# **Statim G4 Error Codes**

# 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. An extremely large steam leak (Statim 5000). Replace cassette seal, lid or tray. End user repair
- 2. An extremely large load (Statim 5000). End user repair
- 3. 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  $1\Omega$  thermal fuse is good. If thermal fuse checks good proceed to step 3, if bad replace and check water pump using Pump Tester Bottle. Field Service Tech. repair
- 4. Check resistance reading between J1-3 & J1-4, should read approx. 11Ω. Field Service Tech. repair
- 5. 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
- 6. Check for line voltage at boiler terminals. Field Service Tech. repair

#### 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 #6

# The software has detected the Validation thermocouple temperature to be 5°C greater than the chamber during the sterilizing phase of a cycle.

- 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 for kinked exhaust tubing. End user repair
- 3. Check for sticking solenoid. Field Service Tech. repair
- 4. Calibrate Validation thermocouple. Field Service Tech. repair

#### Cycle Fault #7

# The cassette temperature has dropped 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 temperature 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 Validation thermocouple. Field Service Tech. repair

#### Cycle Fault #10

During conditioning 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. Listen for normal clicking sound when the cassette is inserted and removed. If there is no clicking sound the solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube. Field Service Tech repair

If the Statim exhaust tubing is connected to a VistaCool or StatFlow system proceed as follows.

- 1. Ensure the cold water supply to the water tank is turned ON. End user repair
- 2. Ensure the water tank is completely filled. Field Service Tech repair
- 3. Check the brass water valve on top of the water tank is operating properly. Insert a small screwdriver in the view port hole on the brass stem of the thermal regulator on top of the tank and push **up** on the water piston. The piston is operating when water can be seen leaving the ½" overflow fitting on the tank and running to the drain adapter. Field Service Tech repair
- 4. Check the in line thermal sensor on the manifold drain line is open. 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. (See Cycle Fault 10)

#### 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 #15

The cassette temperature rose above the high threshold during sterilization phase of the cycle or above 138.6°C during conditioning or pressurizing phase of the cycle.

(See Cycle Fault 10)

#### Cycle Fault #16

The steam generator (boiler) temperature went above threshold value (171°C).

- 1. Check water reservoir for water. If reservoir is empty, check to see if Float Switch is stuck in the raised position. Tap float with a long instrument, screw driver or ruler so float drops down. Refill reservoir with water. If float continues to stick replace Float Switch in reservoir part #01-110891S. Field Service Tech. repair
- 2. Check pump using the Pump Tester Bottle clean the pump filters if needed. Field Service Tech. repair
- 3. Check for constant power to boiler and replace PCB if needed. Shop repair

#### Cycle Fault #19

The Validation thermocouple calibration is invalid.

1. Calibrate the Validation thermocouple. Field Service Tech. repair

#### Cycle Fault #25

The software has failed to detect a need to pump water in 90 seconds of the start of the cycle.

- 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  $1\Omega$  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. 11Ω. 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. Note: the unit has to fail on 3 consecutive cycles for CF26 to display. "Cycle Interrupted" displayed for the first 2 occurrences.

- 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 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 water reservoir for water. If reservoir is empty, check to see if Float Switch is stuck in the raised position. Tap float with a long instrument, screw driver or ruler so float drops down. Refill reservoir with water. End User repair
- 2. If float continues to stick replace Float Switch in reservoir part #01-110891S. Field Service Tech. repair
- 3. Check the pump using the Pump Tester Bottle. Field Service Tech. repair

#### Cycle Fault #90

Corrupted or not initialized chamber calibration value.

- 1. Go to Technician Menu/NVRAM Tools select restore NVRAM. Field Service Tech. repair
- 2. Calibrate the Chamber thermocouple. Shop repair

#### Cycle Fault #94

EEPROM error, failure to read EEPROMM messages from 24C512.

- 1. Replace microprocessor & EEPROM on Rev. 7 PCB. Field Service Tech. repair
- 2. Replace Rev. 7 PCB. Shop repair

# Cycle Fault #95

Communication error, the LCD controller PCB failed to receive messages from the Rev. 7 PCB.

- 1. Check that 5V is available on Rev. 7 PCB. Green light is lit on the front of the PCB. Field Service Tech. repair
- 2. Check all fuses on Rev. 7 PCB. Field Service Tech. repair
- 3. Check all cables for bad connection. Field Service Tech. repair

#### Cycle Fault #96

Color LCD Controller program memory error, the LCD controller PCB fails to validate the integrity of the software at power up.

- 1. Update software. Field Service Tech. repair
- 2. Replace Color LCD Controller. Field Service Tech. repair

#### Cycle Fault #98

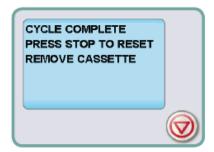
Square microprocessor failed to communicate with PCB.

- 1. If power goes off and on during a cycle this cycle fault may appear. End User or Field Service Tech. repair
- 2. Check that pins on square microprocessor are not shorted. Field Service Tech. repair

The air drying phase of the cycle may be interrupted at any time by pressing the STOP button. The display will then read:

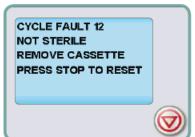


When the automatic 60-minute drying stage is finished the display reads:



To stop a cycle, press the STOP button. If the STOP button is pushed, the cassette is removed, or the unit detects a problem while operating, the cycle will stop. Once a cycle has been stopped, the STOP button must be pressed before another cycle can be started. The display reads any of the following messages:





# **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

#### Display blank no light at all

- 1. Check power supply PCB located above water pump on 2000 & in front of 5000. Field Service Tech. repair
- 2. Check wiring from power supply PCB. Field Service Tech. repair

## Display back lit but blank

- 1. Check wiring to LCD. Field Service Tech. repair
- 2. Replaced LCD. Field Service Tech. 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 the 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. 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 level in user menu so bubble is green. 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