5. Trouble codes

A. Trouble codes list

Main code	Sub code	Details of trouble
E7	01	Duplex model memory setup error, memory not-detected error
	02	LSU trouble
	10	Shading trouble (Black correction)
	11	Shading trouble (White correction)
	16	Abnormal laser output
F2	02	Toner supply abnormality
	04	Improper cartridge (Destination error, life cycle error)
F5	02	Copy lamp lighting abnormality
H2	00	Thermistor open
H3	00	Heat roller high temperature detection
H4	00	Heat roller low temperature detection
L1	00	Feeding is not completed within the specified time after starting feeding. (The scan head locking switch is locked)
L3	00	Scanner return trouble
L4	01	Main motor lock detection
	32	Exhaust fan motor lock detection trouble
L6	10	Polygon motor lock detection
U2	04	EEPROM read/write error (Serial communication error)
	11	Counter check sum error (EEPROM)
	40	CRUM chip communication error

B. Details of trouble codes

Main code	Sub code	Details of trouble	
E7	01	Content	Duplex model memory setup error, memory not-detected error
		Detail	The memory is not set properly or the memory capacity is not set to the duplex setup (6M).
		Check and remedy	Set TC 26-39 code number to 2.
	02	Content	LSU trouble
		Detail	The BD signal from the LSU cannot be detected in a certain cycle. (Always OFF or always ON)
		Cause	LSU connector or LSU harness defect or disconnection Polygon motor rotation abnormality Laser beams are not generated. MCU PWB abnormality.
		Check and remedy	Check connection of the LSU connector. Execute TC 61-03 to check the LSU operations. Check that the polygon motor rotates normally. Check that the laser emitting diode generates laser beams. Replace the LSU unit. Replace the MCU PWB.
E7	10	Content	Shading trouble (Black correction)
		Detail	The CCD black scan level is abnormal when the shading.
		Cause	Improper connection of the CCD unit flat cable CCD unit abnormality MCU PWB abnormality
		Check and remedy	Check connection of the CCD unit flat cable. Check the CCD unit.
	11	Content	Shading trouble (White correction)
		Detail	The CCD white scan level is abnormal when the shading.
		Cause	Improper connection of the CCD unit flat cable Dirt on the mirror, the lens, and the reference white plate Copy lamp lighting abnormality CCD unit abnormality MCU PWB abnormality (When occurred in the RSPF scan position.) Improper installation of the mirror unit
		Check and remedy	Clean the mirror, lens, and the reference white plate. Check the light quantity and lighting status of the copy lamp (TC 5-03). Check the MCU PWB.
	16	Content	Abnormal laser output
		Detail	When the laser output is stopped, HSYNC is detected.
		Cause	Laser abnormality MCU PWB abnormality.
		Check and remedy	Check the laser emitting diode operation. Replace the MCU PWB.
F2	02	Content	Toner supply abnormality
		Detail	The maximum toner supply time is greatly exceeded.
		Cause	CRUM chip trouble Improper developing unit
		Check and remedy	Replace the CRUM chip. Replace the developing unit.
	04	Content	Improper cartridge (Destination error, life cycle error)
		Detail	The destination of the main unit differs from that of the CRUM. When the life cycle information is other than Not Used (FFh).
		Cause	CRUM chip trouble Improper developing unit
		Check and remedy	Replace the CRUM chip. Replace the developing unit.

Main code	Sub code	Details of trouble	
F5	02	Content	Copy lamp lighting abnormality
		Detail	The copy lamp does not turn on.
		Cause	Copy lamp abnormality Copy lamp harness abnormality CCD PWB harness abnormality.
		Check and remedy	Use TC 5-03 to check the copy lamp operations. **When the copy lamp lights up.** Check the harness and the connector between the CCD unit and the MCU PWB. **When the copy lamp does not light up.** Check the harness and the connector between the copy lamp unit and the MCU PWB. Replace the copy lamp unit. Replace the MCU PWB.
H2	00	Content	Thermistor open
		Detail	The thermistor is open. The fusing unit is not installed.
		Cause	Thermistor abnormality Control PWB abnormality Fusing section connector disconnection The fusing unit is not installed.
		Check and remedy	Check the harness and the connector between the thermistor and the PWB. Use TC 14 to clear the self diagnostic display.
H3	00	Content	Heat roller high temperature detection
		Detail	The fusing temperature exceeds 240°C.
		Cause	Thermistor abnormality Control PWB abnormality Fusing section connector disconnection.
		Check and remedy	Use TC 5-02 to check the heater lamp blinking operation. **When the lamp blinks normally.** Check the thermistor and its harness. Check the thermistor input circuit on the control PWB. **When the lamp keeps ON.** Check the power PWB and the lamp control circuit on the MCU PWB. Use TC 14 to clear the self diagnostic display.

Main code	Sub code	Details of trouble	
H4	00	Content	Heat roller low temperature detection
		Detail	1) When the target temperature (165°C) is not reached in 55 sec after starting warming-up. 2) When the temperature below 100°C is detected for 300ms under the ready print state. * "Starting warming-up" means not only that in power supply but also reset that in reset from shut-off and in side door close. (The timing of generating H4 is not limited to that in power supply.)
		Cause	Thermistor abnormality Heater lamp abnormality Thermostat abnormality Control PWB abnormality
		Check and remedy	Use TC 5-02 to check the heater lamp blinking operation. **When the lamp blinks normally.** Check the thermistor and its harness. Check the thermistor input circuit on the control PWB. **When the lamp does not light up.** Check for disconnection of the heater lamp and the thermostat. Check the interlock switch. Check the power PWB and the lamp control circuit on the MCU PWB. Use TC 14 to clear the self diagnostic display.
L1	00	Content	Feeding is not completed within the specified time after starting feeding. (The scan head locking switch is locked)
		Detail	Though the mirror base is shifted by about 30mm, the MHPS is not turned OFF.
		Cause	The scan head is locked by the lock switch. Mirror unit abnormality The scanner wire is disconnected. The origin detection sensor abnormality Mirror motor harness abnormality
		Check and remedy	Check to confirm that the scan head lock switch is released. Use TC 1-01 to check the mirror reciprocating operations. **When the mirror does not feed.** Check for disconnection of the scanner wire. Check the harness and the connector between the mirror motor and the MCU PWB. Replace the mirror unit. Replace the MCU PWB. **When the mirror does feed.** Use TC 1-02 to check the mirror home position sensor.

Main code	Sub code	Details of trouble	
L3	00	Content	Scanner return trouble
		Detail	When the mirror base is returned for the specified time (6 sec) in mirror initializing after turning on the power, the mirror home position sensor (MHPS) does not turn ON. Or when the mirror base is returned for the specified time (about 6 sec) after start of copy return, the mirror home position sensor (MHPS) does not turn ON.
		Cause	Mirror unit abnormality Scanner wire disconnection Origin detection sensor abnormality Mirror motor harness abnormality
		Check and remedy	Use TC 1-01 to check the mirror reciprocating operations. **When the mirror does not return.** Check for disconnection of the scanner wire. Check the harness and the connector between the mirror motor and the MCU PWB. Replace the mirror unit. Replace the MCU PWB. **When the mirror does feed.** Use TC 1-02 to check the mirror home position sensor.
L4	01	Content	Main motor lock detection
		Detail	When the main motor encoder pulse is not detected for 1000 msec.
		Cause	Main motor unit abnormality Improper connection or disconnection the main motor and the harness. MCU PWB abnormality
		Check and remedy	Use TC 25-01 to check the main motor operations. Check connection of the main motor harness/connector. Replace the main motor. Replace the MCU PWB.
	32	Content	Exhaust fan motor lock detection trouble
		Detail	The error detection is started after 2 sec from starting rotation of the exhaust fan motor. 1) The continuous rotation state of 250ms is not detected for 1 sec after starting detection. 2) When the lock sensor (in the exhaust fan) detects the HIGH level (unstable) after detection the lock state (stable state).
		Cause	Exhaust fan motor connector connection trouble Exhaust fan motor trouble MCU PWB trouble
		Check and remedy	Exhaust fan motor connector connection check Exhaust fan motor replacement Replace the MCU PWB.

Main code	Sub code	Details of trouble	
L6	10	Content	Polygon motor lock detection
		Detail	The lock signal (specified rpm signal) does not return within a certain time (about 20 sec) from starting the polygon motor rotation.
		Cause	Polygon motor unit abnormality Improper connection or disconnection of the polygon motor and the harness. MCU PWB abnormality
		Check and remedy	Use TC 61-01 to check the polygon motor operations. Check connection of the polygon motor harness/connector. Replace the polygon motor. Replace the MCU PWB.
U2	04	Content	EEPROM read/write error (Serial communication error)
		Detail	EEPROM access process error
		Cause	EEPROM abnormality
		Check and remedy	Check that the EEPROM is properly set. Cancel by turning OFF/ON the power. Replace the MCU PWB.
	11	Content	Counter check sum error (EEPROM)
		Detail	Check sum error of the counter area in the EEPROM
		Cause	EEPROM abnormality
		Check and remedy	Check that the EEPROM is properly set. Use TC 16 to cancel the trouble. Replace the MCU PWB.
	40	Content	CRUM chip communication error
		Detail	An error occurs in MCU-CRUM chip communication.
		Cause	CRUM chip trouble Defective contact of developing unit MCU PWB trouble
		Check and remedy	Replace the CRUM chip. Check installation of the developing unit. Cancel by turning OFF/ON the power. Replace the MCU PWB.