#### **Statim 900 Error Codes**

# Cycle Fault 1

The chamber temperature failed to reach 95°C within a time-out period.

- 1. Boiler does not heat up. No power to boiler.
- 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 is good proceed to step 3, if bad replace and check unit for proper operation. Test pump using pump tester.
- 3. Check resistance reading between J1-3 & J1-4 should read approx. 11 ohms.
- 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.
- 5. An extremely large steam leak. Replace chamber seal.

# Cycle Fault 2 N/A

## Cycle Fault 3

The chamber has failed to pressurize and achieve a temperature of 110°C within a time-out period.

- 1. If visible steam leaks appear replace chamber seal.
- 2. If no leaks are visible disassemble solenoid valve and check for debris. Make sure plunger slides smoothly in plunger tube.

## Cycle Fault 4

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

- 1. If visible steam leaks appear replace chamber seal.
- 2. If no leaks are visible disassemble solenoid valve and check for debris. Make sure plunger slides smoothly in plunger tube.

#### Cycle Fault 5 N/A

#### Cycle Fault 6 (Software Revision 2XX & 4XX)

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. Check exhaust seal screen, clean or replace as needed.
- 2. Calibrate boiler and chamber. If problem persists replace and calibrate boiler.
- 3. Check Vref voltage.

#### Cycle Fault 6 (Software Revision 5XX and Higher)

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

- 1. Check for kinked or pinched exhaust tubing and for visible steam leaks from the chamber.
- 2. If no leaks are visible disassemble solenoid valve and check for debris. Make sure plunger slides smoothly in plunger tube.
- 3. Recalibrate validation and chamber thermocouples.

## Cycle Fault 7 (Software Revision 5XX and Higher)

During sterilization phase of the cycle the chamber temperature has dropped below the sterilization temperature by less the 3°C, the sterilization phase of the cycle restarts (this could happen only two times). Third time, CF 7 is displayed. If the chamber temperature drops below the sterilization temperature by more than 3°C, CF 7 is displayed right away.

- 1. If visible steam leaks appear replace chamber seal.
- 2. Check for clogged exhaust seal filter in left rear of the tray.
- 3. Check for kinked or pinched exhaust tubing.
- 4. Check the solenoid valve for debris and make sure the plunger slides smoothly.

## Cycle Fault 8 (Software Revision 2XX & 4XX)

The software has detected a steam generator (boiler) temperature 5° 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 8 (Software Revision 5XX & Higher)

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

- 1. Check for clogged exhaust seal filter under left rear of the tray.
- 2. Check for kinked or pinched exhaust tubing.
- 3. Recalibrate the validation and chamber thermocouples.

## Cycle Fault 9 N/A

## Cycle Fault 10

The chamber temperature has failed to drop to 115°C during the Handpiece/Hollow Instrument Cycle or 110°C during the Rubber and Plastics Cycle in the purge conditioning stage.

- 1. Check for clogged exhaust seal filter under left rear of the tray.
- 2. Check for kinked or pinched exhaust tubing.
- 3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube.
- 4. Check for power to solenoid. Using a voltmeter, check for line voltage at terminals J1-7 & J1-8 while the unit is warming up. 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.

## Cycle Fault 11

The chamber 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.
- 2. Check exhaust seal screen, clean or replace as needed.
- 3. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube.
- 4. Check for power to solenoid. Using a voltmeter, check for line voltage at terminals J1-7 & J1-8 while the unit is warming up. 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.

# Cycle Fault 12

This indicates a problem with the temperature measuring system.

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

## Cycle Fault 13-14 N/A

## Cycle Fault 15

The chamber temperature rose above the limit temperature 140°C.

- 1. Check for kinked or pinched exhaust tubing.
- 2. Solenoid valve is failing to open. Disassemble and check that plunger slides smoothly in plunger tube.

# Cycle Fault 16

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

- 1. Check water pump using the Pump Tester Bottle.
- 2. If pump tests weak, clean the pump filters. (Not in all pumps)
- 3. Check for clogged in line water filter to pump.

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

#### Cycle Fault 19

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

1. Calibrate the boiler or validation thermocouple.

#### Cycle Fault 20-24 N/A

## 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.
- 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 is good proceed to step 3, if bad replace and check unit for proper operation. Test pump using pump tester.
- 3. Check resistance reading between J1-3 & J1-4 should read approx. 11 ohms.
- 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.
- 5. Check for line voltage at boiler terminals.

## Cycle Fault 26 (Software Revision 2XX & 4XX)

The sterilization phase has failed to start within 3 minutes of the cassette reaching the sterilization temperature.

- 1. Check exhaust seal filter, clean or replace as needed.
- 2. Calibrate boiler.

# Cycle Fault 26 (Software Revision 5XX and Higher)

The sterilization phase has failed to start within 3 minutes of the cassette reaching the sterilization temperature. CF 26 is displayed when it occurred in three consecutive cycles. (Cycle interrupted is displayed for the first two cycles). Cycle Fault 26 counter is reset whenever a successful cycle is complete.

- 1. Check exhaust seal filter, clean or replace as needed.
- 2. Calibrate validation thermocouple.

# Cycle Fault 27

The temperature of the boiler failed to drop below a set point temperature 165°C in a time-out period.

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

#### Cycle Fault 29

The pump failed to cool the steam generator (boiler) to the target temperature during the first pump of the 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 30

The chamber and steam generator (boiler) temperatures did not stabilize within 2°C of one another within 30 seconds of the chamber reaching sterilization temperature.

- 1. Check exhaust seal screen, clean or replace as needed. End user repair
- 2. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

## Cycle Fault 50

During the Rubber and Plastics cycle, the chamber temperature dropped 4°C below the sterilization temperature, allowing for measurement error.

- 1. Check exhaust seal screen, clean or replace as needed. End user repair
- 2. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

#### Cycle Fault 51

During the Rubber and Plastics cycle, the chamber temperature rose more than 4°C above the sterilization temperature, allowing for measurement error.

- 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 60

During a cycle at 132°C, the chamber temperature dropped 4°C below the sterilization temperature, allowing for measurement error.

- 1. Check exhaust seal screen, clean or replace as needed. End user repair
- 2. Calibrate boiler. If problem persists replace and calibrate boiler. Field Service Tech. repair

## Cycle Fault 61

During a cycle at 132°C, the chamber temperature rose more than 4°C above the sterilization temperature, allowing for measurement error.

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

## Cycle Fault 90

Corrupted or not initialized chamber calibration value.

1. Calibrate chamber thermocouple.

## Cycle Fault 98

#### Microprocessor not communicating with PCB

- 1. Check that the microprocessor is inserted properly in the socket.
- 2. Replace microprocessor.
- 3. Replace PCB (Printed Circuit Board).

#### "NO CONFIGURATION EEPROM"

- 1. Check that the microprocessor is inserted properly in the socket.
- 2. Check EEPROM is inserted properly in the socket.
- 3. Replace microprocessor.
- 4. Replace PCB (Printed Circuit Board).

# "STOP BUTTON PRESSED"

The operator pressed the STOP button to stop the cycle. The LCD shows thee message "NOT STERILE" as a result

#### "CYCLE INTERRUPTED"

This message is displayed on power-up following a power failure during a cycle or whenever the power is turned OFF after an error occurred without pressing the STOP button to reset.

This message is displayed when the sterilization phase has failed to start within three minutes of the chamber reaching the sterilization temperature. If it occurs in three consecutive cycles Cycle Fault #26 is displayed.

# "PRESS STOP TO RESET"

This message is displayed for all Cycle Faults. The user MUST press the STOP button on the keypad to reset the unit; otherwise the user will be unable to initiate another cycle.