

**[9] TROUBLE CODE LIST**

**1. List**

Trouble code		Trouble contents	Trouble detection
Main code	Sub code		
A0	01	Security incompatibility error	
E1	00	IMC PWB communication trouble	MCU
	10	IMC PWB trouble	
	11	IMC PWB ASIC error	
	12	IMC PWB CODEC IC error	
	13	IMC PWB flash ROM error	
	14	IMC PWB expanded memory module (DIMM) error	
	15	IMC PWB page memory error /SRAM error	
	16	IMC PWB standard compression memory error	
	17	IMC PWB smoothing IC error	
	80	IMC PWB communication trouble (protocol)	
	81	IMC PWB communication trouble (Parity)	
	82	IMC PWB communication trouble (Overrun)	
	84	IMC PWB communication trouble (Framing)	
	88	IMC PWB communication trouble (Time-out)	
E7	02	LSU trouble	
	10	CCD black level error	
	11	CCD white level error	
	12	Shading trouble	
F1	00	Finisher communication trouble (AR-FN5A)	FIN
	01	Side guide plated home position error (AR-FN5A)	
	03	Paddle motor trouble (AR-F14N)	
	06	Offset motor trouble (AR-FN5A) Slide motor trouble (AR-F14N)	
	08	Staple motor error (AR-FN5A)	
	10	Staple motor trouble (AR-F14N)	
	11	Rear edge plate home position error (AR-FN5A) Bundle exit motor trouble (AR-F14N)	
	15	Finisher lift-up motor trouble	
	19	Alignment motor (F) trouble (AR-F14N)	
	20	Alignment motor (R) trouble (AR-F14N)	
	30	Finisher interface error (AR-F14N)	
	31	Fold sensor trouble (AR-F14N)	
	32	Punch unit communication trouble (AR-F14N)	
	33	Punch side registration motor trouble (AR-F14N)	
	34	Punch motor trouble (AR-F14N)	
	35	Punch side registration sensor trouble (AR-F14N)	
	36	Punch registration sensor trouble (AR-F14N)	
	37	Backup RAM trouble (AR-F14N)	
	38	Punch backup RAM trouble (AR-F14N)	
	39	Punch dust sensor trouble (AR-F14N)	
	40	Punch power trouble (AR-F14N)	
	50	Finisher incompatibility error	
	53	Interface transport unit connection trouble (AR-F14N)	
81	Transport motor trouble (AR-F14N)		

Trouble code		Trouble contents	Trouble detection
Main code	Sub code		
F2	02	Toner supply failure	
	04	Identification error	
		Model error	
		Type error	
		Destination error	
		Data abnormality	
		Misc error	
58	Temperature humidity sensor abnormality		
F5	02	Copy lamp (xenon lamp) error	
F6	00	FAX control PWB communication trouble	MCU
	10	FAX control PWB trouble	
	80	FAX control PWB communication trouble (Protocol)	
	81	FAX control PWB communication trouble (Parity)	
	82	FAX control PWB communication trouble (Overrun)	
	84	FAX control PWB communication trouble (Framing)	
	88	FAX control PWB communication trouble (Time-out)	
	95	Incompatibility error of AR-F14N and FAX control PWB	
	99	FAX control PWB destination error	
F9	00	Printer PWB communication trouble	MCU
	10	Printer PWB trouble	
	80	Printer PWB communication trouble (Protocol)	
	81	Printer PWB communication trouble (Parity)	
	82	Printer PWB communication trouble (Overrun)	
	84	Printer PWB communication trouble (Framing)	
	88	Printer PWB communication trouble (Time-out)	
	95	Incompatibility error of AR-F14N and PCL/GDI PWB	
	96	PCL PWB incompatibility error	
99	Printer PWB language error		
H2	00	Main heater lamp thermistor open hard detection	
	01	Sub heater lamp thermistor open hard detection	
H3	00	Main heater lamp abnormally high temperature hard detection trouble	
	01	Sub heater lamp abnormally high temperature hard detection trouble	
	10	Main heater lamp abnormally high temperature soft detection trouble	
	11	Sub heater lamp abnormally high temperature soft detection trouble	
H4	00	Main heater lamp abnormally low temperature detection	
	01	Sub heater lamp abnormally low temperature detection	
	20	Main heater lamp abnormally low temperature detection	
	21	Sub heater lamp abnormally low temperature detection	
H5	01	10 times of continuous detection of the lower paper exit sensor (POD1) lead edge jam or the upper paper exit sensor (POD2) lead edge jam or the duplex sensor (PPD2) rear edge jam	
L1	00	Scanner feed trouble	
L3	00	Scanner return trouble	

Trouble code		Trouble contents	Trouble detection
Main code	Sub code		
L4	01	Main motor trouble	
	11	Shifter motor trouble	
L6	10	Polygon motor trouble	
L8	10	Power abnormality detection trouble	
U1	01	FAX battery error	
	02	PANEL LOW battery error	
U2	04	EEPROM communication error	
	20	Machine speed code data error	
	40	CRUM chip communication error	
U7	00	RIC communication trouble	
U9	00	Operation control PWB communication trouble	OPE
	80	Operation control PWB communication trouble (Protocol)	
	81	Operation control PWB communication trouble (Parity)	
	82	Operation control PWB communication trouble (Overrun)	
	84	Operation control PWB communication trouble (Framing)	
	88	Operation control PWB communication trouble (Time-out)	
EE	EL	Developer adjustment trouble (Over-toned abnormality)	
	EU	Developer adjustment trouble (Under-toned abnormality)	
PF	00	PF trouble	

## 2. Self diagnostics

Trouble code		Details of trouble	
Main code	Sub code	Content	Details
A0	01	Content	Security incompatibility error
		Details	When the PCL or the FAX control PWB is installed, it does not match with compatible/incompatible setup of the MCU PWB security.
		Cause	The security compatibility/incompatibility of the installed PCL or FAX control PWB does not match with that of the MCU PWB.
		Check and remedy	Check the security compatibility/incompatibility of each board. Match the security compatibility/incompatibility of the boards.
E1	00	Content	IMC PWB communication trouble
		Details	Communication trouble between MCU and IMC PWB
		Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.
		Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.
	10	Content	IMC PWB trouble
		Details	IMC PWB hardware abnormality
		Check and remedy	Replace the IMC PWB

Trouble code		Details of trouble	
Main code	Sub code	Content	Details
E1	11	Content	IMC PWB ASIC error
		Details	ASIC abnormality on IMC PWB
		Cause	IMC PWB abnormality
		Check and remedy	Replace the IMC PWB
	12	Content	IMC PWB CODEC IC error
		Details	CODEC IC (JBIG chip) abnormality on IMC PWB
		Cause	IMC PWB abnormality
		Check and remedy	Replace the IMC PWB
	13	Content	IMC PWB flash ROM error
		Details	Flash ROM abnormality on IMC PWB
		Cause	IMC PWB abnormality
		Check and remedy	Replace the IMC PWB. When the program download is abnormally terminated, a error may occur. In this case, download the program again.
	Remarks	Program ROM abnormality	
14	Content	IMC PWB expanded memory module (DIMM) error	
	Details	IMC extended compression memory module (DIMM) installation error. IMC extended compression memory module (DIMM) access error.	
	Cause	IMC expanded memory module installation trouble. IMC expanded memory module trouble. IMC expanded memory contact trouble. IMC PWB abnormality.	
	Check and remedy	Check installation of the expanded memory module. (Spec: Added to Slot 1.) Replace the expanded memory module. Replace the IMC PWB.	
	Remarks	Extend memory abnormality for compressed image store (DIMM module)	
15	Content	IMC PWB page memory error /SRAM error	
	Details	IMC PWB page memory or work SRAM access error	
	Cause	IMC PWB abnormality	
	Check and remedy	Replace the IMC PWB	
	Remarks	Print buffer page memory or work SRAM abnormality	
	16	Content	IMC PWB standard compression memory error
Details		Access error of standard compression memory on IMC PWB	
Cause		IMC PWB abnormality	
Check and remedy		Replace the IMC PWB	
Remarks		Standard compression image store memory abnormality	
17	Content	IMC PWB smoothing IC error	
	Details	IMC PWB smoothing IC abnormality	
	Cause	IMC PWB abnormality	
	Check and remedy	Replace the IMC PWB	

Trouble code		Details of trouble	
Main code	Sub code		
E1	80	Content	IMC PWB communication trouble (protocol)
		Details	Communication trouble between MCU and IMC PWB (Protocol error)
		Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.
		Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.
	81	Content	IMC PWB communication trouble (Parity)
		Details	Communication trouble between MCU and printer IMC (Parity error)
		Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.
		Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.
	82	Content	IMC PWB communication trouble (Overrun)
		Details	Communication trouble between MCU and IMC PWB (Overrun error)
		Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.
		Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.
	84	Content	IMC PWB communication trouble (Framing)
		Details	Communication trouble between MCU and IMC PWB (Framing error)
		Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.
		Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.
88	Content	IMC PWB communication trouble (Time-out)	
	Details	Communication trouble between MCU and IMC PWB (Time-out error)	
	Cause	IMC PWB connector disconnection. Motherboard connector pin breakage. IMC PWB ROM defect, data failure.	
	Check and remedy	Check the connectors of the IMC PWB and MCU PWB. Check the grounding of the copier. Check the ROM of the IMC PWB.	

Trouble code		Details of trouble	
Main code	Sub code		
E7	02	Content	LSU trouble
		Details	BD signal from LSU is not detected in a constant cycle (Kept OFF or ON)
		Cause	LSU connector or LSU inside harness trouble or disconnection. Polygon motor rotation abnormality. Laser does not illuminate. MCU PWB failure.
		Check and remedy	Check for disconnection of the LSU connector. Check the LSU operation with SIM 61-1. Check that the polygon motor rotates normally. Check laser LED lighting. Replace the LSU unit. Replace the MCU PWB.
	10	Content	CCD black level error
		Details	CCD black reference plate scan level abnormality when the copy lamp turns off.
		Cause	Flat cable installation failure to CCD unit. CCD unit error.
		Check and remedy	Check flat cable installation to the CCD unit. Check CCD unit.
	11	Content	CCD white level error
		Details	Improper CCD white reference plate reading level for copy lamp lighting
		Cause	Flat cable installation failure to CCD unit. Dirt on the mirror, lens, and reference white plate. Copy lamp lighting trouble. CCD unit abnormality. MCU PWB abnormality. (Occurred in the RSPF scan position)
		Check and remedy	Clean the mirror, the lens, and the reference white plate. Check the copy lamp light quantity and its operation. (SIM 5-3) Check CCD unit. Check MCU PWB.
	12	Content	Shading trouble
		Details	White correction is not completed in the specified number of times.
		Cause	Flat cable installation failure to CCD unit. Dirt on the mirror, lens, and reference white plate. Copy lamp lighting trouble. CCD unit abnormality. MCU PWB abnormality.
		Check and remedy	Clean the mirror, the lens, and the reference white plate. Check the copy lamp light quantity and its operation. (SIM 5-3) Check CCD unit. Check MCU PWB.

Trouble code		Details of trouble	
Main code	Sub code		
F1	00	Content	Finisher communication trouble
		Details	Communication line test error occurs when power is turned on or after the exit of a simulation mode. Error in finisher communication
		Cause	Connection trouble or disconnection of the connector and harness between the body and the finisher. Finisher control PWB trouble. Control PWB failure. Malfunction by noises.
		Check and remedy	Canceled by turning OFF/ON the power. Check the connectors and the harness of communication line. Replace the finisher control PWB.
	01	Content	Side guide plated home position error (AR-FN5A)
		Details	The side guide plate cannot return to the position of home position error.
		Cause	Side guide plate drive motor abnormality. Side guide plate home position sensor abnormality. Finisher PWB abnormality.
		Check and remedy	Use SIM3-3-1 to check the side guide plate motor operation.
	03	Content	Paddle motor trouble (AR-F14N)
		Details	Paddle motor operation abnormality
		Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	Use SIM3-3-10 to check the paddle motor operation
	06	Content	Offset motor trouble (AR-FN5A) Slide motor trouble (AR-F14N)
		Details	(AR-FN5A) When the offset motor of the finisher is driven it does not reach the specified position. (AR-F14N) Slide motor operation abnormality
		Cause	(AR-FN5A) Offset motor abnormality. Offset motor origin sensor abnormality. Finisher PWB abnormality. (AR-FN14N) Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	(AR-FN5A) Use SIM 3-3-6 to check the offset motor operation (AR-F14N) Use SIM 3-3-6 to check the slide motor operation

Trouble code		Details of trouble	
Main code	Sub code		
F1	08	Content	Staple motor error (AR-FN5A)
		Details	The staple motor cannot return to the home position
		Cause	Staple motor abnormality. Staple motor home position sensor abnormality. Staple unit abnormality. Finisher PWB abnormality.
		Check and remedy	Use SIM 3-3-7 to check the staple motor operation
	10	Content	Staple motor trouble (AR-F14N)
		Details	Staple motor operation abnormality
		Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	Use SIM 3-3-5 to check the staple motor operation.
	11	Content	Rear edge plate home position error (AR-FN5A) Bundle exit motor trouble (AR-F14N)
		Details	(AR-FN5A) The rear edge plate cannot return to the home position (AR-F14N) Bundle exit motor operation abnormality
		Cause	(AR-FN5A) Rear edge plate drive motor abnormality. Side guide plate home position sensor abnormality. Finisher PWB abnormality. (AR-F14N) Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	(AR-FN5A) Use SIM 3-3-2 to check the rear edge plate motor operation (AR-F14N) Use SIM 3-3-9 to check the bundle exit motor operation
	15	Content	Finisher lift-up motor trouble
		Details	The finisher lift-up motor does not reach the specified position
		Cause	Lift-up motor abnormality. Lift-up motor upper limit sensor abnormality. Finisher PWB abnormality.
		Check and remedy	Use SIM 3-3-5 to check the lift-up motor operation
19	Content	Alignment motor (F) trouble (AR-F14N)	
	Details	Alignment motor operation abnormality	
	Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.	
	Check and remedy	Use SIM3-3-8 to check the alignment (F) motor operation.	

Trouble code		Details of trouble	
Main code	Sub code		
F1	20	Content	Alignment motor (R) trouble (AR-F14N)
		Details	Alignment motor operation abnormality
		Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	Use SIM3-3-7 to check the alignment (R) motor operation
	30	Content	Finisher interface error (AR-F14N)
		Details	Communication line test error occurs when power is turned on or after the exit of a simulation mode. Error in console finisher communication
		Cause	Connection trouble or disconnection of the connector and harness between the body and the finisher. Finisher control PWB trouble. Control PWB (PCU) failure. Malfunction by noises.
		Check and remedy	Canceled by turning OFF/ON the power. Check the connectors and the harness of communication line Replace the finisher control PWB.
	31	Content	Fold sensor trouble (AR-F14N)
		Details	Sensor input value abnormality
		Cause	Sensor breakage. harness breakage. Finisher control PWB trouble.
		Check and remedy	Use SIM3-2 to check the sensor operation.
	32	Content	Punch unit communication trouble (AR-F14N)
		Details	Communication error between the console finisher and the punch unit
		Cause	Improper connection or disconnection of connector and harness between the finisher and the punch unit. Finisher control PWB trouble. Control PWB (PCU) failure. Malfunction by noises.
		Check and remedy	Canceled by turning OFF/ON the power. Check the connectors and the harness of communication line. Replace the finisher control PWB.
	33	Content	Punch side registration motor trouble (AR-F14N)
		Details	Punch side registration motor operation abnormality
		Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	Use SIM3-3-2 to check the punch side registration motor operation
34	Content	Punch motor trouble (AR-F14N)	
	Details	Punch motor operation abnormality	
	Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.	
	Check and remedy	Use SIM3-3-3 to check the punch motor operation	

Trouble code		Details of trouble	
Main code	Sub code		
F1	35	Content	Punch side registration sensor trouble (AR-F14N)
		Details	Sensor input value abnormality
		Cause	Sensor breakage. harness breakage. Finisher control PWB trouble.
		Check and remedy	Use SIM3-2 to check the punch side registration sensor operation
	36	Content	Punch registration sensor trouble (AR-F14N)
		Details	Sensor input value abnormality
		Cause	Sensor breakage. harness breakage. Finisher control PWB trouble.
		Check and remedy	Use SIM3-2 to check the punch registration sensor operation
	37	Content	Backup RAM trouble (AR-F14N)
		Details	Backup RAM contents are disturbed
		Cause	Finisher control PWB trouble. Malfunction by noise.
		Check and remedy	Replace the finisher control PWB.
	38	Content	Punch backup RAM trouble (AR-F14N)
		Details	Punch unit backup RAM contents are disturbed.
		Cause	Punch control PWB trouble. Malfunction by noise.
		Check and remedy	Replace the punch control PWB
	39	Content	Punch dust sensor trouble (AR-F14N)
		Details	Punch dust sensor detection trouble
		Cause	Sensor breakage. harness breakage. Finisher control PWB trouble.
		Check and remedy	Use SIM3-2 to check the punch dust sensor operation
40	Content	Punch power trouble (AR-F14N)	
	Details	Punch unit power discontinuity detection	
	Cause	Punch control PWB defect	
	Check and remedy	Replace the punch control PWB	
50	Content	Finisher incompatibility error	
	Details	Speed does not coincide between finisher and main unit	
	Cause	AR-FN5N/F14 is connected to 31 sheet model	
	Check and remedy	Connect AR-FN5A. Connect AR-F14N.	
53	Content	Interface transport unit connection trouble (AR-F14N)	
	Details	Interface transport unit connector disconnection	
	Cause	Improper connection of connector between the finisher and the interface transport unit	
	Check and remedy	Check the interface transport unit connector.	

Trouble code		Details of trouble	
Main code	Sub code		
F1	81	Content	Transport motor trouble (AR-F14N)
		Details	Transport motor trouble
		Cause	Motor lock. Motor rpm abnormality. Overcurrent to the motor. Finisher control PWB trouble.
		Check and remedy	Use SIM3-3-11 to check the front transport motor operation
F2	02	Content	Toner supply failure
		Details	The value judged from the actual toner supply hysteresis differs greatly from the toner sensor value
		Cause	Developing unit trouble. Toner supply abnormality caused by installation of unpacked toner cartridge.
		Check and remedy	Replace the developing unit. Use SIM 25-1 to perform DV stirring.
	04	Content	Identification error
		Model error	
		Type error	
		Destination error	
		Data abnormality	
		Misc error	
		Details	(Identification error) When the CRUM trademark differs. When the CRUM company code differs.
		(Model error) When the boot program model code does not match with the CRUM model information	
		(Type error) When the CRUM type is other than [Genuine/Conversion/Production rotation]	
		(Destination error) The destination of the body differs from that of the CRUM	
		(Data abnormality) The initial check information includes an erroneous value. When the max. toner supply time is 00. When the print hard stop is 00.	
		Cause	CRUM chip failure. Erroneous developing unit.
		Check and remedy	Replace the CRUM chip. Replace the developing unit.
58	Content	Temperature humidity sensor abnormality	
	Details	Temperature humidity sensor abnormality	
	Cause	Temperature humidity sensor connector disconnection. Short-circuit of the temperature humidity sensor was detected.	
	Check and remedy	Check the connection of temperature humidity sensor. Replace the temperature humidity sensor.	

Trouble code		Details of trouble	
Main code	Sub code		
F5	02	Content	Copy lamp (xenon lamp) error
		Details	The copy lamp does not light up
		Cause	Copy lamp abnormality. Copy lamp harness abnormality. CCD PWB harness abnormality.
		Check and remedy	Check the copy lamp. (SIM 5-3) When the lamp lights: Check the harnesses and connectors between the CCD unit and the MCU PWB. When the lamp does not light: Check the harness and connector between the copy lamp and the MCU PWB. Replace the copy lamp unit. Replace the MCU PWB.
F6	00	Content	FAX control PWB communication trouble
		Details	Communication trouble between MCU and FAX control PWB
		Cause	FAX control PWB connector disconnection. Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.
	10	Content	FAX control PWB trouble
		Details	FAX control PWB abnormality
		Cause	FAX control PWB defect
		Check and remedy	Replate the FAX control PWB
	80	Content	FAX control PWB communication trouble (Protocol)
		Details	Communication trouble between MCU and FAX control PWB (Protocol error)
Cause		FAX control PWB connector disconnection Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.	
Check and remedy		Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.	
81	Content	FAX control PWB communication trouble (Parity)	
	Details	Communication trouble between MCU and FAX control PWB (Parity error)	
	Cause	FAX control PWB connector disconnection Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.	
	Check and remedy	Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.	

Trouble code		Details of trouble	
Main code	Sub code		
F6	82	Content	FAX control PWB communication trouble (Overrun)
		Details	Communication trouble between MCU and FAX control PWB (Overrun error)
		Cause	FAX control PWB connector disconnection. Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.
	84	Content	FAX control PWB communication trouble (Framing)
		Details	Communication trouble between MCU and FAX control PWB (Framing error)
		Cause	FAX control PWB connector disconnection. Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.
	88	Content	FAX control PWB communication trouble (Time-out)
		Details	Communication trouble between MCU and FAX control PWB (Time-out error)
		Cause	FAX control PWB connector disconnection. Harness trouble between FAX control PWB and MCU PWB. Motherboard connector pin breakage. FAX control PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of FAX control PWB and MCU PWB. Check the grounding of the copier. Check FAX control PWB ROM.
	95	Content	Incompatibility error of AR-F14N and FAX control PWB
		Details	FAX control PWB incompatible with AR-F14N and AR-F14N was installed to the copier
		Cause	FAX control PWB is incompatible
		Check and remedy	Install the FAX control PWB compatible with AR-F14N
99	Content	FAX control PWB destination error	
	Details	The machine destination setup does not coincide with the FAX control PWB destination setup.	
	Cause	The machine destination setup (Sim 26-6) does not coincide with the FAX control PWB setup	
	Check and remedy	Check the variety of FAX LIU PWB. Check the machine destination setup (Sim 22-6) and FAX country code (Soft SW table).	

Trouble code		Details of trouble	
Main code	Sub code		
F9	00	Content	Printer PWB communication trouble
		Details	Communication trouble between MCU and printer PWB
		Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.
	10	Content	Printer PWB trouble
		Details	Printer PWB abnormality
		Cause	Printer PWB defect
		Check and remedy	Replace the printer PWB
	80	Content	Printer PWB communication trouble (Protocol)
		Details	Communication trouble between MCU and printer PWB (Protocol error)
		Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.
	81	Content	Printer PWB communication trouble (Parity)
		Details	Communication trouble between MCU and printer PWB (Parity error)
		Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.
82	Content	Printer PWB communication trouble (Overrun)	
	Details	Communication trouble between MCU and printer PWB (Overrun error)	
	Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.	
	Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.	

Trouble code		Details of trouble	
Main code	Sub code		
F9	84	Content	Printer PWB communication trouble (Framing)
		Details	Communication trouble between MCU and printer PWB (Framing error)
		Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.
	88	Content	Printer PWB communication trouble (Time-out)
		Details	Communication trouble between MCU and printer PWB (Time-out error)
		Cause	Printer PWB connector disconnection. Harness trouble between the printer PWB and the MCU PWB. Motherboard connector pin breakage. Printer PWB ROM defect/Data failure.
		Check and remedy	Check the connectors and the harness of the printer PWB and MCU PWB. Check the grounding of the copier. Check ROM on printer PWB.
	95	Content	Incompatibility error of AR-F14N and PCL/GDI PWB
		Details	PCL/GDI PWB incompatible with AR-F14N and AR-F14N was installed to the copier
		Cause	PCL/GDI PWB is incompatible
		Check and remedy	Install the PCL/GDI PWB compatible with AR-F14N
	96	Content	PCL PWB incompatibility error
		Details	Incompatible PCL PWB was installed to the copier
		Cause	AR-P17 was installed.
		Check and remedy	Install the AR-P27 to the copier
	99	Content	Printer PWB language error
		Details	The machine language setup does not coincide with the PCL board language setup.
		Cause	PCL board connection error. SIM setup error.
		Check and remedy	Check combination between the firmware on PCL board and the panel screen data, and download the correct version, if necessary. Check the machine language information. (Machine language setup: SIM 26-22)
H2	00	Content	Main heater lamp thermistor open hard detection
		Details	Main heater lamp thermistor open detection. Fusing unit not installed.
		Cause	Main thermistor defect. Control PWB failure. Fusing section connector contact failure. Fusing unit not installed.
		Check and remedy	Check the harness and the connector of the thermistor and the MCU.

Trouble code		Details of trouble		
Main code	Sub code			
H2	01	Content	Sub heater lamp thermistor open hard detection	
		Details	Fusing sub thermistor open detection. Fusing unit not installed.	
		Cause	Sub thermistor defect. Control PWB failure. Fusing section connector contact failure. Fusing unit not installed.	
		Check and remedy	Check the harness and the connector of the thermistor and the MCU.	
	H3	00	Content	Main heater lamp abnormally high temperature hard detection trouble
			Details	The fusing main heater thermistor causes abnormally high temperature
			Cause	Main thermistor defect. Control PWB failure. Fusing section connector contact failure.
			Check and remedy	Check the main heater lamp blinking with SIM 5-2-1. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.
		01	Content	Sub heater lamp abnormally high temperature hard detection trouble
			Details	The fusing sub thermistor causes abnormally high temperature
			Cause	Sub thermistor defect. Control PWB failure. Fusing section connector contact failure.
			Check and remedy	Check the sub heater lamp blinking with SIM 5-2-2. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.
10	Content	Main heater lamp abnormally high temperature soft detection trouble		
		A/D value the fusing main thermistor causes abnormally high temperature (over 230°C).		
	Cause	Main heater lamp thermistor defect. Control PWB failure. Fusing section connector contact failure.		
		Check the main heater lamp blinking with SIM 5-2-1. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.		

Trouble code		Details of trouble	
Main code	Sub code		
H3	11	Content	Sub heater lamp abnormally high temperature soft detection trouble
		Details	A/D value the fusing sub heater lamp thermistor causes abnormally high temperature (over 230°C).
		Cause	Sub heater lamp thermistor defect. Control PWB failure. Fusing section connector contact failure.
		Check and remedy	Check the sub heater lamp blinking with SIM 5-2-2. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.
H4	00	Content	Main heater lamp abnormally low temperature detection
		Details	The setup temperature (about 90°C) is not reached within the specified time (about 17sec) from turning on the power. When the temperature of main heater lamp thermistor falls below 140°C in the standby mode or printing. When the temperature of main heater lamp thermistor falls below 50°C in the pre-heat mode.
		Cause	Main heater lamp thermistor defect Main heater lamp failure Main thermostat failure Control PWB failure
		Check and remedy	Check the heater lamp blinking with SIM 5-2. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check for disconnection of the heater lamp and thermostat. Check the interlock switch. Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.

Trouble code		Details of trouble	
Main code	Sub code		
H4	01	Content	Sub heater lamp abnormally low temperature detection
		Details	The setup temperature (about 90°C) is not reached within the specified time (about 17sec) from turning on the power. When the temperature of sub heater thermistor falls below 140°C in the standby mode or printing. When the temperature of sub heater lamp thermistor falls below 50°C in the pre-heat mode.
		Cause	Sub heater lamp thermistor defect. Sub heater lamp failure. Sub thermostat failure. Control PWB failure.
		Check and remedy	Check the sub heater lamp blinking with SIM 5-2-2. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14.
	20	Content	Main heater lamp abnormally low temperature detection
		Details	The setup temperature (about -25°C: Sim 43-1-1) is not reached within the specified time (about 32sec) from turning on the power. A/D value of fusing main thermistor is not reached within the specified temperature. (specified temperature : SIM43-1 (600dpi) -25°C )
		Cause	Main thermistor defect. Main heater lamp failure. Main thermostat failure. Control PWB failure.
		Check and remedy	Check the main heater lamp blinking with SIM 5-1. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14. Check that there is no foreign material in the contact section between the thermistor and the heat roller.

Trouble code		Details of trouble	
Main code	Sub code		
H4	21	Content	Sub heater lamp abnormally low temperature detection
		Details	The setup temperature (about -25°C: Sim 43-1-1) is not reached within the specified time (about 32sec) from turning on the power. A/D value of fusing sub thermistor is not reached within the specified temperature (specified temperature : SIM43-1 (600dpi) -25°C )
		Cause	Sub thermistor defect. Sub heater lamp failure. Sub thermostat failure. Control PWB failure.
		Check and remedy	Check the sub heater lamp blinking with SIM 5-2-2. When the lamp blinks normally: Check the thermistor and the harness. Check the MCU PWB thermistor input circuit. If lamp lights and stays lit: Check the power circuit and the lamp control circuit on MCU PWB. Clear the display of self-diagnostics with SIM 14. Check that there is no foreign material in the contact section between the thermistor and the heat roller.
H5	01	Content	10 times of continuous detection of the lower paper exit sensor (POD1) lead edge jam or the upper paper exit sensor (POD2) lead edge jam or the duplex sensor (PPD2) rear edge jam
		Details	After supplying the power, one of the above jams occurs 10 times continuously in printing Counting is started on supplying the power. When any one of the above jams occurs, one count is made. When paper entry to the POD1 or POD2 is detected, the counter is cleared.
		Cause	A paper jam (paper rounding, etc.) near the duplex sensor (PPD2) on the fusing unit is not canceled completely. POD1, POD2, PPD2 sensor breakdown or harness connection trouble Fusing unit installation failure
		Check and remedy	Check for jam paper in the fusing section. (paper winding, etc.) Check fusing unit installation. Check the POD1, POD2 or PPD2 sensor. Clear the trouble with SIM 14.

Trouble code		Details of trouble	
Main code	Sub code		
L1	00	Content	Scanner feed trouble
		Details	Scanner feed is not completed within the specified time.
		Cause	Mirror unit defect. Scanner wire disconnection. Origin detection sensor error. Mirror motor harness abnormality.
		Check and remedy	Check the scanning operation with SIM 1-1. When the mirror not feeds: Check for disconnection of the scanner wire. Check the harness and connector between the mirror motor and the MCU PWB. Replace the mirror unit. Replace the MCU PWB. When the mirror feeds: Check the mirror home position sensor with SIM 1-2.
L3	00	Content	Scanner return trouble
		Details	Scanner return is not completed within the specified time. When OC copying with the mirror at the home position, the mirror is not in the home position.
		Cause	Mirror unit defect. The scanner wire is disconnected. Origin detection sensor error. Mirror motor harness abnormality.
		Check and remedy	Check the scanning operation with SIM 1-1. When the mirror fails to return: Check for disconnection of the scanner wire. Check the harness and connector between the mirror motor and the MCU PWB. Replace the mirror unit. Replace the MCU PWB. When the mirror feeds: Check the mirror home position sensor with SIM 1-2.
L4	01	Content	Main motor trouble
		Details	The main motor does not rotate. The motor lock signal is detected for 1sec or more after the main motor rotates. The motor lock signal is detected for 1sec during rotation of the main motor.
		Cause	Main motor defect. Main motor connection, harness trouble or disconnection. MCU PWB failure.
		Check and remedy	Check the main motor operation with SIM 25-1. Check connection of the main motor harness and connector. Replace the main motor. Replace the MCU PWB.

Trouble code		Details of trouble	
Main code	Sub code		
L4	11	Content	Shifter motor trouble
		Details	The shifter home position detection signal is not detected when the shifter is operating.
		Cause	Shifter motor trouble or harness connection trouble and disconnection. Shifter home position sensor trouble.
		Check and remedy	Check the shifter motor operation with SIM 3-11. Check connection of the shifter motor harness/connector. Replace the shifter motor. Replace the MCU PWB.
L6	10	Content	Polygon motor lock trouble
		Details	The polygon motor does not rotate. The motor lock signal is detected for 6sec or more after the polygon motor rotates. The motor lock signal is detected for 1sec during rotation of the polygon motor.
		Cause	Polygon motor unit failure Polygon motor connection, harness trouble or disconnection MCU PWB failure
		Check and remedy	Check the polygon motor operation with SIM 61-1. Check the connectors and the harness of polygon motor Replace the polygon motor. Replace the MCU PWB.
L8	10	Content	Power abnormality detection trouble
		Details	The power status monitoring signal keeps power OFF state after passing the specified time (2sec).
		Cause	Circuit around the power status monitoring signal (PSSTS) failure.
		Check and remedy	Check whether power status monitoring signal (PSSTS) on MCU PWB is OPEN or not. Replace MCU PWB.
U1	01	Content	FAX battery error
		Details	The SRAM backup battery voltage on FAX control PWB falls.
		Cause	The SRAM backup battery voltage on FAX control PWB falls.
		Check and remedy	Check voltage of the SRAM back up battery. Replace the battery.
	02	Content	PANEL LOW battery error
		Details	The voltage of the panel clock function battery falls.
		Cause	The voltage of the panel clock function battery falls.
		Check and remedy	Check voltage of panel clock function battery. Replace the battery.

Trouble code		Details of trouble		
Main code	Sub code			
U2	04	Content	EEPROM communication error	
		Details	EEPROM communication error	
		Cause	EEPROM defect. ICU PWB EEPROM access circuit failure.	
		Check and remedy	Check that the EEPROM is properly set. Clear trouble with SIM 16. Replace the MCU PWB.	
		20	Content	Machine speed code data error
			Details	The machine boot speed information is not identical to the model code speed information
	Cause		EEPROM defect. SIM operation error.	
	40	Content	CRUM chip communication error	
			Error in MCU-CRUM chip communication	
		Cause	CRUM chip failure. Developing unit contact trouble. MCU PWB failure.	
			Check and remedy	Replace the CRUM chip. Check installation of the developing unit. Clear the trouble with SIM 16. Replace the MCU PWB.
	Remarks	CRUM communication error		
U7	00	Content	RIC communication trouble	
		Details	Error in communication with RIC. Error in communication test after turning on the power or canceling SIM.	
		Cause	Connector harness contact trouble or disconnection. RIC control PWB trouble. MCU PWB failure. Malfunction by noises.	
		Check and remedy	Check the communication cable, connectors from the RIC box to the main body.	
U9	00	Content	Operation control PWB communication trouble	
		Details	Communication trouble between MCU and the operation control PWB	
		Cause	Operation control PWB connector disconnection Harness failure of the operation control PWB and the MCU PWB	
		Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier. Check ROM on the operation control PWB.	
	80	Content	Operation control PWB communication trouble (Protocol)	
			Communication trouble between MCU and the operation control PWB (Protocol error)	
		Cause	Operation control PWB connector disconnection. Harness failure of the operation control PWB and the MCU PWB.	
			Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier.

Trouble code		Details of trouble	
Main code	Sub code		
U9	81	Content	Operation control PWB communication trouble (Parity)
		Details	Communication trouble between MCU and the operation control PWB (Parity error)
		Cause	Operation control PWB connector disconnection. Harness failure of the operation control PWB and the MCU PWB.
		Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier.
	82	Content	Operation control PWB communication trouble (Overrun)
		Details	Communication trouble between MCU and the operation control PWB (Overrun error)
		Cause	Operation control PWB connector disconnection. Harness failure of the operation control PWB and the MCU PWB.
		Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier.
	84	Content	Operation control PWB communication trouble (Framing)
		Details	Communication trouble between MCU and the operation control PWB (Framing error)
		Cause	Operation control PWB connector disconnection. Harness failure of the operation control PWB and the MCU PWB.
		Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier.
	88	Content	Operation control PWB communication trouble (Time-out)
		Details	Communication trouble between MCU and the operation PWB (Time-out error)
		Cause	Operation control PWB connector disconnection. Harness failure of the operation control PWB and the MCU PWB.
		Check and remedy	Check the connectors and the harness of the operation control PWB and MCU PWB. Check the grounding of the copier.
	99	Content	Operation panel destination error
		Details	An error occurred in checking the destination of the operation panel and the main body.
		Cause	Erroneous connection the operation panel unit. SIM setup error.
		Check and remedy	Check the destination information of the operation panel unit and the MCU. (Use SIM 26-6 for the destination of the body.)

Trouble code		Details of trouble			
Main code	Sub code				
EE	EL	Content	Developer adjustment trouble (Over-toned abnormality)		
		Details	An abnormality occurred in execution of automatic developer adjustment. Sample data was detected over-toner.		
		Cause	Toner concentration sensor abnormality. Toner concentration trouble. Developing unit trouble. MCU PWB failure.		
		Check and remedy	Use SIM 25-2 to perform the auto developer adjustment.		
	EU	Content	Developer adjustment trouble (Under-toned abnormality)		
		Details	An abnormality occurred in execution of automatic developer adjustment. Sample data was detected under-toner.		
		Cause	Toner concentration sensor abnormality. Toner concentration trouble. Developing unit trouble. MCU PWB failure.		
		Check and remedy	Use SIM 25-2 to perform the auto developer adjustment.		
		PF	00	Content	PF trouble
				Details	The copy inhibit command from RIC is received.
Cause	Judged by the host.				
Check and remedy	Inform to the host.				