

## Statim Error Codes Revision 5XX & Higher 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, 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 2, if bad replace and check water pump using Pump Tester Bottle. Field Service Tech. repair
2. Check resistance reading between J1-3 & J1-4 should read approx. 11ohms. Field Service Tech. repair
3. Check for line voltage at terminals J1-3 & J1-4 during warm up. If the reading is good proceed to step 4, if bad, PCB (Printed Circuit Board) is defective. Shop repair
4. Check for line voltage at boiler terminals. Field Service Tech. repair
5. An extremely large steam leak (Statim 5000). Replace cassette seal, lid or tray. End user repair
6. An extremely large load (Statim 5000). End user repair

#### **Cycle Fault #2 N/A**

#### **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. If the cassette is leaking repair as needed. Replace cassette seal, lid or tray. End user repair
2. Check the solenoid for debris and make sure the plunger is not sticking. Field Service Tech. repair

#### **Cycle Fault #4**

**The cassette has failed to achieve sterilization conditions within a time-out period of the chamber first reaching 110°C.**

1. Refer to explanation for **Cycle Fault #3**.

#### **Cycle Fault #5 N/A**

#### **Cycle Fault #6**

**The software has detected a Validation Thermocouple temperature 5°C greater than the chamber during the sterilizing phase of the cycle.**

1. Check for kinked or pinched exhaust tubing. End user repair
2. Check for visible steam leaks from the cassette. If the cassette is leaking repair as needed. Replace cassette seal, lid or tray. End user repair
3. Check the solenoid and make sure the plunger is not sticking. Field Service Tech. repair
4. Calibrate boiler (validation thermocouple). 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. If the cassette is leaking repair as needed. Replace cassette seal, lid or tray. End user repair
2. Check the solenoid and make sure the plunger is not sticking. 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

### **Cycle Fault #8**

**The software has detected a Validation Thermocouple temperature 5°C less than the chamber during the sterilizing phase of the cycle.**

1. Check for a clogged venturi in the left rear of the cassette tray. Clean as needed. End user repair
2. Check the solenoid for debris and make sure the plunger is not sticking. Field Service Tech. repair
3. Calibrate boiler (validation thermocouple). 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

### **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

### **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 #13-14 N/A**

### **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.**

1. Check pump using the Pump Tester Bottle clean the pump filters if needed. Field Service Tech. repair
2. Check for constant power to boiler and replace PCB if needed. Shop repair

## **Cycle Fault #17-18 N/A**

### **Cycle Fault #19**

**The boiler (validation thermocouple) calibration is invalid. A new calibration is required.**

1. Calibrate the boiler (validation thermocouple). If problem persists replace Microprocessor and EEPROM (matched set) and calibrate boiler (validation thermocouple). 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 pump using the Pump Tester Bottle clean the pump filters if needed. 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. Cycle Fault 26 is displayed when this occurs in three consecutive cycles. (Cycle Interrupted is displayed for the first two cycles). Cycle Fault 26 Counter is reset whenever a successful cycle is completed.**

1. Check for visible steam leaks from the cassette. If the cassette is leaking repair as needed  
Replace cassette seal, lid or tray. End user repair
2. Check the solenoid for debris and make sure the plunger is not sticking. Field Service Tech. repair
3. Calibrate boiler (validation thermocouple). Field Service Tech. repair

### **Cycle Fault #27**

**The temperature of the steam generator (boiler) has failed to drop below a set point temperature in a timeout period.**

1. Check pump using the Pump Tester Bottle clean the pump filters if needed. Field Service Tech. repair

### **Cycle Fault #72**

**There is a communication error between the microprocessor and the Temperature Adapter Board.**

1. Check the connection between the square microprocessor and the PCB. Field Service Tech. repair
2. If PCB adapter board is used check the connection between the adapter board and the PCB. Field Service Tech. repair
3. Verify that the Temperature Adapter Board is properly inserted and secure on the main PCB. Field Service Tech. repair

### **Cycle Fault #98**

**Square microprocessor failed to communicate with PCB.**

1. Check that pins on square microprocessor are not shorted.
2. If PCB adapter board is used check for bent pins.
3. Check the pins on the Temperature Adapter Board. 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, white wire 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

### **Water Level Low, Not Sterile**

1. When the Statim checks the water level before the start of the sterilization phase of the cycle if the water level is low the cycle will abort and this message will appear. The Statim will beep for 30 seconds then the beeper will turn OFF.

### **Cycle Interrupted**

1. This message is displayed when the sterilization phase has failed to start within three minutes of the cassette reaching the sterilization temperature. If it occurs in three consecutive cycles Cycle Fault #26 is displayed. Field Service Tech. repair
2. 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 plug connections 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 air bubbles do not appear, check airflow from compressor to waste bottle. End user or Field Service Tech. repair