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 number between 001 and 784, indicating the nature of the problem.* A message requesting the user to call for service is also displayed.

After removing the problem, the self-diagnostic function can be reset as follows.

Printing section: By opening and closing the front, left or right cover to turn safety switch 1, 2 or 3 off and back on.

Optional switchback section: By opening and closing the switchback cover to turn safety switch 4 off and back on.

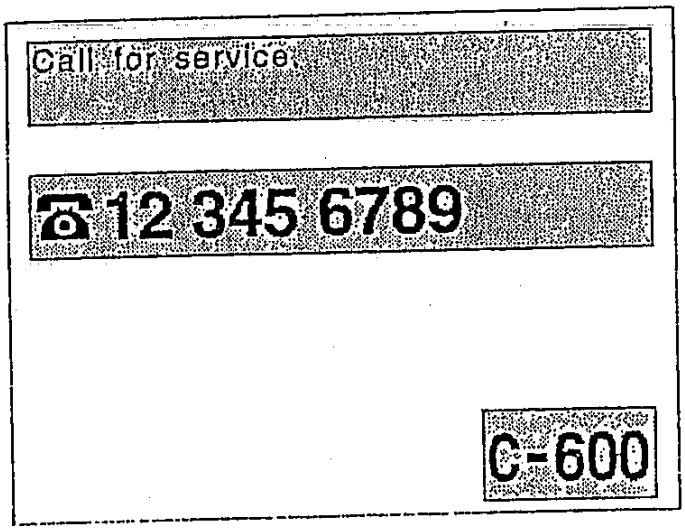

Figure 3-5-1 Service call code display

Self diagnostic codes

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C001	**Task PCB RAM problem** Problems with the task PCB backup data.	The backup data has a problem.	Run maintenance item 12 and enter the contents of the backup data again.
		Defective task PCB.	Replace the task PCB and check for correct operation.
C002	**Main PCB RAM problem** Problems with the main PCB backup data.	The backup data has a problem.	Run maintenance item 13 and enter the contents of the backup data again.
		Defective main PCB.	Replace the main PCB and check for correct operation.
C011	**Operation unit main PCB communication problem** There is a communication problem between the task PCB and the operation unit main PCB.	Poor contact in the connector terminals.	Check the connection of connectors CN11 on the task PCB and CN2 on the operation unit main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective task PCB or operation unit main PCB.	Replace the task PCB or operation unit main PCB and check for correct operation.
C013	**IPU PCB communication problem** There is a communication problem between the task PCB and the IPU PCB.	Poor contact in the connector terminals.	Check the connection of connectors CN3 on the task PCB, CN3 on the IPU PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective task PCB or IPU PCB.	Replace the task PCB or IPU PCB and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C014	**Scanner control PCB communication problem** There is a communication problem between the task PCB and scanner control PCB.	Poor contact in the connector terminals.	*Check the connection of connectors CN5 on the task PCB and CN5 on the scanner control PCB and the continuity across the connector terminals.* Repair or replace if necessary.
		Defective task PCB or scanner control PCB.	Replace the task PCB or scanner control PCB and check for correct operation.
C015	**Main PCB communication problem** There is a communication problem between the task PCB and main PCB.	Poor contact in the connector terminals.	Check the connection of connectors CN2 on the task PCB and CN12 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective task PCB or main PCB.	Replace the task PCB or main PCB and check for correct operation.
C016	***Printer board* communication problem*** *There is a communication problem between the task PCB and printer board.*	*Poor contact in the connector terminals.*	*Check the connection of connectors CN9 on the task PCB and CN4 on the printer board and continuity across the connector terminals. Repair or replace if necessary.*
		Defective task PCB or printer board.	*Replace the task PCB or printer board and check for correct operation.*

** Optional.*

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C017	***Memory copy board* communication problem*** *There is a communication problem between the task PCB and memory copy board.*	*Poor contact in the connector terminals.*	*Check the connection of connectors CN7 on the task PCB and CN4 on the memory copy board and the continuity across the connector terminals. Repair or replace if necessary.*
		Defective task PCB or memory copy board.	*Replace the tack PCB or memory copy board and check for correct operation.*
C020	***Memory copy board* problem*** *The memory copy board does not output R-Ready and W-Ready signals for a certain amount of time.*	*Defective memory copy board.*	*Replace the memory copy board and check for correct operation.*
C110	**Scanner home position problem** *Operation of the scanner home position switch cannot be detected within 4 s of the start of initialization immediately after the power is turned on.* *Operation of the scanner home position switch cannot be detected within 1 s after the scanner has started returning to the home position (after copying, etc.).*	Poor contact in the connector terminals.	Check the connection of connector CN3 on the scanner control PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective scanner home position switch.	Replace the scanner home position switch.
		Defective task PCB or scanner control PCB.	Replace the task PCB or scanner control PCB and check for correct operation.

** Standard for 120 V specifications and optional for other specifications.*

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C200	**Drive motor problem** The drive motor does not reach the correct speed within 2 s after turning on the drive motor remote signal.	Poor contact in the connector terminals.	Check the connection of connectors CN2 on the power source PCB and CN9 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective rotation control circuit in the drive motor.	Replace the drive motor.
		Damaged gear(s) or other components in the drive system of the drive motor.	Check the gear(s) in the drive system of the drive motor. Replace the gear(s) if damaged.
C220	***Duplex unit side registration motor problem***		*See the duplex unit service manual.*
C240	***Desk drive motor problem***		*See the paper feed desk service manual.*

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C250	**Upper lift motor problem** The problem of the upper lift limit switch not turning on within 6 s after the upper lift motor has started rotating is detected twice in a row.	Poor contact in the upper lift motor connector terminals.	Check for continuity across the connector terminals. If none, replace them.
		Defective upper lift motor.	Check for continuity across the coil. If none, replace the upper lift motor.
		Poor contact in the upper lift limit switch connector terminals.	Check for continuity across the connector terminals. If none, replace them.
		Defective upper lift limit switch.	Check if CN8-9 on the main PCB goes low when the upper lift limit switch is turned on. If not, replace the upper lift limit switch.
C251	**Lower lift motor problem** The problem of the lower lift limit switch not turning on within 6 s after the lower lift motor has started rotating is detected twice in a row.	Poor contact in the lower lift motor connector terminals.	Check for continuity across the connector terminals. If none, replace them.
		Defective lower lift motor.	Check for continuity across the coil. If none, replace the lower lift motor.
		Poor contact in the lower lift limit switch connector terminals.	Check for continuity across the connector terminals. If none, replace them.
		Defective lower lift limit switch.	Check if CN8-10 on the main PCB goes low when the lower lift limit switch is turned on. If not, replace the lower lift limit switch.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C252	***Desk upper lift motor problem***		*See the paper feed desk service manual.*
C253	***Desk lower lift motor problem***		*See the paper feed desk service manual.*
C300	**Polygon motor problem** The polygon motor does not reach the correct speed within 12 s after the polygon motor remote signal turns on.	Poor contact in the connector terminals.	Check the connection of the polygon motor connector and connector CN12 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective polygon motor.	Replace the LSU.
C302	***VTC problem*** *There is a problem with the VTC on the IPU.*	Defective IPU PCB.	Replace the IPU PCB and check for correct operation.
		Defective LSU.	Replace the LSU and check for correct operation.
C303	**BD steady-state problem** *No BD signal after the polygon motor speed has been stabilized.*	Defective laser diode.	Replace the LSU and check for correct operation.
		Defective polygon motor.	Replace the LSU and check for correct operation.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C430	Broken developing unit thermistor wire *The developing unit thermistor output voltage remains below 0.2 V for 10 s.*	Poor contact in the connector terminals.	Check connector CN10 on the main PCB and continuity across the connector terminals. Repair or replace if necessary.
		Defective developing unit thermistor.	Replace the developing unit thermistor.
C500	Main high-voltage transformer PCB problem *The main high-voltage alarm signal is detected when the main high-voltage remote signal is turned on.*	Defective main high-voltage transformer PCB.	Replace the main high-voltage transformer PCB.
C510	Transfer high-voltage transformer PCB problem *The transfer high-voltage transformer alarm signal is detected when the transfer high-voltage transformer remote signal is turned on.*	Defective transfer high-voltage transformer PCB.	Replace the transfer high-voltage transformer PCB.
C600	Broken fixing unit thermistor wire *The fixing temperature does not reach the secondary stabilization fixing temperature within 90 s after turning on the fixing remote signal.* *The fixing unit thermistor output voltage does not increase by 0.12 V within 20 s after the fixing control has started.*	Defective fixing unit thermistor.	Check the connection of connector CN7 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Broken fixing unit thermistor wire.	Measure the resistance. If it is $\infty\ \Omega$, replace the fixing unit thermistor.

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C620	**Abnormally low fixing temperature** *The fixing temperature drops to less than 100°C/ 212°F (fixing unit thermistor output voltage drops to less than 0.41 V) after having reached the stabilization level once.*	Fixing unit thermistor installed incorrectly.	Check the fixing thermistor and reinstall it if necessary.
		Fixing unit thermostats 1/2 triggered.	Check for continuity. If none, replace fixing unit thermostats 1/2.
		Fixing heaters M/S installed incorrectly.	Check fixing heaters M/S and reinstall them if necessary.
		Broken wires of fixing heaters M/S.	Check for continuity. If none, replace fixing heaters M/S.
C640	**Abnormally high fixing temperature** *The fixing temperature exceeds 210°C/410°F (fixing unit thermistor output voltage exceeds 3.06 V).*	Shorted fixing unit thermistor.	Measure the resistance. If it is 0 Ω replace the fixing unit thermistor.
C700	*Sorter stapler problem*		*See the stapler sorter service manual.*
C701	*Sorter jogger problem*		*See the stapler sorter service manual.*
C702	*Sorter bin sliding problem*		*See the stapler sorter service manual.*
C710	*Mail box problem*		*See the mail box service manual.*
C720	*Sorter bin unit overrun problem*		*See the stapler sorter stacker service manual.*
C721	*Sorter bin slide motor problem*		*See the stapler sorter stacker service manual.*
C722	*Sorter paper press motor problem*		*See the stapler sorter stacker service manual.*
C723	*Sorter jog motor problem*		*See the stapler sorter stacker service manual.*
C724	*Sorter punch problem*		*See the stapler sorter stacker service manual.*

Code	Contents	Remarks	
		Causes	Check procedures/ corrective measures
C725	*Sorter stapler table shift motor problem*		*See the stapler sorter stacker service manual.*
C726	*Sorter side registration motor problem*		*See the stapler sorter stacker service manual.*
C727	*Sorter stapler table motor problem*		*See the stapler sorter stacker service manual.*
C728	*Sorter bin shift motor problem*		*See the stapler sorter stacker service manual.*
C729	*Sorter slide tray motor problem*		*See the stapler sorter stacker service manual.*
C730	*Sorter hand motor problem*		*See the stapler sorter stacker service manual.*
C731	*Sorter stack tray motor problem*		*See the stapler sorter stacker service manual.*
C732	*Sorter pick-up section problem*		*See the stapler sorter stacker service manual.*
C770	RADF paper feed motor problem		See the RADF service manual.
C771	RADF conveying motor problem		See the RADF service manual.
C772	RADF switchback motor problem		See the RADF service manual.
C780	Large paper deck conveying motor problem		See the large paper deck service manual.
C781	Large paper deck lift 1 motor problem		See the large paper deck service manual.
C782	Large paper deck lift 2 motor problem		See the large paper deck service manual.
C783	Large paper deck lift 1 position problem		See the large paper deck service manual.
C784	Large paper deck lift 2 position problem		See the large paper deck service manual.