E01

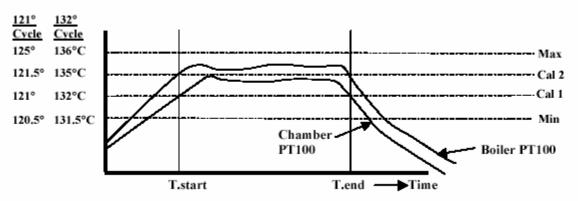
Power failure

Power failure at any time during sterilizing cycle

- 1. If unit has 116 software replace with 117
- 2. Unit lost power check wall outlet
- 3. Check fuse connections under plate by power cord
- 4. Check thermal cutout on boiler for intermittent operation

E02

The autoclave is fitted with an electronic comparator that checks the following conditions during sterilizing cycle:



t02 – Sterilizing time fault.

When the sterilizing start temperature is reached, the on board computer sets to zero the cycle timer, it also reads the time clock. When the cycle timer has timed out, the on board computer reads the time clock. The cycle time and the timer clock values must agree to better than 10 seconds.

What to look for:

Reset the real time clock.

Put Quantim on a separate circuit or install a surge protector with a noise filter. Keep Ultrasonic cleaners at least 6 feet away or have a physical barrier between the Ultrasonic and the Quantim.

d02 – PT100 boiler and chamber probes do not agree.

Compares boiler and chamber PT100 probe values. During the sterilizing period they must agree, with an error of $<2^{\circ}$ C.

What to look for:

Check for leaks, clean gasket and chamber face.

Check that both PT100 probes have similar resistance approx. 109 ohms. Check chamber probe insertion depth, probe tip should be flush with the inside rim of the brown molding.

Check for dirty probes. Control module fault.

b02 – Temperatures outside of control band.

Both boiler and chamber PT100 probes must be within the min/max cycle limits. What to look for:

Check for leaks, clean gasket and chamber face.

Check that both PT100 probes have similar resistance approx. 109 ohms.

Check resistance of boiler approx. 7 ohms.

Control module fault.

E03

Air bleed was not successful

Autoclave has failed to obtain a balance between boiler and chamber PT100 probes within 20 minutes of water being detected in the boiler and full power applied. The unit starts checking for this balance when the chamber reaches 93°C.

- 1. Check for large steam leak
- 2. Check boiler heating element (7 ohms)
- 3. Air bleed tube or solenoid blocked (Eng 003 first light)
- 4. Check that the water fill solenoid is closing.

E07

Boiler thermistor failure

- 1. Boiler thermistor open circuit or short circuit to ground (80.5 ohms)
- 2. Power control module fault

E10

Water in boiler

Water in boiler at end of cycle when door open is enabled

- 1. Fill solenoid leaking (Eng 003 fourth light)
- 2. Flush solenoid not venting (Eng 003 third light)
- 3. Check boiler water filter

E13

Boiler failed to fill

Note: If level sensor has failed the boiler may overfill into the chamber, be careful when opening door as water may come out of chamber.

- 1. Water filter dirty
- 2. Fill solenoid not operating (Eng 003 fourth light)
- 3. Check level sensor

E14

PT100 failure (chamber)

- 1. Check chamber PT100 for open or short circuit to ground. (109 ohms)
- 2. Power control module fault.

E15

Drying cycle interrupted 15 flashing on top display. This can only be caused by pressing the door open button when the door light is flashing interrupting the drying cycle. If unit has 115 or higher software "Abt" will appear on the pressure display. After the door open button is pressed after approximately 2 minutes 15 will start flashing on the top display, the unit will start beeping and the door will pop open slightly.

1. Recovery sequence:

Press standby/ready button once flashing and beeping stops 15 still appears on top display door open partially Press standby/ready button again, door will open completely and unit goes to standby mode

E17

Temperature failed to drop to 110°C in 100 seconds after flush valve opens

- 1. Check software must be 115X or higher
- 2. Check water filter
- 3. Check flush valve (Eng 003 third light)

uod1

Boiler dry (previously E12) appears in 115 and higher software

- Autoclave detects that the boiler has run out of water
- 1. Check for large steam leak
- 2. Boiler did not fill properly check water filter

Note: Thermal cutout operation is often preceded by uod1

uod2

Unit fails to reach the correct sterilizing temperature within a twenty-minute period (previously E18)

appears in 115 and higher software

- 1. Check for leaks
- 2. Check heating element (7 ohms)

Unit flashes Door continuously

The solenoid has been triggered but the door microswitch has not opened

- 1. Door is held closed due to some mechanical condition
- 2. Door is held closed by a vacuum caused during cool down as a consequence of the air bleed valve not operating
- 3. Door microswitch or wiring harness is short-circuited
- 4. Power control module fault

Unit flashes door intermittently or door open light is not illuminated when door is shut

Occurs when pressing cycle start button with door open

- 1. Door is open
- 2. Door latch is not fully engaged, check solenoid springs
- 3. Door microswitch harness fault, open circuit
- 4. Check microswitch set position
- 5. Power control module fault

Flashing red LED

Insufficient water in fresh water tank to run cycle