



## Error Codes

### **---or-- Message**

**The Current Water Temperature is "Unknown" (- - - or - -) while in Economy or Sleep Mode.**

Between Filter Cycles, while in the Economy or Sleep Heating Modes, the Pump has not turned ON and the Last Water Temperature is not current. To read the Current Water Temperature, either Change to Standard Heating Mode or turn On the Heating Related Pump, and wait at least 2 Minutes.

### **drY, dY, or HEATER DRY SERVICE REQD Message**

There is a Verified "Dry" (drY or dY) Condition in the heater.

The "dr" or "HEATER MAY BE DRY WILL RETEST SHORTLY" Fault has occurred 3 times in a row without a successful Heating Cycle and Spa Functions are Disabled. There is not enough Water in the Heater to Start it. After the Problem has been Resolved, you Must Press Any Button to reset and Restart Heater Start Up. Check for Water Level, Flow Restrictions, Closed Valves, Air Bubbles, and Pump Prime, or contact us on 023 9232 1719

Check for all of the following Conditions:

1. Low Water Level.
2. Blocked Suction Fitting.
3. Blocked Skimmer.
4. Dirty Filter.
5. Too Many Closed Jets.
6. Closed Slice Valve.
7. Heat Related Pump Not Running.
8. Heat Related Pump Not Primed.

### **ICE, IC, or FREEZE COND Message**

A Potential Freeze Condition has been Detected, and "Ice" (ICE) in the System is being Prevented.

44°F (6.7°C) or Lower has been detected at the Lowest Temp Sensor, or the Aux Freeze Switch has closed, and All Pumps and Blower are activated. All Pumps and Blower are ON for at least 4 Minutes After Temp is 45°F (7.2°C) or Above at the Sensors, or when the Aux Freeze Switch Opens. This is an Operational Message, Not an Error Indication. Either wait for the Potential Freeze Condition to End, or contact us on 023 9232 1719

### **Pr or PRIMING MODE TAKES 4 MIN Message**

The Spa is Operating in "Priming" (Pr) Mode.

The Spa has just been powered up and is in Priming Mode for 4 Minutes. Pumps and Blower can be turned ON and OFF to remove any Air from the Heater. On EL and GL Systems Only, equipped with a "Mode" Button, the Ozone Generator can be Turned ON for 15 Seconds and OFF by using the "Mode" Button. No automatic functions will turn ON during this time, and the Heater will Not Start. This is Not an Error Message. Wait 4 Minutes or Press any Temp Related Button to Exit Priming Mode to Normal Operation.

Note: On some Early VS and GS Systems (prior to Version 23) equipped with a "Mode" button, the Ozone Generator can be Turned ON for 15 Seconds and OFF by using the "Mode" button.

### **SLP or SL Message**

If the SLP or SL Message is Alternating with the Water Temperature on the Display, the Spa is Operating in the Sleep Heating Mode.

If the SLP or SL Message is ON Solid (Not Flashing) on the Display, the Spa is Operating in the Sleep Heating Mode, but there is No current water temperature because the Spa is between Filter Cycles.

Ecn or Ec is Alternating with Temp: The Spa is Operating in the "Economy" (Ecn or Ec) Heating Mode.

The Water Temperature is sampled Only during Programmed Filter Cycles. The Heater will only operate and Heat up to Set Temperature during the Filter Cycles. The Water Temperature will probably drop Below Set Temperature between Filter Cycles.

Other Heating Modes are Standard, Standard in Economy, and Sleep Modes.

Ecn or Ec is ON Solid (Not Flashing):

The Current Water Temperature is "Unknown" (- - - or - -) while in Economy or Sleep Mode.

Between Filter Cycles, while in the Economy or Sleep Heating Modes, the Pump has not turned ON and the Last Water Temperature is not current. To read the Current Water Temperature, either Change to Standard Heating Mode or turn On the Heating Related Pump, and wait at least 2 Minutes.

--F, --C, or -- Message

The Actual Water Temperature is "Unknown" (- -).

Priming Mode has been exited and the Pump has not yet run for 1 or 2 Minutes (depending on Model) to Sample Actual Water Temperature. With the Heat Related Pump Running, wait at Least 2 Minutes for the Correct Actual Water Temperature to be displayed. This is normal operation.

### **Ecn or Ec Message**

If the Ecn or Ec Message is Alternating with the Water Temperature on the Display, the Spa is Operating in the Economy Heating Mode.

If the Ecn or Ec Message is ON Solid (Not Flashing) on the Display, the Spa is Operating in the Economy Heating Mode, but there is No current water temperature because the Spa is between Filter Cycles.

Ecn or Ec is Alternating with Temp:

The Spa is Operating in the "Economy" (Ecn or Ec) Heating Mode.

The Water Temperature is sampled Only during Programmed Filter Cycles. The Heater will only operate and Heat up to Set Temperature during the Filter Cycles. The Water Temperature will probably drop Below Set Temperature between Filter Cycles. Other Heating Modes are Standard, Standard in Economy, and Sleep Modes.

Ecn or Ec is ON Solid (Not Flashing): The Current Water Temperature is "Unknown" (- - - or - -) while in Economy or Sleep Mode. Between Filter Cycles, while in the Economy or Sleep Heating Modes, the Pump has not turned ON and the Last Water Temperature is not current. To read the Current Water Temperature, either Change to Standard Heating Mode or turn On the Heating Related Pump, and wait at least 2 Minutes.

### **LF or LOW FLOW Message**

There is a Verified "Low Flow" (LF) Condition in the Heater.

The "HFL", "HL", or "HTR FLOW LOW" Fault has occurred 5 times in the Last 24 Hours or Less, and Heating has been disabled. There is Not Enough Water Flow through the Heater to carry the Heat Away from the Heating Element. After the Problem has been Resolved, you Must Press Any Button to reset and Restart Heater Start Up. Check for Water Level, Flow Restrictions, Closed Valves, Air Bubbles, and Pump Prime, or contact us on 023 9232 1719

Check for all of the following Conditions:

1. Low Water Level.
2. Blocked Suction Fitting.
3. Blocked Skimmer.
4. Dirty Filter.
5. Too Many Closed Jets.
6. Closed Slice Valve.
7. Heat Related Pump Not Running.
8. Heat Related Pump Not Primed.

**SbY or STANDBY MODE Message**

The Spa is Operating in the "Standby" (SbY) Mode.

All Automatic Spa System Functions are disabled so that Pumps and Blower will not turn ON Automatically. This Mode allows the User to Replace or Clean a Pressure Side Filter Cartridge without Equipment turning ON unexpectedly. Press any Button except "Jets 1" to Exit and Return to Normal Operation.

**SnA, SA, or SENSOR A SERVICE REQD Message**

"Sensor A" (SnA or SA) is Not Operating Correctly.

The Sensor Connected to the "Sens.A" Connector on the System Board may have failed and Spa Functions are disabled. Contact us on 023 9232 1719

A Sensor Failure Message may indicate Excessively High Heater Temperatures which can scald or Burn!

If the Heater is Not Cool Enough to Safely Service, allow the Heater to Cool before Testing.

**Std, St, or STANDARD Message**

The Spa is Operating in the "Standard" (Std or St) Heating Mode.

Between filter cycles, the water temperature is sampled every 30 minutes. The heater and pump will operate any time the thermostat demands heat. The water temperature is always maintained within 1°F (.5°C) of set temperature. Other heating modes are Economy, Standard in Economy, and Sleep Modes.

Note: On the Panels that Display the "Std" or "St" Messages, the Message will only be displayed for a Few Seconds After the Heating Mode is changed to Standard from a different Heating Mode.