Statim Error Codes Revision 2XX Software

All leaks should be corrected before proceeding with troubleshooting

Cycle Fault #1
The cassette temperature failed to reach 95°C within a time-out period.
1. Boiler does not heat up. No power to boiler. Field Service Tech. repair
2. Check thermal fuse. Using an ohmmeter, check for continuity between J1-3 & lower terminal on boiler. If you read less than 1-ohm thermal fuse is good. If thermal fuse checks good proceed to step 3, if bad replace and check unit for proper operation. Test pump using pump tester. Field Service Tech. repair
3. Check resistance reading between J1-3 & J1-4 should read approx. 11ohms. Field Service Tech. repair
4. Check for line voltage at terminals J1-3 & J1-4 during warm up. If the reading is good proceed to step 5, if bad, PCB (Printed Circuit Board) is defective. Shop repair
5. Check for line voltage at boiler terminals. Field Service Tech. repair
6. An extremely large steam leak (Statim 5000). Replace cassette seal, lid or tray. End user repair
7. An extremely large load (Statim 5000). End user repair

Cycle Fault #2
The cassette temperature failed to increase from 95°C to 100°C within a time-out period.
1. Unit will normally have a major steam leak from the cassette. Repair cassette as needed to stop the steam leak. Replace cassette seal, lid or tray. End user repair
2. If the cassette is not leaking, unit is reading incorrect chamber temperature. A calibration cassette is required to check chamber temperature. Shop repair
3. An extremely large load (Statim 5000). End user repair

Note: The solenoid does not close until the chamber temperature reaches approx. 102°, therefore the solenoid will not cause this error message to appear.

Cycle Fault #3
The cassette has failed to pressurize and achieve a temperature of 110°C within a time-out period.
1. Check for visible steam leaks from the cassette. Repair cassette as needed to stop the steam leak. Replace cassette seal, lid or tray. End user repair
2. If no leaks are visible disassemble the solenoid valve and check for debris or the plunger sticking in the plunger tube. Field Service Tech. repair
3. Check for constant power to the solenoid. Measure AC voltage at J1-7 & J1-8, should be zero volts with cassette out of the unit and line voltage with cassette inserted in the unit. Field Service Tech. repair
4. Verify that the check valve and pressure relief valves are not leaking. Field Service Tech. repair

Cycle Fault #4
The cassette has failed to achieve sterilization conditions within 6 minutes of the chamber first reaching110°C.
1. Refer to explanation for **Cycle Fault #3.**

Cycle Fault #5 N/A

Cycle Fault #6

The software has detected a steam generator (boiler) temperature 5°C greater than the chamber, within 7.2 seconds after a purge during the sterilizing phase of a cycle.

1. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

DO NOT clean boiler with CLR

Cycle Fault #7

The cassette temperature has dropped 4°C below a set point.

If the cassette can be removed normally after venting:

1. Check for visible steam leaks from the cassette. Repair cassette as needed to stop the steam leak. Replace cassette seal, lid or tray. End user repair
2. If no steam leaks are visible disassemble solenoid valve and check for debris. Make sure plunger slides smoothly in plunger tube. Field Service Tech. repair
3. Verify that the check valve and pressure relief valves are not leaking. Field Service Tech. repair

If the cassette is hard to remove after venting: (Statim 2000 only)

1. Check for kinked or pinched exhaust tubing. End user repair
2. Check for a clogged venturi in the left rear of the cassette tray. Clean as needed. End user repair
3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube. Field Service Tech repair
4. Check for power to solenoid. Using a voltmeter check for line voltage at terminals J1-7 & J1-8 with the cassette inserted. If line voltage is present check for a magnetic field above the solenoids coil. The solenoid coil has a bridge rectifier built into it. To check the coil put your meter on the diode checking scale and read the resistance of the coil, and then reverse the leads, the resistance should be approximately the same in both directions. Field Service Tech. repair

Cycle Fault #8

The software has detected a steam generator (boiler) temperature 5°C less than the chamber, within 7.2 seconds after a purge during the sterilizing phase of a cycle.

1. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

Cycle Fault #9 N/A

Cycle Fault #10

The cassette temperature has failed to drop to 115°C during the Unwrapped or Wrapped Cycle or the temperature has failed to drop to 110°C during the Rubber and Plastics Cycle in the purge conditioning stage.

1. Check for kinked or pinched exhaust tubing. End user repair
2. Check for a clogged venturi in the left rear of the cassette tray. Clean as needed. End user repair
3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube. Field Service Tech repair
4. Check for power to solenoid. Using a voltmeter check for line voltage at terminals J1-7 & J1-8 with the cassette inserted. If line voltage is present check for a magnetic field above the solenoids coil. The solenoid coil has a bridge rectifier built into it. To check the coil put your meter on the diode checking scale and read the resistance of the coil, and then reverse the leads, the resistance should be approximately the same in both directions. Field Service Tech. repair

Cycle Fault #11

The cassette temperature has failed to drop to 102°C within 60 seconds of the end of a cycle during venting.

1. Check for kinked or pinched exhaust tubing. End user repair
2. Check for a clogged venturi in the left rear of the cassette tray. Clean as needed. End user repair
3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube. Field Service Tech repair
4. Check for power to solenoid. Using a voltmeter check for line voltage at terminals J1-7 & J1-8 with the cassette inserted. If line voltage is present check for a magnetic field above the solenoids coil. The solenoid coil has a bridge rectifier built into it. To check the coil put your meter on the diode checking scale and read the resistance of the coil, and then reverse the leads, the resistance should be approximately the same in both directions. Field Service Tech. repair

Cycle Fault #12

This indicates a problem with the temperature measuring system.

1. Check thermocouples, they should read approximately 10 ohms at room temperature. Shop repair

Cycle Fault #13 N/A

Cycle Fault #14

The steam generator (boiler) temperature is above 171°C during the Sterilization phase of a cycle.

1. Check water pump using the Pump Tester Bottle. Field Service Tech. repair
2. If pump tests weak, clean the pump filters. Field Service Tech. repair
3. Calibrate boiler when pump is functioning properly. Field Service Tech. repair

Cycle Fault #15

The cassette temperature is 3°C or more above a set point during the Sterilization phase of the cycle.

1. Check for kinked or pinched exhaust tubing. End user repair
2. Check for a clogged venturi in the left rear of the cassette tray. Clean as needed. End user repair
3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube. Field Service Tech repair

Cycle Fault #16

The steam generator (boiler) temperature went above 171°C during the heat up phase of a cycle.

1. Check water pump using the Pump Tester Bottle. Field Service Tech. repair
2. If pump tests weak, clean the pump filters. Field Service Tech. repair
3. Calibrate boiler when pump is functioning properly. Field Service Tech. repair

Cycle Fault #17-18 N/A

Cycle Fault #19

The steam generator (boiler) calibration is invalid. A new calibration is required.

1. Calibrate the boiler. If problem persists replace Microprocessor and EEPROM (matched set) and calibrate boiler. Field Service Tech. repair

Cycle Fault #20
The pump has failed to pump water into the steam generator (boiler) during a pre-vent pump time-out. The steam generator (boiler) temperature was greater than 140°C for 3.6 seconds after the pump was activated to pump water to cool the steam generator (boiler).
1. Check water pump using the Pump Tester Bottle. Field Service Tech. repair
2. If pump tests weak, clean the pump filters. Field Service Tech. repair

Cycle Fault #21-24 N/A

Cycle Fault #25
The software has failed to detect a need to pump water in 90 seconds.
1. Boiler does not heat up. No power to boiler. Field Service Tech. repair
2. Check thermal fuse. Using an ohmmeter, check for continuity between J1-3 & lower terminal on boiler. If you read less than 1-ohm thermal fuse is good. If thermal fuse checks good proceed to step 3, if bad replace and check unit for proper operation. Test pump using pump tester. Field Service Tech. repair
3. Check resistance reading between J1-3 & J1-4 should read approx. 11ohms. Field Service Tech. repair
4. Check for line voltage at terminals J1-3 & J1-4 during warm up. If the reading is good proceed to step 5, if bad, PCB (Printed Circuit Board) is defective. Shop repair
5. Check for line voltage at boiler terminals. Field Service Tech. repair

Cycle Fault #26
The sterilization phase has failed to start within 3 minutes of the cassette reaching the sterilization temperature.
1. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

Cycle Fault #27
The internal temperature of the steam generator (boiler) has exceeded 150°C for 25 seconds.
1. Check water pump using the Pump Tester Bottle. Field Service Tech. repair
2. If pump tests weak, clean the pump filters. Field Service Tech. repair
3. Calibrate boiler when pump is functioning properly. Field Service Tech. repair

Printer Fault
Message appears if optional printer is installed and not printing.
1. Check for paper jam. End user repair

No message displayed and printer does not work.
1. Check the printer ON/OFF switch (white switch). The white switch is both the ON & OFF switch for the printer. When the white button is pushed in the printer is ON, when the white button is out the printer is OFF. (The black button is for paper advance only). End user repair
2. Make sure that all printer cables are connected. Cables are correctly connected if the time and date are shown on the LCD. Field Service Tech. repair
3. Ensure that the paper is loaded properly. Check that the paper leaves the paper roll from the top of the roll. This means that the treated surface of the thermal paper will be in contact with the thermal print head. End user repair

Water Quality is Not Acceptable

1. The water quality sensor has detected water in the reservoir that is above acceptable limits for total dissolved solids. Drain reservoir and refill with known good distilled water. End user repair
2. Check wiring to water pump coil, the white wire should be on terminal closest to the rear of the Statim and the black wire on the terminal closest to the front of the Statim. Field Service Tech. repair
3. Follow instructions for diagnosing water quality sensor problems. Field Service Tech. repair

Cycle Interrupted

1. This message is displayed when there is a power failure in the middle of a cycle or whenever the power is turned off after an error occurred and the STOP button is not pressed.

Press Stop to Reset

1. This message is displayed on all error faults. Press STOP to clear message.

GFI (ground fault interrupter) trips when Statim is turned on.

1. Check for leaking check valve. Field Service Tech. repair

Touch pads do not work

1. Disconnect keypad plug from PCB. Be sure blue plastic piece for keypad plug on PCB is pushed up on the plug pins as far as possible. Reconnect keypad and check. Replace keypad if necessary. Field Service Tech. repair

No display or garbled display on LCD

1. Check ribbon cable connection from cover to PCB. Field Service Tech. repair
2. Check to see that the microprocessor is seated firmly in its socket. Field Service Tech. repair

Statim makes a clicking noise when cassette removed

1. This is caused by steam leaking from the cassette. The steam gets into the microswitch causing the contacts to open and close and the solenoid clicks. Repair cassette leak and clicking should stop in approximately 24 hours. End user repair

Loud buzzing noise

1. Clean or replace solenoid as needed. Field Service Tech. repair

Noise during drying cycle only

1. Some check valve noise is normal. Check the air filter. Replace if dirty. End user repair
2. If filter is wet replace check valve and compressor if necessary. Field Service Tech. repair

Water dripping from drain tube under Statim

1. Replace seal or repair cassette as needed. End user repair

Steam is escaping from Condenser Bottle vent hole

1. Ensure that condenser bottle is always filled to Min. line with water. End user repair

Steam is leaking from Push-In fitting at rear of Statim

1. Ensure that exhaust tube is fully inserted in fitting. Push past initial resistance until tube seats. End user repair

Wraps remain wet after drying

1. Check air filters, if dirty replace. End user repair
2. Ensure that cassette is clean and has been treated with Stat Dri. End user repair
3. Drain tube must run directly to condenser bottle with no dips, loops or kinks. End user repair
4. Do not stack wraps. End user repair
5. Invert mesh rack to provide air space below wraps. End user repair
6. Set bubble level to 4 or 5 o'clock position. End user repair
7. Check for airflow through unit. While the Statim is running in the drying cycle remove exhaust tubing from the top of the waste bottle (be careful tubing may be hot). Place tubing into a cup of water, vigorous bubbles should appear in the cup of water. If bubbles do not appear, check airflow from compressor to waste bottle. End user or Field Service Tech. repair