

## **Original Statim Error Codes Unit Says Select A Program**

**Before using the Original Statim Error Codes verify that the Statim says Select A Program when turned on.**

**All leaks should be corrected before proceeding with troubleshooting.**

### **Check Cassette #1**

**The cassette temperature failed to reach 95°C in three minutes.**

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 & the lower terminal on the boiler. If you read less than 1-ohm the 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

### **Check Cassette #2**

**The cassette temperature failed to increase from 95 to 100°C within 80 seconds.**

1. Unit will normally have a major steam leak from the cassette, if cassette is leaking, repair as needed. 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

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

### **Check Cassette #3**

**The cassette has failed to pressurize and achieve a temperature of 110°C within 70 seconds of pressurization.**

1. Check for visible steam leaks from the cassette, if cassette is leaking, repair as needed. 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

### **Check Cassette #4**

**The Cassette has failed to achieve sterilization conditions within 10 minutes of the chamber first reaching 102°C.**

1. Refer to explanation for **Check Cassette #3**.

### **Check Cassette #5**

**The software causes the pump to activate while between 2 minutes 44 seconds and 2 minutes 24 seconds remaining in the cycle. If a request to pump water occurs outside of 2 minutes 44 seconds Check Cassette #5 occurs.**

1. Check pump and boiler. Field Service Tech. repair
2. Check pump using Pump Tester Bottle. Field Service Tech. repair
3. If pump tests weak and is a new style pump, check the pump filters. Field Service Tech. repair
4. If pump is old style, replace the pump. Field Service Tech. repair
5. If the pump tests good the boiler needs to be replaced. Shop repair

**Note: When checking pumps if the pump is louder than normal check the input filter. If the pump sounds normal or quieter than normal check the output filter.**

### **Check Cassette #6**

**Boiler temperature is more than 5°C higher than the chamber while sterilizing.**

1. When the display changes from "pressurization" to "sterilization" does it take longer than 10 seconds for the pressure information (xxxKpa) to appear in the read-out?  
Replace boiler. Shop repair

### **Check Cassette #7**

**Chamber temperature is below the lower limit 130.5°C during the sterilizing phase of the Unwrapped/Wrapped Cycle or below 117.5°C during the sterilizing phase of the Rubber and Plastics Cycle.**

**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. If no steam leaks are visible, disassemble the solenoid and check for debris or the plunger sticking in the 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:**

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 Solenoid 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. Then reverse the leads, the resistance should be approximately the same in both directions. Field Service Tech. repair

### **Check Cassette #8**

**Chamber temperature is more than 5°C higher than the boiler while sterilizing.**

1. Check the exhaust tube for kinks. End user repair
2. Check for a clogged venturi in the cassette. End user repair
3. Check to see if the condenser bottle is full of hot water. End user repair
4. When the cassette changes from "pressurization" to "sterilization" does it take longer than 10 seconds for the pressure information (xxxKpa) to appear in the read-out? Replace boiler. Shop repair

### **Check Cassette (no number)**

**The cassette temperature has failed to drop below 103°C within a timeout period at the end of a 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
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 solenoids 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

### **Service Needed**

**The boiler temperature has exceeded 170°C or the chamber temperature has exceeded 147°C or a thermocouple is broken.**

**Does the Service Needed message appear as soon as the cycle button is pressed, before pressing the start button?**

1. A thermocouple or the PCB is bad. Thermocouples should read approx. 10 ohms at room temperature. Shop repair

**Does the Service Needed message appear after the start button is depressed and the cycle starts?**

1. Check the pump using the Pump Tester Bottle. Field Service Tech. repair
2. If pump tests weak and is a new style pump, check the pump filters. Field Service Tech. repair
3. If pump is old style, replace the pump. Field Service Tech. repair
4. If the pump tests good, the boiler needs to be replaced. Shop repair

**Note: When checking pumps if the pump is louder than normal check the input filter. If the pump sounds normal or quieter than normal check the output filter.**

**Select A Program is displayed in the middle of a cycle.**

1. Check the microswitch. Disconnect the microswitch wires and measure with an ohmmeter. With the cassette inserted should read less than 1 ohm, with cassette removed should read open (infinite). Field Service Tech. repair

**Insert Cassette is displayed when the cassette is inserted fully and the Start button is pressed.**

1. Check to see if the chamber thermocouple is bent. End user check
2. Check microswitch. Field Service Tech. repair
3. Check probe bracket roller spring under steam input and exhaust ports. Bend spring down slightly if needed. Field Service Tech. repair

**Distilled H2O Only**

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. Follow instructions for diagnosing water quality sensor problems. Field Service Tech. repair

### **PRV leaking steam**

1. Check the cassette seal. Be sure that the steam input and exhaust ports are open. One hole is open completely the second hole is open half way through the seal. End user repair
2. Check elbow fitting and copper tube from boiler to probe bracket. Make sure they are not clogged. Field Service Tech. repair
3. If seal is installed correctly and elbow fitting and the copper tube are clear, replace PRV. Field Service Tech. repair

### **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 the plug connections from cover to PCB. Field Service Tech. repair
2. Check to see that the microprocessor is seated firmly in it's 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