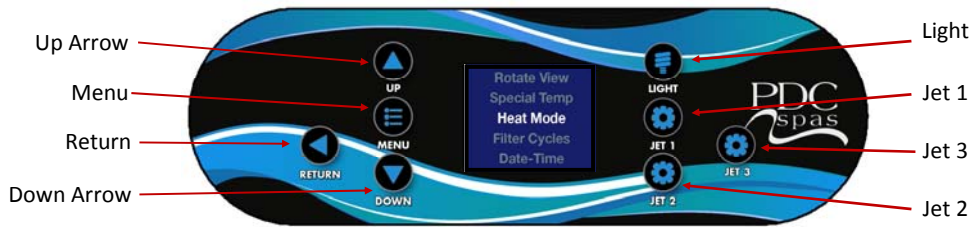


**WARNING:** Read all instructions before using the spa. PDC Spas, PDC International assumes no responsibility for personal injury or property damage sustained by or through the use of this product. When installing and using this equipment basic safety precautions should always be taken to reduce risk of electrical shock, ensure safe usage, and safeguard the user’s health.

**Synergy™ Series Swim Spas  
& Hot Tub Zone for all Dual-Zone models.**



**UP ARROW & DOWN ARROW KEY**

These keys adjust the temperature and navigate through the menu screens.

**MENU KEY**

This key will allow you to enter the menu.

**RETURN KEY**

The return key will take you back to the previous screen

**LIGHT KEY**

This key turns the light on / off.

**JETS 1 KEY**

The first press of this key will turn pump 1 on to low speed. Pressing this key a second time will activate high speed (If the spa is heating or in a filter cycle low speed will already be on. The first press of the key will turn on high speed and pump will not be able to be turned off if the spa is calling for heat).

**JETS 2 KEY**

This key turns pump 2 on or off.

**JETS 3 KEY**

This key turns pump 3 on or off.

Below are icons that will be displayed on control screen depending on the component or option selected.

**Selection Icons**

FILTER CYCLE 1

ENERGY SAVING HEAT MODE

OZONE ON

FILTER CYCLE 2

VACATION HEAT MODE

JET ON LOW SPEED

FILTER CYCLE 3

CLEANER CYCLE

JET ON HIGH SPEED

FILTER CYCLE 4

POLLING CYCLE

SPECIAL TEMP SELECT

LIGHT ON

TEMPERATURE LOCK

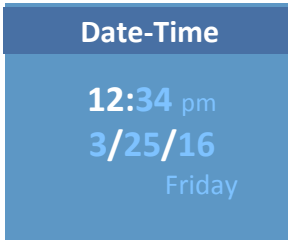
HEATER ON

PANEL LOCK



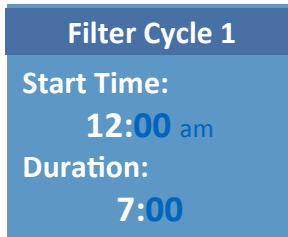
### Priming Mode

When power is ON, the system will enter a priming mode with priming screen display on the panel. In this mode, all devices such as JETS, or LIGHT are operable. JETS can be turned on and off to prime the pump. System will exit priming mode and go to MAIN display when RETURN button is pushed, or after 4 minutes of inactivity.



### Setting the Time and Date

To set the time press the menu button. Use the down arrow until Date-Time is highlighted then press menu again. The hour will be highlighted first, use the up or down arrow key to change the hour to the correct hour. Press the menu key again to highlight the minutes and again, use the arrow key to change to the correct minute. Press the menu key again to highlight the month, then use the up or down arrow key to change to the correct month. Press the menu key again to highlight the day, then use the up or down arrow key to change to the correct date of the current month. Press the menu key again to highlight the year, then use the up or down arrow key to change to the correct year. Press the menu key again to highlight the day of the week, then use the up or down arrow key to change to the correct day of the week. Once the time and date are correct, press the return key to return to the menu and, again, to return to the main screen.



### Setting the Filter Cycle

To set the filter cycle press the menu button. Use the down arrow until Filter Cycles is highlighted. There are 4 programmable filter cycles. A minimum of 8 hours is needed for the ozonator to be effective. Use of all 4 filter cycles is not needed but it will allow you greater control of the filter time each day. Once Filter Cycles is selected in the main menu screen, Filter Cycle 1 is highlighted press the menu key to enter Filter Cycle 1. The start time hour will be highlighted use the up or down arrow key to adjust to the desired hour. Press the menu key again to move to minutes, again, use the up or down arrow key to adjust to the desired minute. Press the menu key again to move to am/pm use the up or down arrow key to select the desired selection. Press the menu key again to set the number of hours of duration using the up or down arrow keys. The duration is the amount of hours the spa will filter during Filter Cycle 1. Press the menu key again to set the minutes of duration using the up or down arrow keys. Press the return key to return to the filter cycles menu. If desired, repeat above directions to program more filter cycles. When finished, press return to go back to the menu and return again to go back to the main screen.



### Setting Temperature

To change water set temperature, use UP and DOWN buttons to set the desired temperature. The screen will display "SET TEMP" with the current set temperature. After 5 seconds without any change to the set temperature, the screen will reverse back to the MAIN screen with current water temperature display. Changing set temperature will make the heater and pump turn on to get accurate water temperature and determine if water needs to be heated.

### Panel Timeout

If user is in Setting Menus and no button is pushed within 15 seconds, the screen will timeout, current screen setting will be lost and panel reverts back to MAIN screen.

In MAIN screen, if no button is pushed within 60 minutes, all LED and LCD lights will turn off and panel goes to sleep. Any button pushed in this time will wake the panel up, LED and LCD lights will turn back on and panel will poll for water temperature.

## Setting Screens

**Rotate View:** rotate the view 180°, the UP and DOWN button also swap when rotated. With ROTATE VIEW highlighted press MENU to enter ROTATE VIEW setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.

**Special Temp:** *only available for authorized technicians*

**Heat Mode:** select STANDARD heating mode for most users or ENERGY SAVING mode (reduces polling water temperature) or VACATION mode (set temp set to 50°F). With HEAT MODE highlighted press MENU to enter HEAT mode setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.

**Filter Cycles:** set up filter cycle start time, duration and date for filtering the spa. For FILTER CYCLE 1 and 2, if duration is set to zero the system will do a purge cycle at the start time setting. With FILTER CYCLE highlighted press MENU to enter FILTER CYCLE 1,2,3, or 4 setting. Select a FILTER CYCLE and press MENU again to enter TIME/DURATION setting screen. In this screen, press MENU to move between HOURS, MINUTES and DAYS setting; UP/DOWN to change values, RETURN to exit and confirm setting.

**Date-Time:** set up date and time for spa. With DATE-TIME highlighted press MENU to enter DATE-TIME setting. In his screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to exit and confirm the setting.

**Degree F/C:** displays spa temperature in Celsius or Fahrenheit. This option is only available for 60HZ countries and automatically displays Celsius for 50HZ. With DEGREE F/C highlighted press MENU to enter DEGREE F/C setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Time Display:** display spa time in AM/PM or 24 hours time. With TIME DISPLAY highlighted press MENU to enter TIME DISPLAY setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm setting.

**Devices Timeout:** *only available for authorized technicians*

**Panel Lock:** locks all panel buttons except MENU button. With PANEL LOCK highlighted press MENU to enter PANEL LOCK setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Temp Lock:** locks TEMPERATURE setting with UP/DOWN buttons. With TEMP LOCK highlighted press MENU to enter TEMP LOCK setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Service Mode:** *only available for authorized technicians*

**Demo Mode:** to demonstrate all device capabilities of the spa. With DEMO MODE highlighted press MENU to enter MODE setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**General Information:** displays general information of the spa. With GENERAL INFORMATION highlighted press MENU to enter GENERAL INFORMATION menu. Use UP/DOWN to view different pages and information and RETURN to exit and confirm.

**Languages:** to select various languages for spa display. With LANGUAGES highlighted press MENU to enter and select a specific language. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

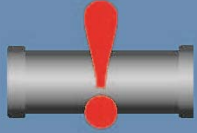











**Serenity Mode:** to turn off all outputs and provide a quiet time setting. With SERENITY MODE highlighted press MENU to enter and select a specific time. Use UP/DOWN to select the desire time setting. Press MENU again to navigate to EXIT/START. Select the desired option and RETURN to exit and confirm setting.

**Energy Interval:** *only available on non-circ systems.* With ENERGY INTERVAL highlighted press MENU to enter ENERGY INTERVAL setting. Use UP/DOWN to select the desired minutes setting and RETURN to exit and confirm.

**Silent Time:** *only available on non-circ systems.* Set up time for no polling. With SILENT TIME highlighted press MENU to enter SILENT TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to exit and confirm setting.

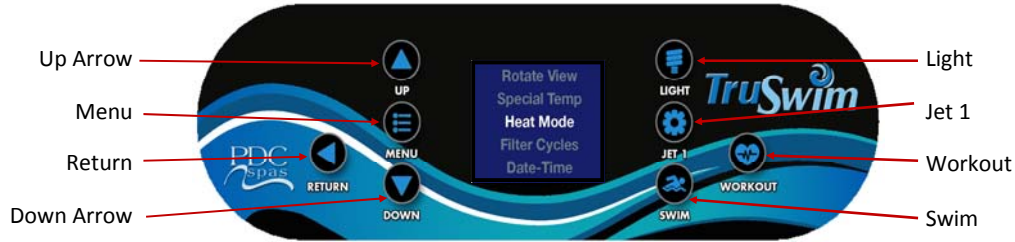
**Cleaner Cycle:** *only available on non-circ systems.* To turn on filtration after using the spa for short cleaning period. With CLEANER CYCLE highlight press MENU to enter and select a specific duration. Use UP/DOWN to select the desired time setting. Press MENU again to navigate to EXIT/START/ Select the desired option and RETURN to exit and confirm.

**Error Codes**

<p><b>Plumbing Error</b></p>  <p>Press RETURN to clear</p>	<p>Error caused when SENSOR 1 and SENSOR 2 have been plugged in incorrectly. Swap the SENSOR 1 and SENSOR 2 plug in controller to correct this problem.</p>	<p><b>Sensor 1 open</b></p>  <p>Press RETURN to clear</p>
<p><b>Insufficient Flow</b></p>  <p>Press RETURN to clear</p>	<p>Error caused by no water flow through heater or no water in heater. Check to be sure there is enough water flow through heater.</p>	<p><b>Sensor 1 short</b></p>  <p>Press RETURN to clear</p>
<p><b>Low Flow</b></p>  <p>Press RETURN to clear</p>	<p>Check to be sure there is enough water flow through heater.</p>	<p><b>Sensor 2 open</b></p>  <p>Press RETURN to clear</p>
<p><b>Water Overheat</b></p>  <p>Press RETURN to clear</p>	<p>Wait for water temperature to cool down.</p>	<p><b>Sensor 2 short</b></p>  <p>Press RETURN to clear</p>
<p><b>Heater Overheat</b></p>  <p>Press RETURN to clear</p>	<p>Wait for water temperature to cool down. Check to be sure there is enough water flow through heater.</p>	<p><b>Sensor 3 open</b></p>  <p>Press RETURN to clear</p>
<p><b>Potential Freeze</b></p>  <p>Press RETURN to clear</p>	<p>Error caused when SENSOR 1,2, or 3 detects low temperature. All JETS and BLOWERS will turn on automatically to protect plumbing from freezing. JETS and BLOWERS will shut down when all 3 SENSORS reach a desired temperature.</p>	<p><b>Sensor 3 short</b></p>  <p>Press RETURN to clear</p>

continued next page

**WARNING:** Read all instructions before using the spa. PDC Spas, PDC International assumes no responsibility for personal injury or property damage sustained by or through the use of this product. When installing and using this equipment basic safety precautions should always be taken to reduce risk of electrical shock, ensure safe usage, and safeguard the user’s health.



**UP ARROW & DOWN ARROW KEY**

These keys adjust the temperature and navigate through the menu screens.

**MENU KEY**

This key will allow you to enter the menu.

**RETURN KEY**

The return key will take you back to the previous screen

**LIGHT KEY**

This key turns the light on / off.

**JETS 1 KEY**

The first press of this key will turn pump 1 on to low speed. Pressing this key a second time will activate high speed (If the spa is heating or in a filter cycle low speed will already be on. The first press of the key will turn on high speed and pump will not be able to be turned off if the spa is calling for heat).

**SWIM KEY**

This key turns the TruSwim propulsion system on and off.

**WORKOUT KEY**

This key turns the pre-programmed workout on or off.

Below are icons that will be displayed on control screen depending on the component or option selected.

**Selection Icons**

**FILTER CYCLE 1**

**FILTER CYCLE 2**

**FILTER CYCLE 3**

**FILTER CYCLE 4**

**LIGHT ON**

**HEATER ON**

**ENERGY SAVING HEAT MODE**

**VACATION HEAT MODE**

**CLEANER CYCLE**

**POLLING CYCLE**

**TEMPERATURE LOCK**

**PANEL LOCK**

**OZONE ON**

**JET ON LOW SPEED**

**JET ON HIGH SPEED**

**SPECIAL TEMP SELECT**

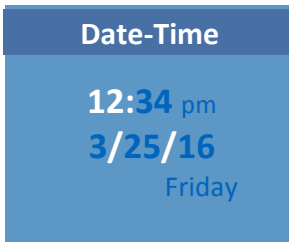
**WORKOUT**

**SWIM**



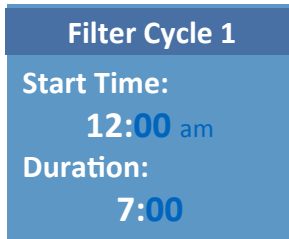
### Priming Mode

When power is ON, the system will enter a priming mode with priming screen display on the panel. In this mode, all devices such as JETS, or LIGHT are operable. JETS can be turned on and off to prime the pump. System will exit priming mode and go to MAIN display when RETURN button is pushed, or after 4 minutes of inactivity.



### Setting the Time and Date

To set the time press the menu button. Use the down arrow until Date-Time is highlighted then press menu again. The hour will be highlighted first, use the up or down arrow key to change the hour to the correct hour. Press the menu key again to highlight the minutes and again, use the arrow key to change to the correct minute. Press the menu key again to highlight the month, then use the up or down arrow key to change to the correct month. Press the menu key again to highlight the day, then use the up or down arrow key to change to the correct date of the current month. Press the menu key again to highlight the year, then use the up or down arrow key to change to the correct year. Press the menu key again to highlight the day of the week, then use the up or down arrow key to change to the correct day of the week. Once the time and date are correct, press the return key to return to the menu and, again, to return to the main screen.



### Setting the Filter Cycle

To set the filter cycle press the menu button. Use the down arrow until Filter Cycles is highlighted. There are 4 programmable filter cycles. A minimum of 8 hours is needed for the ozonator to be effective. Use of all 4 filter cycles is not needed but it will allow you greater control of the filter time each day. Once Filter Cycles is selected in the main menu screen, Filter Cycle 1 is highlighted press the menu key to enter Filter Cycle 1. The start time hour will be highlighted use the up or down arrow key to adjust to the desired hour. Press the menu key again to move to minutes, again, use the up or down arrow key to adjust to the desired minute. Press the menu key again to move to am/pm use the up or down arrow key to select the desired selection. Press the menu key again to set the number of hours of duration using the up or down arrow keys. The duration is the amount of hours the spa will filter during Filter Cycle 1. Press the menu key again to set the minutes of duration using the up or down arrow keys. Press the return key to return to the filter cycles menu. If desired, repeat above directions to program more filter cycles. When finished, press return to go back to the menu and return again to go back to the main screen.



### Setting Temperature

To change water set temperature, use UP and DOWN buttons to set the desired temperature. The screen will display "SET TEMP" with the current set temperature. After 5 seconds without any change to the set temperature, the screen will reverse back to the MAIN screen with current water temperature display. Changing set temperature will make the heater and pump turn on to get accurate water temperature and determine if water needs to be heated.

### Panel Timeout

If user is in Setting Menus and no button is pushed within 15 seconds, the screen will timeout, current screen setting will be lost and panel reverts back to MAIN screen.

In MAIN screen, if no button is pushed within 60 minutes, all LED and LCD lights will turn off and panel goes to sleep. Any button pushed in this time will wake the panel up, LED and LCD lights will turn back on and panel will poll for water temperature.

### Swim Button



1. Press the SWIM button to turn the pump ON—the blue SWIM icon on the LCD screen turns ON the propulsion system at 5%.

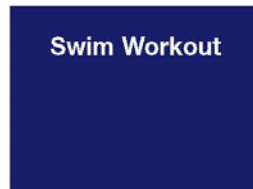


2. Then press UP or DOWN button to select your desired SPEED % between 5% and 100%. The duration is preset to 20 minutes. Allow system to reach set point before readjusting.

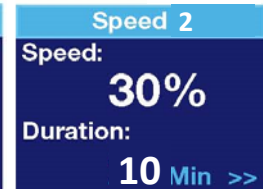


3. Press the SWIM button again to turn OFF the pump (the pump will continue to run until re-setting to 5% then turns off) the blue SWIM icon on the LCD screen turns off.

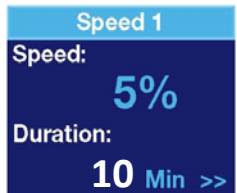
### Workout Button



1. To program the SWIM WORKOUT; press the MENU button; then up button and select SWIM WORKOUT by pressing the MENU button to get to the SPEED 1 setting.



2. Press the UP or DOWN button to select the SPEED % (between 5% and 100%) for SPEED 1; then press the MENU button to select DURATION in minutes up to 10 minutes; then press the MENU button twice to get to SPEED 2.



3. Press the UP or DOWN button to select the SPEED % for SPEED 2, then press the MENU button to select DURATION in minutes up to 10 minutes, then press MENU button twice to get to SPEED 3.



4. Press the UP or DOWN button to select the SPEED % for SPEED 3; then press the MENU button to select DURATION in minutes, up to 10 minutes, then press the MENU button twice to get out of SPEED 4. Repeat this step for up to 10 settings.

5. Press the UP or DOWN button to select the speed for SPEED 4; then press the MENU button to select DURATION in minutes, up to 10 minutes; then press the RETURN button twice to get out of the SWIM WORKOUT screen.

6. Press the SWIM WORKOUT button to turn ON the pump, the red SWIM icon on the LCD screen turns ON. The WORKOUT feature will activate to cycle each of the SPEED setting and specific DURATION setting for WORKOUT. If you need to increase or decrease pump speed manually, press the UP or DOWN button to your desired SPEED % in each cycle.

7. Press the SWIM WORKOUT button again at any time, to turn OFF the pump—the red SWIM icon on the LCD screen turns OFF.

At the end of the programmed workout, the red icon on the LCD screen and pump turn off.

## Setting Screens

**Rotate View:** rotate the view 180°, the UP and DOWN button also swap when rotated. With ROTATE VIEW highlighted press MENU to enter ROTATE VIEW setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.

**Special Temp:** *only available for authorized technicians*

**Heat Mode:** select STANDARD heating mode for most users or ENERGY SAVING mode (reduces polling water temperature) or VACATION mode (set temp set to 50°F). With HEAT MODE highlighted press MENU to enter HEAT mode setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.

**Filter Cycles:** set up filter cycle start time, duration and date for filtering the spa. For FILTER CYCLE 1 and 2, if duration is set to zero the system will do a purge cycle at the start time setting. With FILTER CYCLE highlighted press MENU to enter FILTER CYCLE 1,2,3,or 4 setting. Select a FILTER CYCLE and press MENU again to enter TIME/DURATION setting screen. In this screen, press MENU to move between HOURS, MINUTES and DAYS setting; UP/DOWN to change values, RETURN to exit and confirm setting.

**Date-Time:** set up date and time for spa. With DATE-TIME highlighted press MENU to enter DATE-TIME setting. In his screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to exit and confirm the setting.

**Degree F/C:** displays spa temperature in Celsius or Fahrenheit. This option is only available for 60HZ countries and automatically displays Celsius for 50HZ. With DEGREE F/C highlighted press MENU to enter DEGREE F/C setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Time Display:** display spa time in AM/PM or 24 hours time. With TIME DISPLAY highlighted press MENU to enter TIME DISPLAY setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm setting.

**Devices Timeout:** *only available for authorized technicians*

**Panel Lock:** locks all panel buttons except MENU button. With PANEL LOCK highlighted press MENU to enter PANEL LOCK setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Temp Lock:** locks TEMPERATURE setting with UP/DOWN buttons. With TEMP LOCK highlighted press MENU to enter TEMP LOCK setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Service Mode:** *only available for authorized technicians*

**Demo Mode:** to demonstrate all device capabilities of the spa. With DEMO MODE highlighted press MENU to enter MODE setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**General Information:** displays general information of the spa. With GENERAL INFORMATION highlighted press MENU to enter GENERAL INFORMATION menu. Use UP/DOWN to view different pages and information and RETURN to exit and confirm.

**Languages:** to select various languages for spa display. With LANGUAGES highlighted press MENU to enter and select a specific language. Use UP/DOWN to select the desired setting and RETURN to exit and confirm.

**Serenity Mode:** to turn off all outputs and provide a quiet time setting. With SERENITY MODE highlighted press MENU to enter and select a specific time. Use UP/DOWN to select the desire time setting. Press MENU again to navigate to EXIT/START. Select the desired option and RETURN to exit and confirm setting.

**Energy Interval:** *only available on non-circ systems.* With ENERGY INTERVAL highlighted press MENU to enter ENERGY INTERVAL setting. Use UP/DOWN to select the desired minutes setting and RETURN to exit and confirm.

**Silent Time:** *only available on non-circ systems.* Set up time for no polling. With SILENT TIME highlighted press MENU to enter SILENT TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to exit and confirm setting.

**Cleaner Cycle:** *only available on non-circ systems.* To turn on filtration after using the spa for short cleaning period. With CLEANER CYCLE highlight press MENU to enter and select a specific duration. Use UP/DOWN to select the desired time setting. Press MENU again to navigate to EXIT/START/ Select the desired option and RETURN to exit and confirm.



**Error Codes**

**Plumbing Error**

Press RETURN to clear

Error caused when SENSOR 1 and SENSOR 2 have been plugged in incorrectly. Swap the SENSOR 1 and SENSOR 2 plug in controller to correct this problem.

Clean filter.  
Check SENSOR 1 connection.  
Clean filter, check jets in "on" position and valve open.

**Sensor 1 open**

Press RETURN to clear

**Insufficient Flow**

Press RETURN to clear

Error caused by no water flow through heater or no water in heater. Check to be sure there is enough water flow through heater.

Clean filter.  
Check SENSOR 1 connection or replace SENSOR 1.  
Clean filter, check jets in "on" position and valve open.

**Sensor 1 short**

Press RETURN to clear

**Low Flow**

Press RETURN to clear

Check to be sure there is enough water flow through heater.

Clean filter.  
Check SENSOR 2 connection.  
Clean filter, check jets in "on" position and valve open.

**Sensor 2 open**

Press RETURN to clear

**Water Overheat**

Press RETURN to clear

Wait for water temperature to cool down.

Check SENSOR 2 connection or replace SENSOR 2.

**Sensor 2 short**

Press RETURN to clear

**Heater Overheat**

Press RETURN to clear

Wait for water temperature to cool down. Check to be sure there is enough water flow through heater.

Clean filter.  
Check SENSOR 3 connection.

**Sensor 3 open**

Press RETURN to clear

**Potential Freeze**

Press RETURN to clear

Error caused when SENSOR 1,2, or 3 detects low temperature. All JETS and BLOWERS will turn on automatically to protect plumbing from freezing. JETS and BLOWERS will shut down when all 3 SENSORS reach a desired temperature.

Check SENSOR 3 connection or replace SENSOR 3.

**Sensor 3 short**

Press RETURN to clear