3-5-1 Self-diagnosis

(1) Self-diagnostic function

This unit is equipped with a self-diagnostic function. When it detects a problem with itself, it disables copying and displays the problem as a code consisting of "C" followed by a two-digit number, indicating the nature of the problem. A message, "Call for service," is also displayed.

When more than one service call code related problem occurs at the same time, the message display shows only the largest of the two-digit codes.

The last five service call codes are retained as the service call history item of the action list output by maintenance mode function No. 761.

Note that service call codes C81 to C85, C91 and C92 will not be shown on the display even if the respective problems occur. However, they will be entered into the action list service call history.

After removing the problem, the self-diagnostic function can be reset by opening and closing the front cover to turn safety switch 1 off and on.

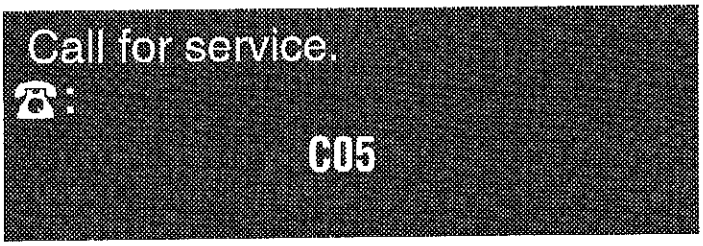

Figure 3-5-1 Service call code display

Self diagnostic codes

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C02	**Bitmap memory board not installed** The power is turned on without installing the bitmap memory board.	The bitmap memory board is not installed.	Install the bitmap memory board.
C05	**Operation unit PCB communication problem** There is a communication problem between the main PCB and operation unit PCB.	The connectors of the wires between the main PCB and operation unit PCB make poor contact.	Check the connection of connectors of the wires between the main PCB and operation PCB.
		Defective main PCB or operation unit PCB.	Replace the main PCB or operation unit PCB and check for correct operation.
C06	**Engine PCB communication problem** There is a communication problem (or a protocol error) between the main PCB and engine PCB.	The connectors of the wires between the main PCB and engine PCB make poor contact.	Check the connection of connectors on the main PCB and engine PCB.
		Defective main PCB or engine PCB.	Replace the main PCB or engine PCB and check for correct operation.
C07	**Checksum problem in the SRAM programming area** There is a difference between the checksum in the SRAM programming area stored when the power is turned off and the value checked when the power is turned on.	Defective engine PCB.	Replace the engine PCB and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C08	**Checksum problem in the SRAM software area** There is a difference between the checksum in the SRAM software area stored when the power is turned off and the value checked when the power is turned on.	Defective engine PCB.	Replace the engine PCB and check for correct operation.
C10	**Exposure lamp problem** The value of the ASIC address AGCHMAX is 30 or less when scanning the white reference data.	The connectors of the exposure lamp make poor contact.	Check the connection of the connectors of the exposure lamp.
		Defective inverter PCB or engine PCB.	Replace the inverter PCB or engine PCB and check for correct operation.
C31	**The scanner home position switch problem** The scanner home position switch does not turn on when expected. The scanner home position switch does not turn off when expected.	The connectors of the scanner home position switch make poor contact.	Check the connection of the connectors of the scanner home position switch.
		Defective scanner home position switch.	Check if CN24-5 on the engine PCB goes high when the scanner home position switch is on and goes low when the switch is off. If it does not, replace the scanner home position switch.
C42	**Laser scanner unit problem** The laser scanner unit is not stabilized (the MSYNC signal remains high) within 6 s after the scanner motor turns on. The MSYNC signal goes high after the laser scanner unit is stabilized.	Defective laser scanner unit.	Replace the laser scanner unit and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C51	**Main charger output problem** The MC ALM signal is output from the high-voltage transformer PCB while the main charger output is on.	Main charger output leaking.	Check the charger housing visually and clean it if it is dirty.
		Broken charger wire.	Check the charger wire visually and replace it if it is broken.
		Defective high-voltage transformer PCB.	Replace the high-voltage transformer PCB and check for correct operation.
C52	**Transfer high-voltage output problem** The TC ALM signal is output from the high-voltage transformer PCB while the transfer high-voltage output is on.	Transfer high-voltage output leaking.	Check the transfer wire and repair it if necessary.
		Defective high-voltage transformer PCB.	Replace the high-voltage transformer PCB and check for correct operation.
C60	**Fixing problems** The fixing temperature is 210°C/410°F or higher when the fixing heater is turned on. The fixing temperature does not rise within 20 s after the fixing heater is turned on. The fixing temperature does not exceed 120°C/ 248°F within 100 s after the fixing heater is turned on. The fixing temperature does not exceed 165°C/ 329°F within 100 s after the fixing heater is turned on. The fixing temperature rises to 210°C/410°F or higher during secondary stabilization or preheat. The fixing temperature drops to 120°C/248°F or lower during secondary stabilization or preheat. The fixing heater remains on for 25 s or longer during secondary stabilization or preheat. An error signal is output from the engine PCB.	Broken fixing heater wire.	Check for continuity across the fixing heater. If none, replace the heater.
		Fixing unit thermostat 1/ 2 actuated.	After clarifying the cause of the actuation, replace the fixing thermostat 1/2.
		Fixing unit thermistor installed incorrectly.	Check fixing unit thermistor and reinstall it if necessary.
		Broken fixing unit thermistor wire.	Measure the resistance. If it is ∞ Ω, replace the fixing unit thermistor.
		Shorted fixing unit thermistor.	Measure the resistance. If it is 0 Ω, replace the fixing unit thermistor.
		Defective power source PCB.	Replace the power source PCB and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C74	**Transfer problems** The external humidity sensor output A/D data is 242 or larger (4.75 V or higher, 99% RH or higher).	Poor contact in the humidity sensor PCB connector terminals.	Check the connection of the humidity sensor PCB connectors.
C81	**Paper conveying motor problem (when the finisher is installed)** When the LD signal from the paper conveying motor is monitored during operation, high level output is detected for 0.8 s.	The paper conveying motor connector makes poor contact.	Check the connection of the paper conveying motor connector.
		The paper conveying motor malfunctions.	Replace the paper conveying motor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C82	**Jogger motor problem (when the finisher is installed)** When detecting the jog guide in the home position during initialization, the jogger home position sensor state changes from on to off or off to on. However, this operation does not end within 0.8 s.	The jogger motor connector makes poor contact.	Check the connection of the jogger motor connector.
		The jogger motor malfunctions.	Replace the jogger motor and check for correct operation.
		The jogger home position sensor connector makes poor contact.	Check the connection of the jogger home position sensor connector.
		The jogger home position sensor malfunctions.	Check if the level of PJ10-2 on the finisher main PCB changes when the jogger home position sensor is turned on and off. If not, replace the jogger home position sensor.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C83	**Belt motor problem (when the finisher is installed)** The tractor does not leave the home position within 0.3 s of the start of tractor belt initialization. The tractor does not return to the home position within 1.6 s of the start of tractor belt initialization.	The belt motor connector makes poor contact.	Check the connection of the belt motor connector.
		The belt motor malfunctions.	Replace the belt motor and check for correct operation.
		The belt home position sensor connector makes poor contact.	Check the connection of the belt home position sensor connector.
		The belt home position sensor malfunctions.	Check if the level of PJ9-11 on the finisher main PCB changes when the belt home position sensor is turned on and off. If not, replace the belt home position sensor.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C84	**Stapler problem (when the finisher is installed)** The stapler does not return to the home position within 0.45 s of the start of stapler initialization.	The stapler motor connector makes poor contact.	Check the connection of the stapler motor connector.
		The stapler motor malfunctions.	Replace the stapler motor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C85	**Tray elevation motor problem (when the finisher is installed)** The vertical movement of the copy tray does not end within 7 s of the start of the tray elevation motor operation.	The tray elevation motor connector makes poor contact.	Check the connection of the tray elevation motor connector.
		The tray elevation motor malfunctions.	Replace the tray elevation motor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C91	**Printer network error (when the printer unit is installed)** The following printer status 1 is received from the printer controller. Bit 2: Network error	The connectors between the printer board and network boards make poor contact.	Check the connection of the connectors between the printer and network boards.
		Defective network board or printer board.	Replace the network board or printer board.
C92	**Printer error (when the printer unit is installed)** The following printer status 1 is received from the printer controller. Bit 0: Printer controller error Bit 1: Add-on RAM error	The printer cable connectors make poor contact.	Check the connection of the printer cable connectors.
		Defective printer board.	Replace the printer board.
		The connector of the add-on RAM on the printer board makes poor contact.	Check the connection of the connector of the add-on RAM on the printer board.
		Defective printer board add-on RAM.	Replace the printer board add-on RAM.