

# ELECTRICAL REQUIREMENTS

## SELECTING THE VOLTAGE FOR YOUR SPA

The Pace™, Stride™, SX and TX operates on 115 volts 20 amp (15 amp for TX) 60 Hz. These models can also be converted to either 115 volt 30 amp or 230 volt 50 amp. The Relay® and Rhythm® models require a dedicated 230 volt power supply. When the Pace, Stride, SX or TX is connected to 115 volts 15 or 20 amp, the heater will provide approximately 1000 watts of heat only when the pump is operating in LOW speed and the thermostat is calling for heat. When the Pace, Stride, SX or TX spa is connected to 115 volts 30 amp, the heater will provide approximately 1000 watts of heat when the pump is operating in LOW or HIGH speed and the thermostat is calling for heat. When the Pace, Stride, SX or TX is connected to 230 volts 50 amps, the heater will provide approximately 4000 watts of heat when the pump is operating in LOW or HIGH speed and the thermostat is calling for heat.

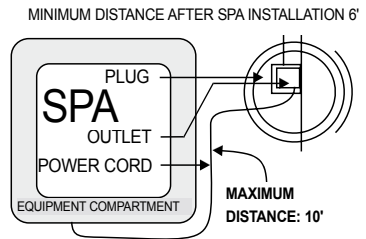
All electrical connections must be made in accordance with the wiring information contained in the electrical control box or on the back of the field wiring access panel of the equipment module.

## STANDARD, CORD-CONNECTED 115 VOLT 15 OR 20 AMP CONFIGURATION

For your safety, if you are having an electrician install an electric outlet for the spa it should be no closer than 6 feet (1.8 m) and no further than 10 feet (3 m) from the spa. [Reference National Electrical Code].

One GFCI is used in the cord-connected 20 amp configuration. The GFCI module is located at the end of the power cord. To test the GFCI, simply press the TEST button. The GFCI should trip to the “off” position, disconnecting power to the spa. To reset the GFCI, press the RESET button. The GFCI should reset, and power should be restored to the spa. If the GFCI does not function in this way, unplug the cord and contact an authorized Hot Spring spa service technician.

**NOTE:** Consult your local code authority to determine if an electrical outlet with a cover is required for your installation. If it is, a suitable outlet cover may be purchased from your authorized Hot Spot dealer.



## 115 VOLT 20 AMP ELECTRICAL REQUIREMENTS

The Pace, Stride and SX spa models must be connected to a 115 volt, 20 amp grounded circuit. A dedicated circuit is required; the term “dedicated” means the electrical circuit is not being used for any other high-load electrical items (patio lights, appliances, garage circuits, etc.). If the spa is connected to a non-dedicated circuit, overloading will result in “nuisance tripping” of the internal fuses or of the breaker switch at the house electrical breaker panel.

The circuit must be properly wired; that is, it must have the following:

- Standard (cord-connected) 115 volt 20 amp (Pace, Stride & SX models) – A minimum 20 amp GFCI circuit breaker in the house panel, #12 AWG or larger wire (including the ground wire) and the correct polarity throughout the circuit.

In addition to the dedicated 20 amp, 115 volt GFCI protected circuit, your spa requires a 20 amp single receptacle. This receptacle, which contains an outdoor-rated, weather-resistant receptacle cover plate, will be provided to you. The single receptacle and cover plate should be installed by your electrician prior to the delivery of your spa.

A pressure wire connector is provided on the exterior surface of the spa’s electrical control box, located inside the equipment compartment. This is to permit the connection of a bonding ground wire between this point and any metal equipment, enclosures, pipe or conduit within five feet of the spa (if needed to comply with local building code requirements). The bonding wire must be at least a #8 AWG copper wire.

### NEVER CONNECT THE SPA TO AN EXTENSION CORD!

Each Pace, Stride, SX and TX spa comes equipped with approximately 15 feet (4.5 m) of usable power cord (this is the maximum length allowed by regulatory standards and the National Electric Code). The power cord is stored for shipping inside the spa. To remove the power cord, open the equipment compartment and locate the cord. Carefully

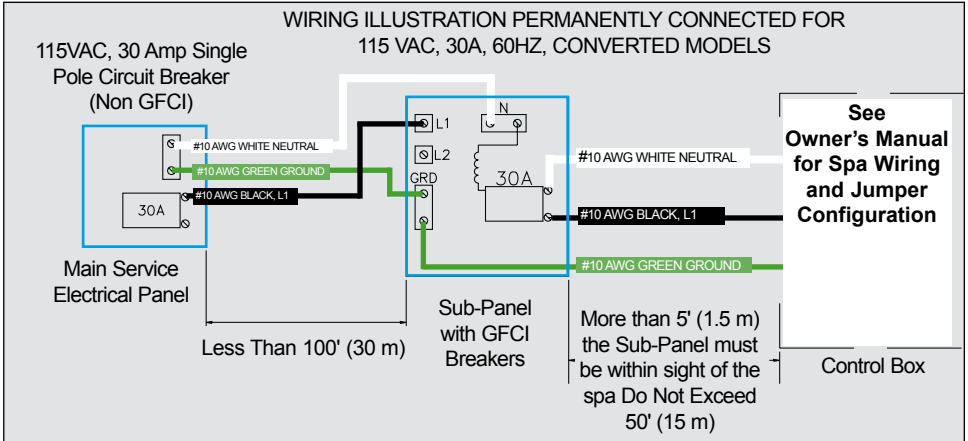
pull the cord out of the equipment compartment to the desired length and place in center cutout .

**NOTE:** Canadian regulations prevent Pace™, Stride and SX spas to come with a power cord and are require to be wired directly to the power source. Use Canadian Electrical Codes for electrical installation.

## 115 VOLT 30 AMP CONVERSION (PACE, STRIDE, SX & TX SPAS)

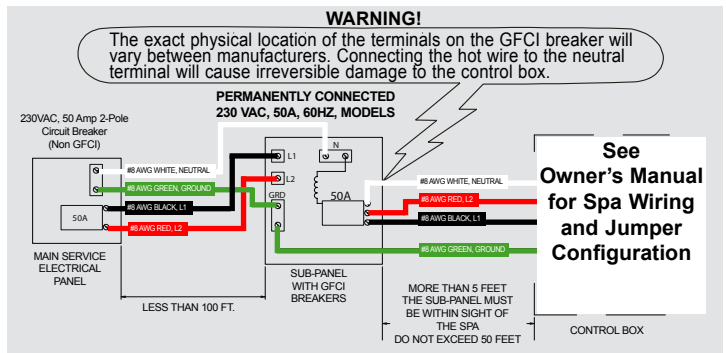
To ensure you will have an opportunity to use your spa soon after delivery, it is very important that the required electrical service has been installed. Unless otherwise stipulated by your dealer, **THIS IS YOUR RESPONSIBILITY.**

**IMPORTANT:** All electrical circuits must be installed by a qualified, licensed electrician.



## 230 VOLT INSTALLATION (RELAY® & RHYTHM® AND OPTIONAL PACE, STRIDE, SX AND TX CONVERTED SPA MODEL)

Your spa contains a control box designed to operate at 230V, 60Hz. Installation of a 50 amp. dedicated circuit is required for Relay & Rhythm spas and optional for the other spa models. The control box must be hard wired directly to a subpanel protected by a Ground Fault Circuit Interrupter (GFCI). The subpanel containing GFCI breakers is included with the Relay & Rhythm spa models only. Purchase the subpanel from you dealer for the converted models when converting to 230 volts.



**IMPORTANT NOTE:** All electrical connections to the control box must be accomplished by a qualified electrician in accordance with the National Electrical Code and in accordance with any local electrical codes in effect at the time and place of installation.

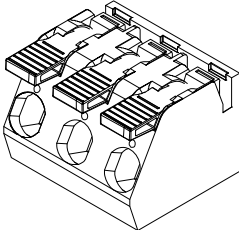
All electrical connections must be made in accordance with the wiring information contained in this manual and on the back of the field wiring access panel of the control box. A licensed electrician should install a four-wire electrical service (two line voltages, one neutral, one ground) from the main electrical service panel to the subpanel.

Your electrician should mount the subpanel in the vicinity of the spa but it should not be closer than five feet (1.5 m) from the spa water edge.

**INSTALLATION NOTE:** After the spa has been installed, your electrician can connect the conduit from the subpanel to the spa's control box and then complete the wiring connections in the control box. **NOTE:** Complete step-by-step Installation and Wiring Instructions for all models are included in the Owner's Manual.

**WARNING:** Removing or bypassing the GFCI breakers in the subpanel at any time will result in an unsafe spa and will void the warranty.

### How to Install Power Wires into TB



**NOTE:** Install Ground into single lug below terminal block



<p><b>1.</b></p> <p>Strip wire insulation back 1/2" (12.5 mm)</p>	<p><b>2.</b></p> <p>Open Terminal Block by lifting lever to the UP position</p>
<p><b>3.</b></p> <p>Insert wire fully into Terminal Block</p>	<p><b>4.</b></p> <p>Close Terminal Block by lowering lever to the DOWN position <b>IMPORTANT:</b> Lever must be in the FULL DOWN position to Lock wire</p>
<p><b>5.</b></p> <p>Repeat steps 1-4 to add additional wires.</p>	