(2) Self diagnostic codes

Code	Contents	Remarks	
		Causes	**Check procedures/corrective measures**
C0030	**Fax board* problem** • Problems with data from fax board.	Defective fax board.	Replace the fax board and check for correct operation.
C0110	**Backup memory data problem** • Data in the specified area of the backup memory does not match the specified values.	Problem with the backup memory data.	Turn safety switch 1 off and back on and run maintenance item U020 to set the contents of the backup memory data again.
		Defective backup RAM.	If the C011 is displayed after re-setting the backup memory contents, replace the backup RAM.
C0210	**Operation unit PCB communication problem** • There is no reply after 20 retries at communication.	Poor contact in the connector terminals.	Check the connection of connectors CN36, CN42 on the main PCB and CN1, CN2 and CN3 on the operation unit PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB or operation unit PCB.	Replace the main PCB or operation unit PCB and check for correct operation.
C0240	**Printer board* communication problem** • There is no reply after 20 retries at communication.	Poor contact in the connector terminals.	Check the connection of connector CN43 on the main PCB and the connector on the printer board. Repair or replace if necessary.
		Defective main PCB or printer board.	Replace the main PCB or printer board and check for correct operation.
C0250	**Scanner network board* communication problem** • There is no reply after 20 retries at communication.	Poor contact in the connector terminals.	Check the connection of connector CN46 on the main PCB and the connector on the memory PCB. Repair or replace if necessary.
		Defective main PCB or scanner network board.	Replace the main PCB or scanner network board and check for correct operation.
C0280	**Fax board* communication problem** • There is no reply after 20 retries at communication.	Poor contact in the connector terminals.	Check the connection of connector CN44 on the main PCB and the connector on the memory PCB. Repair or replace if necessary.
		Defective main PCB or fax board.	Replace the main PCB or fax board and check for correct operation.
C0420	**Large paper deck*/paper feed desk* communication problem** • An error code from the side deck is detected eight times in succession. No communication: there is no reply after 3 retries. Abnormal communication: a communication error (parity or checksum error) is detected five times in succession.	Poor contact in the connector terminals.	Check the connection of connectors CN3 on the main PCB and the connector on the deck main PCB/desk main PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB.	Replace the main PCB and check for correct operation.
		Defective deck main PCB/desk main PCB.	Replace the deck main PCB/desk main PCB and check for correct operation.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C0440	**Finisher* communication problem** • An error code from the side deck is detected eight times in succession. No communication: there is no reply after 3 retries. Abnormal communication: a communication error (parity or checksum error) is detected five times in succession.	Poor contact in the connector terminals.	Check the connection of connectors CN4, CN5 on the main PCB and CN2 on the finisher main PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB.	Replace the main PCB and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C0450	**Mailbox* communication problem** • An error code from the side deck is detected eight times in succession. No communication: there is no reply after 3 retries. Abnormal communication: a communication error (parity or checksum error) is detected five times in succession.	Poor contact in the connector terminals.	Check the connection of connectors CN3 on the main PCB and CN1 on the mailbox main PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB.	Replace the main PCB and check for correct operation.
		Defective mailbox main PCB.	Replace the mailbox main PCB and check for correct operation.
C0470	**Switchback unit* communication problem** • An error code from the side deck is detected eight times in succession. No communication: there is no reply after 3 retries. Abnormal communication: a communication error (parity or checksum error) is detected five times in succession.	Poor contact in the connector terminals.	Check the connection of connectors CN3 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB.	Replace the main PCB and check for correct operation.
		Defective switchback unit main PCB.	Replace the switchback unit main PCB and check for correct operation.
C0600	**DIMM problem** The DIMM on the memory PCB does not operate correctly.	DIMM installed incorrectly.	Check if the DIMM is inserted into the socket on the main PCB correctly.
		Defective DIMM.	Replace the DIMM and check for correct operation.
C0610	**Bitmap problem** • There is a problem with the data or address bus of the bitmap DRAM.	Defective main PCB.	Replace the main PCB and check for correct operation.
C0620	**Memory input interface problem** Reading-in of an image does not complete within 10 s of the start of image transmission.	Defective main PCB.	Replace the main PCB and check for correct operation.
C0630	**DMA problem** • DMA transmission of compressed, decompressed, rotated, relocated or blanked-out image data does not complete within the specified period of time.	Defective main PCB.	Replace the main PCB and check for correct operation.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C1010	**Upper lift motor problem** • When the upper drawer is inserted, the upper lift limit switch does not turn on within 6 s of the upper lift motor turning on and the upper lift limit switch does not turn on by turning off the upper lift motor for 200 ms and retrying twice. • During copying, the upper lift limit switch does not turn on within 200 ms of the upper lift motor turning on.	Broken gears or couplings of the upper lift motor.	Replace the upper lift motor.
		Defective upper lift motor.	Check for continuity across the coil. If none, replace the upper lift motor.
		Poor contact of the upper lift motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective upper lift limit switch.	Check if CN13-B9 on the main PCB goes low when the upper lift limit switch is turned off. If not, replace the upper lift limit switch.
		Poor contact of the upper lift limit switch connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
C1020	**Lower lift motor problem** • When the lower drawer is inserted, the lower lift limit switch does not turn on within 6 s of the lower lift motor turning on and the lower lift limit switch does not turn on by turning off the lower lift motor for 200 ms and retrying twice. • During copying, the lower lift limit switch does not turn on within 200 ms of the lower lift motor turning on.	Broken gears or couplings of the lower lift motor.	Replace the lower lift motor.
		Defective lower lift motor.	Check for continuity across the coil. If none, replace the lower lift motor.
		Poor contact of the lower lift motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective lower lift limit switch.	Check if CN13-B15 on the desk main PCB goes low when the lower lift limit switch is turned off. If not, replace the lower lift limit switch.
		Poor contact of the lower lift limit switch connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
C1030	**Desk upper lift motor problem** • When the upper drawer of the paper feed desk* is inserted, the desk upper lift limit switch does not turn on within 6 s of the desk upper lift motor turning on and the desk upper lift limit switch does not turn on by turning off the desk upper lift motor for 200 ms and retrying twice. • During copying, the desk upper lift limit switch does not turn on within 200 ms of the desk upper lift motor turning on.	Broken gears or couplings of the desk upper lift motor.	Replace the desk upper lift motor.
		Defective desk upper lift motor.	Check for continuity across the coil. If none, replace the desk upper lift motor.
		Poor contact of the desk upper lift motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective desk upper lift limit switch.	Check if CN1-5 on the desk main PCB goes low when the desk upper lift limit switch is turned off. If not, replace the desk upper lift limit switch.

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C1030	**Desk upper lift motor problem** • When the upper drawer of the paper feed desk* is inserted, the desk upper lift limit switch does not turn on within 6 s of the desk upper lift motor turning on and the desk upper lift limit switch does not turn on by turning off the desk upper lift motor for 200 ms and retrying twice. • During copying, the desk upper lift limit switch does not turn on within 200 ms of the desk upper lift motor turning on.	Poor contact of the desk upper lift limit switch connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
C1040	**Desk lower lift motor problem** • When the lower drawer of the paper feed desk* is inserted, the desk lower lift limit switch does not turn on within 6 s of the desk lower lift motor turning on and the desk lower lift limit switch does not turn on by turning off the desk lower lift motor for 200 ms and retrying twice. • During copying, the desk lower lift limit switch does not turn on within 200 ms of the desk lower lift motor turning on.	Broken gears of couplings of the desk lower lift motor.	Replace the desk lower lift motor.
		Defective desk lower lift motor.	Check for continuity across the coil. If none, replace the desk lower lift motor.
		Poor contact of the desk lower lift motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective desk lower lift limit switch.	Check if CN1-7 on the desk main PCB goes low when the desk lower lift limit switch is turned off. If not, replace the desk lower lift limit switch.
		Poor contact of the desk lower lift limit switch connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
C1100	**Paper deck motor 1* problem** • A motor over-current signal is detected continuously for 1 s or longer.	Paper deck motor 1 does not rotate correctly (the motor is overloaded).	Check the gears and remedy if necessary.
		Paper deck motor 1 connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
C1110	**Paper deck motor 2* problem** • A motor over-current signal is detected continuously for 1 s or longer.	Paper deck motor 2 does not rotate correctly (the motor is overloaded).	Check the gears and remedy if necessary.
		Paper deck motor 2 connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C1120	**Deck right lift* position problem** • Deck level switch 2 does not turn on within 30 s of paper deck motor 2 turning on.	Defective deck level switch 2.	Check if CN5-4 on the desk main PCB goes low when desk level switch 2 is turned off. If not, replace desk level switch 2.
		Poor contact of deck level switch 2 connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective paper deck motor 2.	Check for continuity across the coil. If none, replace paper desk motor 2.
		Poor contact of paper deck motor 2 connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		The deck right lift does not rise properly.	Check the gears and belts, and remedy if necessary.
C1130	**Deck left lift* position problem** • Deck level switch 2 does not turn on within 30 s of paper deck motor 2 turning on.	Defective deck level switch 1.	Check if CN5-7 on the desk main PCB goes low when desk level switch 1 is turned off. If not, replace desk level switch 1.
		Poor contact of deck level switch 1 connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		Defective paper deck motor 1.	Check for continuity across the coil. If none, replace paper desk motor 1.
		Poor contact of paper deck motor 1 connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, repair or replace the cable.
		The deck left lift does not rise properly.	Check the gears and belts, and remedy if necessary.
C1160	**Large paper deck*/paper feed desk* sequence problem**	Operation start request is sent from the copier to the large paper deck/paper feed desk while paper feed is disabled.	Turn the power off and back on (reset request is sent from the copier to the large paper deck/paper feed desk to cancel operation start request).
		Paper feed request is sent from the copier to the large paper deck/ paper feed desk before operation start request.	Turn the power off and back on (reset request is sent from the copier to the large paper deck/paper feed desk to cancel operation start request).

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C1170	**Large paper deck* (paper feed desk*) incorrect type problem**	Deck/desk for the printer is installed.	Replace the deck/desk fot the copier.
C2000	**Drive motor problem** • LOCK ALM signal remains high for 1 s, 1 s after the drive motor has turned on.	Poor contact in the drive motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective drive motor rotation control circuit.	Replace the drive motor.
		Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
C2500	**Paper feed motor problem** • LOCK ALM signal remains high for 1 s, 1 s after the paper feed motor has turned on.	Poor contact in the paper feed motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective paper feed motor rotation control circuit.	Replace the paper feed motor.
		Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
C2600	**Deck conveying motor*/desk drive motor* problem** • No pulse is input within 500 ms of the start-up. • No pulse is input within 100 ms of the previous pulse input.	Defective deck conveying motor PCB/desk drive motor PCB.	Replace the deck conveying motor PCB/ desk drive motor PCB and check for correct operation.
		Deck conveying motor /desk drive motor does not rotate correctly (the motor is overloaded).	Check the gears and remedy if necessary.
		Poor contact in the deck conveying motor/desk drive motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C3100	**Scanner carriage problem** • The home position is not correct when the power is turned on or at the start of copying using the bypass table.	Poor contact in the connector terminals.	Check the connection of connector CN37 on the main 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 main PCB or scanner drive PCB.	Replace the main PCB or scanner drive PCB and check for correct operation.
		Defective scanner motor.	Replace the scanner motor.
C3200	**Exposure lamp problem** • Check the CCD input value for the lighting status of the exposure lamp 100 ms after the exposure lamp is lit and the carriage is moved to the shading position. If the exposure lamp does not light, turn off the lamp. After 500 ms, light the lamp again and, a further 500 ms later, check the CCD input. The exposure lamp does not light after 5 retries.	Poor contact of the connector terminals.	Check the connection of connectors CN34 and CN37 on the main PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective exposure lamp.	Replace the exposure lamp or inverter PCB.
		Defective main PCB.	Replace the main PCB and check for correct operation.
		Incorrect shading position.	Adjust the position of the contact glass (shading plate). If the problem still occurs, replace the scanner home position switch.
C3300	**Optical system problem** • After AGC, correct input is not obtained at CCD.	Poor contact of the connector terminals.	Check the connection of connector CN34 on the main PCB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective main PCB.	Replace the main PCB and check for correct operation.
C4000	**Polygon motor synchronization problem** • The polygon motor does not reach the stable speed within 15 s of the polygon motor remote signal turning on.	Poor contact in the polygon motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective polygon motor.	Replace the LSU (see page 1-6-20).
		Defective power source PCB.	Check if 24 V DC is supplied to CN2-1 on the main PCB. If not, replace the power source PCB.
		Defective main PCB.	Check if 24 V DC is output from CN8-10 on the main PCB. If not, replace the main PCB.

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C4010	**Polygon motor steady-state problem** • The polygon motor rotation is not stable for 600 ms after the polygon motor rotation has been stabilized.	Poor contact in the polygon motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective polygon motor.	Replace the LSU (see page 1-6-20).
		Defective power source PCB.	Check if 24 V DC is supplied to CN2-1 on the main PCB. If not, replace the power source PCB.
		Defective main PCB.	Check if 24 V DC is output from CN8-10 on the main PCB. If not, replace the main PCB.
C4200	**BD steady-state problem** • The VTC detects a BD error for 600 ms after the polygon motor rotation has been stabilized.	Defective laser diode.	Replace the LSU (see page 1-6-20).
		Defective polygon motor.	Replace the LSU (see page 1-6-20).
		Defective main PCB.	Replace the main PCB and check for correct operation.
C5300	**Broken cleaning lamp wire** While the cleaning lamp is on, the broken cleaning lamp wire detection signal is detected for 2 s continuously.	Defective cleaning lamp.	Replace the cleaning lamp.
		Defective main PCB.	Replace the main PCB and check for correct operation.
C6000	**Broken fixing heater wire** • The fixing temperature does not increase for 40 s after the fixing heaters have been turned on for warming up. • The fixing temperature remains below 50 °C/122 °F for 10 s continuously after the fixing heaters have been turned on during stabilization.	Poor contact in the fixing unit thermistor connector terminals.	Check the connection of connector CN10 on the main PCB and the continuity across the connector terminals. Repair or replace if necessary.
		Fixing unit thermistor installed incorrectly.	Check and reinstall if necessary.
		Fixing unit thermostat triggered.	Check for continuity. If none, replace the fixing unit thermostat.
		Fixing unit heater M or S installed incorrectly.	Check and reinstall if necessary.
		Broken fixing unit heater M or S wire.	Check for continuity. If none, replace the fixing unit heater M or S (see page 1-6-38).
C6020	**Abnormally high fixing unit thermistor temperature** • The fixing temperature exceeds 230 °C/446 °F for 10 s.	Shorted fixing unit thermistor.	Measure the resistance. If it is 0 Ω, replace the fixing unit thermistor.
		Broken fixing unit heater control circuit on the power source PCB.	Replace the power source PCB.

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C6050	**Abnormally low fixing unit thermistor temperature** • The fixing temperature remains below 120 °C/248 °F for 10 s.	Poor contact in the fixing unit thermistor connector terminals.	Check the connection of connector CN10 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 ∞ Ω, replace the fixing unit thermistor.
		Fixing unit thermistor installed incorrectly.	Check and reinstall if necessary.
		Fixing unit thermostat triggered.	Check for continuity. If none, replace the fixing unit thermostat.
		Fixing unit heater M or S installed incorrectly.	Check and reinstall if necessary.
		Broken fixing unit heater M or S wire.	Check for continuity. If none, replace the fixing unit heater M or S.
C6410	**Fixing unit connector insertion problem** • Absence of the fixing unit is detected continuously for 1500 ms while there is no error on the copier.	Fixing unit connector inserted incorrectly.	Reinsert the fixing unit connector if necessary.
		Defective fixing unit connector.	Replace the fixing unit.
C6420	**Broken fixing unit thermistor wire** • The fixing temperature remains at 0 °C/32 °F for 30 s continuously when the fixing heater is on.	Poor contact in the fixing unit thermistor connector terminals.	Check the connection of connector CN10 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 ∞ Ω, replace the fixing unit thermistor.
C7300	**Toner sensor problem** • While the toner container sensor is on, the toner sensor in the developing unit does not turn on after the toner sensor turns off and toner is replenished from the toner container.	Defective toner sensor.	Replace the toner sensor.
		Poor contact in the toner sensor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective toner container sensor.	Replace the toner container sensor.
		Defective toner container.	Replace the toner container.
C7400	**Image formation unit connector insertion problem** • Absence of the image formation unit is detected continuously for 1500 ms while there is no error on the copier.	Image formation unit connector inserted incorrectly.	Reinsert the image formation unit connector if necessary.
		Defective image formation unit connector.	Replace the image formation unit.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C7410	**Drum unit connector insertion problem** • Absence of the drum unit is detected continuously for 1500 ms while there is no error on the copier.	Drum unit connector inserted incorrectly.	Reinsert the drum unit connector if necessary.
		Defective drum unit connector.	Replace the drum unit.
C7800	**Broken external temperature thermistor wire** • The input voltage is above 4.5 V.	Poor contact in the humidity sensor PCB connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective external temperature thermistor.	Replace the humidity sensor PCB.
C7810	**Short-circuited external temperature thermistor** • The input voltage is below 0.5 V.	Poor contact in the humidity sensor PCB connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective external temperature thermistor.	Replace the humidity sensor PCB.
C8010	**Finisher* paper conveying motor problem** • The paper conveying motor lockup signal is detected for 0.5 s or longer.	Poor contact in the paper conveying motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		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.
C8030	**Finisher* paper conveying belt problem** • An on-to-off or off-to-on state change of the paper conveying belt home position sensor is not detected within 2 s of the paper conveying belt clutch turning on.	The paper conveying belt is out of phase.	Adjust the paper conveying belt so that it is in phase and check for correct operation.
		The paper conveying belt clutch malfunctions.	Replace the paper conveying belt clutch and check for correct operation.
		The paper conveying belt home position sensor malfunctions.	Replace the paper conveying belt home position sensor and check for correct operation.
		The paper conveying belt home position sensor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The internal tray is incorrectly inserted.	Check whether the internal tray unit or front cover catches are damaged.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C8140	**Finisher* tray elevation motor problem** • The sort tray is not detected in the home position within 30 s of the start of the tray elevation motor rotation.	Poor contact in the tray elevation motor connector terminals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		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.
C8170	**Finisher* front side registration motor problem** • If the front side registration home position sensor is on in initialization, the sensor does not turn off within 570 ms of starting initialization. • If the front side registration home position sensor is off in initialization, the sensor does not turn on within 3180 ms of starting initialization.	The front side registration motor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The front side registration motor malfunctions.	Replace the front side registration motor and check for correct operation.
		The front side registration home position sensor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The front side registration home position sensor malfunctions.	Replace the front side registration home position sensor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C8180	**Finisher* rear side registration motor problem** • If the rear side registration home position sensor is on in initialization, the sensor does not turn off within 570 ms of starting initialization. • If the rear side registration home position sensor is off in initialization, the sensor does not turn on within 2880 ms of starting initialization.	The rear side registration motor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The rear side registration motor malfunctions.	Replace the rear side registration motor and check for correct operation.
		The rear side registration home position sensor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The rear side registration home position sensor malfunctions.	Replace the rear side registration home position sensor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C8190	**Finisher* trailing edge registration motor problem** • If the trailing edge registration home position sensor is on in initialization, the sensor does not turn off within 570 ms of starting initialization. • If the trailing edge registration home position sensor is off in initialization, the sensor does not turn on within 4550 ms of starting initialization.	The trailing edge registration motor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The trailing edge registration motor malfunctions.	Replace the trailing edge registration motor and check for correct operation.
		The trailing edge registration home position sensor connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The trailing edge registration home position sensor malfunctions.	Replace the trailing edge registration home position sensor and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C8210	**Finisher* front stapler problem** • The front stapler home position sensor does not change state from non-detection to detection within 200 ms of the start of front stapler motor counterclockwise (forward) rotation. • During initialization, the front stapler home position sensor does not change state from non-detection to detection within 600 ms of the start of front stapler motor clockwise (reverse) rotation.	The front stapler connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The front stapler malfunctions. a) The front stapler is blocked with a staple. b) The front stapler is broken.	a) Remove the front stapler cartridge, and check the cartridge and the stapling section of the stapler. b) Replace the front stapler and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C8220	**Finisher* rear stapler problem** • The rear stapler home position sensor does not change state from non-detection to detection within 200 ms of the start of rear stapler motor counterclockwise (forward) rotation. • During initialization, the rear stapler home position sensor does not change state from non-detection to detection within 600 ms of the start of rear stapler motor clockwise (reverse) rotation.	The rear stapler connector makes poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The rear stapler malfunctions. a) The rear stapler is blocked with a staple. b) The rear stapler is broken.	a) Remove the front stapler cartridge, and check the cartridge and the stapling section of the stapler. b) Replace the front stapler and check for correct operation.
		Defective finisher main PCB.	Replace the finisher main PCB and check for correct operation.
C8300	**Booklet stitcher* paper ejection motor problem**	A problem is detected with the paper ejection motor.	See the booklet stitcher service manual.
C8310	**Booklet stitcher* elevation motor problem**	A problem is detected with the elevation motor.	See the booklet stitcher service manual.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C8320	**Booklet stitcher* rear jog motor problem**	A problem is detected with the rear jog motor.	See the booklet stitcher service manual.
C8330	**Booklet stitcher* front jog motor problem**	A problem is detected with the front jog motor.	See the booklet stitcher service manual.
C8340	**Booklet stitcher* staple motor problem**	A problem is detected with the staple motor.	See the booklet stitcher service manual.
C8350	**Booklet stitcher* batch processing motor problem**	A problem is detected with the batch processing motor.	See the booklet stitcher service manual.
C8360	**Booklet stitcher* stapler shift motor problem**	A problem is detected with the stapler shift motor.	See the booklet stitcher service manual.
C8370	**Booklet stitcher* paddle motor problem**	A problem is detected with the paddle motor.	See the booklet stitcher service manual.
C8380	**Booklet stitcher* folding problem**	A problem is detected with the folding sensor.	See the booklet stitcher service manual.
C8390	**Booklet stitcher* backup RAM data problem**	A backup RAM data error is detected.	See the booklet stitcher service manual.
C8400	**Booklet stitcher* incorrect type problem**	An incorrect type error is detected.	See the booklet stitcher service manual.
C8410	**Booklet stitcher* punch motor problem**	A problem is detected with the punch motor.	See the booklet stitcher service manual.
C8420	**Booklet stitcher* shift motor problem**	A problem is detected with the shift motor.	See the booklet stitcher service manual.
C8430	**Booklet stitcher* punch communication problem**	A problem is detected with the punch communication.	See the booklet stitcher service manual.
C8440	**Booklet stitcher* punch sensor problem**	A problem is detected with the punch sensor.	See the booklet stitcher service manual.
C8450	**Booklet stitcher* side punch sensor problem**	A problem is detected with the side punch sensor.	See the booklet stitcher service manual.

*: Optional

Code	Contents	Remarks	
		Causes	Check procedures/corrective measures
C8460	**Booklet stitcher* punch backup RAM data problem**	A problem is detected with the punch backup RAM data.	See the booklet stitcher service manual.
C8470	**Booklet stitcher* punch dust sensor problem**	A problem is detected with the punch dust sensor.	See the booklet stitcher service manual.
C8480	**Booklet stitcher* broken punch power source wire problem**	A broken punch power source wire problem is detected.	See the booklet stitcher service manual.
C8500	**Mailbox* drive motor problem** • While the mailbox drive motor is driving, synchronization signals do not synchronize continually for 464 ms (motor lockup).	Defective mailbox drive motor or mailbox main PCB.	Run a simulation of the mailbox (communication test mode, see page 3-2-2 of the mailbox service manual). If there is any problem with the communication, replace the mailbox drive motor or the mailbox main PCB and check for correct operation.

*: Optional