

### 13.0 Error Conditions/Error Messages

There are a number of unique functions designed into your spa to protect it from damage and/or aid in troubleshooting. Refer to Sections 13.1-13.8 below for a listing of all possible error messages and their meanings.

#### 13.1 Summer Logic

When the actual spa water temperature reaches up to 2°F (1°C) above the set temperature, the spa goes into "summer logic." The circulation pump will turn off automatically to avoid adding additional heat to the water, eventually creating an overheat condition. This setting is not user-programmable.



**Note:** The summer logic does not take effect until the spa water temperature reaches 95°F (35°C). This condition is more likely in excessively hot weather. Remember, the spa's ability to cool is directly affected by the ambient temperature. An excessively hot ambient temperature may prevent the spa from cooling down because it's fully insulated construction is designed to retain heat and to minimize operating costs.

#### 13.2 Overheat Condition



**WARNING: RISK OF HYPERTHERMIA (OVER-HEATING)  
CAUSING SEVERE INJURY, BURNS, OR WELTS.**

**DO NOT ENTER SPA WATER!** Water is too hot. Overheat protection. Heater is deactivated. Spa water temperature is above acceptable limits. When the actual water temperature is approximately 2°F (1°C) above the set temperature, the circulation pump will stop operating to reduce (frictional) heating. To correct condition, remove spa cover to speed cooling. **(CAUTION! Never leave spa uncovered when children are present!)** If condition persists, contact your authorized Sundance dealer.



#### 13.3 Panel displays SN1

Open sensor (heater is disabled) or shorted sensor (spa is deactivated). The high-limit temperature sensor is not functioning. Your authorized dealer must repair this.



**13.4 Panel displays SN2**

Open or shorted sensor (heater disabled). The temperature sensor is not functioning. Your authorized dealer must repair this.

**13.5 Panel displays FL1 or FL2**

A flashing "FL1" display means the flow switch is malfunctioning open, the circulation pump's filter cartridge is excessively dirty, or an "air lock" condition has occurred at the circulation pump intake. A flashing "FL2" display means the flow switch is malfunctioning closed.



- This error will cause the heater to deactivate. The main pump #1 may also deactivate.
- This problem is caused by an interruption in water flow from an excessively dirty filter cartridge, an "air lock" condition at the pump intake, or by a malfunctioning flow switch.

To Correct Condition:

1. Verify water level is above all jets and below lowest pillow. Add water if necessary.
2. Check for clogged/excessively dirty filter cartridge. See Section 11.1 (pages 31-32).
3. Purge "air lock" from circulation pump intake by removing the filter cartridge. Hold your garden hose over the filter wall fitting (with grate) using a rag as a seal around hose end, then ask a helper to turn on water for 30 seconds, then turn off. Reinstall filter cartridge and check spa. See Section 11.1 (pages 31-32).
4. If the circulation pump is not running, turn power off at the main breaker, then turn power back on. This will reset the circulation pump priming cycle. Once the pump is primed, the error should clear.
5. If problem persists, contact your authorized dealer.

**13.6 Panel displays COL**

Cool Condition - Temperature has dropped 20°F (11°C) below the current set temperature. The pump and heater have been activated to bring the temperature to within 15°F (8°C) of the set temperature. No corrective action is required (page 30).

**Note:** During cold periods, you may consider increasing the number of filtration cycles.

**13.7 Panel displays ICE**

Freeze Protection - A potential freeze condition has been detected. No action is required. Main pump will operate to circulate warm water through the plumbing until the spa is out of danger.



### 13.8 Panel displays - - -



**WARNING: RISK OF HYPERTHERMIA (OVER-HEATING)  
CAUSING SEVERE INJURY, BURNS, OR WELTS.**

**DO NOT ENTER SPA WATER!** The safety "Watchdog" software has been triggered and the spa is deactivated. A problem has been detected which could cause damage to the spa or its components. Contact your authorized dealer.



## 14.0 Troubleshooting Procedures

In the event your Sundance spa is not working the way it should, please first review all the installation and operating instructions in this manual and check the message on the panel display. If you are still not satisfied it is working properly, please follow the appropriate troubleshooting instructions.

**Note:** If any of the supply cords to the accessories are damaged, they must be replaced by authorized service personnel.

### 14.1 None of the Components Operate (e.g. Pump, Light)

Check the following:

1. Is there power to the spa?
2. Is the household circuit breaker tripped?
3. Call your authorized dealer.

### 14.2 Pump Does Not Operate but Light Does

Press the JETS 1 Button:

1. If no water movement is detected, make sure power is going to the spa and check the water level. If it does not solve the problem, contact your authorized Sundance dealer.
2. The main pump operates but no water flows to jets. Pump may not be properly primed. This can happen after the spa is drained and refilled. Press the JETS 1 button several times, never leaving the motor on for more than 5 to 10 seconds at a time. Turn power off and let the air out by loosening the cap on the massage selector and/or removing the filter. Refer to Section 8.2 (page 24). Make certain you tighten the massage selector cap and/or reinstall the filter before turning on spa power and restarting the pump.

**14.3 Poor Jet Action**

1. Press the JETS 1 button to make certain the pump #1 is on.
2. Rotate the air control clockwise to the "on" position.
3. Check for dirty filter. Clean, if necessary.
4. Make sure jets are all the way open.

**14.4 Water is Too Hot**

Reduce thermostat setting so the heater turns off.

**14.5 No Heat**

1. Check thermostat setting.
2. Keep the spa cover in place while heating.
3. Check the settings to see if your spa is in economy filtration/heating mode (pages 29-30).

Should checking the above steps fail to correct the problem, please call your dealer so that they may arrange service. We build the best spas in the industry. Nonetheless, we are always striving to improve the quality and features of our products. Your input as a Sundance spa owner is a cherished part of this process. If you have any comments or suggestions, or if you wish to be informed on any new products for your spa, please write to us.

**CONGRATULATIONS** on your good taste and welcome to the happiest and most relaxed family in the world!