
				Message		
			Details	Finisher/punch shift motor trouble When operating the punch shift motor, it does not move from the home position in 4sec. When operating the punch shift motor, it does not return to the home position in 4sec.		
				Section	Finisher	
				Operation mode		
				Note		
			Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble	
					Remedy	Use SIM 3-3 to check the motor operation.
					Note	

Main code	Sub code	Title	Finisher/punch motor trouble			
<b>F1</b>	<b>34</b>	Phenomenon	Display	Lamp		
				Message		
			Details	Finisher/punch motor trouble When learning the punch unit, it does not complete normally and does not return to the home position. When executing punching, it does not shift from the home position in 0.2sec, or it overruns to go into non-HP state. When operating the punch unit, the encoder input cannot be detected within 0.1sec.		
				Section	Finisher	
				Operation mode		
				Note		
			Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Finisher control PWB trouble	
					Remedy	Use SIM 3-3 to check the motor operation.
					Note	

Main code	Sub code	Title	Finisher/ backup RAM trouble			
<b>F1</b>	<b>37</b>	Phenomenon	Display	Lamp		
				Message		
			Details	Finisher/ backup RAM trouble When backup RAM data check sum is NG when turning on the power.		
				Section	Finisher	
				Operation mode		
				Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises	
					Remedy	Replace the finisher control PWB.
					Note	

Main code	Sub code	Title	Finisher/punch backup ROM trouble		
<b>F1</b>	<b>38</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/punch backup ROM trouble Punch unit backup RAM data are garbled.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Punch control PWB trouble Malfunction caused by noises
				Remedy	Replace the punch control PWB.
			Note		

Main code	Sub code	Title	Finisher/saddle positioning plate motor trouble		
<b>F1</b>	<b>41</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle positioning plate motor trouble The positioning motor HP sensor does not turn on within 1.33sec after starting the motor. The positioning motor HP sensor does not turn off within 1sec after starting the motor.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
			Note		

Main code	Sub code	Title	Finisher/saddle guide motor trouble		
<b>F1</b>	<b>42</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle guide motor trouble It does not return to the home position within the specified time from starting the guide motor. The HP sensor does not turn off within the specified time when shifting from the home position to the specified position.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
			Note		

Main code	Sub code	Title	Finisher/saddle alignment motor trouble		
<b>F1</b>	<b>43</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle alignment motor trouble When shifting to the home position, the home position sensor does not turn on. The HP sensor does not turn off within the specified time when shifting from the home position to the specified position.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
			Note		

Main code	Sub code	Title	Finisher/saddle bottom staple motor trouble		
<b>F1</b>	<b>44</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle bottom staple motor trouble The home position sensor does not turn off within the specified time after normal starting of the motor. The home positions sensor does not turn on within the specified time after reverse starting of the motor in recovery.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
				Note	

Main code	Sub code	Title	Finisher/saddle front staple motor trouble		
<b>F1</b>	<b>45</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle front staple motor trouble The home position sensor does not turn off within the specified time after normal starting of the motor. The home positions sensor does not turn on within the specified time after reverse starting of the motor in recovery.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
				Note	

Main code	Sub code	Title	Finisher/saddle push motor trouble		
<b>F1</b>	<b>46</b>	Phenomenon	Display	Lamp Message	
			Details	Finisher/saddle push motor trouble When moving to the home position, the home position sensor does not turn on within the specified time. The push lead edge sensor does not turn on within the specified time after shifting from the home position. When shifting from the home position to the lead edge, the home position sensor does not turn off within the specified time. The lead edge sensor does not turn off within the specified time when shifting from the lead edge position to the home position. The motor RPM at every 50msec falls below the specified level. The lead edge sensor does not turn on within the specified time when shifting from the home position to the lead edge position.	
			Section	Finisher	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises
				Remedy	Replace the finisher control PWB.
				Note	

Main code	Sub code	Title		Finisher/saddle sensor connector connection trouble				
F1	51	Phenomenon	Display	Lamp				
				Message				
			Details	Finisher/saddle sensor connector connection trouble The connector connection detection input of the guide HP sensor is off. The connector connection detection input of the push lead edge sensor is off.				
			Section	Finisher				
			Operation mode					
			Note					
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises			
				Remedy	Replace the finisher control PWB.			
				Note				

Main code	Sub code	Title		Finisher/micro switch trouble				
F1	52	Phenomenon	Display	Lamp				
				Message				
			Details	Finisher/micro switch trouble With all cover PI (photo sensor) ON, the transport cover MS is off for 1sec continuously from starting copying. With all cover PI (photo sensor) ON, the front cover MS is off for 1sec continuously from starting copying. With all cover PI (photo sensor) ON, the paper exit cover MS is off for 1sec continuously from starting copying.				
			Section	Finisher				
			Operation mode					
			Note					
			Case 1	Trouble position/ Cause	Finisher control PWB trouble Malfunction caused by noises			
				Remedy	Replace the finisher control PWB.			
				Note				

Main code	Sub code	Title		Finisher-inserter communication trouble			
F1	60	Phenomenon	Display	Lamp			
				Message			
			Details	Finisher/inserter communication trouble			
			Section	Inserter			
			Operation mode				
		Note					
		Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness between the finisher and the inserter unit			
			Remedy	Check the connector and the harness in the communication line.			
			Note				
		Case 2	Trouble position/ Cause	Finisher control PWB trouble Control PWB (PCU) trouble			
			Remedy	Replace the finisher control PWB.			
			Note				
		Case 3	Trouble position/ Cause	Malfunction caused by noises			
			Remedy	Canceled by turning ON/OFF the power.			
			Note				

Main code	Sub code	Title		Inserter/EEPROM trouble			
F1	61	Phenomenon	Display	Lamp			
				Message			
			Details	Inserter/EEPROM trouble Data read failure on turning on the power			
			Section	Inserter			
			Operation mode				
		Note					
		Case 1	Trouble position/ Cause	EEPROM trouble Control circuit runaway due to noises			
			Remedy	Check that the EEPROM is properly installed. Replace the inserter PWB.			
			Note				
		Case 2	Trouble position/ Cause	Inserter PWB EEPROM access circuit trouble			
	Remedy	Replace the inserter PWB.					
	Note						

Main code	Sub code	Title		
<b>F1</b>	<b>62</b>	<b>Inserter/reverse sensor trouble</b>		
		Phenomenon	Display	Lamp
				Message
			Details	Inserter/reverse sensor trouble Auto adjustment failure on turning on the power
			Section	Inserter
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	Auto adjustment failure on turning on the power Sensor breakage Harness disconnection Inserter PWB trouble
		Remedy	Use SIM 3-2 to check the sensor operation.	
Note				

Main code	Sub code	Title		
<b>F2</b>	<b>00</b>	<b>Toner control sensor open</b>		
		Phenomenon	Display	Lamp
				Message
			Details	Toner control sensor output open After completion of auto development adjustment, during process operation, the toner sensor output is detected as 0.5V or less or 4.5V or above three times.
			Section	Engine
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	Connector harness trouble Connector not connected.
		Remedy	Check connection of the toner control sensor. Check connection of the connector harness to the main PWB. Check for disconnection of the harness.	
Note				

Main code	Sub code	Title		
<b>F2</b>	<b>02</b>	<b>Toner supply abnormality</b>		
		Phenomenon	Display	Lamp
				Message
			Details	Toner supply abnormality Toner remains in the toner bottle when undertoner is detected by the toner concentration sensor in the developing unit.
			Section	Engine
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	Toner concentration sensor trouble Toner remaining quantity sensor trouble Connector harness trouble for the above sensors.
		Remedy	Check connector of hopper unit toner motor (TM1) Check connector of toner bottle toner motor (TM2) Check connection of the connector harnesses to the main PWB. Check broken harness for above connections. Check output of the toner concentration sensor (SIM25-1) Check output of the toner remaining quantity sensor (SIM10-2)	
		Note		

Main code	Sub code	Title		
<b>F2</b>	<b>04</b>	<b>Improper cartridge (Life cycle error, ertc.)</b>		
		Phenomenon	Display	Lamp
				Message
			Details	An improper toner bottle is inserted. CRUM (IC chip trouble)
			Section	Engine
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	IC chip trouble Improper cartridge
		Remedy	Insert a proper cartridge.	
Note				

Main code	Sub code	Title	CRUM error		
<b>F2</b>	<b>05</b>	Phenomenon	Display	Lamp Message	
			Details	Communication with the IC chip cannot be made. Data write failure to the CRUM or data read failure from the CRUM occurs 3 times continuously except for toner cartridge installation detection.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	IC chip trouble Improper cartridge
				Remedy	Insert a proper cartridge.
				Note	

Main code	Sub code	Title	Process control trouble (Photoconductor surface reflection rate abnormality)		
<b>F2</b>	<b>31</b>	Phenomenon	Display	Lamp Message	
			Details	Process control trouble (Photoconductor surface reflection rate abnormality) Before starting process control, the drum surface is read by the image density sensor to make the sensor gain adjustment so that the output is fixed to a certain level. Though the sensor gain is changed, the output is not fixed to a certain level.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Image density sensor trouble
				Remedy	Use SIM 44-02 to perform the process control sensor gain adjustment.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the image density sensor
				Remedy	If "Error" is displayed, it may be considered as a breakdown. Check the sensor and the harness.
			Note		
		Case 3	Trouble position/ Cause	The image density sensor is dirty. OPC drum cleaning trouble	
			Remedy	If the adjustment is completed, check the drum surface conditions.	
			Note		

Main code	Sub code	Title	Process control trouble (Drum marking scan trouble)		
<b>F2</b>	<b>32</b>	Phenomenon	Display	Lamp Message	
			Details	Process control trouble (Drum marking scan trouble) The drum marking size, density, or the number of units is improper.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Drum marking sensor trouble
				Remedy	Use SIM 44-02 to perform the process control sensor gain adjustment.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the drum marking sensor
				Remedy	If "Error" is displayed, it may be considered as a breakdown. Check the sensor and the harness.
			Note		
		Case 3	Trouble position/ Cause	The drum marking sensor is dirty. OPC drum cleaning trouble	
			Remedy	If the adjustment is completed, check the drum surface conditions.	
			Note		

Main code	Sub code	Title	Drum marking sensor gain adjustment error		
<b>F2</b>	<b>37</b>	Phenomenon	Display	Lamp Message	
			Details	Drum marking sensor gain adjustment error Before starting process control, the drum marking area surface is read by the sensor to make the sensor gain adjustment so that the output is fixed to a certain level. Though the sensor gain is changed, the output is not fixed to a certain level.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Drum marking sensor trouble
				Remedy	Use SIM 44-02 to perform the process control sensor gain adjustment.
				Note	

Main code	Sub code	Title		Drum marking sensor gain adjustment error	
F2	37	Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the drum marking sensor	
			Remedy	If "Error" is displayed, it may be considered as a breakdown. Check the sensor and the harness.	
			Note		
		Case 3	Trouble position/ Cause	The drum marking sensor is dirty. OPC drum cleaning trouble	
			Remedy	If the adjustment is completed, check the drum surface conditions.	
			Note		

Main code	Sub code	Title		Process thermistor breakdown	
F2	39	Phenomenon	Display	Lamp	
				Message	
			Details	Process thermistor breakdown When the process thermistor detection, 3.03V or above, or 0.28V or below is detected once.	
			Section	Engine	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Improper connection of the process thermistor harness.	
			Remedy	Check connection of the connector and the harness of the process thermistor.	
			Note		
		Case 2	Trouble position/ Cause	Process thermistor trouble	
			Remedy	Replace the process thermistor.	
			Note		
		Case 3	Trouble position/ Cause	PCU PWB trouble	
			Remedy	Check the PCU PWB.	
			Note		

Main code	Sub code	Title		Developing thermistor breakdown	
F2	46	Phenomenon	Display	Lamp	
				Message	
			Details	Developing thermistor open or short. Three successive values of 244 or above, or values of 20 or below, are detected at the developing thermistor.	
			Section	Engine	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Developing thermistor harness connection trouble	
			Remedy	Check connection of the connector and the harness of the developing thermistor.	
			Note		
		Case 2	Trouble position/ Cause	Developing thermistor trouble	
			Remedy	Check the developing thermistor	
			Note		
		Case 3	Trouble position/ Cause	PCU PWB trouble	
			Remedy	Check the PCU PWB.	
			Note		

Main code	Sub code	Title		Developing humidity sensor breakdown	
F2	48	Phenomenon	Display	Lamp	
				Message	
			Details	Developing humidity sensor open or short. A value of greater than or equal to 255 or above, or value of 7 or below, is detected at the developing humidity sensor.	
			Section	Engine	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Developing humidity sensor harness connection trouble	
			Remedy	Check connection of the connector and the harness of the developing humidity sensor.	
			Note		
		Case 2	Trouble position/ Cause	Developing humidity sensor trouble	
			Remedy	Check the developing humidity sensor	
			Note		
		Case 3	Trouble position/ Cause	PCU PWB trouble	
			Remedy	Check the PCU PWB.	
			Note		



Main code	Sub code	Title	Machine tray 1 lift-up trouble		
<b>F3</b>	<b>12</b>	Phenomenon	Display	Lamp Message	
			Details	Machine tray 1 lift-up trouble PED does not turn on within the specified time. LUD does not turn on within the specified time. The trouble occurs 3 times continuously that the upper limit sensor does not turn on by lift-up operation for 21sec when inserting a tray or for 2sec when printing. For the first and the second times, guide the user to pull out the tray in case of a tray size error.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	PED, LUD trouble No. 1 tray lift-up motor trouble Improper connection of the harness of the PCU PWB, the lift-up unit, and the paper feed unit
				Remedy	Check the harness and connector of PED and LUD Lift-up trouble unit check. Use SIM 15 to cancel the trouble.
				Note	

Main code	Sub code	Title	Machine tray 2 lift-up trouble	
<b>F3</b>	<b>22</b>	Phenomenon	Display	Lamp Message
			Details	Machine tray 2 lift-up trouble MCPED does not turn on within the specified time. MCLUD does not turn on within the specified time. The trouble occurs 3 times continuously that the upper limit sensor does not turn on by lift-up operation for 10sec when inserting a tray or for 2sec when printing. For the first and the second times, guide the user to pull out the tray in case of a tray size error.
			Section	Engine
			Operation mode	
			Note	

Main code	Sub code	Title	Machine tray 2 lift-up trouble	
<b>F3</b>	<b>22</b>	Case 1	Trouble position/ Cause	MCPED, MCLUD trouble No. 2 tray lift-up motor trouble Improper connection of the harness of the PCU PWB, the lift-up unit, and the paper feed unit
			Remedy	Check the harness and the connector of MCPED and MCLUD. Lift-up trouble unit check. Use SIM 15 to cancel the trouble.
			Note	

Main code	Sub code	Title	Machine tray 3 lift-up trouble		
<b>F3</b>	<b>32</b>	Phenomenon	Display	Lamp Message	
			Details	Machine tray 3 lift-up trouble MCPED does not turn on within the specified time. MCLUD does not turn on within the specified time. The trouble occurs 3 times continuously that the upper limit sensor does not turn on by lift-up operation for 10sec when inserting a tray or for 2sec when printing. For the first and the second times, guide the user to pull out the tray in case of a tray size error.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	MCPED, MCLUD trouble No. 3 tray lift-up motor trouble Improper connection of the harness of the PCU PWB, the lift-up unit, and the paper feed unit
				Remedy	Check the harness and the connector of MCPED and MCLUD. Lift-up trouble unit check
				Note	

Main code	Sub code	Title	Machine tray 4 lift-up trouble		
<b>F3</b>	<b>42</b>	Phenomenon	Display	Lamp	
				Message	
			Details	Machine tray 4 lift-up trouble MCPED does not turn on within the specified time. MCLUD does not turn on within the specified time. The trouble occurs 3 times continuously that the upper limit sensor does not turn on by lift-up operation for 10sec when inserting a tray or for 2sec when printing. For the first and the second times, guide the user to pull out the tray in case of a tray size error.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	MCPED, MCLUD trouble No. 4 tray lift-up motor trouble Improper connection of the harness of the PCU PWB, the lift-up unit, and the paper feed unit
				Remedy	Check the harness and the connector of MCPED and MCLUD. Lift-up trouble unit check
				Note	

Main code	Sub code	Title	38V voltage trouble		
<b>F4</b>	<b>38</b>	Phenomenon	Display	Lamp	
				Message	
			Details	38V voltage falls or rises.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness
				Remedy	Check the connector and the harness of the power line.
				Note	
			Case 2	Trouble position/ Cause	PCU PWB trouble Power unit trouble
			Remedy	Check 38V power source in the power unit and the PCU PWB.	
			Note		

Main code	Sub code	Title	MFP control-FAX communication trouble (MFP control detection)		
<b>F6</b>	<b>00</b>	Phenomenon	Display	Lamp	
				Message	
			Details	MFP control-FAX communication trouble (MFP control detection) The booting sequence by the command line (9600bps, serial) is not completed normally. Communication establishment error/ framing/ parity/ protocol error	
			Section	FAX	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Defective connection of the slave unit PWB connector Defective harness between the slave unit PWB and the MFP control PWB Slave unit PWB mother board connector pin breakage
				Remedy	Use SIM 25-2 to perform the automatic developing adjustment. Check connection of the connector between the slave unit PWB and the MFP control PWB and the harness.
				Note	Check grounding of the machine.
			Case 2	Trouble position/ Cause	Slave unit ROM trouble/ no ROM/ Reversed insertion of ROM/ ROM pin breakage
			Remedy	Check the ROM on the slave unit PWB.	
			Note		

Main code	Sub code	Title	FAX expansion Flash memory trouble (MFP control detection)		
<b>F6</b>	<b>01</b>	Phenomenon	Display	Lamp Message	
			Details	FAX expansion Flash memory trouble (MFP control detection) The expansion flash memory inserted to the FAX I/F PWB could not be cleared.	
			Section	FAX	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Initialization of the FAX expansion memory failed, which is required for a new memory that is inserted to the PWB.
				Remedy	Use SIM 66-10 to clear the expansion flash memory.
				Note	
				Note	

Main code	Sub code	Title	FAX write protect cancel		
<b>F6</b>	<b>20</b>	Phenomenon	Display	Lamp Message	
			Details	The write protect jumper of the FAX interface PWB is released.	
			Section	FAX	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	The FAX write protect pin is set to Write Enable.
				Remedy	Check the write protect pin in the FAX interface PWB.
				Note	
			Case 2	Trouble position/ Cause	FAX interface PWB trouble FAX PWB trouble
				Remedy	Replace the FAX PWB. Replace the FAX interface PWB.
		Note			

Main code	Sub code	Title	FAX modem operation abnormality		
<b>F6</b>	<b>04</b>	Phenomenon	Display	Lamp Message	
			Details	FAX modem operation abnormality The initializing process of the modem chip in the FAX PWB is not completed normally.	
			Section	FAX	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	SW101 in the FAX PWB tries to perform normal operation on the boot side.
				Remedy	Set SW101 on the FAX PWB to other than the boot side, and turn on the power again.
				Note	
			Case 2	Trouble position/ Cause	FAX PWB modem chip operation trouble
				Remedy	Replace the FAX PWB.
		Note			

Main code	Sub code	Title	Abnormal combination of the TEL/LIU PWB and the FAX soft switch		
<b>F6</b>	<b>21</b>	Phenomenon	Display	Lamp Message	
			Details	Combination error of TEL/LIU PWB and software If the destination of the installed TEL/LIU PWB differs from that of the FAX soft switch, it is judged as an error.	
			Section	FAX	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	The destination of the installed TEL/LIU PWB differs. The FAX PWB information (soft switch) differs.
				Remedy	Check the destination of the TEL/LIU PWB. Check the FAX PWB information (soft switch).
				Note	
			Case 2	Trouble position/ Cause	TEL/LIU PWB trouble
				Remedy	Replace the TEL/LIU PWB.
		Note			

Main code	Sub code	Title			
<b>F6</b>	<b>97</b>	<b>FAX-BOX incompatibility trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	The FAX-BOX PWB is not one for the AR-FX8. (FAX detection) If the FAX-BOX modem controller PWB information (hard detection) is not for the AR-FX8, it is judged as an error.	
			Section	FAX	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Because the FAX-BOX modem controller PWB information (hard detection) is not for the AR-FX8. (The modem controller PWB for the AR-FX5 or the AR-FX6 is used.)	
			Remedy	Check the FAX-BOX modem controller PWB. Replace it with a modem controller PWB for the AR-FX8.	
			Note		

Main code	Sub code	Title			
<b>F6</b>	<b>98</b>	<b>Combination error of the FAX-BOX destination information and the machine destination information</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Combination error of the FAX-BOX destination information and the machine destination information When the destination information stored in the FAX-BOX EEPROM is compared with that of the machine, and if the combination is improper, it is judged as an error.	
			Section	FAX	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Because of improper combination between the destination information stored in the EEPROM on the FAX-BOX PWB and that of the machine (set with SIM 26-6).	
			Remedy	Check the destination of the FAX-BOX. Check the machine destination with SIM 26-6. Use a proper combination of the machine and the FAX-BOX.	
			Note		

Main code	Sub code	Title			
<b>F7</b>	<b>01</b>	<b>FAX board EEPROM read/write error</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	FAX board EEPROM read/write error ACK from the EEPROM cannot be checked.	
			Section	FAX	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	EEPROM trouble FAX PWB EEPROM access circuit trouble	
			Remedy	Replace the EEPROM. Re-setup the soft SW.	
			Note		

Main code	Sub code	Title			
<b>F9</b>	<b>02</b>	<b>PRT centro port check error</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	PRT centro port check error	
			Section	Controller	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Centro port trouble MFP control PWB trouble	
			Remedy	Replace the MFP control PWB.	
			Note		

Main code	Sub code	Title			
<b>H2</b>	<b>00/ HL1 01/ HL2 02/ HL3</b>	<b>Thermistor open/Fusing unit not installed</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Thermistor open (An input voltage of 2.95V or above is detected.) Fusing unit not installed	
			Section	Engine	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Thermistor trouble Control PWB trouble Improper connection of the fusing section connector AC power trouble Fusing unit not installed	
			Remedy	Check the harness and the connector between the thermistor and the control PWB. Use SIM 14 to clear the self diag display.	
			Note		

Main code	Sub code	Title	Fusing section high temperature trouble	
			Display	Lamp
H3	00/HL1	Phenomenon	Display	Lamp
	01/HL2		Message	
			Details	Fusing section high temperature trouble The fusing temperature exceeds 241.5°C. (An input voltage of 0.35V or less is detected.) When fusing temperature control is started and a temperature of 242°C is detected 3 times continuously in sampling of 300 (450) msec interval. (Except for Japan)
			Section	Engine
			Operation mode	
			Note	
	Case 1		Trouble position/ Cause	Thermistor trouble Control PWB trouble Improper connection of the fusing section connector AC power trouble
			Remedy	Use SIM 5-2 to check flashing of the heater lamp. When the lamp flashes normally. <ul style="list-style-type: none"> <li>• Check the thermistor and the harness.</li> <li>• Check the thermistor input circuit on the control PWB.</li> </ul> When the lamp keeps ON. <ul style="list-style-type: none"> <li>• Check the AC PWB and the lamp control circuit on the control PWB.</li> </ul> Use SIM 14 to cancel the trouble
			Note	

Main code	Sub code	Title	Fusing section low temperature trouble	
			Display	Lamp
H4	00/HL1	Phenomenon	Display	Lamp
	01/HL2		Message	
			Details	Fusing section low temperature trouble The set temperature is not reached within the specified time (normally 4 min) after turning on the power relay. The heater lamp does not turn off in 4 min after starting warming up. After completion of warming up, when the temperature below (*) is detected 5 times continuously during sampling in the interval of 300(450) msec (EX JAPAN): * H4-02/HL3: 80°C (Fixed level) This temperature is -50°C lower than the temperature control level of H4-00/HL1, H4-01/HL2.
			Section	Engine
			Operation mode	
			Note	
	Case 1		Trouble position/ Cause	Thermistor trouble Heater lamp trouble Control PWB trouble Thermostat trouble AC power trouble Interlock switch
			Remedy	Use SIM 5-2 to check flashing of the heater lamp. When the lamp flashes normally. <ul style="list-style-type: none"> <li>• Check the thermistor and the harness.</li> <li>• Check the thermistor input circuit on the control PWB.</li> </ul> When the lamp does not turn on. <ul style="list-style-type: none"> <li>• Check for disconnection of the heater lamp or the thermostat.</li> <li>• Check the interlock switch.</li> <li>• Check the AC PWB and the lamp control circuit on the control PWB.</li> </ul> Use SIM 14 to cancel the trouble
			Note	

Main code	Sub code	Title			
<b>H5</b>	<b>01</b>	<b>5-time continuous POD not-reached JAM detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	5-time continuous POD not-reached JAM detection When POD1 not-reached jam is detected 5 times continuously. POD1 jam counter is backed up and used in a print job after turning on the power. The counter is cleared when POD1 jam does not occur in a job or when the trouble is canceled.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	The fusing jam is not canceled completely. (Jam paper remains.)
				Remedy	Check for jam paper in the fusing section. (Winding, etc.)
			Case 2	Trouble position/ Cause	POD1 sensor trouble, or harness connection trouble
				Remedy	Check the PODC1 sensor harness and installation of the fusing unit.
		Case 3	Trouble position/ Cause	Fusing unit installation trouble	
			Remedy	Use SIM 14 to cancel the trouble	

Main code	Sub code	Title			
<b>L1</b>	<b>00</b>	<b>Scanner feed trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Scanner feed trouble Scanner feed is not completed within the specified time. When MHP Soft is not detected within 2 sec after shifting the mirror base unit in the feeding direction.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Scanner unit trouble The scanner wire is disconnected.
				Remedy	Use SIM 1-1 to check scanning operation.
				Note	

Main code	Sub code	Title			
<b>L3</b>	<b>00</b>	<b>Scanner return trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Scanner return trouble Scanner return is not completed within the specified time. MHP Son is not detected within 10sec after starting the mirror base unit in the return direction.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Scanner unit trouble The scanner wire is disconnected.
				Remedy	Use SIM 1-1 to check scanning operation.
				Note	

Main code	Sub code	Title			
<b>L4</b>	<b>01</b>	<b>Main motor lock detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Main motor lock detection Three successive trouble signals are detected after 600 msec from starting the main motor. No trouble is detected after 600msec above.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Main motor trouble
				Remedy	Use SIM 6-1 to check the main motor operation.
				Note	
			Case 2	Trouble position/ Cause	Improper disconnection of the harness between the PCU PWB and the main motor Control circuit trouble
			Remedy	Check the harness and the connector between the PCU PWB and the main motor.	
			Note		

Main code	Sub code	Title			
<b>L4</b>	<b>02</b>	<b>Drum motor lock detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Drum motor lock detection The motor lock signal is detected for 1.5sec during rotation of the drum motor.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Drum motor trouble
				Remedy	Use SIM 6-1 to check the drum motor operation.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the drum motor Control circuit trouble
		Remedy		Check the harness and the connector of the PCU PWB, and the drum motor.	
		Note			

Main code	Sub code	Title			
<b>L4</b>	<b>04</b>	<b>Developing motor lock detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Developing motor lock detection The motor lock signal is detected for 1.5sec during rotation of the developing motor	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Developing motor trouble
				Remedy	Use SIM 6-1 to check the developing motor operation.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the developing motor Control circuit trouble
		Remedy		Check the harness and the connector between the PCU PWB and the developing motor.	
		Note			

Main code	Sub code	Title			
<b>L4</b>	<b>03</b>	<b>Fusing motor lock detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Fusing motor lock detection Three successive trouble signals are detected after 600 msec from starting the fusing motor.	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Fusing motor trouble
				Remedy	Use SIM 6-1 to check the fusing motor operation.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the fusing motor Control circuit trouble
		Remedy		Check connection of the harness and the connector between the PCU PWB and the fusing motor.	
		Note			

Main code	Sub code	Title			
<b>L4</b>	<b>06</b>	<b>Transfer belt separation motor trouble detection</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Transfer belt separation motor trouble detection The transfer belt home position sensor ON/OFF is not detected within the specified time (4 sec) during operation of the transfer belt (separation, contact).	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Transfer belt separation motor trouble
				Remedy	Use SIM 6-1 to check the transfer belt motor operation.
				Note	
			Case 2	Trouble position/ Cause	Improper connection of the harness between the PCU PWB and the transfer belt separation motor. Control circuit trouble
		Remedy		Check connection of the harness and the connector between the PCU PWB and the fusing motor.	
		Note			

Main code	Sub code	Title																													
<b>L4</b>	<b>30</b>	<b>Controller fan motor lock detection</b>																													
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<b>L4</b>	<b>31</b>	<b>Paper discharging fan trouble</b>																																					
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<b>L6</b>	<b>10</b>	<b>Polygon motor lock detection</b>																													
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<b>L8</b>	<b>01</b>	<b>No full wave signal</b>																																					
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Main code	Sub code	Title		
<b>PF</b>	<b>00</b>	<b>RTC copy inhibit command receive</b>		
		Phenomenon	Display	Lamp
				Message
			Details	The copy inhibit command is received from the RIC (host). (By PPC communication standards.)
			Section	Controller
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	Judged by the host.
			Remedy	Notification to the host
			Note	

Main code	Sub code	Title		
<b>U1</b>	<b>01</b>	<b>FAX battery abnormality</b>		
		Phenomenon	Display	Lamp
				Message
			Details	FAX battery abnormality FAX backup SRAM battery voltage fall
			Section	FAX
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	Battery life
			Remedy	Check that the battery voltage is about 2.5V or above.
			Note	
		Case 2	Trouble position/ Cause	Battery circuit trouble
Remedy	Check the battery circuit.			
Note				

Main code	Sub code	Title		
<b>U1</b>	<b>02</b>	<b>RTC read error (combined use as FAX, on MFP control PWB)</b>		
		Phenomenon	Display	Lamp
				Message
			Details	RTC read error (combined use as FAX, on MFP control PWB) The read value from the RTC on the MFP control PWB is abnormal such as "EE"h.
			Section	Controller
			Operation mode	
			Note	

Main code	Sub code	Title		
<b>U1</b>	<b>02</b>	<b>RTC read error (combined use as FAX, on MFP control PWB)</b>		
		Case 1	Trouble position/ Cause	RTC circuit trouble
			Remedy	Make the time setup again with the key operation and check that the time advances normally. Check the RTC circuit.
			Note	
		Case 2	Trouble position/ Cause	Battery voltage fall
			Remedy	Check that the battery voltage is about 2.5V or above.
			Note	
		Case 3	Trouble position/ Cause	Battery circuit trouble
			Remedy	Check the battery circuit.
			Note	

Main code	Sub code	Title		
<b>U2</b>	<b>00</b>	<b>EEPROM read/write error (MFP control)</b>		
		Phenomenon	Display	Lamp
				Message
			Details	EEPROM write error
			Section	Controller
			Operation mode	
		Note		
		Case 1	Trouble position/ Cause	EEPROM trouble
			Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
			Note	
		Case 2	Trouble position/ Cause	Insertion of EEPROM which is not initialized
			Remedy	Use SIM 16 to cancel the U2 trouble.
			Note	
		Case 3	Trouble position/ Cause	MFP control PWB EEPROM access circuit trouble
			Remedy	Replace the MFP control PWB.
			Note	

Main code	Sub code	Title	Counter check sum error (MFP control)	
U2	11	Phenomenon	Display	Lamp
				Message
			Details	Counter data area check sum error
			Section	Controller
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	EEPROM trouble
			Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
			Note	
		Case 2	Trouble position/ Cause	Control circuit runaway due to noises
			Remedy	Use SIM 16 to cancel the U2 trouble.
			Note	
		Case 3	Trouble position/ Cause	MFP control PWB EEPROM access circuit trouble
			Remedy	Replace the MFP control PWB.
			Note	

Main code	Sub code	Title	Adjustment value check sum error (MFP control)	
U2	12	Phenomenon	Display	Lamp
				Message
			Details	Adjustment value data area check sum error
			Section	Controller
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	EEPROM trouble
			Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
			Note	
		Case 2	Trouble position/ Cause	Control circuit runaway due to noises
			Remedy	Use SIM 16 to cancel the U2 trouble.
			Note	
		Case 3	Trouble position/ Cause	MFP control PWB EEPROM access circuit trouble
			Remedy	Replace the MFP control PWB.
			Note	

Main code	Sub code	Title	SRAM memory check sum error (MFP control)	
U2	22	Phenomenon	Display	Lamp
				Message
			Details	MFPC section SRAM memory check sum error SRAM check sum error when turning on the power. (If this error occurs, initialize the one-touch dial and the FAX soft switches.)
			Section	Controller
			Operation mode	
			Note	
		Case 1	Trouble position/ Cause	SRAM trouble
			Remedy	Initialize the communication management table registered in the SRAM and the FAX soft switch. Since the registered data are deleted, register the data again.
			Note	
		Case 2	Trouble position/ Cause	Control circuit runaway due to noises
			Remedy	Use SIM 16 to cancel the U2 trouble.
			Note	
		Case 3	Trouble position/ Cause	MFP control PWB EEPROM access circuit trouble
			Remedy	Replace the MFP control PWB.
			Note	

Main code	Sub code	Title		SRAM memory individual data check sum error			
U2	23	Phenomenon	Display	Lamp			
				Message			
			Details	Check sum error for every individual data in SRAM of the MFPC section when turning on the power (If this error occurs, initialize the data related to the check sum error. (Communication management table, sender's information, etc.)			
			Section	Controller			
			Operation mode				
		Note					
		Case 1	Trouble position/ Cause	SRAM trouble			
			Remedy	Automatically initialize the data related to the check sum error by turning OFF/ ON the power. Since the registered data are deleted, register the data again.			
			Note				
		Case 2	Trouble position/ Cause	Control circuit runaway due to noises			
			Remedy	Use SIM 16 to cancel the U2 trouble.			
			Note				
		Case 3	Trouble position/ Cause	MFP control PWB EEPROM access circuit trouble			
			Remedy	Replace the MFP control PWB.			
			Note				

Main code	Sub code	Title		HDD section individual data check sum error (MFP control)			
U2	50	Phenomenon	Display	Lamp			
				Message			
			Details	Check sum error for every individual data in HDD of the MFPC section when turning on the power (If this error occurs, initialize the data related to the check sum error. (One-touch, group, program, etc.)			
			Section	Controller			
			Operation mode				
		Note					
		Case 1	Trouble position/ Cause	HDD write/read error			
			Remedy	Automatically initialize the data related to the check sum error by turning OFF/ ON the power. Since the registered data are deleted, register the data again.			
			Note				
		Case 2	Trouble position/ Cause	Control circuit runaway due to noises			
			Remedy	Use SIM 16 to cancel the U2 trouble.			
			Note				
		Case 3	Trouble position/ Cause	MFP control PWB HDD access circuit trouble			
			Remedy	Replace the HDD. Replace the MFP control PWB.			
			Note				

Main code	Sub code	Title	EEPROM red/write error (Scanner)		
<b>U2</b>	<b>80</b>	Phenomenon	Display	Lamp	
				Message	
			Details	EEPROM red/write error (Scanner) EEPROM communication trouble (NACK detection) Retry 3 times	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	EEPROM trouble
				Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
				Note	
			Case 2	Trouble position/ Cause	Insertion of EEPROM which is not initialized
				Remedy	Use SIM 16 to cancel the U2 trouble.
				Note	
			Case 3	Trouble position/ Cause	Scanner PWB EEPROM access circuit trouble
			Remedy	Replace the scanner PWB.	
			Note		

Main code	Sub code	Title	Memory check sum error (Scanner)		
<b>U2</b>	<b>81</b>	Case 2	Trouble position/ Cause	Control circuit runaway due to noises	
			Remedy	Use SIM 16 to cancel the U2 trouble.	
			Note		
			Case 3	Trouble position/ Cause	Scanner PWB EEPROM access circuit trouble
				Remedy	Replace the scanner PWB.
				Note	

Main code	Sub code	Title	EEPROM read/write error (PCU)		
<b>U2</b>	<b>90</b>	Phenomenon	Display	Lamp	
				Message	
			Details	EEPROM read/write error (PCU) EEPROM communication trouble (NACK detection) Retry 3 times	
			Section	Engine	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	EEPROM trouble
				Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
				Note	
			Case 2	Trouble position/ Cause	Insertion of EEPROM which is not initialized
				Remedy	Use SIM 16 to cancel the U2 trouble.
				Note	
			Case 3	Trouble position/ Cause	PCU PWB EEPROM access circuit trouble
			Remedy	Replace the PCU PWB.	
			Note		

Main code	Sub code	Title	Memory check sum error (Scanner)		
<b>U2</b>	<b>81</b>	Phenomenon	Display	Lamp	
				Message	
			Details	Memory check sum error (Scanner) When counter data sum error is detected.	
			Section	Scanner	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	EEPROM trouble
				Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/ adjustment values, write down the counter/ adjustment values.
				Note	

Main code	Sub code	Title			
<b>U2</b>	<b>91</b>	<b>Memory check sum error (PCU)</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	Memory check sum error (PCU) When POF data/counter data sum error is detected.	
			Section	Engine	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	EEPROM trouble	
			Remedy	Check that the EEPROM is properly installed. In the simulation to prevent against delete of the counter data/adjustment values, write down the counter/adjustment values.	
			Note		
			Case 2	Trouble position/ Cause	Control circuit runaway due to noises
		Remedy		Use SIM 16 to cancel the U2 trouble.	
		Note			
		Case 3	Trouble position/ Cause	PCU PWB EEPROM access circuit trouble	
			Remedy	Replace the PCU PWB.	
			Note		

Main code	Sub code	Title			
<b>U5</b>	<b>30</b>	<b>SPF tray lift-up trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	SPF tray lift-up trouble Lift-up trouble is detected 5 times continuously.	
			Section	Scanner	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	STUD/STLD trouble STUD does not turn on within the specified time. STLD does not turn off within the specified time.	
			Remedy	Check the harness and the connector of the STUD and STLD. Lift-up trouble unit check	
			Note		

Main code	Sub code	Title			
<b>U5</b>	<b>31</b>	<b>SPF tray lift-down trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	SPF tray lift-down trouble STLD does not turn off within the specified time.	
			Section	Scanner	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	STUD/STLD trouble STUD does not turn on within the specified time. STLD does not turn off within the specified time.	
			Remedy	Check the harness and the connector of the STUD and STLD. Lift-up trouble unit check	
			Note		

Main code	Sub code	Title			
<b>U6</b>	<b>09</b>	<b>LCC lift motor trouble</b>			
		Phenomenon	Display	Lamp	
				Message	
			Details	LCC lift motor trouble <ul style="list-style-type: none"> <li>The upper limit sensor does not turn on within 24 sec after the lift motor is on.</li> <li>No rotation sensor signal is detected for 0.2 sec or longer while the lift motor is on.</li> <li>The upper limit switch is on while the lift motor is on.</li> </ul> When the trouble occurs 3 time continuously that the upper limit sensor does not turn on.	
			Section	LCC	
			Operation mode		
			Note		
		Case 1	Trouble position/ Cause	Sensor trouble LCC control PWB trouble Gear breakage Lift motor trouble	
			Remedy	Use SIM to check the sensor detection. Use SIM to check the lift motor operation. Use SIM 15 to cancel the trouble.	
			Note		

Main code	Sub code	Title	LCC communication trouble		
<b>U6</b>	<b>20</b>	Phenomenon	Display	Lamp Message	
			Details	Communication trouble with the LCC. Follows the communication protocol specifications. Communication error, timing abnormality of the communication data and the communication signal line	
			Section	LCC	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness Desk control PWB trouble Control PWB (PCU) trouble Malfunction caused by noises
				Remedy	Canceled by turning ON/OFF the power. Check the connector and the harness in the communication line.
				Note	

Main code	Sub code	Title	LCC transport motor trouble		
<b>U6</b>	<b>21</b>	Phenomenon	Display	Lamp Message	
			Details	LCC transport motor trouble The lock detection signal is detected continuously for 1sec after delay of 1sec from start of the motor.	
			Section	LCC	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Motor lock Motor RPM abnormality Overcurrent to the motor Desk control PWB trouble
				Remedy	Use SIM 4-3 to check the transport motor operation.
				Note	

Main code	Sub code	Title	LCC 24V power abnormality addition		
<b>U6</b>	<b>22</b>	Phenomenon	Display	Lamp Message	
			Details	LCC 24V power abnormality addition 24V power is not supplied to the LCC. (the LCC 24V power is not detected for 1 sec or longer after 1 sec from power on)	
			Section	LCC	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness
				Remedy	Check the connector and the harness of the power line.
				Note	
			Case 2	Trouble position/ Cause	LCC control PWB trouble Power unit trouble
				Remedy	Check the 24V power with the power unit and the LCC control PWB.
			Note		

Main code	Sub code	Title	RIC communication trouble		
<b>U7</b>	<b>00</b>	Phenomenon	Display	Lamp Message	
			Details	Communication error with RIC (By PPC communication standards) An error in the communication line test after turning on the power or canceling the simulation	
			Section	Controller	
			Operation mode		
			Note		
			Case 1	Trouble position/ Cause	Improper connection or disconnection of the connector and the harness RIC control PWB trouble Control PWB (MFP control) trouble Malfunction caused by noises
				Remedy	Canceled by turning ON/OFF the power. Check the connector and the harness in the communication line.
				Note	