

## EXPLANATION OF ERROR CODES

### ERROR CODE 1 POWER INTERRUPTED

Power interruption to control PC board:

- Check if overheat thermostat activated during sterilizing cycle due to pressure leak (Refer to chart 1).
- Check if overheat thermostat activated because water level sensor shorted, bypassing filling phase.
- Check if overheat thermostat activated during dry cycle due to high input voltage to unit (Refer to chart 4) or pressure leak during sterilization (Refer to chart 1).
- Check for poor electrical connection in sterilizer or facility wiring.
- Check for faulty overheat thermostat that trip early.
- Check water level in chamber.

### ERROR CODE 2 STOP BUTTON DEPRESSED

Stop button pressed during sterilizer cycle.

### ERROR CODE 3 ON/STANDBY BUTTON DEPRESSED

On / Standby button pressed during sterilizer cycle.

### ERROR CODE 4 DOOR AJAR DURING CYCLE

Door ajar during sterilizer cycle:

- Check if door latch is engaging switch.
- Check door switch or wiring connection.

### ERROR CODE 5 EXCESSIVE PRESSURE

Display pressure exceeded 35 psi:

- Check if sterilizer is overloaded.
- Check if bellows is closing early trapping air in the chamber.
- Check if unit calibration or temperature probe is malfunctioning or dirty (Refer to Calibration Procedure).
- Check for moisture around pressure sensor hose on the Main PC board.

### ERROR CODE 6 EXCESSIVE TEMPERATURE

Display temperature exceeded 277 degrees:

- Check for slow pressure leak (Ref. to chart 1).
- Check if unit calibration or temperature probe is malfunctioning or dirty (Refer to Calibration Procedure).

### ERROR CODE 7 PRESSURE LOW DURING CYCLE

Display pressure dropped below 24.5 psi:

- Check for slow pressure leak (Ref. to chart 1).

### ERROR CODE 7 (cont'd.)

- Check if unit calibration or temperature probe is malfunctioning or dirty (Refer to Calibration Procedure).

### ERROR CODE 8 DOOR MALFUNCTION

Door switch did not change status after door solenoid actuated.

If door opened at end of cycle:

- Check door switch or wiring connection.

If door did not open at end of cycle:

- Check for smooth operation of latch lever and door solenoid plunger (Refer to Door Opening Test Procedure.)
- Check for burrs on door pins and latch bracket in door. Clean and lube with a lithium based grease.
- Check zero (0) pressure calibration.
- Check for dedicated power to the unit.

### ERROR CODE 9 DOOR MALFUNCTION

Display pressure exceeded .9 psi during dry cycle.

If door opened at end of cycle:

- Check 0 pressure calibration.

If door did not open at end of cycle:

- Check for smooth operation of latch lever and door solenoid plunger. (Refer to Door Opening Test Procedure.)
- Check for burrs on door pins and latch bracket in door. Clean and lube with a lithium based grease.
- Check 0 pressure calibration.

### ERROR CODE 10 HARDWARE / SOFTWARE

Watchdog timer reset error:

- Check for poor wiring connection in sterilizer or facility. Run additional cycle. If problem persists, change Main PC board.

### ERROR CODE 11 HARDWARE / SOFTWARE

Software interruption error:

- Run additional cycle. If problem persists, change Main PC board.

### ERROR CODE 12 HARDWARE / SOFTWARE

Ram test error:

- Run additional cycle. If problem persists, change Main PC board.

### BLOWN FUSES

If fuse on Main PC blows:

- Check for internal shorts in the unit.

### NO DISPLAY LIGHTS

IF UNIT DISPLAYS TEMPERATURE AND PRESSURE BUT WILL NOT SHOW LED STATUS LIGHTS:

- Disconnect power from unit for 30 seconds.

### LOW WATER ERROR

Water did not complete the ground circuit within the (5) minute time limit.

If water is continuously filling:

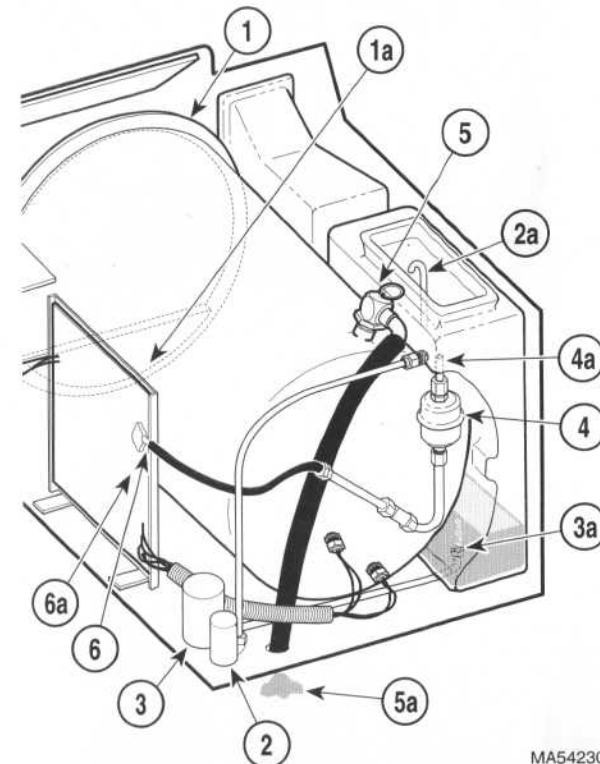
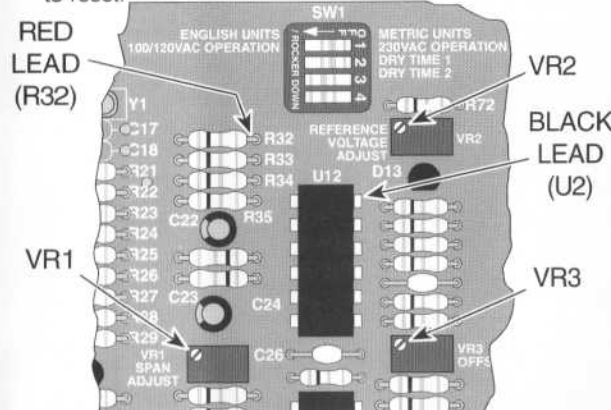
- Check for open sensor circuit or corrosion on sensor.
- Check temperature probe by disconnecting from Main PC board.

If water is not entering the chamber:

- Check for dirty filter.
- Check fill valve for debris.

## M9 / M11 PRESSURE & TEMPERATURE CALIBRATION PROCEDURE

- 1) Open door.
- 2) Depress the LIQUIDS & PACKS button while plugging in the power cord
- 3) Depress and release all 7 buttons from left to right across display panel starting with UNWRAP button.
- 4) Adjust pressure pot (VR3) counter-clockwise to 0.0 PSI, then turn clockwise until display pressure reads 0.1 PSI.
- 5) Attach red lead of multimeter to right prong of R32.
- 6) Attach black lead to top right pin of U12.
- 7) Adjust temperature pot (VR2) to reference 2.55 VDC.
- 8) Attach pressure gauge, close door and press START.
- 9) Check for pressure leaks after 212°F (Refer to chart 1).
- 10) After display reaches 272°F, adjust the pressure range pot (VR1) until display pressure matches pressure gauge.
- 11) Depress the STOP button to end test cycle.
- 12) After unit vents and door opens, unplug power cord to reset.



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## CHART 1 - AREAS TO CHECK FOR PRESSURE LEAKS

### 1) Door Gasket:

- 1a) • Check for water leaking around the door.

### 2) Vent Solenoid Valve:

- 2a) • Check for water leaking in the reservoir through the condensing coil.

### 3) Fill Solenoid Valve:

- 3a) • Check for water leaking back into the reservoir through the fill line, raising the reservoir water level.

### 4) Bellows Valve:

- 4a) • Check for excessive steam from the bellows line in the reservoir. NOTE: A light hiss of steam is not uncommon.

### 5) Pressure Relief Valve:

- 5a) • Check for water leaking beneath the back of the sterilizer. NOTE: Check actual pressure in the sterilizer before replacing the pressure relief valve.

### 6) Pressure Sensor Hose:

- 6a) • Check for steam leak onto Main PC board.