

1. Error Codes

1.1 List of Error Codes

The machine is equipped with a mechanism to run self diagnosis to find out its condition (particularly of its sensors): CPU on the main controller PCB and the CPU on the DC controller PCB. If it finds a fault, it indicates the nature of the fault in its control panel.

The following is a list of codes and descriptions (including timing of detection); a code may have detailed codes, which may be checked in service mode (COPIER>DISPLAY>JAM/ERR).

E000	
Main Cause	The main thermistor (TH1) has poor contact or an open circuit. The thermal switch (TP1) has an open circuit. The fixing heater has an open circuit. The SSR is faulty. The DC controller PCB is faulty.
Mode of Detection	0000 After the main power switch is turned on, the temperature detected by the main thermistor does not reach 70°C.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E001	
Main Cause	The main thermistor (TH1) has a short circuit. The sub thermistor (TH2) has detected overheating. The SSR is faulty. The DC controller PCB is faulty.
Mode of Detection	0001 The main thermistor or the sub thermistor has detected about 230°C or higher for 2 sec. 0002 The main thermistor has detected 230°C or higher (hard circuit detection). 0003 The sub thermistor has detected about 236°C or higher.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).

E002	
Main Cause	The main thermistor (TH1) has poor contact or an open circuit. The thermal switch (TP1) has an open circuit. The SSR is faulty. The DC controller is faulty.
Mode of Detection	0000 The temperature of the upper fixing roller does not reach 100°C within 2 min after it has exceeded 70°C.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E003	
Main Cause	The main thermistor (TH1) has poor contact or an open circuit. The thermal switch (TP1) has an open circuit. The fixing heater has an open circuit. The SSR is faulty. The DC controller PCB is faulty.
Mode of Detection	0000 The temperature detected by the main thermistor is 70°C for 2 sec or more after it has reached 100°C.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E004	
Main Cause	The SSR has a short circuit. The DC controller PCB is faulty.
Mode of Detection	0000 The SSR used to drive the fixing heater is found to have a short circuit (hard circuit detection).
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E005	
Main Cause	The fixing web has been taken up. The fixing web length sensor (PS45) is faulty. The DC controller PCB is faulty.
Mode of Detection	0000 The length of fixing web that has been taken up is in excess of the specified length.
Caution	After replacing the fixing web, be sure to reset the two web counters in service mode: COPIER>COUNTER>MISC>FIX-WEB and COPIER>COUNTER>DRBL-1>FX-WEB.

E010	<p>The main motor (M2) is faulty. The DC controller PCB is faulty.</p> <p>0000 The clock pulses do not arrive for 2 secs or more after the main motor drive signal (MMFG) has been generated.</p>
E012	<p>The drum motor (M1) is faulty. The DC controller PCB is faulty.</p> <p>0000 The clock pulses do not arrive for 2 secs or more after the drum motor drive signal (DMFG) has been generated.</p>
E013	<p>The waste toner feedscrew is faulty. The water toner clock sensor (MSW2) is faulty. The DC controller PCB is faulty.</p> <p>0000 The rotation of the waste toner feedscrew goes out of order, and the switch (MSW2) is pressed multiple times during a specific period of time.</p>
E014	<p>The fixing motor (M19) is faulty. The DC controller PCB is faulty.</p> <p>0000 The motor clock signal is detected for 2 secs or more continuously after the fixing motor drive signal has been generated.</p>
E020	<p>The hopper connector is left disconnected. The hopper motor (M9/M10) is faulty. The toner sensor (TS1/TS2) is faulty. The DC controller PCB is faulty.</p> <p>0000 During printing, the toner supply signal is '0' (absence of toner) for 2 mins.</p>

E032	<p>The copy data controller or the remote diagnostic device is faulty. The Main controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 Although once connected, the copy data controller or the remote diagnostic device has become disconnected.</p>
E061	<p>The laser shutter is faulty. The laser unit is faulty. The potential measurement PCB is faulty. The DC controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 As the result of potential control, the drum surface potential (VL2) of the white background is about 200 V (generating solid black images).</p> <p>0002 The primary charging output used for print output and the drum surface potential after laser output has been made are about 200 V (generating solid black images).</p>
E100	<p>The BD PCB is faulty. The laser unit is faulty. The laser driver PCB is faulty. The wiring is faulty (short circuit, open circuit). The DC controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 In 100 msec after the laser drive signal has been generated, the BD signal is not detected 50 times or more within 40 msec.</p> <p>0002 While the laser is on, the BD signal cycle is found to be outside a specific range 10 times or more.</p>

E110	<p>The laser scanner motor (M15) is faulty. The wiring is faulty (short circuit, open circuit). The DC controller PCB is faulty.</p>
<p>Main Cause</p> <p>Mode of Detection</p>	<p>0001</p> <ul style="list-style-type: none"> • After the laser scanner motor drive signal has been generated, the motor ready signal (LMRDY*) does not arrive for 15 secs or more. (stop → full speed, half-speed → full speed) • During the period of 'full speed → half speed', the motor ready signal does not arrive for 60 secs or more after the speed change signal has been generated. • During the period of 'full speed rotation', the motor ready signal is not detected 50 times or more (t intervals of 100 msec).
E121	<p>The controller cooling fan (FM4) is faulty. The wiring is faulty (short circuit, open circuit). The DC controller PCB is faulty.</p>
<p>Main Cause</p> <p>Mode of Detection</p>	<p>0001 Although the controller cooling fan (FM4) is being driven, the clock signal (FM4LCK) does not arrive for 5 secs or more.</p>
E196	<p>The EEPROM on the DC controller PCB is faulty. The location of the EEPROM is wrong. The DC controller PCB is faulty.</p>
<p>Main Cause</p> <p>Mode of Detection</p>	<p>1abb When data is written to the EEPROM, the data written and the data read do not match.</p> <p>2abb When the ID read into the EEPROM and the ID into the ROM are compared, a mismatch is found.</p> <p>3abb When ID in the EEPROM and the ID in the ROM are compared after the main power switch is turned on, a mismatch is found.</p> <p>a: chip Nos. 0 through 5 (0: IC104, 1: IC105, 2: IC109, 3: IC110, 4: IC127, 5: IC130)</p> <p>bb: chip faulty address (bit)</p>

E202	<p>The scanner HP sensor (PS39) is faulty. The scanner motor (M3) is faulty. The reader controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The scanner HP sensor does not turn off even when the scanner has been moved 40 mm forward after the main power switch has been turned on or the Start key has been pressed.</p> <p>0002 The scanner HP sensor does not turn on even when the scanner has been moved 450 mm in reverse.</p>
Caution	<p>No code is indicated, and keys are locked.</p> <p>The code may be checked in service mode (COPIER>DISPLAY>ERR).</p>
E204	<p>The ADF controller PCB is faulty. The reader controller PCB is faulty.</p>
Main Cause Mode of Detection	
Caution	<p>0001 During printing, the image leading edge signal does not arrive from the ADF.</p> <p>No code is indicated, and keys are locked.</p> <p>The code may be checked in service mode (COPIER>DISPLAY>ERR).</p>
E220	<p>The lamp inverter PCB is faulty. The reader controller PCB is faulty.</p>
Main Cause Mode of Detection	
	<p>0001 The lamp inverter PCB is found to have a fault.</p>
E225	<p>The scanning lamp (xenon tube) is faulty. The inverter PCB is faulty. The CCD/AP PCB is faulty. The reader controller PCB is faulty.</p>
Main Cause Mode of Detection	
	<p>0000 A specific signal level cannot be attained by CCD gain correction at power-on.</p> <p>0002 The edge gain correction value changed more than a specific level compared with the correction value used for the preceding sheet.</p>

E240 Main Cause Mode of Detection	The main controller PCB. The DC controller PCB is faulty. 0000 An error has occurred in the communication between the main controller PCB and the CPU of the DC controller PCB.
E243 Main Cause Mode of Detection	The control panel CPU PCB is faulty. The main controller PCB is faulty. 0000 An error has occurred in communication between the CPU of the control panel CPU PCB and the main controller PCB.
E248 Main Cause Mode of Detection	The EEPROM on the reader controller PCB is faulty. The reader controller PCB is faulty. 0001 The ID read into the EEPROM when the main power switch has been turned on and the ID in the ROM do not match. 0002 When data is written into EEPROM, the data written and the data read do not match. 0003 When data is written, the ID in the EEPROM and the ID in the ROM are found not to match.
E302 Main Cause Mode of Detection	The CCD/AP PCB is faulty. The wiring is faulty (short circuit, open circuit). The reader controller PCB is faulty. 0001 During shading, the reader controller PCB does not end shading in 1 sec. 0002 In stream reading, the edge white accumulation (processing) does not end after a period of 10 secs.

E601	<p data-bbox="153 302 320 331">Main Cause</p> <p data-bbox="153 387 288 454">Mode of Detection</p> <p data-bbox="355 302 1378 376">The wiring is faulty (short circuit, open circuit). The hard disk drive is faulty. The DC controller PCB is faulty. The main controller PCB is faulty.</p> <p data-bbox="376 465 1378 577">0000 The main controller PCB has detected an error in control data while an image was transmitted between the main controller PCB and the hard disk drive.</p> <p data-bbox="376 591 1378 703">0001 The main controller PCB has found an error in the control data in transfer of images between main controller PCB and the DC controller PCB.</p>
E602	<p data-bbox="153 801 320 831">Main Cause</p> <p data-bbox="153 887 288 954">Mode of Detection</p> <p data-bbox="355 801 1378 875">The wiring is faulty (short circuit, open circuit). The hard disk drive is faulty. The main controller PCB is faulty.</p> <p data-bbox="376 965 1378 1039">0001 A mount error was detected when the hard disk was started up from the boot ROM.</p> <p data-bbox="376 1052 1378 1122">0002 A data read error (from the hard disk) was detected when the hard disk was started from the boot ROM.</p>
E607	<p data-bbox="153 1220 320 1249">Main Cause</p> <p data-bbox="153 1305 288 1373">Mode of Detection</p> <p data-bbox="355 1220 1378 1294">The hard disk fan (FM7) is faulty. The wiring is faulty (short circuit, open circuit). The DC controller PCB is faulty.</p> <p data-bbox="376 1384 1378 1451">0000 While the hard disk fan (FM7) is being driven, the clock signal (FM7CLK) does not arrive for 5 secs or more.</p>
E677	<p data-bbox="153 1550 320 1579">Main Cause</p> <p data-bbox="153 1635 288 1702">Mode of Detection</p> <p data-bbox="355 1550 1378 1624">The various printer board (accessories) are faulty. The main controller PCB is faulty.</p> <p data-bbox="376 1713 1378 1789">0001 An error has occurred in the communication between the various printer boards (accessories) and the main controller PCB.</p>

E710	<p>The DC controller PCB is faulty. The reader controller PCB is faulty. The main controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 When the main power is turned on, the IPC (IC5021) on the reader controller PCB cannot be initialized.</p> <p>0002 When the main power is turned on, the IPC (IC120) on the DC controller PCB cannot be initialized.</p> <p>0003 When the main power is turned on, the IPC (IC1003) on the main controller PCB cannot be initialized.</p>
E711	<p>The connector is not connected properly. The remote diagnostic device PCB is faulty. The copy data controller PCB is faulty. The ADF controller PCB is faulty. The ADF controller PCB is faulty. The finisher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 Data has been written to the error register of the IPC (IC5021) on the reader controller PCB four times or more within 1.5 secs.</p> <p>0002 Data has been written to the error register of the IPC (IC120) on the DC controller PCB four times or more within 2 secs.</p> <p>0003 Data has been written to the error register of the IPC (IC1003) of the main controller PCB four times or more within 2 secs.</p>
E712	<p>The connector is not connected properly. The ADF 24-V power supply is faulty. The ADF controller PCB is faulty. The reader controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 Communication does not resume in 3 secs after data has been written to the error register of the communication IC (IPC) of the ADF controller PCB.</p> <p>0002 The transmission bit is not enabled after a period of 10 sec at the sync register of the IPC (IC5021) on the reader controller PCB.</p>

E713	
Main Cause	The connector is not connected properly. The finisher accessories power supply PCB is faulty. The finisher controller PCB is faulty. The DC controller PCB is faulty.
Mode of Detection	0000 The communications IC (IPC) on the finisher controller has gone out of order.
E717	
Main Cause	The wiring is faulty (short circuit, open circuit). The copy data controller or the remote diagnostic device is faulty. The main controller PCB is faulty.
Mode of Detection	0001 The copy data controller or the NE controller is out of order or an open circuit has been detected.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E719	
Main Cause	The wiring is faulty (short circuit, open circuit). The coin vendor is faulty. The main controller PCB is faulty.
Mode of Detection	0001 The communication between the coin vendor and the main controller PCB has been interrupted.
Caution	The error must be reset in service mode (COPIER>FUNCTION>CLEAR>ERR).
E732	
Main cause	The connector has poor contact. The reader controller PCB is faulty.
Mode of Detection	0001 The main controller PCB has detected an error in the communication between the reader controller PCB and the main controller PCB.
E733	
Main cause	The connector has poor contact. The DC controller PCB is faulty.
Mode of Detection	0001 The main controller PCB has detected an error in the communication between the DC controller PCB and the main controller PCB.

E740	<p>The LAN card is faulty. The main controller PCB is faulty.</p> <p>0001 An error is detected on the LAN card at power-on (with the card inserted).</p> <p>0002 A MAC address is found to be faulty.</p> <p>0003 The LAN card register cannot be read.</p>
E741	<p>The PCI bus connection is not proper. The main controller PCB is faulty.</p> <p>0000 An error has occurred in the PCI bus.</p>
E742	<p>The RIP1 board (accessory) is faulty. The main controller PCB is faulty.</p> <p>0000 An error has been detected by self diagnosis of the RIPI board.</p>
E743	<p>The connector has poor contact. The main controller PCB is faulty.</p> <p>0000 The reader controller PCB has detected an error in the communication between the main controller PCB and the reader controller PCB.</p>
E804	<p>The wiring is faulty (short circuit, open circuit). The DC power supply fan (FM6) is faulty. The DC controller PCB is faulty.</p> <p>0000 While the DC power supply fan is being driven, the clock signal (FM6CLK) does not arrive for 5 secs or more.</p>

E805

Main Cause

The wiring is faulty (short circuit, open circuit). The feed fan (FM1) is faulty. The heat discharge fan (FM3) is faulty. The DC controller PCB is faulty.

Mode of Detection

- 0001 While the heat discharge fan is being driven, the clock signal (FM3CLK) does not arrive for 5 secs or more.
- 0002 While the feed fan is being driven, the clock signal (FM1CLK) does not arrive for 5 secs or more.

E824

Main Cause

The wiring is faulty (short circuit, open circuit). The primary charging assembly cooling fan (FM2) is faulty. The DC controller PCB is faulty.

Mode of Detection

- 0000 While the primary charging assembly cooling fan is being driven, the clock signal (FM2CLK) does not arrive for 5 secs or more.

1.2 Self Diagnosis of the ADF

When the machine's self diagnosis mechanism has turned on, the condition can be reset by turning off and then on the host machine's power switch.

If the machine must remain out of order, prints may still be made by disconnecting the machine's lattice connector, and placing an original on the host machine's copyboard glass.

E412 Main Cause Mode of Detection	The cooling fan (FM1) is faulty. The ADF controller PCB is faulty. 0001 While the cooling fan is being driven, the lock signal (FMLCK) arrives for 100 msec or more.
E420 Main Cause Mode of Detection	The EEPROM is faulty. The ADF controller PCB is faulty. 0001 When the host machine's power switch is turned on, the backup data of the EEPROM cannot be read or the data, if read, has an error.
E421 Main Cause Mode of Detection	The EEPROM is faulty. The ADF controller PCB is faulty. 0001 Backup data cannot be written to the EEPROM or the data, if written, has an error.
E422 Main Cause Mode of Detection	The IPC communication has an error. The communication line has an open circuit. The ADF controller PCB is faulty. 0001 While the machine is in standby, the communication with the host machine has been interrupted for 5 secs or more. or, while the machine is in operation, the communication with the host machine has been interrupted for 0.5 sec or more.

1.3 Self Diagnosis of the Finisher

E500 Main Cause Mode of Detection	The finisher controller PCB is faulty. The DC controller PCB is faulty. 0001 The communication between the host machine and the finisher has been interrupted; this error is detected by the host machine.
E503 Main Cause Mode of Detection	The saddle stitcher controller PCB is faulty. The finisher controller PCB is faulty. 0002 The communication between the saddle stitcher controller PCB and the finisher controller PCB has been interrupted.
E504 Main Cause Mode of Detection	The height sensor (PS1) is faulty. The finisher controller PCB is faulty. 0001 Communication between the height sensor and the finisher controller PCB is not possible, or communication data has an error. 0002 Communication between the height sensor and the finisher controller PCB is not possible for a specific period of time. 0003 At time of power-on, the connector of the height sensor is found to be disconnected. 0004 When the height sensor is being adjusted using the DIP switch, an error occurred during the adjustment.
E505 Main Cause Mode of Detection	The EEPROM is faulty. The finisher controller PCB is faulty. The puncher driver PCB is faulty. 0001 When the power switch is turned on, the check sum of the EEPROM on the finisher controller PCB is found to have an error. 0002 When the power switch is turned on, the check sum of the EEPROM on the puncher driver PCB is found to have an error.

E512	<p data-bbox="217 304 384 338">Main Cause</p> <p data-bbox="217 387 352 454">Mode of Detection</p> <p data-bbox="421 304 1434 376">The delivery motor clock sensor (PI10) is faulty. The delivery motor (M2) is faulty. The finisher controller PCB is faulty.</p> <p data-bbox="440 468 1390 539">0001 When operation starts, as many clocks as needed do not arrive from the delivery motor clock sensor.</p> <p data-bbox="440 551 1441 622">0002 No clock pulse arrives while paper is being moved over a distance of 200 mm.</p>
E530	<p data-bbox="217 725 384 759">Main Cause</p> <p data-bbox="217 808 352 875">Mode of Detection</p> <p data-bbox="421 725 1434 797">The alignment plate home position sensor (PI6) is faulty. The alignment motor (M3) is faulty. The finisher controller PCB is faulty.</p> <p data-bbox="440 889 1441 960">0001 The alignment plate does not leave home position when the alignment motor has been driven for 2 secs.</p> <p data-bbox="440 972 1398 1043">0002 The alignment plate does not return to home position when the alignment motor has been driven for 2 secs.</p>
E531	<p data-bbox="217 1146 384 1180">Main Cause</p> <p data-bbox="217 1229 352 1296">Mode of Detection</p> <p data-bbox="421 1146 1457 1218">The stapler home position detecting switch (MS7) is faulty. The stapler motor (M6) is faulty. The finisher controller PCB is faulty.</p> <p data-bbox="440 1310 1422 1382">0001 The stapler does not leave home position when the stapler motor has been driven for 0.5 sec.</p> <p data-bbox="440 1393 1441 1464">0002 The stapler does not return to home position when the stapler motor has been driven for 0.5 sec.</p>
E532	<p data-bbox="217 1568 384 1601">Main Cause</p> <p data-bbox="217 1650 352 1718">Mode of Detection</p> <p data-bbox="421 1568 1457 1639">The stapler shift home position sensor (PI7) is faulty. The stapler shift motor (M4) is faulty. The finisher controller PCB is faulty.</p> <p data-bbox="440 1731 1457 1803">0001 The stapler unit does not leave home position when the stapler shift motor has been driven for 4 secs.</p> <p data-bbox="440 1814 1441 1886">0002 The stapler unit does not return to home position when the stapler shift motor has been driven for 4 secs.</p>

E535	<p>The swing motor clock sensor (PI20) is faulty. The swing guide open sensor (PI18) is faulty. The safety area switch (MS3) is faulty. The swing guide closed detecting switch 2 (MS6) is faulty. The swing motor (M7) is faulty. The finisher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The swing guide closed detecting switch 2 does not turn on when the swing motor has been rotated CCW for 1 sec.</p> <p>0002 The swing guide open sensor does not turn on when the swing motor has been rotated CW for 1 sec.</p> <p>0003 When the tray lift motor is in operation, the swing guide closed detecting switch 2 is found to be off while the tray 1/2 is at OFF position of the safety area switch.</p> <p>0004 No clock arrives for 200 msec while the machine is in swing operation.</p>
E540	<p>The tray home position sensor (PI8) is faulty. The tray lifter motor clock sensor 1/2 (PI9/PI19) is faulty. The tray upper limit detecting switch (MS5) is faulty. The tray lifter motor (M5) is faulty. The finisher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The ascent does not end in 15 secs when the tray lift motor is driven; or, the tray home position cannot be detected when the tray lift motor has been driven for 15 secs.</p> <p>0002 While the tray is moving up, the tray upper limit detection switch is found to be on.</p> <p>0003 When the tray lift motor is driven, clock pulses do not arrive from the clock sensor 1/2 for 200 msec.</p>
E584	<p>The shutter open sensor (PI5) is faulty. The safety area detecting switch (MS3) is faulty. The shutter closed detecting switch (MS4) is faulty. The No. 2 feed motor (M8) is faulty. The finisher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The shutter closed detecting switch does not turn on when the No. 2 feed motor has been rotated CCW for 1 sec or more.</p> <p>0002 The shutter open sensor does not turn on when the No. 2 feed motor has been rotated CCW for 1 sec.</p> <p>0003 While the tray lift motor is in operation, the shutter closed detecting switch is found to be off when the tray 1/2 is at OFF position of the safety area detecting switch.</p>

E590	
Main Cause	The punch home position sensor (PI3P) is faulty. The punch motor (M1P) is faulty. The punch driver PCB is faulty.
Mode of Detection	0001 The puncher does not leave home position when the punch motor has been driven for 200 msec. 0002 The puncher does not return to home position when the punch motor has been driven for 200 msec.
E593	
Main Cause	The horizontal registration home position sensor (PI1P) is faulty. The horizontal registration motor (M1P) is faulty. The punch driver PCB is faulty.
Mode of Detection	0001 The puncher does not leave home position when the horizontal registration motor has been driven for 4 secs. 0002 The puncher does not return to home position when the horizontal registration motor has been driven for 4 secs.

1.4 Self Diagnosis of the Saddle Stitcher

E5F0	<p>The paper positioning plate home position sensor (PI7S) is faulty. The paper positioning plate motor (M4S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The paper positioning plate home position sensor does not turn on when the paper positioning plate motor has been driven for about 1.3 secs.</p> <p>0002 The paper positioning plate home position sensor does not turn off 1 sec after the paper positioning plate motor has been driven for 1 sec.</p>
E5F1	<p>The folding motor clock sensor (PI4S) is faulty. The paper folding home position sensor (PI21S) is faulty. The folding motor (M2S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The number of detection pulses of the folding motor clock sensor drops below a specific value.</p> <p>0002 The state of the paper folding home position sensor does not change when the folding motor has been driven for 3 secs.</p>
E5F2	<p>The guide home position sensor (PI13S) is faulty. The guide motor (M3S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The guide home position sensor does not turn on when the guide motor has been driven for about 0.5 sec.</p> <p>0002 The guide home position sensor does not turn off when the guide motor has been driven for 1 sec.</p>

E5F3	<p>The alignment home position sensor (PI5S) is faulty. The alignment motor (M5S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The alignment plate home position sensor does not turn on when the alignment motor has been driven for 0.5 sec (initially, driven for about 1.7 sec).</p> <p>0002 The alignment plate home position sensor does not turn off when the alignment motor has been driven for 1 sec.</p>
E5F4	<p>The stitch home position sensor (rear, MS5S) is faulty. The stitch motor (rear, M6S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The stitcher home position sensor (rear) does not turn off when the stitch motor (rear) has been rotated CW for 0.5 sec or more.</p> <p>0002 The stitch home position sensor (rear) does not turn on when the stitch motor (rear) has been rotated CCW for 0.5 sec or more.</p>
E5F5	<p>The stitch home position sensor (front, MS7S) is faulty. The stitch motor (front, M7S) is faulty. The saddle stitcher controller PCB is faulty.</p>
Main Cause	
Mode of Detection	<p>0001 The stitch home position sensor (front) does not turn off when the stitch motor (front) has been rotated CW for 0.5 sec or more.</p> <p>0002 The stitch home position sensor (front) does not turn on when the stitch motor (front) has been rotated CCW for 0.5 sec or more.</p>

E5F6

Main Cause

The paper push-on plate motor clock sensor (PI1S) is faulty. The paper push-on plate leading edge position sensor (PI15S) is faulty. The paper push-on plate home position sensor (PI14S) is faulty. The paper push-on plate motor (M8S) is faulty. The saddle stitcher controller PCB is faulty.

Mode of Detection

- 0001 The paper push-on plate home position sensor does not turn on when the paper push-on plate motor has been driven for 0.3 sec or more.
- 0002 The paper push-on plate home position sensor does not turn off when the paper push-on plate motor has been driven for 0.3 sec or more.
- 0003 The paper push-on plate leading edge position sensor does not turn off when the paper push-on plate motor has been driven for 0.3 sec or more.
- 0004 The number of detection pulses of the paper push-on plate motor clock sensor drops below a specific value.
- 0005 The paper push-on plate leading edge sensor does not turn on when the paper push-on plate motor has been driven for 0.3 sec or more.

E5F8

Main Cause

The guide home position sensor (PI13S) is faulty. The paper push-on plate home position sensor (PI14S) is faulty. The paper push-on plate leading edge position sensor (PI15S) is faulty. The saddle stitcher controller PCB is faulty.

Mode of Detection

- 0001 The connector of the guide home position sensor is found to be disconnected.
- 0002 The connector of the paper home positioning plate home position sensor is found to be disconnected.
- 0003 The connector of the paper push-on plate leading edge position sensor is found to be disconnected.

E5F9

Main Cause

The inlet door switch (MS1S) is faulty. The front door switch (MS2S) is faulty. The delivery door switch (MS3S) is faulty. The saddle stitch controller PCB is faulty.

Mode of
Detection

- 0001 When the inlet cover, front cover, and the delivery cover are found to be closed, the inlet door switch detects an open condition for 1 sec or more from the start of the initial rotation of the host machine or the start of printing.
- 0002 When the inlet cover, front cover, and delivery cover are found to be closed, the front door switch detects an open condition for 1 sec or more after the start of the initial rotation of the host machine or the start of printing.
- 0003 When the inlet cover, front cover, and delivery cover are found to be closed, the delivery door switch detects an open condition for 1 sec or more from the start of the initial rotation of the host machine or the start of printing.