

SC100: Scanning System

SC No.		Symptom	Possible Cause
101	D	Exposure Lamp Error	
		At trigger on, the lamp was not detected on.	<ul style="list-style-type: none"> • Exposure lamp defective • Lamp regulator defective • Lamp regulator harness damaged, disconnected • Dirty standard white plate • Scanner mirror dirty or out of position • Lens dirty, out of position • SBU board defective
120	D	Scanner home position error 1	
		The scanner HP sensor does not detect the on condition during initialization or copying.	<ul style="list-style-type: none"> • BCU, SDRB (Scanner Driver Board) defective • Scanner motor defective • Harness between BCU, SDRB, scanner motor disconnected. • Scanner HP sensor defective. • Harness between scanner HP sensor and BCU disconnected. • Scanner wire, timing belt, pulley, carriage installed incorrectly.
121	D	Scanner home position error 2	
		The scanner HP sensor does not detect the off condition during initialization or copying.	<ul style="list-style-type: none"> • BCU, SDRB (Scanner Driver Board) defective • Scanner motor defective • Harness between BCU, SDRB, scanner motor disconnected • Scanner HP sensor defective • Harness between scanner HP sensor and BCU disconnected • Scanner wire, timing belt, pulley, carriage installed incorrectly.
122	D	Scanner home position error 3	
		The scanner home position sensor does not detect the on condition during original scanning.	<ul style="list-style-type: none"> • BCU, SDRB (Scanner Driver Board) defective • Scanner motor defective • Harness between BCU, SDRB, scanner motor disconnected • Scanner HP sensor defective • Harness between scanner HP sensor and BCU disconnected • Scanner wire, timing belt, pulley, carriage installed incorrectly

123	D	Scanner home position error 4	<p>The scanner home position sensor does not detect the off condition during original scanning.</p> <ul style="list-style-type: none"> • BCU, SDRB (Scanner Driver Board) defective • Scanner motor defective • Harness between BCU, SDRB, scanner motor disconnected • Scanner HP sensor defective • Harness between scanner HP sensor and BCU disconnected • Scanner wire, timing belt, pulley, carriage installed incorrectly.
143	C	SBU auto adjust error	<p>Automatic adjustment of the SBU fails when the machine is switched on.</p> <ul style="list-style-type: none"> • Exposure lamp defective • Exposure lamp regulator defective • Harness between exposure lamp and lamp regulator is disconnected • White plate installed incorrectly or is dirty • Scanning mirrors of the exposure unit are dirty or out of position • SBU board defective • VIB board defective. • Harness between SBU, VIB disconnected • Harness between VIB, BCU disconnected
144	D	SBU transmission error	<p>After the SBU switches on, the BCU detects one of the following conditions on the SBU:</p> <ul style="list-style-type: none"> • 1 s after power on, the SYDI signal does not go high, even after 1 retry. • 1 s after power on, the SYDI signal goes high, but the SBU ID could not be read after 3 attempts. <ul style="list-style-type: none"> • SBU defective • VIB defective • Harness (40-pin shielded) between the SBU, VIB is disconnected • Harness (shielded cable) between the VIB, BCU is disconnected
165		Copy data security unit error B828	B246
		The copy data security option is installed by not operating correctly.	<ul style="list-style-type: none"> • Copy data security card corrupted • The board is not installed or the board is defective • IPU board defective

181	D	<p>CIS lamp abnormal</p> <p>After the CIS lamp trigger goes on, the CIS lamp is not detected on. Detecting the lamp on or off determines the peak white level value for shading correction. (If the peak level is determined to be below a certain level, the CIS lamp is judged to be off.)</p>	<ul style="list-style-type: none"> • CIS lamp defective • CIS power supply board defective • CIS lamp regulator defective • Harness between lamp and lamp regulator is disconnected. • Harness between CIS, ADF is disconnected • CIS exposure glass dirty. • White roller dirty or installed incorrectly • CIS unit defective
183	C	<p>CIS auto adjust error</p> <p>Automatic adjustment of the CIS unit failed.</p>	<ul style="list-style-type: none"> • CIS unit defective • CIS exposure glass dirty • White roller dirty or installed incorrectly
184	D	<p>CIS transmission error</p> <p>When the CIS is powered on, the ADF detects one of the following abnormal conditions on the CIS unit:</p> <ul style="list-style-type: none"> • The SOUT signal does not go high within 1 s after power on. • The SOUT signal goes high within 1 s after power on, but the SBU ID cannot be read after 3 attempts. 	<ul style="list-style-type: none"> • CIS unit defective • Harness between the CIS, ADF is disconnected

SC200: Exposure

202	Polygon mirror motor error 1: Timeout at ON	B246
	The polygon mirror motor unit did not enter "Ready" status within 20 sec. after the motor was turned on, or within 20 sec. after the speed of rotation was changed.	<ul style="list-style-type: none"> • The polygon mirror motor PCB connector is loose, broken, or defective • Polygon mirror motor PCB defective • Polygon mirror motor defective • IPU defective
203	Polygon mirror motor error 2: Timeout at OFF	B246
	The polygon mirror motor did not leave "Ready" within 3 sec. after the motor was switched off. (The XSCRDY signal did not go HIGH (inactive) within 3 sec.)	<ul style="list-style-type: none"> • The polygon mirror motor PCB connector is loose, broken, or defective • Polygon mirror motor PCB defective • Polygon mirror motor defective • IPU defective
204	Polygon mirror motor error 3: XSCRDY signal error	B246
	The polygon mirror motor "Ready" signal went inactive (HIGH) while the motor was operating at normal speed, even though the motor was neither switched off nor was there a request for a change in speed.	<ul style="list-style-type: none"> • Electrical noise interference on the line with the motor signals • Polygon mirror motor PCB connector loose, broken, defective • Polygon mirror motor PCB defective • Polygon mirror motor defective
205	Polygon mirror motor error 4: Unstable timeout	B246
	The "Ready" signal (XSCRDY) was detected as unstable for more than 20 sec. while the polygon mirror motor was operating at normal speed.	<ul style="list-style-type: none"> • Electrical noise on the line with the motor signals • Polygon mirror motor PCB connector loose, broken, defective • Polygon mirror motor PCB defective • IPU defective
220	Laser synchronization detection error	B246
	The 1st laser synchronization detection unit could not detect the line synchronization signal (DETP0) within 500 ms while the polygon mirror motor was operating at normal speed. Note: The unit polls for the signal every 50 ms. This SC is issued after the 10th attempt fails to detect the signal.	<ul style="list-style-type: none"> • Laser synchronization board connector loose, broken, defective • Laser synchronization detection board is not installed correctly (out of alignment) • Laser synchronization board defective • IPU defective

Troubleshooting

SC300: Image Development System (1)

SC No.		Symptom	Possible Cause
300	D	Charge corona output error	
		The feedback voltage from the charge corona unit is detected too high 9 times.	<ul style="list-style-type: none"> • Charge corona power pack defective • Charge corona harness disconnected • Poor charge corona unit connection
303	C	Charge corona grid leak	
		When the high voltage is output to the corona grid, feedback voltage exceeds the prescribed value 9 times.	<ul style="list-style-type: none"> • Charge corona power pack defective • Charge corona harness disconnected • Poor charge corona unit connection
304	D	Charge grid circuit open	
		When high voltage goes to the corona grid, feedback voltage is more than the set value 9 times. This feedback voltage is used to update PWM for output control.	<ul style="list-style-type: none"> • Charge corona unit defective or disconnected • Charge corona harness defective • Charge corona power pack is defective.
305	D	Charge corona wire cleaner error 1	
		The charge cleaner pad does not arrive at the home position: <ul style="list-style-type: none"> • Motor locked within 4 s after switching on, or does not lock within 30 s. • Motor locked within 10 s after reversing, or does not lock within 30 s. 	<ul style="list-style-type: none"> • Charge corona wire cleaner motor defective • Motor driver defective
306	C	Charge corona wire cleaner error 2	
		Charge coronal motor is disconnected. (The current at the charge corona motor is detected less than 83 mA.)	<ul style="list-style-type: none"> • Charge corona wire cleaner motor connector is defective, connected.

NOTE: When SC310~SC317 are logged, the machine halts without displaying the SC number. These SC codes log an abnormal condition at the potential sensor only when SP3901 (Auto Process Control) is set to on.

SC No.		Symptom	Possible Cause
310	D	Potential sensor calibration error 1	
		During drum potential sensor calibration, the drum potential sensor output voltage does not meet specification when test voltages (–100V, –800V) are applied to the drum.	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Development power pack defective

311	C	Potential sensor calibration error 2	
		During drum potential sensor calibration, the drum potential sensor output voltage does not meet specification when test voltages (-100V, -800V) are applied to the drum.	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Development power pack defective
312	C	Potential sensor calibration error 3	
		During drum potential sensor calibration when adjusting the drum potential (VD), the drum potential sensor detects VD higher than VG (grid voltage). -or- When adjusting VD (drum surface potential of black areas after exposure), even after 5 adjustments of VG (charge corona grid potential), VD could not be set in the target range (-800±10 + VL + 130V)	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Development power pack defective • Charge corona unit worn out, dirty
314	C	Potential sensor calibration error 4	
		During drum potential sensor calibration when adjusting the drum potential (VH) for LD power adjustment, the first time the VH pattern is made, the drum potential sensor detects that VH is more than 500V: $VH > -500 + VL + 130 V$	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • LD defective
315	C	Potential sensor calibration error 5	
		During drum potential sensor calibration, when -100V is applied to the drum, the output value is out of the prescribed range.	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Development power pack defective
316	C	Potential sensor calibration error 6	
		During drum potential sensor calibration, when -800V is applied to the drum, the output value is out of the prescribed range.	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Development power pack defective

317	C	Potential sensor calibration error 7	
		During drum potential sensor calibration, when VL is adjusted, the pattern surface potential VL pattern is not within range 0V ~ -400V. (VL is the potential after exposing a white pattern.)	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness disconnected • Potential sensor connector defective or disconnected • IOB defective • OPC connector defective • Charge corona power pack defective • Development power pack defective
321	D	F-GATE error	B140 Only
		The laser writing signal (F-GATE) for the IPU does not go LOW within 60 s.	<ul style="list-style-type: none"> • BICU board defective • PCI bus between controller board, BICU board defective
322	D	Laser synchronization detector error	B140 Only
		After the polygon motor reaches standard rotation speed and the LD unit fires for 500 ms, the laser synchronization detector does not generate a signal.	<ul style="list-style-type: none"> • Harness between detector and I/F disconnected or damaged • Detector is installed incorrectly • Detector board is defective • IPU board defective
335	D	Polygon mirror motor error 1	B140 Only
		The ready signal does not go low within 20 s after the polygon mirror motor turns on or changes speed.	<ul style="list-style-type: none"> • Harness between I/F and polygon motor disconnected or defective • Polygon motor or polygon motor driver defective • IPU board defective
336	D	Polygon mirror motor error 2	B140 Only
		The ready signal does not go high within 20 s after the polygonal mirror motor turns off.	<ul style="list-style-type: none"> • Harness between I/F and polygon motor disconnected or defective • Polygon motor or polygon motor driver defective • IPU board defective
337	D	Polygonal mirror motor error 3	B140 Only
		The XSCRDY signal goes high while the polygon mirror motor turns on, even though there was no request to either turn off the motor or change the motor speed.	<ul style="list-style-type: none"> • Noise on the line where the polygon ready signal (XSCRDY) is transmitted. • Harness between the polygon motor and I/F disconnected or defective. • Polygon motor or polygon motor driver defective
338	D	Polygonal mirror motor error 4	B140 Only
		While the polygon motor is rotating, the XSCRDY signal goes high during exposure.	<ul style="list-style-type: none"> • Noise on the linef where the polygon ready signal (XSCRDY) is transmitted. • Harness between the polygon motor and I/F disconnected or defective. • Polygon motor or polygon motor driver defective • IPU board defective

340	C	TD sensor output error	
		<p>TD sensor output voltage (Vt), measured during each copy cycle, is detected 10 times at one of the following levels: Vt = 0.5 volts or lower Vt = 4.0 volts or higher</p>	<ul style="list-style-type: none"> • TD sensor defective • TD sensor harness disconnected • TD sensor connector disconnected or defective • IOB defective • Toner bottle motor defective <p>Note: When the TD sensor is defective, the toner supply is controlled using pixel count and the ID sensor.</p>
341	D	TD sensor adjustment error 1	
		<p>During the TD sensor auto adjustment, the TD sensor output voltage (Vt) is 2.5 volts or higher even though the control voltage is set to the minimum value (PWM = 0). When this error occurs, SP2-906-1 reads 0.00V. Note: This SC is released only after correct adjustment of the TD sensor has been achieved. Switching the machine off and on will cancel the SC display, but does not release ID sensor toner supply.</p>	<ul style="list-style-type: none"> • TD sensor defective • TD sensor harness disconnected • TD sensor connector disconnected or defective • IOB defective • Toner bottle motor defective <p>Note: When the TD sensor is defective, the toner supply is controlled using pixel count and the ID sensor.</p>
342	D	TD sensor adjustment error 2	
		<p>During the TD sensor auto adjustment, the TD sensor output voltage (Vt) does not enter the target range (3.0 ± 0.1V) within 20 s. When this error occurs, the display of SP2-906-1 reads 0.00V. Note: This SC is released only after correct adjustment of the TD sensor has been achieved. Switching the machine off and on will cancel the SC display, but does not release ID sensor toner supply.</p>	<ul style="list-style-type: none"> • TD sensor defective • TD sensor harness disconnected • TD sensor connector disconnected or defective • IOB defective
345	D	Development output abnormal	
		<p>The high voltage applied to the development unit is detected 10 times higher than the upper limit (45%) of PWM.</p>	<ul style="list-style-type: none"> • Development power pack defective • Development bias leak due to poor connection, defective connector
350	C	ID sensor error 1	
		<p>One of the following ID sensor output voltages was detected twice consecutively when checking the ID sensor pattern. Vsp ≥ 2.5V Vsg < 2.5 Vsp = 0V Vsg = 0</p>	<ul style="list-style-type: none"> • ID sensor defective • ID sensor harness disconnected • ID sensor connector defective • IOB defective • ID sensor pattern not written correctly • Incorrect image density • Charge power pack defective • ID sensor dirty

Trouble-shooting

351	C	ID sensor error 2	
		The ID sensor output voltage is 5.0V and the PWM signal input to the ID sensor is 0 when checking the ID sensor pattern.	<ul style="list-style-type: none"> • ID sensor defective • ID sensor harness disconnected • ID sensor connector defective • IOB defective • ID sensor pattern not written correctly • Incorrect image density • Charge power pack defective • ID sensor dirty
352	C	ID sensor error 3	
		For 2 s during the ID sensor pattern check, the ID sensor pattern edge voltage is not 2.5V or the pattern edge is not detected within 800 ms.	<ul style="list-style-type: none"> • ID sensor defective • ID sensor harness disconnected • ID sensor connector defective • IOB defective • ID sensor pattern not written correctly • Incorrect image density • Charge power pack defective • ID sensor dirty
353	C	ID sensor error 4	
		One of the following ID sensor output voltages is detected at ID sensor initialization. <ul style="list-style-type: none"> • $V_{sg} < 4.0V$ when the maximum PWM input (255) is applied to the ID sensor. • $V_{sg} \geq 4.0V$ when the minimum PWM input (0) is applied to the ID sensor. 	<ul style="list-style-type: none"> • ID sensor defective • ID sensor harness disconnected • ID sensor connector defective • IOB defective • ID sensor pattern not written correctly • Incorrect image density • Charge power pack defective • ID sensor dirty
354	C	ID sensor error 5	
		V_{sg} falls out of the adjustment target ($4.0 \pm 0.2V$) during V_{sg} checking.	<ul style="list-style-type: none"> • ID sensor defective • ID sensor harness disconnected • ID sensor connector defective • IOB defective • ID sensor pattern not written correctly • Incorrect image density • Charge power pack defective • ID sensor dirty
355	C	ID sensor error 6	
		The V_p value, which measures the reflectivity of the ID sensor pattern, was not in the range of $-70V$ to $-400V$.	<ul style="list-style-type: none"> • Potential sensor defective • Potential sensor harness defective • Potential sensor disconnected • IOB defective • OPC unit connector defective • Charge corona power pack defective • Charge corona wire dirty, broken

SC400: Image Development System (2)

SC No.		Symptom	Possible Cause
401	D	Transfer output abnormal	
		When the transfer is output, the feedback voltage remains higher than 4V for 60 ms.	<ul style="list-style-type: none"> • Transfer power pack defective • Transfer current terminal, transfer power pack disconnected, damaged connector
402	D	Transfer output abnormal release detection	
		When the transfer is output, there is hardly any feedback voltage within 60 ms even with application of 24% PWM.	<ul style="list-style-type: none"> • Transfer power pack defective • Transfer unit harness disconnected • Transfer connector loose, defective
430	C	Quenching lamp error	
		At the completion of auto process control initialization, the potential of the drum surface detected by the potential sensor is more than -400V, the prescribed value.	<ul style="list-style-type: none"> • Quenching lamp defective • Quenching lamp harness disconnected • Quenching lamp connector loose, defective
440	D	Main motor lock	
		The main motor lock signal remains low for 2 seconds while the main motor is on.	<ul style="list-style-type: none"> • Drive mechanism overloaded • Motor driver board defective
441	D	Development motor lock	
		The development motor lock signal remains high for 2 seconds while the development motor is on.	<ul style="list-style-type: none"> • Drive mechanism overloaded due to toner clumping in the wasted toner path • Motor driver board defective
		If this SC is returned on a machine in the field, inspect the toner supply unit coil. If the gear is not damaged replace the coil. If the gear is damaged, the gear shaft is probably deformed, so replace the entire unit.	
490	D	Main fan error	
		The main fan motor lock signal goes high for 5 s while the fan is on.	<ul style="list-style-type: none"> • Fan motor overloaded due to obstruction • Fan connector disconnected
495	D	Toner recycling unit error	
		Encoder pulse does not change for 3 s after the main motor switches on.	<ul style="list-style-type: none"> • Waste toner transport has stopped due to motor overload • Toner end sensor defective, disconnected
496	D	Toner collection bottle error	
		The toner collection bottle set switch remains off when the front door is closed.	<ul style="list-style-type: none"> • No toner collection bottle set • Poor connection of the switch connector
497	D	Toner collection motor error	
		The toner collection motor connector set signal remains off for 1 s.	<ul style="list-style-type: none"> • Toner pump motor defective • Motor connector loose, disconnected

SC500: Feed, Transport, Duplexing, and Fusing Systems

SC No.		Symptom	Possible Cause
501	B	<p>Tray 1 lift malfunction</p> <ul style="list-style-type: none"> • The lift sensor is not activated within 10 seconds after the tray lift motor starts lifting the bottom plate. • When the tray lowers, the tray lift sensor does not go off within 1.5 sec. • Tray overload detected when the tray is set. • The lower limit sensor of the LCT does not detect the lower limit within 10 sec. 	<ul style="list-style-type: none"> • Tray lift motor defective, disconnected • Paper or other obstacle trapped between tray and motor • Pick-up solenoid disconnected, blocked by an obstacle • Too much paper loaded in tray <p>Note (B246)</p> <ul style="list-style-type: none"> • At first, the machine displays a message asking the operator to reset the tray. • This SC will not display until the operator has pulled the tray out and pushed it in 3 times. • If the operator cycles the machine off/on before the 3rd opening and closing of the tray, the 3-count is reset.
502	B	<p>Tray 2 lift malfunction</p> <ul style="list-style-type: none"> • The lift sensor is not activated within 10 seconds after the tray lift motor starts lifting the bottom plate. • When the tray lowers, the tray lift sensor does not go off within 1.5 sec. • Tray overload detected when the tray is set. 	<ul style="list-style-type: none"> • Tray lift motor defective or disconnected • Paper or other obstacle trapped between tray and motor • Pick-up solenoid disconnected or blocked by an obstacle • Too much paper loaded in tray <p>Note (B246)</p> <ul style="list-style-type: none"> • At first, the machine displays a message asking the operator to reset the tray. • This SC will not display until the operator has pulled the tray out and pushed it in 3 times. • If the operator cycles the machine off/on before the 3rd opening and closing of the tray, the 3-count is reset.
503	B	<p>Tray 3 lift malfunction</p> <ul style="list-style-type: none"> • The lift sensor is not activated within 10 seconds after the tray lift motor starts lifting the bottom plate. • When the tray lowers, the tray lift sensor does not go off within 1.5 sec. • Tray overload detected when the tray is set. 	<ul style="list-style-type: none"> • Tray lift motor defective or disconnected • Paper or other obstacle trapped between tray and motor • Pick-up solenoid disconnected or blocked by an obstacle • Too much paper loaded in tray <p>Note (B246)</p> <ul style="list-style-type: none"> • At first, the machine displays a message asking the operator to reset the tray. • This SC will not display until the operator has pulled the tray out and pushed it in 3 times. • If the operator cycles the machine off/on before the 3rd opening and closing of the tray, the 3-count is reset.

504	B	<p>Tray 4 lift malfunction</p> <ul style="list-style-type: none"> • The lift sensor is not activated within 10 seconds after the tray lift motor starts lifting the bottom plate. • When the tray lowers, the tray lift sensor does not go off within 1.5 sec. • Tray overload detected when the tray is set. 	<ul style="list-style-type: none"> • Tray lift motor defective or disconnected • Paper or other obstacle trapped between tray and motor • Pick-up solenoid disconnected or blocked by an obstacle • Too much paper loaded in tray <p>Note (B246)</p> <ul style="list-style-type: none"> • At first, the machine displays a message asking the operator to reset the tray. • This SC will not display until the operator has pulled the tray out and pushed it in 3 times. • If the operator cycles the machine off/on before the 3rd opening and closing of the tray, the 3-count is reset.
507	B	<p>LCT feed motor malfunction</p> <p>One of the following conditions is detected:</p> <ul style="list-style-type: none"> • The LD signal from the feed motor is detected abnormal for 50 ms after the motor switches on. • At power on, the motor is detected loose or disconnected. 	<ul style="list-style-type: none"> • Feed motor defective • Feed motor connector disconnected • Obstacle interfering with mechanical movement of motor.
510	B	<p>LCT tray malfunction</p> <p>One of the following conditions is detected:</p> <ul style="list-style-type: none"> • When the bottom plate is lifted, the upper limit sensor does not come on for 18 s. • When the bottom plate is lowered, the lower limit sensor does not come on for 18 s. • After lift begins, the upper limit sensor does not switch on before the pick-up solenoid switches on. • The paper end sensor switches on during lift and the upper limit sensor does not switch on for 2.5 s, and a message prompts user to reset paper. 	<ul style="list-style-type: none"> • Tray lift motor defective or connector disconnected • Lift sensor defective or disconnected • Pick-up solenoid defective or disconnected • Paper end sensor defective

Trouble-shooting

515	B	Tandem rear fence motor error	
		<p>One of the conditions is detected:</p> <ul style="list-style-type: none"> • The return sensor does not switch on within 10 sec. after the rear fence motor switches on. • The HP sensor does not switch on 10 sec. after the rear fence motor switches on. • The HP sensor and return sensor switch on at the same time. 	<ul style="list-style-type: none"> • Rear fence motor defective or poor connection • Paper or other obstacle interfering with operation of the sensors • Paper or other obstacle trapped between tray and motor • Motor mechanical overload due to obstruction • Return sensor or HP sensor defective or dirty <p>Note (B246)</p> <ul style="list-style-type: none"> • This problem will not issue the SC code on the operation panel. • The machine will prompt the operator to reset tray by opening and closing it. • If the problem persists, the machine will display again and the tray cannot be used.
520	C	Duplex jogger motor error 1	
		<p>When the jogger fence moves to the home position, the jogger HP sensor does not turn on even if the jogger fence motor has moved the jogger fence 153.5 mm.</p>	<ul style="list-style-type: none"> • Paper or other obstacle has jammed mechanism • Sensor connector disconnected or defective • Sensor defective
521	C	Duplex jogger motor error 2	
		<p>When the jogger fence moves from the home position, the jogger fence HP sensor does not turn off even if the jogger motor has moved the jogger fence 153.5 mm.</p>	<ul style="list-style-type: none"> • Paper or other obstacle has jammed mechanism • Sensor connector disconnected or defective • Sensor defective
531	D	Fusing exit motor error	
		<p>The PLL lock signal was low for 2 seconds during motor operation.</p>	<ul style="list-style-type: none"> • Motor lock caused by physical overload • Motor drive PCB defective
541	A	Fusing thermistor open	
		<p>The fusing temperature detected by the center thermistor was below 0°C for 7 sec.</p>	<ul style="list-style-type: none"> • Thermistor open • Thermistor connector defective • Thermistor damaged, or out of position • Fusing temperature -15% less than the standard input voltage
542	A	Fusing temperature warm-up error	
		<p>One of the following occurred:</p> <ul style="list-style-type: none"> • After power on, or after closing the front door, the hot roller does not reach the 100°C control temperature within 25 s. • 5 sec. after temperature rise started, temperature remained below 21°C after 5 samplings. • Fusing unit did not attain reload temperature within 48 sec. of the start of fusing temperature control. 	<ul style="list-style-type: none"> • Fusing lamp disconnected • Thermistor warped, out of position • Thermostat not operating

543	A	Fusing lamp overhear error 1 (software)	
		Central thermistor detected a temperature of 240°C at the center of the hot roller. Fusing temperature control software error	<ul style="list-style-type: none"> • PSU defective • IOB defective • BICU defective
544	A	Fusing lamp overhear error 1 (hardware)	
		The central thermistor or an end thermistor detected a temperature of 250°C on the hot roller.	<ul style="list-style-type: none"> • PSU defective • IOB defective • BICU defective
545	A	Fusing lamp overhear error 2	
		After hot roller reaches warmup temperature, the fusing lamps remained on at full capacity for 11 samplings (1.8 sec. duration) while the hot roller was not rotating.	<ul style="list-style-type: none"> • Thermistor damaged, or out of position • Fusing lamp disconnected
547	D	Zero cross signal malfunction	
		<p>One of the following conditions is detected 10 times:</p> <ul style="list-style-type: none"> • When the main switch is on, the frequency measured by the number of zero cross signals for 500 ms is larger than 66Hz or smaller than 45 Hz. • The interval between one zero cross signal and the next is 7.5 ms or shorter 3 times consecutively for 500 ms. 	<ul style="list-style-type: none"> • Noise on the ac power line
550	A	Fusing Web End	
		Web end detected 5 times within 500 ms and web motor continues to rotate 40 s. If web end is detected for another 500 ms, then the SC is logged.	<ul style="list-style-type: none"> • Web end (requires replacement) • Web end sensor defective <p>Note: After replacing the web with a new one, reset SP1902 001 to "0" to release SC550.</p>
551	A	Fusing thermistor error 1	
		The end thermistor (contact type) was less than 0C (32F) for more than 7 seconds.	<ul style="list-style-type: none"> • Thermistor disconnected • Thermistor connector defective
552	A	Fusing thermistor error 2	
		<p>The end thermistor (contact type) could not detect:</p> <ul style="list-style-type: none"> • 100°C 25 seconds after the start of the warmup cycle. • A change in temperature more than than 16 degrees for 5 seconds. • The reload temperature with 56 seconds after the start of the fusing temperature control cycle. 	<ul style="list-style-type: none"> • Fusing lamp disconnected • Thermistor bent, damaged • Thermistor position incorrect

553	A	Fusing thermistor error 3	
		The end thermistor (contact type) was at 240°C (464°F) for more than 1 second. The temperature is read 10 times every sec. (at 0.1 sec. intervals).	<ul style="list-style-type: none"> • PSU defective • IOB control board defective • BICU control board defective
555	A	Fusing lamp error	
		After the start of the warmup cycle, a fusing lamp was at full power for 1.8 seconds but the hot roller did not turn.	<ul style="list-style-type: none"> • Thermistor bent, out of position • Fusing lamp disconnected • Circuit breaker opened
557		Zero cross signal error	B246
		High frequency noise was detected on the power line.	<ul style="list-style-type: none"> • No action required. The SC code is logged and the operation of the machine is not affected.
559	A	Fusing jam: 3 counts	B246
		At the fusing exit sensor the paper was detected late for three pulse counts (lag error), and SP1159 was on.	This SC only occurs if SP1159 is on, and a jam occurred in the fusing unit for three consecutive sheets of paper. Remove the paper that is jammed in the fusing unit. Then make sure that the fusing unit is clean and has no obstacles in the paper feed path.
569	D	Fusing pressure release motor error	
		During copying, the HP sensor could not detect the actuator, tried again 3 times and could not detect.	<ul style="list-style-type: none"> • Motor lock because of too much load • Motor driver defective • HP sensor defective, disconnected, connector defective, harness damaged
590	D	Toner collection motor error	
		The toner collection motor sensor output does not change for 3 seconds while the toner collection motor is on.	<ul style="list-style-type: none"> • Motor lock due to obstruction • Motor driver board defective • Motor connection loose, defective • Toner collection motor sensor disconnected, sensor defective • Rotational transmission shaft ($\phi 6 \times 30$) missing
599	D	1-bin Exit Motor Error (Japan Only)	
		The transport lock sensor output does not change within 300 ms after the motor switches on.	<ul style="list-style-type: none"> • Motor overload • Motor driver defective

SC600: Data Communication

SC No.		Symptom	Possible Cause
610	D	BICU ⇔ ADF communication/timeout abnormal	
		After 1 data frame is sent to the ADF, an ACK signal is not received within 100 ms, and is not received after 3 retries.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
611	D	BICU ⇔ ADF communication/break reception abnormal	
		During communication a break (Low) signal was received from the ADF.	<ul style="list-style-type: none"> • Serial line connection unstable • Harness disconnected or defective
612	D	BICU ⇔ ADF communication/command abnormal	
		A command that cannot be executed was sent from the main machine to the ADF.	<ul style="list-style-type: none"> • A software error, result of an abnormal procedure.
620	D	BICU ⇔ ADF communication/timeout error	
		After 1 data frame is sent to the finisher MBX, an ACK signal is not received within 100 ms, and is not received after 3 retries.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
621	D	BICU ⇔ Finisher communication/break error	
		During communication with the finisher MBX, the BICU received a break (Low) signal from the finisher.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
623	D	BICU ⇔ Tray 1~4 communication/timeout error	
		After 1 data frame is sent to the trays, an ACK signal is not received within 100 ms, and is not received after 3 retries.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
624	D	BICU ⇔ Tray 1~4 communication/break reception error	
		During communication with the finisher trays, the BICU received a break (Low) signal.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
626	D	BICU ⇔ LCT communication/timeout error	
		After 1 data frame is sent to the LCT, an ACK signal is not received within 100 ms, and is not received after 3 retries.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line
627	D	BICU ⇔ LCT communication/break reception error	
		During communication with the LCT, the BICU received a break (Low) signal.	<ul style="list-style-type: none"> • Serial line connection unstable • External noise on the line

Trouble-shooting

SC650	NRS Modem Communication Error	
	One of the following factors could be the cause of this error: <ul style="list-style-type: none"> • In the User Tools, check the settings for the dial-up user name and dial up password. • Modem has been disconnected. • Modem board disconnected. 	Check the following for a machine that is using Cumin (NRS modem): <ul style="list-style-type: none"> • An error was returned during the dialup connection • A network was detected at startup • At startup the machine detected that the NIB was disabled, or did not detect a modem board

NOTE: For more details about this SC code error, execute **SP5990** to print an SMC report so you can read the error code. The error code is not displayed on the operation panel. Here is a list of error codes:

Error	Problem	Solution
1	Failure to certify dial-up	In the User Tools, check the dial-up user and dial-up password settings
4	Illegal modem setting	Check the setting of SP5816 160 to determine whether the setting for the AT command is correct. If this SP setting is correct, then the problem is a bug in the software.
5	Poor connection due to low power supply on the line.	The problem is on the external power supply line, so there is no corrective action on the machine.
11	Data in the NVRAM became corrupted when the network enable switch and Cumin-M were enabled at the same time.	Use SP5985 1 and set the NIC to "0" (Disable) to disable the network board.
12	The modem board could not enable the NIB.	Replace the modem board.

SC No.	Symptom	Possible Cause
651	Illegal Remote Service Dial-up	
	An expected error occurred when Cumin-M dialed up the NRS Center.	<ul style="list-style-type: none"> • Software bug • No action is required because only the count is logged
670	D Engine startup error	
	The machine engine, controlled by the BICU (Base Image Control Unit), was operating incorrectly when the machine was switched on or returned to normal operation from the energy save mode.	<ul style="list-style-type: none"> • Check the connections between BICU and controller • BICU defective • Controller board defective • PSU defective
672	B Controller startup error	
	<ul style="list-style-type: none"> • After power on, the line between the controller and the operation panel did not open for normal operation. • After normal startup, communication with the controller stopped. 	<ul style="list-style-type: none"> • Controller stalled • Controller installed incorrectly • Controller board defective • Operation panel harness disconnected or defective

SC700: Peripherals

SC No.		Symptom	Possible Cause
700	D	ADF original pick-up error 1	
		Pick-up roller HP sensor signal does not change after the pick-up motor has turned on.	<ul style="list-style-type: none"> • Pick-up roller HP sensor defective • Pick-up motor defective • Timing belt slipping, out of position • ADF main board defective
701	D	ADF bottom plate motor error	
		<ul style="list-style-type: none"> • Bottom plate position sensor does not detect the plate after the bottom plate lift motor switches on to lift the plate. • Bottom plate HP sensor does not detect the plate after the bottom plate motor reverses to lower the plate. 	<ul style="list-style-type: none"> • Bottom plate position sensor defective • Bottom plate HP sensor defective • Bottom plate motor defective • ADF main board defective
720	D	Finisher transport motor error	
		The encoder pulse of the finisher transport motor does not change state (high/low) within 600 ms and does not change after 2 retries.	<ul style="list-style-type: none"> • Finisher transport motor defective • Transport motor harness disconnected, or defective • Finisher main board defective
721	B	Finisher jogger motor error	
		<ul style="list-style-type: none"> • The finisher jogger HP sensor remains de-activated for more 1,000 pulses when returning to home position. • The finisher jogger HP sensor remains activated for more than 1,000 pulses when moving away from home position. 	<ul style="list-style-type: none"> • Jogger HP sensor defective • Jogger mechanism overload • Jogger motor defective (not rotating) • Finisher main board defective • Harness disconnected or defective
723		Feed-Out Belt Motor (B478)	B246
		The pawl of the feed-out belt did not return to the home position during the prescribed time after 2 attempts to detect.	<ul style="list-style-type: none"> • Stack feed-out belt HP sensor loose, broken, defective • Feed-out belt motor defective • Finisher control board defective
724	B	Finisher staple hammer motor error (B478)	
		The staple hammer motor did not return to the home position within the prescribed time (340 ms).	<ul style="list-style-type: none"> • Staple hammer HP sensor loose, broken, defective • Electrical overload on the stapler drive PCB elect • Staple hammer motor defective • Finisher main board defective

Trouble-shooting

B140/B246 Duplicated Number

725	B	Finisher stack feed-out motor error	B140
		The stack feed-out belt HP sensor does not activate within the prescribed number of pulses after the stack feed-out motor turns on and does not activate after 2 retries.	<ul style="list-style-type: none"> • Stack feed-out HP sensor defective • Harness disconnected or defective • Stack feed-out motor defective • Finisher main board defective • Motor overload
725		Exit guide motor	B246
		The status of the exit guide sensor did not change at the prescribed time during operation of the exit guide.	<ul style="list-style-type: none"> • Exit guide open sensor loose, broken, defective. • Exit guide motor defective • Finisher main board defective

B140/B246 Duplicated Number

726	B	Finisher upper tray lift motor error	B140
		The paper height sensor does not activate within the prescribed time after the upper tray lift motor turns on, or the sensor remains on after the motor reverses to lower the tray.	<ul style="list-style-type: none"> • Upper tray paper height sensor defective • Sensor harness disconnected, defective • Tray lift motor defective • Finisher main board defective • Tray lift motor overload
726		Front shift jogger motor error (B703)	B246
		The sides fences do not retract within the prescribed time after the shift jogger motor switches on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Shift jogger motor disconnected, defective • Shift jogger motor overloaded due to obstruction • Shift jogger HP sensor disconnected, defective

B140/B246 Duplicated Number

727	B	Finisher stapler rotation motor error	B140
		The stapler motor switches on but the motor does not return to the home position within the prescribed number of pulses. After 2 counts, the SC is logged as a jam.	<ul style="list-style-type: none"> • Stapler rotation motor defective • Poor stapler rotation motor connection • Stapler rotation sensor defective • Finisher main board defective • Rotation motor overload
727	B	Rear shift jogger motor (B703)	B246
		The side fences do not retract within the prescribed time after the shift jogger motor switches on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective • Motor overload • HP defective

728	B	Shift jogger retraction motor error (B703)	B246
		The side fences do not retract within the prescribed time after the retraction motor switches on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective • Motor overload • HP defective
729	D	Finisher punch motor error	B140
		The punch HP sensor does not activate within the prescribed time after the punch motor turns on.	<ul style="list-style-type: none"> • Punch HP sensor defective • Sensor harness disconnected, defective • Punch motor defective • Finisher main board defective • Poor punch motor overload

B140/B246 Duplicated Number

730	B	Finisher stapler movement motor error	B140
		The stapler HP sensor does activate within the prescribed time after the stapler motor turns on and moves the stapler away from home position. After 2 counts, the SC is logged as a jam.	<ul style="list-style-type: none"> • Stapler HP sensor defective • Sensor harness disconnected, defective • Stapler movement motor defective • Finisher main board defective • Stapler movement motor overload
730	B	Finisher Tray 1 shift motor error	B246
		The shift roller HP sensor of the upper tray does not activate within the prescribed time after the shift tray starts to move toward or away from the home position. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Shift tray HP sensor of the upper tray disconnected, defective • Shift tray motor of the upper tray is disconnected, defective • Shift tray motor of the upper tray overloaded due to obstruction

Trouble-shooting

732	B	Finisher shift roller motor error	
		The shift roller HP sensor does not activate within the prescribed time after the shift roller motor turns on. After 2 counts, the SC is logged as a jam.	<ul style="list-style-type: none"> • Shift roller HP sensor defective • Sensor harness disconnected, defective • Shift roller motor defective • Finisher main board defective • Shift roller motor overload
733	D	Finisher lower tray lift motor error	
		After the lift motor switches on to lift the tray, paper height sensor 2 does not detect the top of the paper stack, or after the motor reverses to lower the stack the top of the stack remains detected (the status of paper height sensor 1 does not change). After 2 counts, the SC is logged as a jam.	<ul style="list-style-type: none"> • Paper height sensor 1 or 2 defective • Sensor harness disconnected, defective • Tray lift motor defective • Finisher main board defective • Tray lift motor overload

735	B	Finisher pre-stack motor error	
		<ul style="list-style-type: none"> The pre-stack motor starts but does not return to the home position within 400 pulses. After 2 counts, the SC is logged as a jam. Motor does not return to the home position within 280 pulses immediately before or after pre-stacking. After 2 counts, the SC is logged as a jam. 	<ul style="list-style-type: none"> Jogger HP sensor defective Sensor harnesses disconnected, defective Pre-stack motor defective Finisher main board defective Pre-stack motor overload
736	B	Finisher paper exit guide plate motor error	
		<p>The paper exit guide plate motor starts but the paper exit guide plate HP sensor does not activate within 750 ms. After 2 counts, the SC is logged as a jam.</p>	<ul style="list-style-type: none"> Guide plate HP sensor defective Sensor harness disconnected, defective Paper exit guide plate motor defective Finisher main board defective Guide plate motor overload.
737	B	Trimmed staple waste hopper full	
		<p>The hopper that holds the waste from staple trimming is full.</p>	<ul style="list-style-type: none"> Staple waste hopper full Staple waste sensor defective
738	B	Finisher pressure plate motor error	
		<p>The pressure plate motor switches on but does not return to the home position within the prescribed time after 2 counts.</p>	<ul style="list-style-type: none"> HP sensor defective Harness disconnected, defective Motor defective Finisher main board defective Motor overload
739	B	Finisher folder plate motor error	
		<p>The folder plate motor turns on but the plate does not return to the home position within the prescribed time for 2 counts.</p>	<ul style="list-style-type: none"> Plate HP sensor defective Harness disconnected, defective Folder plate motor defective Finisher main board defective Folder plate motor overload

B140/B246 Duplicated Number

740	B	Finisher front saddle-stitch stapler motor error	B140
		<p>Saddle-stitch stapler motor fails to operate within 450 ms within 2 counts..</p>	<ul style="list-style-type: none"> HP sensor defective Harness disconnected, defective Stapler motor defective Finisher main board defective Stapler motor overload
740	B	Finisher corner stapler motor error	B246
		<p>The stapler motor does not switch off within the prescribed time after operating. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.</p>	<ul style="list-style-type: none"> Staple jam Number of sheets in the stack exceeds the limit for stapling Stapler motor disconnected, defective

B140/B246 Duplicated Number

741	B	Finisher rear saddle-stitch stapler motor error	B140
		Saddle-stitch stapler motor fails to operate within 450 ms within 2 counts..	<ul style="list-style-type: none"> • HP sensor defective • Harness disconnected, defective • Stapler motor defective • Finisher main board defective • Stapler motor overload
741	B	Finisher corner stapler rotation motor error	B246
		The stapler does not return to its home position within the specified time after stapling. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Stapler rotation motor disconnected, defective • Stapler rotation motor overloaded due to obstruction • Stapler rotation HP sensor disconnected, defective

B140/B246 Duplicated Number

742	B	Finisher jogger side fence motor error	B140
		The jogger motor turns on but the side fences to not return to the home position within 340 pulses for 2 counts.	<ul style="list-style-type: none"> • HP sensors defective • Harness disconnected, defective • Motor defective • Finisher main board defective • Motor overload
742	B	Finisher stapler movement motor error	B246
		The stapler HP sensor is not activated within the specified time after the stapler motor turned on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Stapler movement motor disconnected, defective • Stapler movement motor overloaded due to obstructicn • Stapler HP sensor disconnected, defective

Trouble-shooting

B140/B246 Duplicated Number

743	B	Finisher shift motor errors	B140
		For the optional jogger unit for the B706 finisher: During the return operation, the shift jogger motor or shift jogger fence lift motor did not return to the home position within the set number of pulses.	<ul style="list-style-type: none"> • HP sensor of shift jogger motor, harness, connector defective, or motor disconnected • HP sensor, harness, connector of retraction motor defective, or motor disconnected • Shift jogger motor defective • Shift jogger fence lift motor defective • Finisher main control board defective
743	B	Booklet stapler motor error 1	B246
		The front stapler unit saddle-stitch motor does not start operation within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Front motor disconnected, defective • Front motor overloaded due to obstruction

744	B	Booklet stapler motor error 2	B246
		The rear stapler unit saddle-stitch motor does not start operation within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Rear motor disconnected, defective • Rear motor overloaded due to obstruction

B140/B246 Duplicated Number

750	B	Cover interposer bottom plate motor error	B140
		<ul style="list-style-type: none"> • The bottom plate motor turns on to raise the bottom plate but the plate position sensor does not detect the plate within 3 s. • The bottom plate motor reverses to lower the bottom plate but the bottom plate HP sensor does not detect the plate within 3 s. 	<ul style="list-style-type: none"> • Bottom plate position sensor defective • Bottom plate HP sensor defective • Bottom plate motor defective • Cover sheet feeder main board defective • Harnesses disconnected, defective
750	B	Finisher tray 1 (upper tray lift) motor error	B246
		The upper tray paper height sensor does not change its status with the specified time after the tray raises or lowers. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Tray lift motor disconnected, defective • Upper tray paper height sensor disconnected, defective • Finisher main board connection to motor loose • Finisher main board defective

B140/B246 Duplicated Number

753	B	Z-Folding unit error 3	B140
		The HP sensor of the upper stopper motor does not go off after the stopper moved 128.7 mm.	<ul style="list-style-type: none"> • Upper stopper motor defective • Upper stopper motor disconnected, connector defective • Upper stopper motor HP sensor disconnected, defective • Z-Fold main control board defective
753	B	Return roller motor error	B246
		Occurs during the operation of the lower tray pressure motor.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor overloaded • Home position sensor harness disconnected, loose, defective • Home position defective

B140/B246 Duplicated Number

754	D	Z-Folding unit error 4	B140
		2000 ms after the fan motor switched on, the lock signal did not release.	<ul style="list-style-type: none"> • Fan motor defective • Fan motor disconnected • Fan motor locked because of too much load • Z-Fold main control board defective
754		Z-Fold Unit Fan Motor Error	B246
		The motor lock signal failed to release within 2 sec. after the Z-fold unit fan motor turned on.	<ul style="list-style-type: none"> • Fan motor connected loose, broken, defective • Fan motor defective • Fan blocked by an obstruction
755	B	Z-Folding unit error 5	B140
		The fold timing sensor does not operate correctly.	<ul style="list-style-type: none"> • Paper dust on the sensor • Sensor disconnected, defective • Reflector plate dirty, or out of position • Z-Fold main control board defective
756	B	Z-Folding unit error 6	B140
		The leading edge sensor does not operate correctly.	<ul style="list-style-type: none"> • Paper dust on the sensor • Sensor disconnected, defective • Reflector plate dirty, or out of position • Z-Fold main control board defective
757	B	Z-Folding unit error 7	B140
		The machine could not write to the EEPROM two times (one after the other).	<ul style="list-style-type: none"> • EEPROM defective, replace Z-Fold main control board
760	D	Finisher punch motor error	B246
		The punch HP sensor is not activated within the specified time after the punch motor turned on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Punch HP sensor disconnected, defective • Punch motor disconnected, defective • Punch motor overload due to obstruction
761	B	Finisher folder plate motor error	B246
		The folder plate moves but is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Folder plate HP sensor disconnected, defective • Folder plate motor disconnected, defective • Folder plate motor overloaded due to obstruction.
762	B	Finisher pressure plate motor error	B246
		Pressure plate motor operating but the plate is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Pressure plate HP sensor disconnected, defective • Pressure plate motor disconnected, defective • Pressure plate motor overloaded due to obstruction

763	D	Punch movement motor error	B246
		Occurs during operation of the punch unit. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective
764	D	Paper position sensor slide motor error	B246
		Occurs during operation of the punch unit. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective
765	B	Folding unit bottom fence lift motor	B246
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective
766	B	Clamp roller retraction motor error	B246
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor defective
767	B	Stack junction gate motor error	B246
		Occurs during operation of the punch unit. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.	<ul style="list-style-type: none"> • Motor harness disconnected, loose, defective • Motor overload • Motor defective
770	B	Cover interposer tray bottom plate motor error	B246
		<ul style="list-style-type: none"> • After the motor starts to raise the bottom plate, the bottom plate position sensor does not detect the plate at the specified time (3 s). • After the motor starts to lower the bottom plate, the bottom plate HP sensor does not detect the bottom plate. 	<ul style="list-style-type: none"> • Bottom plate position sensor, disconnected, defective • Bottom plate HP sensor disconnected, defective
780	B	Z-Fold feed motor error	B246
		The feed motor does not attain the prescribed speed within the specified time.	<ul style="list-style-type: none"> • Feed motor disconnected, defective • Feed motor overloaded due to obstruction • Feed motor lock
781	B	Z-Fold lower stopper motor	B246
		The lower stopper motor does not attain the prescribed speed within the specified time.	<ul style="list-style-type: none"> • Lower stopper motor disconnected, defective • Lower stopper motor overloaded due to obstruction • Lower stopper HP sensor disconnected, defective
782	B	Z-Fold upper stopper motor	B246
		The upper stopper was not detected at the home position after the motor remained on long enough to move it 128.7 mm.	<ul style="list-style-type: none"> • Upper stopper motor disconnected, defective • Upper stopper motor overloaded due to obstruction • Upper stopper HP sensor disconnected, defective

784		Z-fold timing unit fold timing sensor adjustment error	B246
		The A/D (Digital/Analog) input value did not change even after the D/A (Digital/Analog) output value changed.	<ul style="list-style-type: none"> • Fold timing sensor connector loose, broken, defective • Fold timing sensor defective • Fold timing sensor, mylar covered with paper dust • Mylar disconnected.
785		Z-fold leading edge sensor adjustment error	B246
		The A/D input value did not change even after the D/A output value changed.	<ul style="list-style-type: none"> • Leading edge sensor connector loose, broken, defective • Leading edge sensor defective • Leading edge sensor, mylar covered with paper dust • Mylar disconnected.
786		Z-fold EEPROM error	B246
		The write operation to the Z-folding EEPROM failed after 2 attempts	<ul style="list-style-type: none"> • EEPROM defective
790	B	Finisher staple trimming hopper full	B246
		The staple waste hopper is full of cut staples.	<ul style="list-style-type: none"> • If the hopper is full, empty the hopper • If the hopper is not full, the hopper full sensor is disconnected, defective

SC800: Overall System

SC No.	Symptom	Possible Cause
817	B	Monitor Error
		<p>This is a file detection and electronic file signature check error when the boot loader attempts to read the self-diagnostic module, system kernel, or root system files from the OS Flash ROM, or the items on the SD card in the controller slot are false or corrupted.</p> <ul style="list-style-type: none"> • OS Flash ROM data defective; change the controller firmware • SD card data defective; use another SD card

Error Codes

Code	Meaning
0x0000 0000	BIOS boot error
0x0000 0001	Primary boot start load error
0x0000 0002	Secondary boot load error (Boot3.Elf)
0x0000 0003	Self-diagnostic module error (Diag.Elf)
0x0000 0004	Kernel start error (Netbsd)
0x0000 0005	Root file system file read error (Rootfs)
0xffff ffff	Other error

Example: Data in the self-diagnostic module, system kernel, or root system files are corrupted or do not exist in OS flash ROM or on the SD card
Files in the self-diagnostic module, kernel, or root file system on the SD card have been falsified or altered

- Before discarding the SD card, try to update the data on the card. If the error occurs again, the card may be defective.
- Be sure to use an SD card that contains the correct electronic signature.

SC No.	Symptom	Possible Cause
818	D	Watchdog error
		<p>While the system program is running, a bus hold or interrupt program goes into an endless loop, preventing any other programs from executing.</p> <ul style="list-style-type: none"> • System program defective; switch off/on, or change the controller firmware if the problem cannot be solved • Controller board defective • Controller option malfunction
819	D	Fatal kernel error
		<p>Due to a control error, a RAM overflow occurred during system processing. One of the following messages was displayed on the operation panel.</p> <ul style="list-style-type: none"> • System program defective • Controller board defective • Optional board defective • Replace controller firmware
		0x696e init died
		0x766d vm_pageout: VM is full
		4361 Cache Error
		Other

NOTE: For more details about this SC code error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel.

SC No.		Symptom	Possible Cause
821	D	Self-diagnostic error 2: ASIC	
		The ASIC provides the central point for the control of bus arbitration for CPU access, for option bus and SDRAM access, for SDRAM refresh, and for management of the internal bus gate.	
		0B0 0	<p>Error code 0xffff ffff is returned when the register Write & Verify check is executed on the ASIC mounted on the controller board. The ASIC controls the ROM and buses for other devices.</p> <ul style="list-style-type: none"> • ASIC (controller board defective)
		0B0 6	<p>ASIC not detected</p> <ul style="list-style-type: none"> • ASIC defective • Poor connection between North Bridge and PCI I/F • Replace controller board
	0B1 0	<p>Failed to initialize or could not read connection bus. Data in SHM register incorrect.</p> <ul style="list-style-type: none"> • Connection bus defective • SHM defective • Replace controller board 	

NOTE: For more details about this SC code error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel.

Trouble-
shooting

SC No.		Symptom	Possible Cause	
822	B	Self-diagnostic error 3: HDD		
		3003	<p>Check performed when HDD is installed:</p> <ul style="list-style-type: none"> • HDD device busy for over 31 s. • After a diagnostic command is set for Sthe HDD, but the device remains busy for over 6 s. A diagnostic command is issued to the HDD device but the result is an erro 	<ul style="list-style-type: none"> • HDD defective • HDD harness disconnected, defective • Controller board defective
		3004	<p>No response to the self-diagnostic command from the ASIC to the HDDs</p>	<ul style="list-style-type: none"> • HDD defective
		3013	<p>Mandolin does not respond, the HDD device remains BUSY for more than 31 s, or the BUSY signal does not drop within 6 s after the diagnostic command is issued to the HDDs.</p>	<ul style="list-style-type: none"> • HDD defective • HDD connector loose or defective • Controller defective

SC No.	Symptom		Possible Cause
		3014 Error returned from HDD in response to the self-diagnostic command, Mandolin could not be located due to a read/write error at the HDD register.	<ul style="list-style-type: none"> HDD defective
824	D	Self-diagnostic error 4: NVRAM NVRAM device does not exist, NVRAM device is damaged, NVRAM socket damaged	<ul style="list-style-type: none"> NVRAM defective Controller board defective NVRAM backup battery exhausted NVRAM socket damaged
826	D	Self-diagnostic error 6: NVRAM (option NVRAM)	
		1501 The difference between the 1 s measured for RTC in the NVRAM and the 1 s timeout of the CPU is out of range, or the NVRAM is not detected.	<ul style="list-style-type: none"> NVRAM defective NVRAM installed incorrectly
		15FE Backup battery error. Battery is exhausted or not within rated specification.	<ul style="list-style-type: none"> The battery is attached permanently to the controller board. Replace the controller board.
828	D	Self-diagnostic error 7: ROM	
		<ul style="list-style-type: none"> Measuring the CRC for the boot monitor and operating system program results in an error. A check of the CRC value for ROMFS of the entire ROM area results in an error. 	<ul style="list-style-type: none"> Software defective Controller board defective ROM defective

NOTE: For more details about this SC 833, SC834 error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel. The additional error codes (0F30, 0F31, etc. are listed in the SMC report.

SC No.	Symptom		Possible Cause
833	D	Self-diagnostic error 8: Engine I/F ASIC	
0F30 0F31		ASIC (Mandolin) for system control could not be detected. After the PCI configuration, the device ID for the ASIC could not be checked.	<ul style="list-style-type: none"> ASCI (Mandolin) for system control is defective Interface between North Bridge and AGPI is defective Replace the mother board
0F41		The read/write check done for resident RAM on the mother board could not be done correctly.	<ul style="list-style-type: none"> Memory device defective Replace the mother board
50B1		Could not initialize or read the bus connection.	<ul style="list-style-type: none"> Bus connection defective, loose SSCG defective Replace the mother board
50B2		Value of the SSCG register is incorrect.	<ul style="list-style-type: none"> Bus connection loose, defective SSCG defective Replace the mother board
834	D	Self-diagnostic error 9: Optional Memory RAM DIMM	
5101		The write/verify check for the optional RAM chip on the engine mother board gave an error.	<ul style="list-style-type: none"> Controller defective Mother board defective
850	B	Net I/F error	

SC No.		Symptom	Possible Cause
		<ul style="list-style-type: none"> • Duplicate IP addresses. • Illegal IP address. • Driver unstable and cannot be used on the network. 	<ul style="list-style-type: none"> • IP address setting incorrect • NIB (PHY) board defective • Controller board defective
851	B	IEEE 1394 I/F error	
		Driver setting incorrect and cannot be used by the 1394 I/F.	<ul style="list-style-type: none"> • NIB (PHY), LINK module defective; change the Interface Board • Controller board defective
853	B	Wireless LAN Error 1	
		During machine start-up, the machine can get access to the board that holds the wireless LAN, but not to the wireless LAN card (802.11b or Bluetooth).	<ul style="list-style-type: none"> • Wireless LAN card missing (was removed)
854	B	Wireless LAN Error 2	
		During machine operation, the machine can get access to the board that holds the wireless LAN, but not to the wireless LAN card (802.11b or Bluetooth).	<ul style="list-style-type: none"> • Wireless LAN card missing (was removed)
855	B	Wireless LAN error 3	
		An error was detected on the wireless LAN card (802.11b or Bluetooth).	<ul style="list-style-type: none"> • Wireless LAN card defective • Wireless LAN card connection incorrect
856	B	Wireless LAN error 4	
		An error was detected on the wireless LAN card (802.11b or Bluetooth).	<ul style="list-style-type: none"> • Wireless LAN card defective • PCI connector (to the mother board) loose
857	B	USB I/F Error	
		The USB driver is not stable and caused an error.	<ul style="list-style-type: none"> • Bad USB card connection • Replace the controller board
860	B	HDD startup error at main power on	
		<ul style="list-style-type: none"> • HDD is connected but a driver error is detected. • The driver does not respond with the status of the HDD within 30 s. 	<ul style="list-style-type: none"> • HDD is not initialized • Level data is corrupted • HDD is defective
861	D	HDD re-try failure	
		At power on with the HDD detected, power supply to the HDD is interrupted, after the HDD is awakened from the sleep mode, the HDD is not ready within 30 s.	<ul style="list-style-type: none"> • Harness between HDD and board disconnected, defective • HDD power connector disconnected • HDD defective • Controller board defective

SC No.		Symptom	Possible Cause
863	D	HDD data read failure	
		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	<ul style="list-style-type: none"> • HDD defective Note: If the bad sectors are generated at the image partition, the bad sector information is written to NVRAM, and the next time the HDD is accessed, these bad sectors will not be accessed for read/write operation.
864	D	HDD data CRC error	
		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	<ul style="list-style-type: none"> • HDD defective
865	D	HDD access error	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	<ul style="list-style-type: none"> • HDD defective.
866	B	SC card error 1: Confirmation	
		<p>The machine detects an electronic license error in the application on the SD card in the controller slot immediately after the machine is turned on.</p> <p>The program on the SD card contains electronic confirmation license data. If the program does not contain this license data, or if the result of the check shows that the license data in the program on the SD card is incorrect, then the checked program cannot execute and this SC code is displayed.</p>	<ul style="list-style-type: none"> • Program missing from the SD card • Download the correct program for the machine to the SD card
867	D	SD card error 2: SD card removed	
		The SD card in the boot slot when the machine was turned on was removed while the machine was on.	<ul style="list-style-type: none"> • Insert the SD card, then turn the machine off and on.
868	D	SD card error 3: SC card access	
		An error occurred while an SD card was used.	<ul style="list-style-type: none"> • SD card not inserted correctly • SD card defective • Controller board defective Note: If you want to try to reformat the SC card, use SD Formatter Ver 1.1.

870	B	Address book data error	
		<p>Address book data on the hard disk was detected as abnormal when it was accessed from either the operation panel or the network. The address book data cannot be read from the HDD or SD card where it is stored, or the data read from the media is defective.</p>	<ul style="list-style-type: none"> • Software defective. Turn the machine off/on. If this is not the solution for the problem, then replace the controller firmware. • HDD defective.
<p>More Details</p> <ul style="list-style-type: none"> • Do SP5846 050 (UCS Settings – Initialize all Directory Info.) to reset all address book data. • Reset the user information with SP5832 006 (HDD Formatting– User Information). • Replace the HDDs. • Boot the machine from the SD card. 			
873	B	HDD mail send data error	
		<p>An error was detected on the HDD immediately after the machine was turned on, or power was turned off while the machine used the HDD.</p>	<ul style="list-style-type: none"> • Do SP5832-007 (Format HDD – Mail TX Data) to initialize the HDD. • Replace the HDD
874	D	Delete All error 1: HDD	
		<p>A data error was detected for the HDD/NVRAM after the Delete All option was used. Note: The source of this error is the Data Overwrite Security Unit B660 running from an SD card.</p>	<ul style="list-style-type: none"> • Turn the main switch off/on and try the operation again. • Install the Data Overwrite Security Unit again. For more, see section “1. Installation”. • HDD defective
875	D	Delete All error 2: Data area	
		<p>An error occurred while the machine deleted data from the HDD. Note: The source of this error is the Data Overwrite Security Unit B660 running from an SD card.</p>	<ul style="list-style-type: none"> • Turn the main switch off/on and try the operation again.
880	D	File Format Converter (MLB) error	
		<p>A request to get access to the MLB was not answered within the specified time.</p>	<ul style="list-style-type: none"> • MLB defective, replace the MLB

Trouble-shooting

SC900: Miscellaneous

SC No.		Symptom	Possible Cause
900	D	Electrical total counter error	B140
		The total counter contains something that is not a number.	<ul style="list-style-type: none"> • NVRAM incorrect type • NVRAM defective • NVRAM data scrambled • Unexpected error from external source
901	D	Mechanical total counter error	
		The mechanical counter is not connected.	<ul style="list-style-type: none"> • Mechanical total counter defective • Mechanical total counter connector not connected
910	D	External Controller Error 1	B140/B246
911	D	External Controller Error 2	
912	D	External Controller Error 3	
913	D	External Controller Error 4	
914	D	External Controller Error 5	
		The external controller alerted the machine about an error.	<ul style="list-style-type: none"> • Please refer to the instructions for the external controller.
919	B	External Controller Error 6 B140/B246	
		While EAC (External Application Converter), the conversion module, was operating normally, the receipt of a power line interrupt signal from the FLUTE serial driver was detected, or BREAK signal from the other station was detected.	<ul style="list-style-type: none"> • Power outage at the EFI controller • EFI controller was rebooted • Connection to EFI controller loose
920	B	Printer error 1	B140
		An internal application error was detected and operation cannot continue.	<ul style="list-style-type: none"> • Software defective; turn the machine off/on, or change the controller firmware • Insufficient memory
921	B	Printer error 2	B140
		When the application started, the necessary font was not on the SD card.	<ul style="list-style-type: none"> • Font not on the SC card

SC No.	Symptom	Possible Cause
925	B	NetFile Function Error
		<ul style="list-style-type: none"> • The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue. • The HDDs are defective and they cannot be debugged or partitioned, so the Scan Router functions (delivery of received faxes, document capture, etc.), Fabric services, and other network functions cannot be used. (HDD status codes displayed on the debug console are described below.)
		<ul style="list-style-type: none"> • HDD defective • Power supply to machine cut occurred while writing data to HDD • Software error • Please refer to the detailed descriptions below for recovery procedures.

HDD Status Codes Displayed on Debug Console

Display	Meaning
(-1)	HDD not connected
(-2)	HDD not ready
(-3)	No level
(-4)	Partition type incorrect
(-5)	Error returned during level read or check
(-6)	Error returned during level read or check
(-7)	"filesystem" repair failed
(-8)	"filesystem" mount failed
(-9)	Drive does not answer command
(-10)	Internal kernel error
(-11)	Size of drive is too small
(-12)	Specified partition does not exist
(-13)	Device file does not exist

Trouble-shooting

Recovery Procedure 1

If the machine returns SC codes for HDD errors (SC860 ~ SC865), please follow the recovery procedures described for these SC codes.

Recovery Procedure 2

If the machine does not return one of the five HDD errors (SC860 ~ SC865), cycle the machine off and on. If this does not solve the problem, then initialize the NetFile partition on the HDD with **SP5832 011** (HDD Formatting – Ridoc I/F).

NetFiles: Jobs printed from the document server using a PC and DeskTopBinder

Before initializing the NetFile partition on the HDD please inform the client that:

1. Received faxes on the delivery server will be lost
2. All captured documents will be lost
3. DeskTopBinder/Print Job Manager/Desk Top Editor job history will be cleared
4. Documents stored on the document server, included scanned documents, will not be lost.
5. The first time the network accesses the machine, the management information must be reconfigured (this will require a significant amount of time).

Before initializing the Netfile partition with **SP5823 011**, do the following:

6. Enter the User Tools mode and execute "Delivery Settings" to print all received fax documents scheduled for delivery and delete them.
7. In the User Tools mode, execute Document Management> Batch Delete Transfer Documents.
8. Execute **SP5832 011** then cycle the machine off and on.

Recovery Procedure 3

If "Procedure 2" does not solve the problem, execute **SP5832 001** (HDD Formatting – All), then cycle the machine off and on.

Executing **SP5832 001** erases all document and address book data stored on the hard disks. Be sure to consult with the customer before executing this SP code.

Recovery Procedure 4

If "Recovery Procedures 1 to 3" fail to correct the problem, replace the HDD.

SC No.		Symptom	Possible Cause
953	D	Scanner image setting error	
		The settings required for image processing using the scanner are not sent from the IPU.	<ul style="list-style-type: none"> • Software defective
954	D	Printer image setting error	
		The settings required for image processing using the printer controller are not sent from the IPU.	<ul style="list-style-type: none"> • Software defective
955	D	Memory setting error	
		The settings that are required for image processing using the memory are not sent from the IPU.	<ul style="list-style-type: none"> • Software defective
964	D	Printer ready error	
		The print ready signal is not generated for more than 17 seconds after the IPU received the print start signal.	<ul style="list-style-type: none"> • Software defective
984	D	Print image data transfer error	
		After a data transfer begins from the controller to the engine via the PCI bus, the transfer does not end within 15 s.	<ul style="list-style-type: none"> • Controller (SIMAC) board defective • BICU defective • BICU ↔ controller disconnected
985	D	Scanned image data transmission error	
		After a data transfer begins from the engine to the controller via the PCI bus, the transfer does not end within 3 s.	<ul style="list-style-type: none"> • Controller (SIMAC) board defective • BICU defective • BICU ↔ controller disconnected
986	D	Software error 1	
		The write parameter received by the write module at the beginning of the setting table is NULL.	<ul style="list-style-type: none"> • Controller (SIMAC) board defective • BICU defective • BICU ↔ controller disconnected
990	D	Software error 2	B140

SC No.		Symptom	Possible Cause
		The software performs an unexpected function and the program cannot continue.	<ul style="list-style-type: none"> • Software defective, re-boot^{*1}
991	C	Software error 3	B140
		The software performs an unexpected function and the program cannot continue. However, unlike SC990, recovery processing allows the program to continue.	<ul style="list-style-type: none"> • Software defective, re-boot^{*1}

*1: In order to get more details about SC990 and SC991:

- 3) Execute SP7403 or print an SMC Report (SP5990) to read the history of the 10 most recent logged errors.
- 4) If you press the zero key on the operation panel with the SP selection menu displayed, you will see detailed information about the recently logged SC990 or SC991, including the software file name, line number, and so on. 1) is the recommended method, because another SC could write over the information for the previous SC.

SC No.		Symptom	Possible Cause
992	D	Software error 4: Undefined	B140
		An error not controlled by the system occurred (the error does not come under any other SC code).	<ul style="list-style-type: none"> • Software defective • Turn the machine power off and on. The machine cannot be used until this error is cleared.
SC994	C	Operation Panel Management Records Exceeded	B246
		An error occurred because the number of records exceeded the limit for images managed in the service layer of the firmware. This can occur if there are too many application screens open on the operation panel.	<ul style="list-style-type: none"> • No action required because this SC does not interfere with operation of the machine.
997	B	Cannot select application function	B140
		An application does not start after the user pushed the correct key on the operation panel.	<ul style="list-style-type: none"> • Software bug • A RAM or DIMM option necessary for the application is not installed or not installed correctly.
998	D	Application cannot start	B140
		Register processing does not operate for an application within 60 s after the machine power is turned on. No applications not start correctly, and all end abnormally.	<ul style="list-style-type: none"> • Software bug • A RAM or DIMM option necessary for the application is not installed or not installed correctly.

Trouble-shooting