4220/6220 - ERROR MESSAGES

To assist the user in identifying problems with the spa, the system will display an error message. These messages will be helpful when communicating with your local dealer or qualified technician if a problem should arise.

PRESSURE or FLOW SWITCH ACTIVATED - This error will be displayed only when the pump is not activated. Cycle the pump through Low & High speeds then off. If the error does not clear this is an indication that the pressure or flow switch is activated with no water flow.

Contact your local spa dealer

PRESSURE or FLOW SWITCH NOT ACTIVATED - This error will be displayed while the is pump running. Cycle the pump through Low & High speeds. If the error does not clear this is an indication that the pressure or flow switch has not activated although there is water flow.

Contact your local spa dealer

TEMPERATURE SENSOR MALFUNCTION - This error will occur when a problem with the temperature sensor exists. This error may also occur if the system is activated while the water temperature is below 35°F.

Contact your local spa dealer

OVERHEAT or HIGH-LIMIT PROTECTION - There are three(3) stages of over-temperture:

1 - The spa water has exceeded 112°F. The heater, pump and accessory will be deactivated until the water cools to 109°F. *Be sure to check the actual water temperature with an accurate thermometer.*

2 - The spa water has exceeded 119°F. The heater will deactivate while the pump and accessory will still operate. The blower (if equipped) can be activated to help cool the water. **WATER MUST BE BELOW 119°F AND POWER MUST BE RESET TO CLEAR THE "HL" ERROR**

A dirty spa filter can also cause a restricted flow of water, be sure the filter is cleaned regularly and ensure all water shutoff valves are open.

If the system has been operating normally until now, the pump may be overheating the spa. Refer to "Programing Filtration" on page X and reduce the duration and/or number of cycles per day.

3 - If you've eliminated items 1 & 2 as problems, the high-limit sensor may have malfunctioned.

Contact your local spa dealer

FREEZE PROTECTION - There are two(2) levels of freeze protection integrated into the system.

1 - SMART WINTER MODE, this mode will activate any time the temperature falls below 59°F. This mode will be active for a period of 24-hours. In this mode, if a pump has not been activated in the last 2 hours, the system will automatically turn it on for 1-minute to prevent freezing. The "Filter Cycle" indicator will illuminate while this mode is active.

2 - If the spa water temperature drops below 49°F, the heater & pump will be activated until the water temperature reaches 50°F. **While freeze protection is active no other functions will be possible.**

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FIX FOR YOUR SPA

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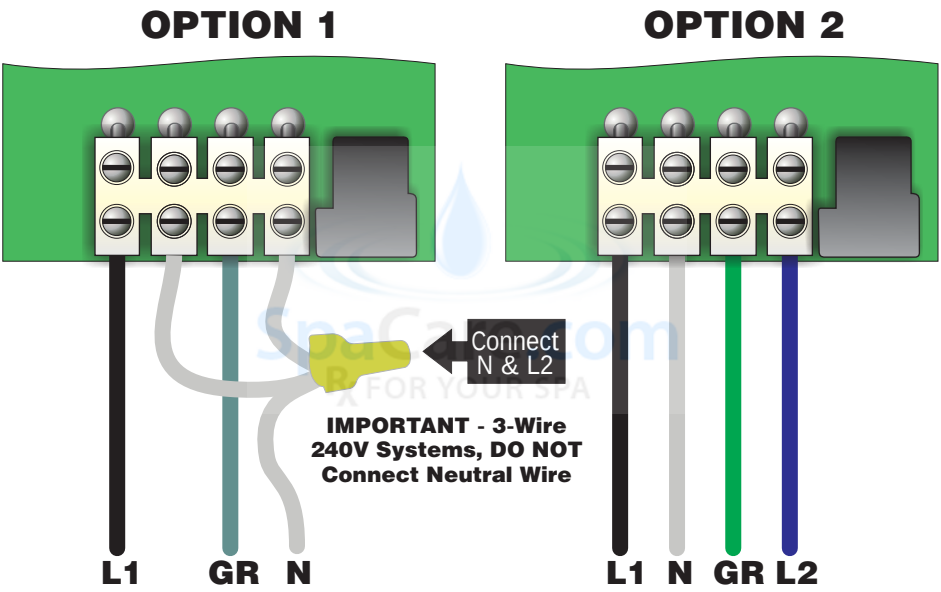
4220/6220 VOLTAGE CONNECTION



120-VOLT ELECTRICAL SERVICE REQUIREMENTS:

Line 1, Neutral and Ground.

Note: For 120V operation Neutral & Line 2 MUST be connected for system to operate properly.

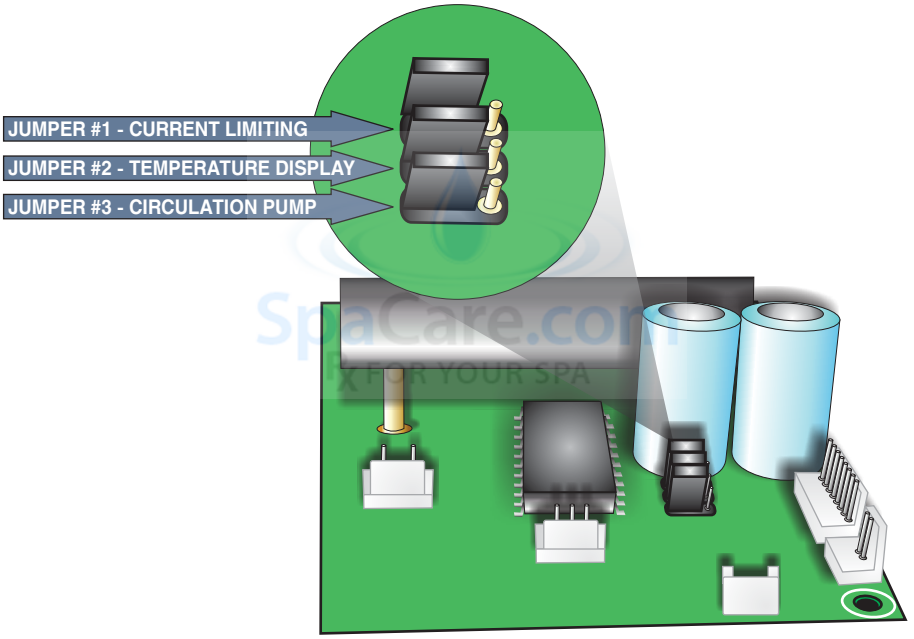
240-VOLT ELECTRICAL SERVICE REQUIREMENTS:

Line 1, Line 2, Neutral and Ground.

IMPORTANT: Always refer to the product data label (located on top of control box) for specific electrical information.

4220/6220 LOW LEVEL PROGRAMMING

It is possible to change the parameters of the system by positioning specific jumpers located on the system board (see illustration below).



JUMPER 1 = Current Limiting:

Position 1 - *(High Current 240vac): There is no current restriction. This allows the heater to operate with the pump in high speed.*

Position 2 - *(Low Current 120vac): The system will not turn the heater on when the pump is in high speed. The heater indicator will flash on the spaside to tell the user that there is a call for heat but the heater is not allowed to start.*

JUMPER 2 = Temperature Display:

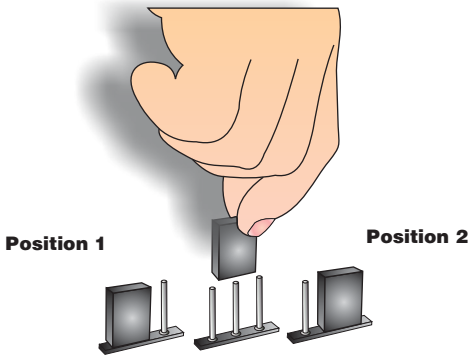
Position 1 - *Fahrenheit Degrees*

Position 2 - *Celsius Degrees*

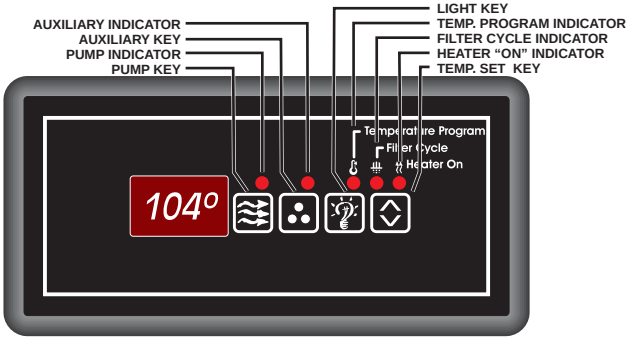
JUMPER 3 = Pump Configuration:

Position 1 - Two Pump

Position 2 - One Pump



4220/6220 - BASIC OPERATION



Pump Key: *Press this key once to turn Pump on. A second press will turn it off. For dual speed pump operation; Press this key once to turn Pump onto Low speed, press this key a second time to turn Pump onto High speed, a third press will turn the pump off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump indicator will illuminate while the pump is running in High speed and flash while it is in Low speed. If the Filter Cycle indicator is illuminated , a filtration cycle has begun and you will not be able to turn the pump off.*

Accessory Key: *Press this key once to turn Accessory on, a second press will turn Accessory off. A built-in timer will shut the accessory off after 20 minutes of operation unless done so manually. The Accessory indicator will illuminate while the accessory is running on.*

Light/Enter Key: *Press this key to turn the light on, a second press will turn the light off. If equipped with Fiber Optic: Press this key once to show "L1". Use the Up/Down Arrow key to turn the light onto High, Low and Off. Press the light key a second time, "F1" will appear. Use the Up/Down Arrow key to turn the Fiber Optic wheel and light on, Fiber Optic wheel off with light on and both Off. The light will automatically shut off after 2 hours.*

Temperature Set Key: *Press the Up/Down Arrow key to increase the desired temperature, release and press again to decrease the desired temperature. The temperature can be adjusted in 1°F increments from 59°F to 104°F (5°C to 40°C). The new setting will remain on the display for 5 seconds as a confirmation. During this time the Temperature Program indicator will be illuminated to let you know this is the desired and not the actual temperature. After 5 seconds the display will return to the current temperature reading. When the temperature drops to 1°F below the set temperature, the heater will be turned on until the temperature is 1°F above the set temperature. The Heater "On" indicator will illuminate while the heater is on and flash when there is a call for heat and the heater has not yet been activated.*

Power Loss: *Any interruption of power will cause the unit to reset and revert to the default programming of 100°F set point temperature and 2, 2-hour filtration cycles.*

Note: Your system may be equipped with "memory". If so, upon power loss, all programmed settings will be saved.

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