Jacuzzi®

PRE-DELIVERY GUIDE

How to make the delivery and installation of your new hot tub fast, easy, and trouble-free

Important Pre-Delivery Information

Please read this booklet before your scheduled delivery day.

Record your spa information below and then store this booklet in a place you can easily find it. If service is required, your dealer will ask for these details.

Spa Model	_____
Spa Serial Number	_____
Date Purchased	_____
Date Installed	_____
Spa Dealer's Name	_____
Spa Dealer's Phone #	_____
Spa Dealer's Address	_____

Consult your local state or city building ordinances to ensure installation is in accordance with local codes. The spa's warranty becomes void if these guidelines are not followed.

Most cities and counties require permits for exterior construction and electrical circuits. In addition, some communities have codes requiring residential barriers such as fencing and/or self-closing gates on the property to prevent unsupervised access to a spa by children. Your Jacuzzi dealer can provide information on which permits may be required and how to obtain them prior to delivery of your spa.

The specifications published in the Spa Dimensions and Specifications section of this book are approximate. Always measure your spa before making critical design or delivery decisions.

Congratulations!

You've purchased a Jacuzzi® hot tub. With a little preparation and care, your spa will give you many years of enjoyment. This booklet has been designed to provide you with all of the information you'll need to ensure a safe, speedy, and trouble-free spa delivery and installation.

Table of Contents

Planning the Best Location for Your Spa 1
- » Suggestions for Outdoor Spa Installation 1
- » Suggestions for Indoor Spa Installation 5

Planning to Move the Spa Into Your Yard 6

Electrical Tasks Before Spa Delivery 8
- » General Electrical System Considerations 8

Electrical Tasks After Spa Delivery 10
- » Important safety information for all spa models 10
- » Power Configurations for Models J-495™ (North America, 60Hz) 11
- » Power Configurations for Models J-435™, J-445™, J-475™, J-485™, J-LX™, and J-LXL™ (North America, 60Hz) 12
- » Equipment Access Consideration for All J-400 & J-LX Models with ProFinish™ Cabinets 13
- » Installing a 3-Wire 240 VAC Connection for Models J-435™, J-445™, J-475™, J-485™, J-495™, J-LX™, and J-LXL™ (North America 60Hz) 14
- » Dip Switch Settings for Models J-LX™, J-LXL™, J-435™, J-445™, J-475™, J-485™, and J-495™ 15
- » 240 VAC Connections for J-435™, J-445™, J-475™, J-485™, J-495™, J-LX™, and J-LXL™ 16
- » Power Configurations for Models J-335™, J-345™, J-355™, J-365™, J-375™, J-385™ (North America, 60Hz) 17
- » Power Configurations for 240V 3-Wire Models J-315™ and J-325™ (North America, 60Hz) 18
- » Equipment Access Consideration for All J-300 Models with ProFinish™ Cabinets 19
- » Installing a 3-Wire 240 VAC Connection for Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™ 20
- » Dip Switch Settings for Dedicated 240V 3-Wire Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™ 21
- » 3-wire 240 VAC Connections for Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™ 22
- » Power Configurations for Convertible Models J-315™, J-325™ (North America, 60Hz) 23
- » Equipment Access Consideration for All J-300 Models with ProFinish™ Cabinets 24
- » Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™ (North America 60Hz) 25
- » Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™ 26
- » Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™ 27
- » Dip Switch Settings for Convertible Models J-315™, J-325™ 28
- » 3-wire 120 VAC Connections for Convertible Models J-315™, J-325™ 29
- » 4-wire 240 VAC Connections for Convertible Models J-315™, J-325™ (North America 60Hz) 30
- » Connection Configuration 120V to 240 VAC Connections side by side for convertible J-315™, J-325™ (North America 60Hz) 31

» Power Configurations for J-285™, J-275™, J-245™, and J-235™ Models (North America 60Hz) 32
» Equipment Access Consideration for All J-200 Models with ProFinish™ Cabinets 33
» Installing a 3-Wire 240 VAC Connection for J-285™, J-275™, J-245™, and J-235™ Models 34
» Dip Switch Settings for J-285™, J-275™, J-245™, and J-235™ Models 35
» 240 VAC Connections for J-285™, J-275™, J-245™, and J-235™ Models (North America 60Hz) 36
» Power Configurations for J-225™ and J-215™ Models (North America 60Hz) 37
» Equipment Access Consideration for All J-200 Models with ProFinish™ Cabinets 38
» Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: J-225™ and J-215™ Models 39
» Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: J-225™ and J-215™ Models 40
» 120 VAC Connections for J-225™ and J-215™ Models (North America 60Hz) 41
» 240 VAC Connections for J-225™ and J-215™ Models (North America 60Hz) 42
» Connection Configuration 120V to 240 VAC Connections side by side for convertible J-225™ and J-215™ Models (North America 60Hz) 43
» Power Configurations for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz) 44
» Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz) 45
» Dip Switch Settings for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz) 47
» 120 VAC Connections for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz) 48
» 240 VAC Connections for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz) 49

Spa Dimensions And Specifications 50
» Useful Details About The Spa 50

Water Capacity And Average Fill Volume 51

Proposition 65 (FOR CALIFORNIA RESIDENTS ONLY)

WARNING: Cancer and Reproductive Harm
www.p65Warnings.ca.gov

Planning the Best Location for Your Spa

Now that you have purchased your hot tub, you need to decide where to install it. Do you want to install it outside or inside? There are many factors to take into consideration when making these location decisions. Answering the questions in this section can help you make the right choices.

Suggestions for Outdoor Spa Installation

Where should I install the spa?

When deciding where to place your spa, it should be:

- Moved away from overhead power lines, Because of the risk of severe injury from electric shock or death from electrocution. A minimum of 10 feet (3 meters) is suggested. See additional safety instructions listed in the owners manual.
- Placed to face a view you enjoy. Do you have a special landscaped area in your yard that you find pleasant?
- Located in an area that gives you the best privacy options. Think of the spa's surroundings during all seasons when making your choice. During cold, winter weather, bare trees won't provide much privacy.
- Locate your spa in a sheltered location to protect yourself from the wind and harsh weather while bathing in your spa. This reduces the cost of spa operation and maintenance.
- Consider locating your spa away from any reflective surface or glass. The heat deflected from such a surface may cause damage to the synthetic cabinet panels.

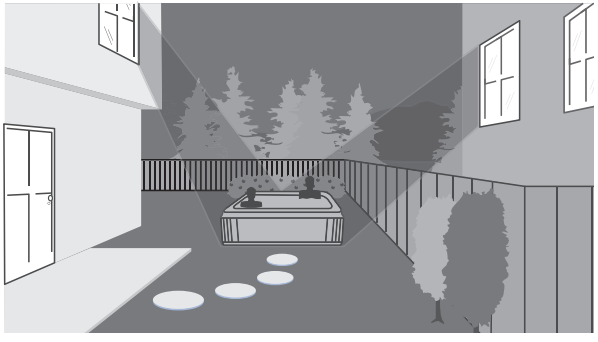


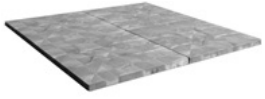
Figure 1 Plan for privacy before the spa is delivered

What kind of foundation is available?

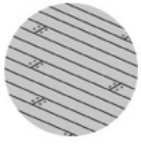
- Because of the combined weight of the spa, water, and bathers, it is extremely important that the base upon which the spa rests can uniformly support this weight without shifting or settling for the entire time the spa is in place. The base should be smooth, flat, and level.

Which is best?

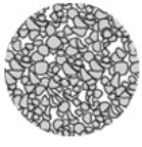
- We suggest the following pads:



Good
Synthetic spa pads can be purchased from your Jacuzzi dealer. These pads can be placed on a smooth, flat, and level surface.



Better
Wood decking with a concrete foundation.



Recommended
Concrete pad (4 in. [10 cm] or thicker). We recommend a poured, reinforced concrete slab with a minimum thickness of 4 in. (10 cm).

- **CAUTION:** When you install the foundation, be sure that water drains away from it. Placing the spa in a depression without provisions for proper drainage could cause rain or any water overflow to flood the equipment and create a wet condition in which the spa would sit.

- **CAUTION: For spas that are to rest on balconies, roofs or other platforms not specifically tied into the main structural support, you should consult a professional Structural Engineer with experience in this type of application.**

- **CAUTION:** If the spa is placed on a surface which does not meet these requirements, damage to the cabinet and/or the spa shell may result. Damage caused by an improper foundation is not covered under warranty. It is your responsibility to assure the integrity of the support at all times. Do not shim the spa. For proper support, the spa must sit flat on the intended foundation.

- ⚠ **WARNING: Proper ventilation should be discussed with an Engineer or authority competent enough to understand the necessary provisions needed to vent moist or heated air and air associated with chemical odors outdoors. When the spa is in use considerable amounts of moisture will escape potentially causing mold and mildew, over time this can damage certain surfaces and or surroundings.**

How will I use the spa?

Consider how you intend to use your spa.

If using the spa for …	Then …
Family recreation	Leave plenty of room around the spa for activities and yard furniture.
Relaxation and therapy	Create a quiet and relaxing environment around the spa.

Does the climate I live in make any difference to where I install my spa?

When deciding the best place to install the spa, consider

If your climate is …	Then consider installing …
Cold and snowy in winter and warm in summer	The spa close to the back door or near the pool house for fast access to a warm room
Warm in winter and hot in summer	A patio cover or perhaps a gazebo to provide shade

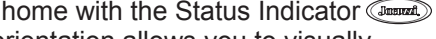
What about spa servicing?

At some time, a service technician may need to access the spa's equipment bay or plumbing components by removing one or all of the side cabinet panels.

To make access easy, create an installation plan that includes the details for removing the side cabinet panels to easily reach the spa's equipment bay and control panel. Depending upon your type of installation, keep in mind that the spa might sometime need to be moved or lifted from the ground. Make sure you provide access to the CLEAR**RAY®** Water Purification System behind the front cabinet panel for yearly bulb replacement.

What other issues should I consider?

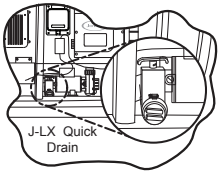
When selecting the ideal outdoor location for your spa, consider these suggestions:

- Keep the pathway to your spa free of debris to prevent dirt and leaves from being tracked into the spa.
- Prevent leaves and bits of plants from dropping in the spa by keeping trees and shrubbery away from the spa.
- For J-400™ Models: We recommend installing the front of your spa facing a window on your home with the Status Indicator  in a direct line-of-sight. This orientation allows you to visually check the Status Indicator in all weather conditions from the comfort of your home. The indicator glows white when all systems are normal, turns red if an error condition exists, or turns off when the spa has no power.

What other issues should I consider?

We recommend installing the spa to permit easy access to the quick-drain port (if equipped) located behind the front/ center cabinet panel on the control panel side of the hot tub.

An included drain hose assembly attaches to this port to provide rapid water removal during scheduled water changes. When draining your spa, always route drain water away from the spa and the foundation of your house into an area capable of absorbing large amounts of water without causing damage to your property. Remember, your spa holds several hundred gallons of water. For this reason, we recommend choosing a location that drains directly to the street curb whenever possible.



Suggestions for Indoor Spa Installation

If you are installing your spa indoors, take into consideration your answers to the questions below.

What are the issues I need to think about when installing a spa indoors?

When installing a spa indoors, it is extremely important to build into your plan a method of handling any excess water. Consider:

- How should water spills be handled?
- How many drains should be installed?
- What is the best flooring to install near the spa?
- If a leak occurs, can the floor handle the entire contents of the spa?
- Will the furniture and walls around my spa withstand and resist water and moisture?
- What provisions should I make for the ceiling and structures that may be below the spa.

What do I need to know about installing a spa on the second floor.

If the spa is being installed on a second story or higher, consult a structural engineer to discuss the best way to support the spa. Special attention is needed to plan for a spa installed on a balcony or roof.

What about spa servicing?

Most spa servicing is performed on the spa equipment that is located behind the side cabinet panels of the spa. It is important to install the spa to allow easy access to the spa equipment. Make sure you provide access to the CLEAR**RAY®** Water Purification System behind the front cabinet panel for yearly bulb replacement.

How can I ventilate the spa area?

When the spa is in use, considerable amounts of moisture/water are present. **Over time, this moisture may cause mold and mildew and damage to certain surfaces and/or surroundings. Proper ventilation should be discussed with an engineer who understands the necessity of venting moist and heated air that is associated with chemical emissions.**

What warranty considerations are important?

Consult your local state or city building ordinances to ensure installation is in accordance with local codes. Any damage caused if you do not follow these guidelines voids the spa's warranty.

Planning to Move the Spa Into Your Yard

Use the information below, on the next page, and in the Spa Dimensions and Specifications chart to plan the delivery of your spa into your yard. The Spa Dimensions and Specifications chart lists your spa model and its dimensions.

Check your spa's dimensions

Check the width of gates, doors, and sidewalks to make sure your spa will pass through unobstructed.

During delivery, the spa must remain on the delivery cart at all times. You may have to remove a gate or part of a fence to allow an unobstructed passageway to the installation location.
Note: To prevent damage to the panels and acrylic, if possible, leave the packaging on until the spa is in place.

⚠ **CAUTION:** Special care must be taken to prevent damage the cabinet during delivery. All cabinet panels must be removed during delivery, then reinstalled after the spa is resting on the pad. *Note: A delivery video is available for all authorized dealers through our dealer support web site.*

Plan the delivery route

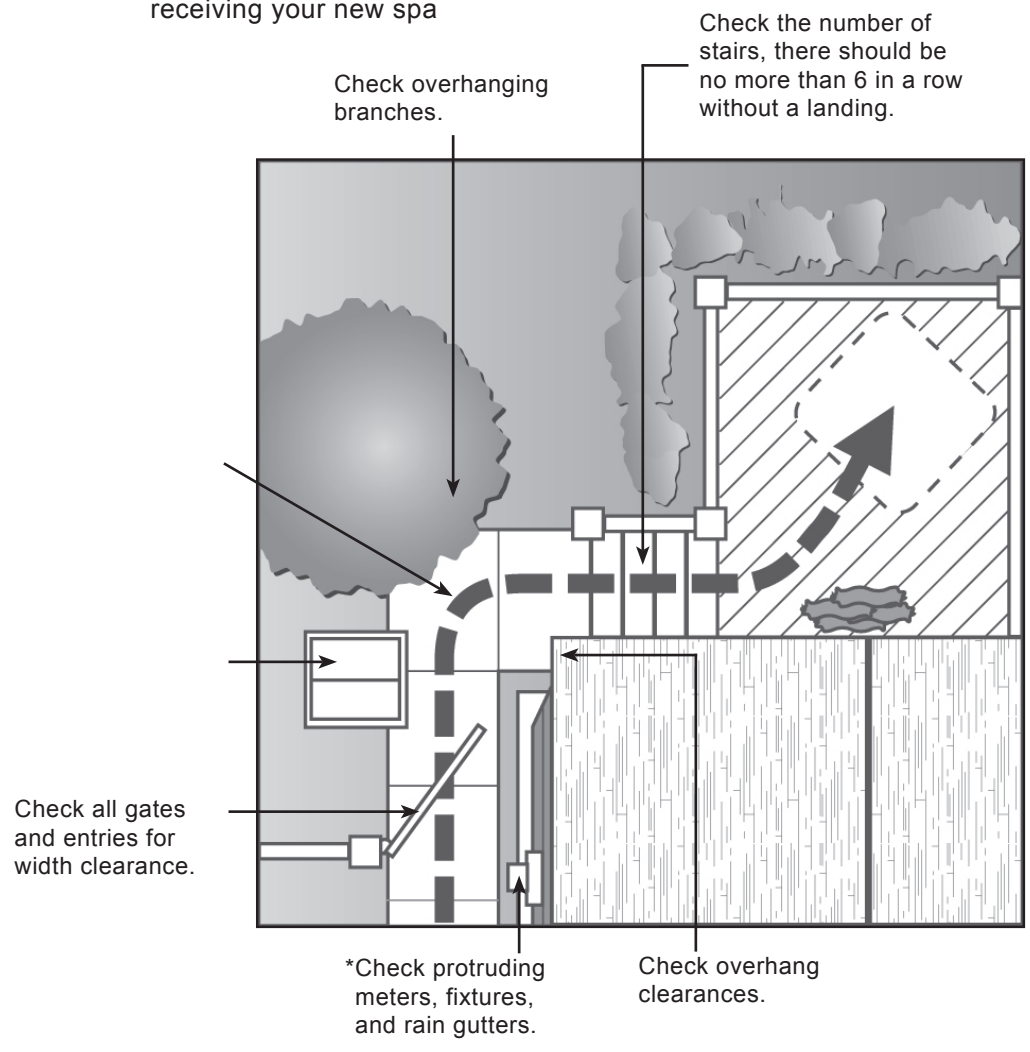
After referring to Figure 2, plan your spa's delivery route into your yard. Check off each item on the checklist below to verify your plans.

- If the delivery route requires a 90° turn, check the measurements at the turn to ensure the spa will fit.
- Are there protruding gas or water meters, or A/C units obstructing the delivery path to your yard? You must make sure that the spa has a clear unobstructed route and will not strike any objects on the path, therefore creating a detectable or non-detectable leak or damage.
- Are there low roof eaves, overhanging branches, or rain gutters that could be an obstruction to overhead clearance?
- Are there more than 6 consecutive stairs without a landing in your delivery route? If so, you must consult your Jacuzzi dealer prior to delivery to make adequate preparations.

Use a crane

The use of a crane for delivery and installation is sometimes necessary. It is used primarily to avoid damage to your spa, your property, or to delivery personnel. Your authorized Jacuzzi dealer may be able to assist you with the arrangements. If your spa delivery requires the use of a crane, the cost of a crane is not included in standard delivery service.

Figure 2 Check for obstacles in the delivery route BEFORE receiving your new spa



***CAUTION:** You must make sure that the spa has a clear unobstructed route and will not strike any objects on the path, therefore creating a detectable or non-detectable leak or damage.

General Electrical System Considerations

Before the installation of your spa begins, check with the local building department to ensure this installation conforms to local building codes.

Important

When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

DANGER: TO DECREASE THE RISK OF SHOCK, PRODUCT DAMAGE OR ELECTRICAL FIRE. Never use an extension cord of any kind. Using an extension cord can damage the spa equipment and void your warranty.

The Jacuzzi J-215™, J-225™, Convertible J-315™, Convertible J-325™, Echo™, Mood™, and Soul™ North American models include a 10 foot GFCI cord for plug-in 120V operation. Connect this cord directly to a dedicated/grounded wall outlet. When a power cord over 10 ft. is required, the spas must be hard wired in accordance with state and local codes.

Before the scheduled arrival of your spa it is necessary to set up the electrical components of the hot tub. Use the checklist below to prepare for the spa installation.

◊ Prepare the electrical connection for your spa based on one of the configurations listed below. If necessary, refer to the Power Configuration tables for additional information by model.

If installing a spa that is...	Then it must be...
240V (North America)	Hard wired to the power supply.
120V (North America)	Plugged into a dedicated grounded outlet using the 10' GFCI cord supplied with the spa. Hard wire for over 10' run or 4-wire 120V/240V application.

To Keep Warranty Valid: The manufacturer's warranty becomes void if the spa's electrical connections do not meet the specifications as stated in this document.

◊ Verify the power supplied to the spa is on a dedicated circuit with no other appliances or lights sharing the power.

◊ Verify the electrician has completed the tasks listed below before the spa is delivered. If necessary, find the information requested by looking in the Power Configuration tables.

Task Complete?	Tasks for the electrician
◊	**Select the wire size based on NEC and/or local codes.**
	Note If you use wire larger than #6 (10 mm²), add a junction box near the spa, and reduce the wire to short lengths of #6 (10 mm²) wire between the junction box and the spa.
◊	Determine the length of wire that is needed between the breaker box and the spa based on the wire size and the maximum current draw.
◊	Acquire enough copper wire with THHN insulation to ensure adequate connections. Do not use aluminum wire.

◊ To comply with Section 422-20 of the National Electric Code, ANSI/NFPA 70, the electrical supply for the spa must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors. The means to disconnect the electricity must be readily accessible to the spa's occupant, but installed at least 5 ft. (1.5m) from the spa water. Check with local municipalities for additional code requirements.

◊ As required by NEC Article 680-42, the electrical circuit for the spa must include a suitable ground fault circuit interrupter (GFCI). We recommend Square-D GFCI breakers. The appropriate wiring configuration for your spa appear elsewhere in this document.

◊ This spa is not intended nor designed to be used in a commercial or public application. The spa buyer shall determine whether there are any code restrictions on the use or installation of this spa since local code requirements vary from one locality to another.

Check the tables on the next few pages to match your hot tub model with one of the power configuration options.

Electrical Tasks After Spa Delivery

Important safety information for all spa models

Proper grounding is extremely important. This spa is equipped with a Current Collector system. A pressure securing wire connector is provided on the outside of the load box to permit connection of a bonding wire between the spa and any metal within 5 ft. (1.5m) of the spa. Bonding wire must be at least #8 AWG (8.4 mm^2) solid copper wire.

After the spa is placed in the specified location, the electrician must perform the tasks listed below to complete the electrical installation. Give this information to the electrician when he begins to install your spa.

IMPORTANT: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/ electrical inspector.

Task	Action
1	To gain access to the spa's power terminal strip, remove the spa cabinet panel on the side of the spa under the control panel. After removing the spa cabinet panel, remove the control box cover screws and control box cover.
2	Locate the power supply inlet (front of the spa near the base). Select the inlet you want to use, then feed the power cable through to the control box.
3	Insert the power cable through the large opening provided on the left-side of the control box.
4	Connect the wires, color to color, on the terminal strips and tighten securely. Set the circuit board S1 DIP Switch to match the selected power configuration.
5	To complete the electrical installation, secure the control box door by replacing its screws, then re-install the spa cabinet panel under the control panel.

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for Models J-495™ (North America, 60Hz)

This section describes the power configuration choices (Standard 50 Amp or Alternate 60 Amp) for hot tub models J-495™.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

Important: All of the alternative electrical configurations require a qualified technician to perform a minor system modification. Do not activate 60A power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 50A Configuration** (factory setting) • 240 VAC/50A 3-wire configuration (2 hots and a ground) • 50A dual-pole GFCI circuit breaker (hard wired only) • Electrical current draw of 37A	If the home's electrical system does not have the full 240V/60A power available, the spa may be connected to the standard 240V/50A. In this Standard 50A configuration, the heater will yield the same rapid temperature rise as in 60A operation but **will not operate** when two or more jet pumps are running.
Config. #2	**Alternate 60A Configuration** (Optional setting for maximum heater performance.) • 240 VAC/60A 3-wire configuration (2 hots and a ground) • 60A dual-pole GFCI circuit breaker (hard wired only) • Electrical current draw of 48A	If the home's electrical system has the full 240V/60A power available, the spa may be connected to a 240V/60A power source after a qualified technician performs a minor system modification. In this configuration, the heater **will operate** when any two jets pumps are running but **will not operate** when all three jet pumps are running. This may be preferable for owners of outdoor spas in cold climates because it will help their spas maintain water temperature during use.

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for Models J-435™, J-445™, J-475™, J-485™, J-LX™, and J-LXL™ (North America, 60Hz)

This section describes the power configuration choices (Standard 50 Amp, Alternate 40 Amp or Alternate 60 Amp) for hot tub models J-435™, J-445™, J-475™, J-485™, J-LX™, and J-LXL™.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

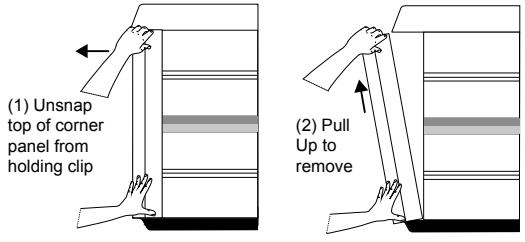
Important: All of the alternative electrical configurations require a qualified technician to perform a minor system modification. Do not activate 40A or 60A power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 50A Configuration** (factory setting) • 240 VAC/50A 3-wire configuration (2 hots and a ground) • 50A dual-pole GFCI circuit breaker (hard wired only) • Electrical current draw of 37A	If the home's electrical system does not have the full 240V/60A power available, the spa may be connected to the standard 240V/50A. In this Standard 50A configuration, the heater will yield the same rapid temperature rise as in 60A operation but **will not operate** while both jet pumps are running.
Config. #2	**Alternate 40A Configuration** (For homes where 240 VAC/50A or 240 VAC/60A power is unavailable.) • 240 VAC/40A 3-wire configuration (2 hots and a ground) • 40A dual-pole GFCI circuit breaker (hard wired only) • Electrical current draw of 26A	If the home's electrical system does not have a 240V/50A or 240V/60A power available, the spa may be connected to a 240V/40A power source after a qualified technician performs a minor system modification. In this configuration, the heater **will not operate** while either jet pump is running.
Config. #3	**Alternate 60A Configuration** (Optional setting for maximum heater performance.) • 240 VAC/60A 3-wire configuration (2 hots and a ground) • 60A dual-pole GFCI circuit breaker (hard wired only) • Electrical current draw of 48A	If the home's electrical system has the full 240V/60A power available, the spa may be connected to a 240V/60A power source after a qualified technician performs a minor system modification. In this configuration, the heater **will operate** while both jet pumps are running. This may be preferable for owners of outdoor spas in cold climates because it will help their spas maintain water temperature during use.

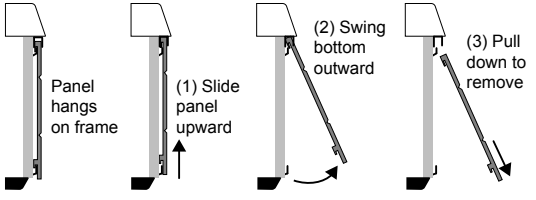
Equipment Access Consideration for All J-400 & J-LX Models with ProFinish™ Cabinets

Remove the corner panels by grabbing the bottom and gently pulling away from the spa to unsnap it from the holding clip. Pull downward to remove the corner panel. Then grab the bottom of the front (or side) cabinet panel and lift upward to remove the panel from the bottom holder. Swing the bottom of the panel outward to clear the upper hanger. This will require approx. 18 inches of access room between the spa and any other structures. Slide the panel downward to remove from the spa.

Corner Panel Removal (Front View)



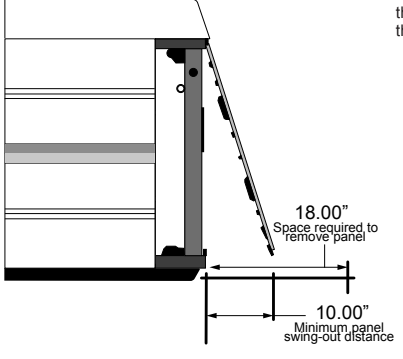
Front / Side Panel Removal (Side View)



Note: The exterior lights on the cabinet panels are connected to the light wires. Take care when removing the corner panels to avoid damaging the wires.

The indicator light is connected to the front panel and needs to be disconnected when removing the panel. See page 13 of the J-400 Owner's manual.

Important Measurements



Installing a 3-Wire 240 VAC Connection for Models J-435™, J-445™, J-475™, J-485™, J-495™, J-LX™, and J-LXL™ (North America 60Hz)

The electrician should look carefully through these diagrams to gather the required information about the electrical tasks for the installation of these spas.

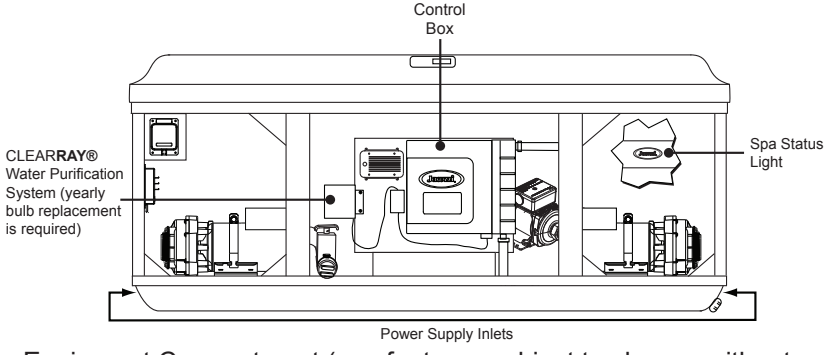
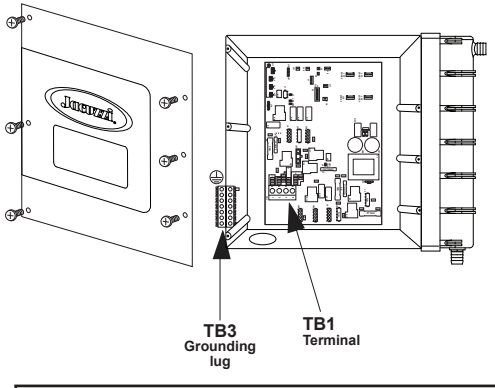


Figure 3 Spa Equipment Compartment (spa features subject to change without notice)

Figure 4 Control Box for 3-Wire, 240 VAC Connection (Hard-wired connections only)

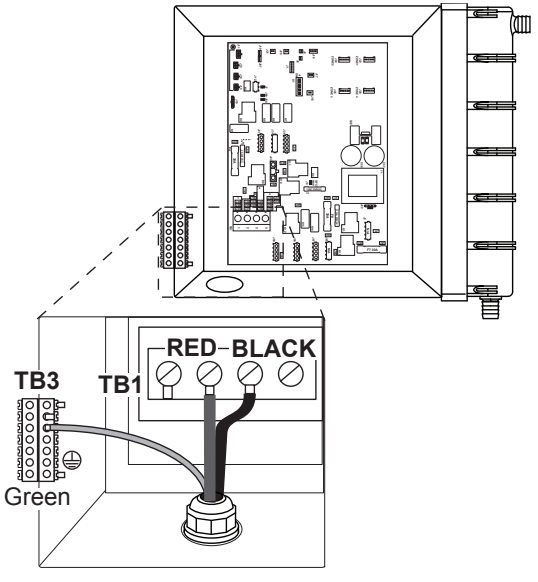


FOR 2 OR 3 SERVICE SEE WIRE DIAGRAM

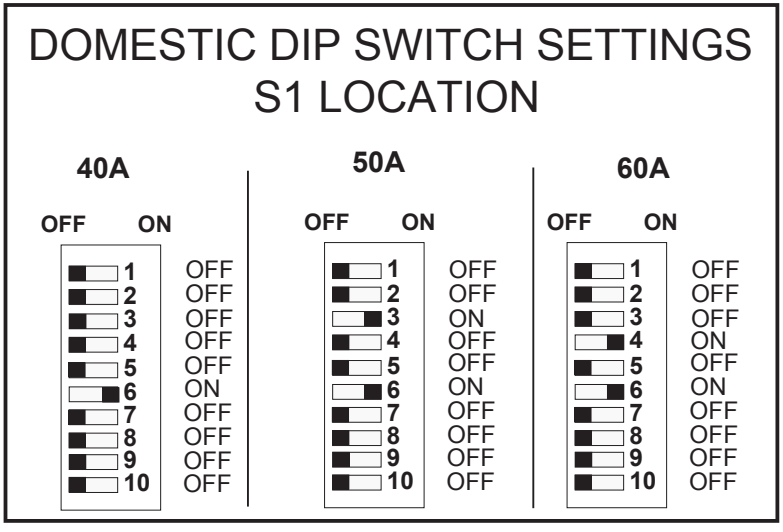
WIRE STRIP LENGTH
11/16" (0.69", 17.5mm)
BARE METAL

HAND TIGHTEN WITH PHILIPS SCREWDRIVER.

Figure 5 3-Wire, 240 VAC Connection (Hard-wired connections only)



Dip Switch Settings for Models J-LX™, J-LXL™, J-435™, J-445™, J-475™, J-485™, and J-495™

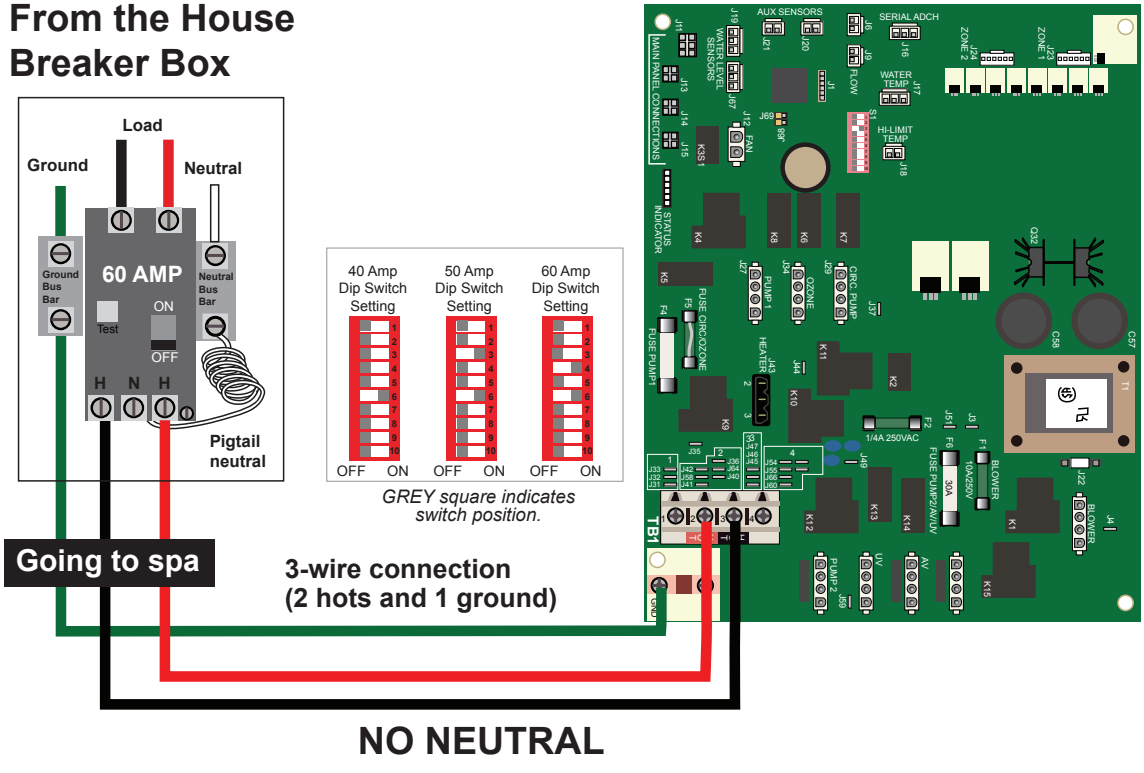


50A factory default

Black square indicates switch position.

240 VAC Connections for J-435™, J-445™, J-475™, J-485™, J-495™, J-LX™, and J-LXL™

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.



Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for Models J-335™, J-345™, J-355™, J-365™, J-375™, J-385™ (North America, 60Hz)

This section describes the power configuration choices (Standard 50 Amp, Alternate 40 Amp or Alternate 60 Amp) for hot tub models J-335™, J-345™, J-355™, J-365™, J-375™, J-385™.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. Do not activate 40A or 60A power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 50A Configuration** (factory setting) • 240 VAC/50A 3-wire configuration (2 hots and a ground) • 50A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 37A	In this Standard 50A configuration, the heater **will not operate** while both jet pumps are running.
Config. #2	**Alternate 40A Configuration** (For homes where 240 VAC/50A or 240 VAC/60A power is unavailable.) • 240 VAC/40A 3-wire configuration (2 hots and a ground) • 40A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 26A	If the home's electrical system does not have the 240V/60A or 240V/50A power available, the spa may be connected to a 240V/40A power source after a qualified technician makes a minor circuit board modification. In this configuration, the heater yields the same rapid temperature rise as in the 60A or 50A configuration, but **will not operate** while either jet pump is running.
Config. #3	**Alternate 60A Configuration** (Optional setting for maximum heater performance.) • 240 VAC/60A 3-wire configuration (2 hots and a ground) • 60A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 48A	If the home's electrical system has the full 240V/60A power available, the spa may be connected to a 240V/60A power source after a qualified technician makes a minor circuit board modification. In this configuration, the heater **will operate** while both jet pumps are running.

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for 240V 3-Wire Models J-315™ and J-325™ (North America, 60Hz)

This section describes the power configuration choices (Standard 40 Amp or Alternate 30 Amp) for hot tub models J-315™, J-325™.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

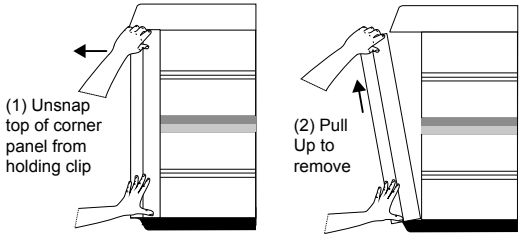
Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. Do not activate 30A power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 40A Configuration** (factory setting) • 240 VAC/40A 3-wire configuration (2 hots and ground) • 4 kW heater output • 40A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 31A	In the Standard 40A configuration, the heater **will operate** at the same time as the jet pump.
Config. #2	**Alternate 30A Configuration** • 240 VAC/30A 3-wire configuration (2 hots and ground) • 4 kW heater output • 30A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 20A	If the home's electrical system does not have the 240V/40A power available, the spa may be connected to a 240V/30A power source after a qualified technician makes a minor circuit board modification. In this configuration, the heater yields the same rapid temperature rise as in the 40A configuration. However, the heater **will not operate** at the same time as the jet pump.

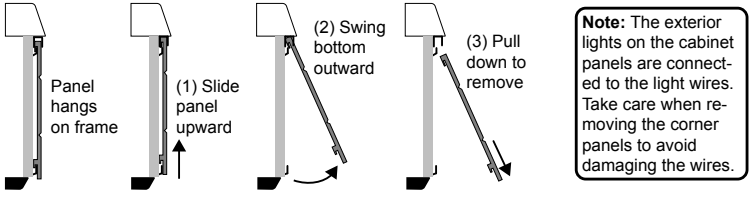
Equipment Access Consideration for All J-300 Models with ProFinish™ Cabinets

Remove the corner panels by grabbing the bottom and gently pulling away from the spa to unsnap it from the holding clip. Pull downward to remove the corner panel. Then grab the bottom of the front (or side) cabinet panel and lift upward to remove the panel from the bottom holder. Swing the bottom of the panel outward to clear the upper hanger. This will require approx. 18 inches of access room between the spa and any other structures. Slide the panel downward to remove from the spa.

Corner Panel Removal (Front View)

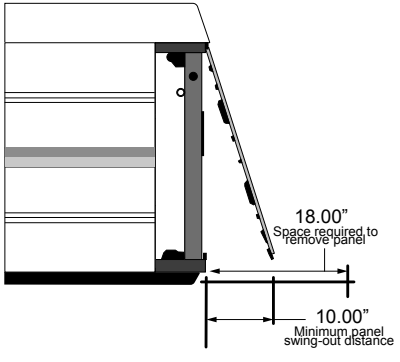


Front / Side Panel Removal (Side View)



Note: The exterior lights on the cabinet panels are connected to the light wires. Take care when removing the corner panels to avoid damaging the wires.

Important Measurements



Installing a 3-Wire 240 VAC Connection for Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™

The electrician should look carefully through these diagrams to gather the required information about the electrical tasks for the installation of these spas.

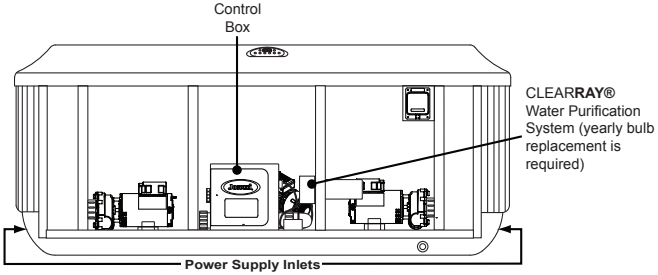


Figure 6 Spa Equipment Compartment (spa features subject to change without notice)

Figure 7 The Control Box for 3-wire, 240 VAC connection

The location of the TB1 terminal may vary between models.

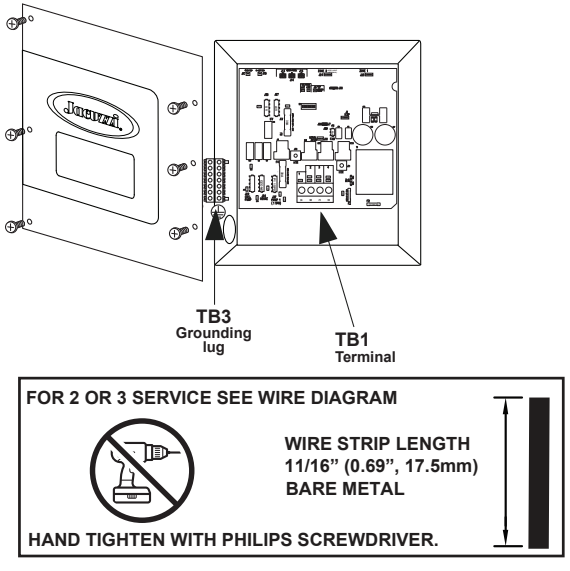
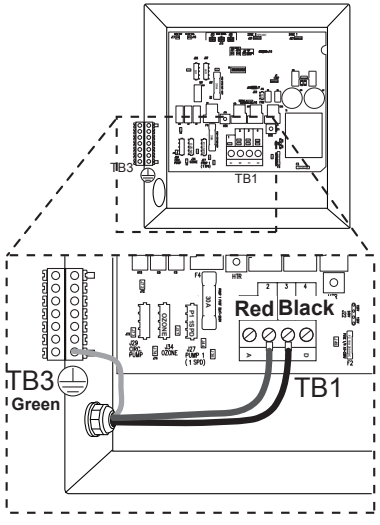


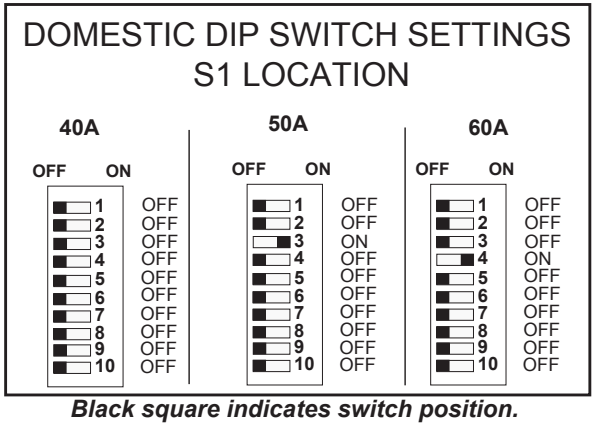
Figure 8 3-Wire, 240 VAC Connection for models (For hard-wired connections only)



WARNING: Determine the electrical requirements when working on J315 and J325 models. These models are available in a dedicated 240V 60Hz or 120V/240V 60Hz convertible configuration.

Dip Switch Settings for Dedicated 240V 3-Wire Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™

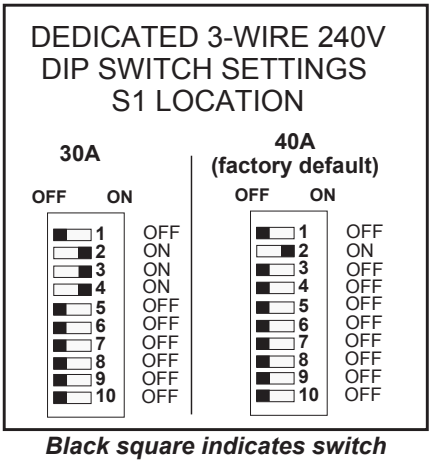
A. **Models J-335™, J-345™, J-355™, J-365™, J-375™, J-385™**



50A factory default

Black square indicates switch position.

B. **Models J315™, J325™ Dedicated 3-wire 240VAC**

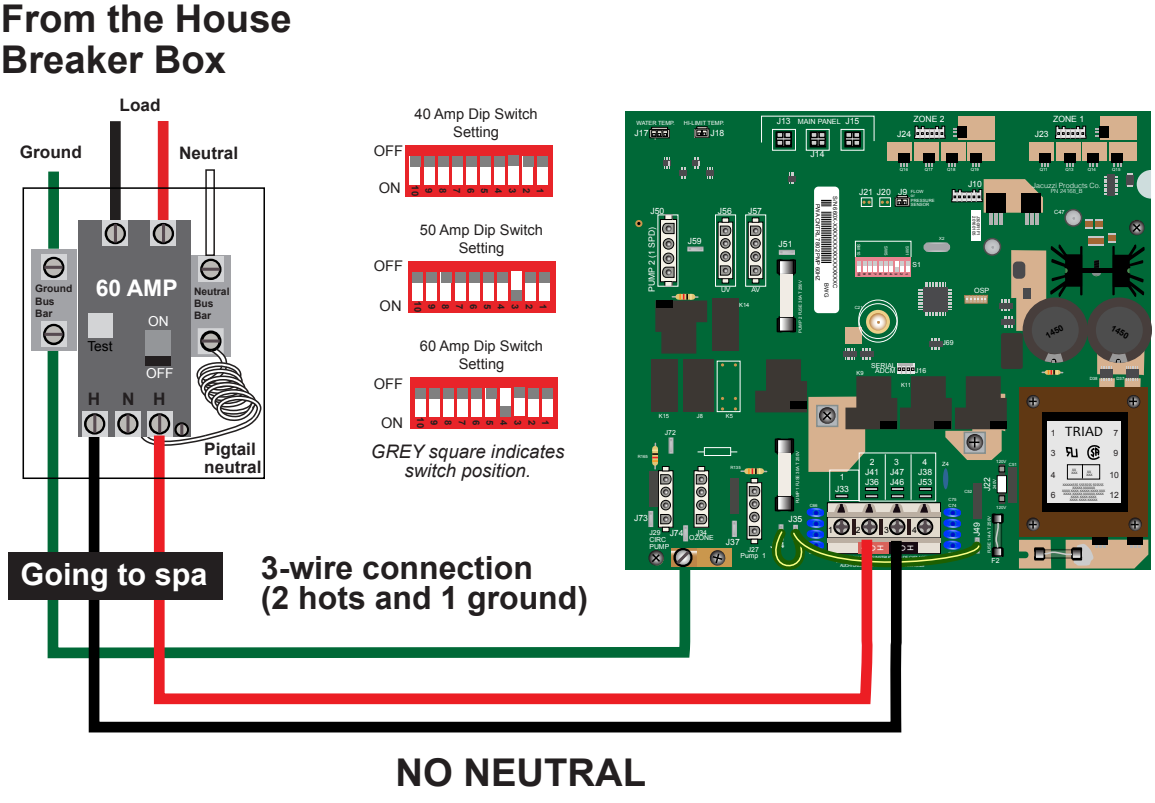


Black square indicates switch position.

WARNING: Determine the electrical requirements when working on J315 and J325 models. These models are available in a dedicated 240V 60Hz or 120V/240V 60Hz convertible configuration.

3-wire 240 VAC Connections for Models J-315™, J-325™, J-335™, J-345™, J-355™, J-365™, J-375™, J-385™

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.



Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for Convertible Models J-315™, J-325™ (North America, 60Hz)

This section describes the power configuration choices (Standard 120 VAC/15 Amp, Alternate 240 VAC/30 Amp or Alternate 240 VAC/40 Amp) for hot tub models J-315™, and J-325™.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

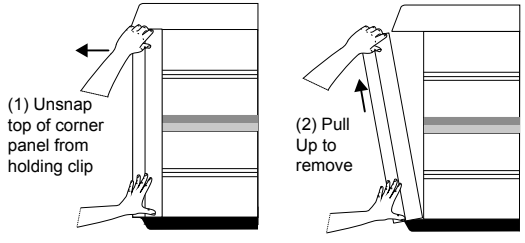
Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. To prevent damage to the spa, do not activate 240V/30A or 240V/40A power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 15A Configuration** (factory setting) • 120 VAC/15A 3-wire configuration (hot, neutral, and ground) • 1 kW heater output • Use either the 15A GFCI power cord (supplied only for US models) or a 15A single-pole GFCI circuit breaker (not supplied) • Maximum electrical current draw of 12A	In 15A configuration the heater **will not operate** when the high-speed jet pump is activated. Place the spa within 10 ft (3m) of a dedicated grounded, grounding-type electrical outlet so that the power cord supplied with the spa can be plugged directly into it. Use the power cord shipped from the factory. Using another power cord may cancel the warranty. If the spa is more than 10 ft (3m) from an outlet, it must be hard wired to a 15A single-pole GFCI breaker.
Config. #2	**Alternate 30A Configuration** • 240 VAC/30A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 30A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 20A	If the home's electrical system does not have the 240V/40A power available, the spa may be connected to a 240V/30A power source after a qualified technician makes a minor circuit board modification. In this configuration, the heater yields the same rapid temperature rise as in the 40A configuration. However, the heater **will not operate** at the same time as the high-speed jet pump.
Config. #3	**Alternate 40A Configuration** • 240 VAC/40A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 40A dual-pole GFCI circuit breaker (hard wired only) • Maximum electrical current draw of 31A	In the Alternate 40A configuration, the heater **will operate** at the same time as the high-speed jet pump. It is necessary to have a qualified technician modify the circuit board.

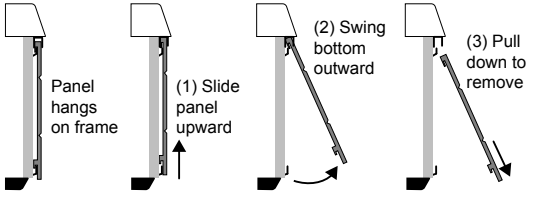
Equipment Access Consideration for All J-300 Models with ProFinish™ Cabinets

Remove the corner panels by grabbing the bottom and gently pulling away from the spa to unsnap it from the holding clip. Pull downward to remove the corner panel. Then grab the bottom of the front (or side) cabinet panel and lift upward to remove the panel from the bottom holder. Swing the bottom of the panel outward to clear the upper hanger. This will require approx. 18 inches of access room between the spa and any other structures. Slide the panel downward to remove from the spa.

Corner Panel Removal (Front View)

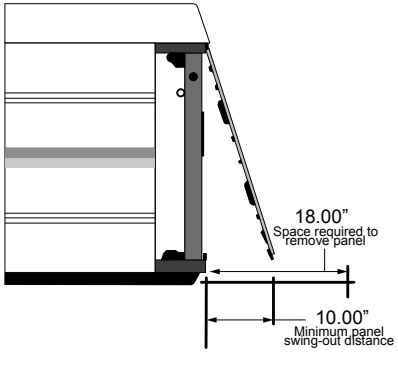


Front / Side Panel Removal (Side View)



Note: The exterior lights on the cabinet panels are connected to the light wires. Take care when removing the corner panels to avoid damaging the wires.

Important Measurements



Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™ (North America 60Hz)

The electrician should look carefully through these diagrams to gather the required information about the electrical tasks for the installation of these spas.

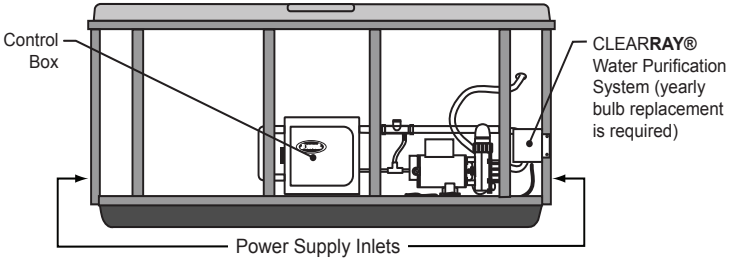
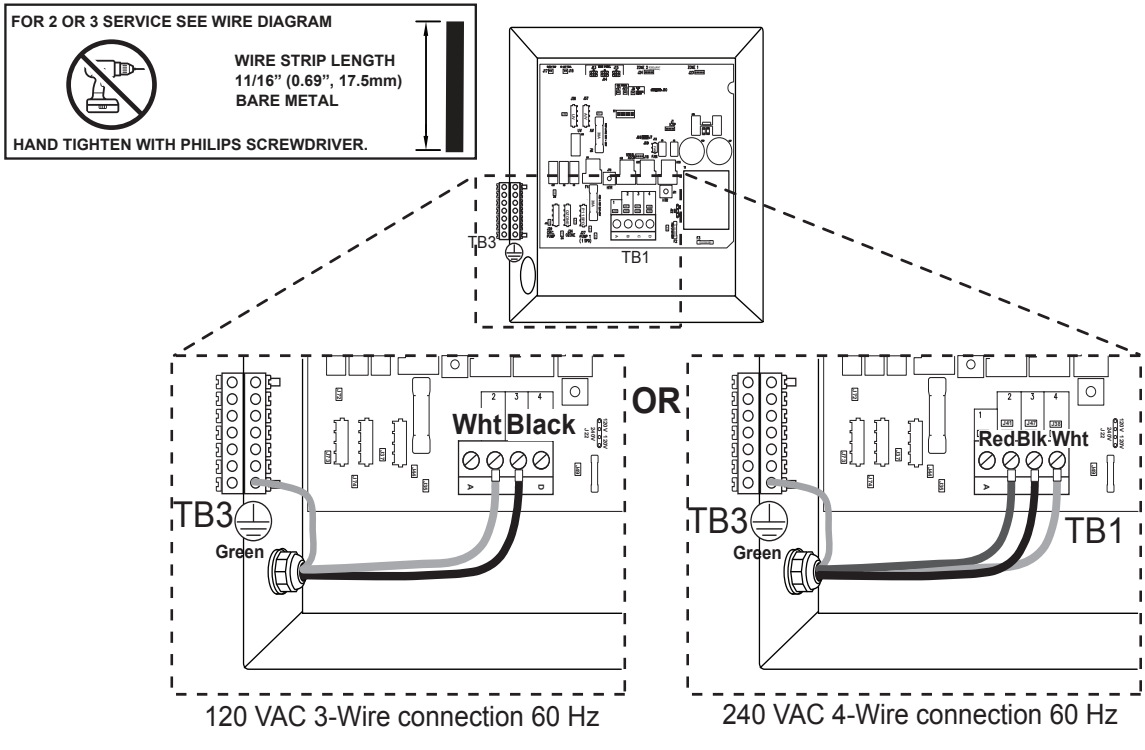


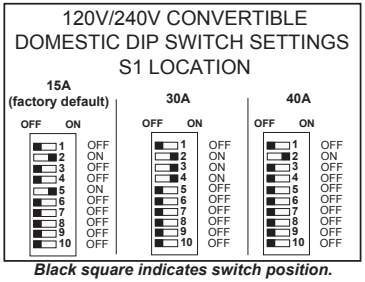
Figure 9 The Spa Equipment Compartment (spa features subject to change without notice)



Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™

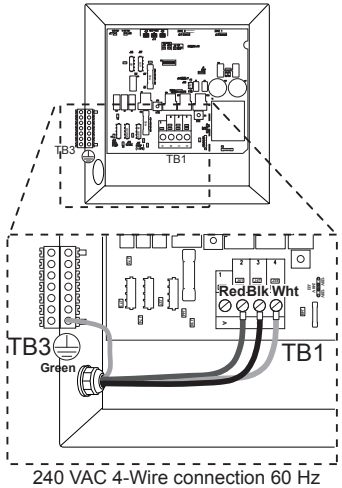
The electrician should look carefully through these diagrams to gather the required information about the electrical tasks for the installation of these spas.

Figure 10 4-wire, 240 VAC Connection



Black square indicates switch position.

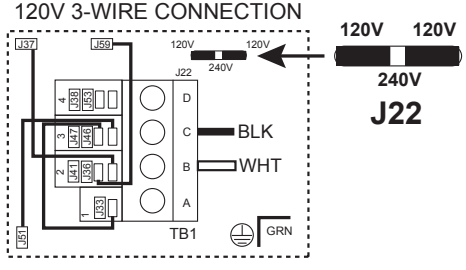
Dip switch #9 must be OFF for a 1-pump model

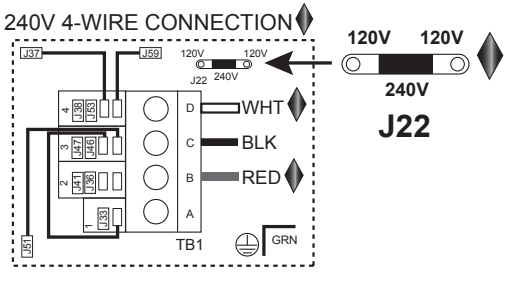


240 VAC 4-Wire connection 60 Hz

Figure 11 4-wire, 240 VAC Connection

Connect the RED wire to the terminal position "B" as shown. Move white wire from position "B" to position "D" as shown. Jumper wires must also be changed as illustrated below. See page 34 for jumper table.





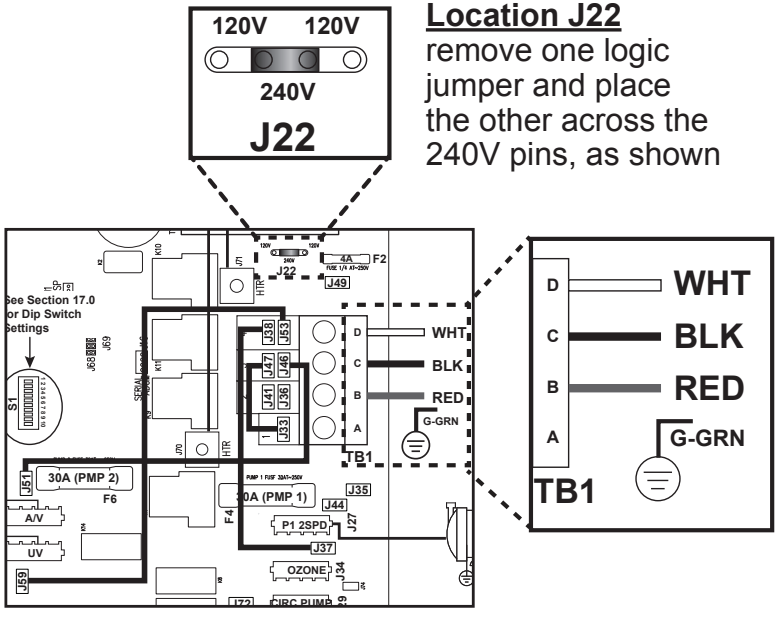
CAUTION: (FOR A 4-WIRE 240 VAC HEATER OPERATION.)
The jumper at location J22 must be changed from a 120V to a 240V configuration. Make sure to connect the wires as shown at TB1, for a 4-wire 240V connection, before applying power. Jumper wires MUST be changed. Failure to follow these steps will result in damage to the circuit board and/or related components and void the manufactures warranty.

Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for Convertible Models J-315™, J-325™

IMPORTANT! The electrician should look carefully through these diagrams to gather the required information about the electrical tasks for the installation of these spas.

Figure 12 4-wire, 240 VAC Connection

Below are all the steps that must be taken to **convert** a 120V model to a 240V model.



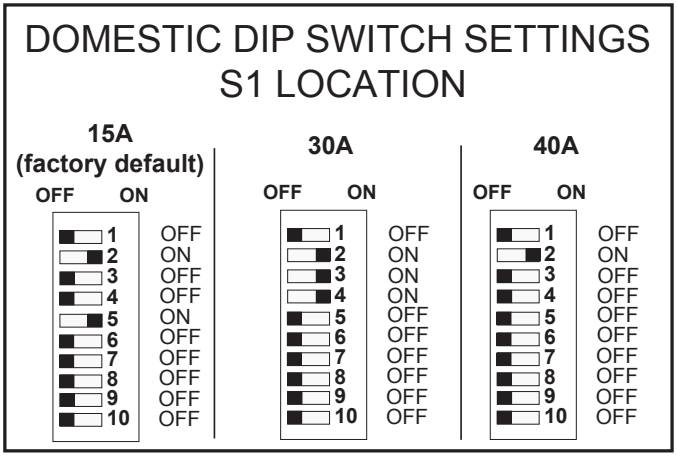
Location J22
remove one logic jumper and place the other across the 240V pins, as shown

TB1 terminal
White wire must be connected to location D and a second hot wire connected (**RED**), as shown

FROM	TO
J37	J38
J51	J46
J59	J53
J33	J47
J22	1 jumper

Jumper wires
The sequence of the jumper wires must be changed, as shown

Dip Switch Settings for Convertible Models J-315™, J-325™



Black square indicates switch position.

Dip switch #9 must be OFF for a 1-pump model

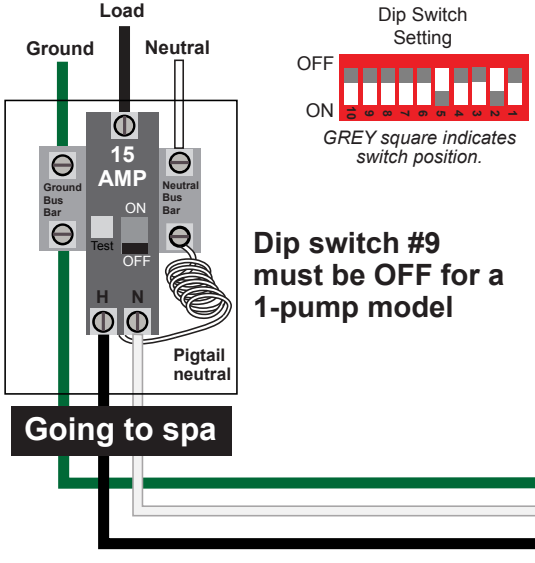
3-wire 120 VAC Connections for Convertible Models J-315™, J-325™

If the supplied 10 ft GFCI power cord (US only) cannot reach a dedicated, grounded wall outlet, it is necessary to install a 3-wire, hard-wired connection. These diagrams illustrate that configuration.

For enhanced heater performance the use of a 4-wire power connection is necessary.

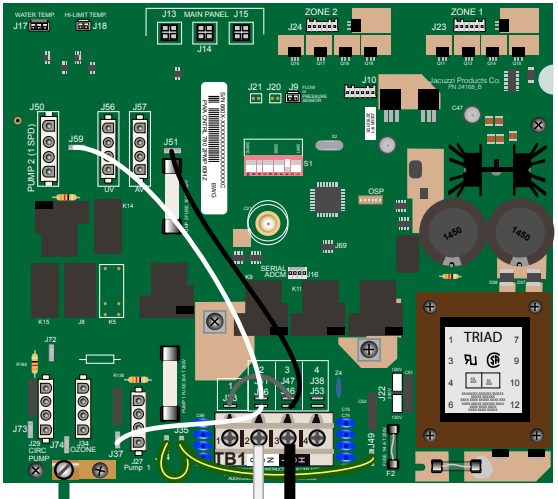
A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box



GREY square indicates switch position.

Dip switch #9 must be OFF for a 1-pump model



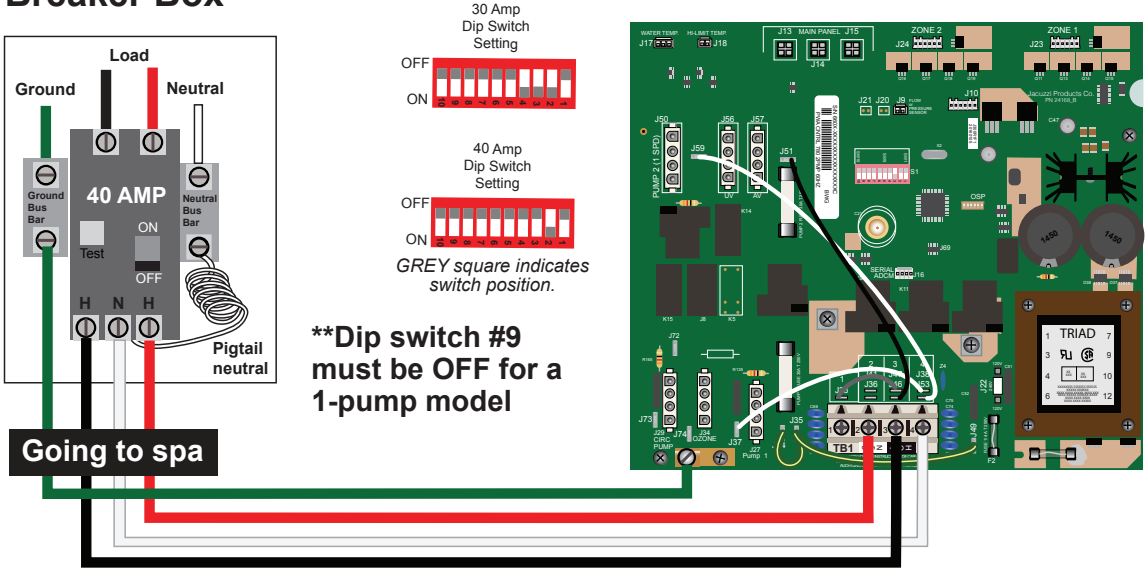
1. If spa is being hard wired, remove the factory installed GFCI cord.
2. Make sure the electrician runs a 15 Amp GFCI breaker. Follow instructions for a 3-wire 120VAC hook up as depicted above.

WARNING: If spa jumper wires are not installed correctly damage will occur.

4-wire 240 VAC Connections for Convertible Models J-315™, J-325™ (North America 60Hz)

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box



1. Remove the factory installed GFCI cord.
2. On board, move the white wires from J41 and J36 to J38 and J53.
3. On J22, remove jumpers from pins 1 and 2, and pins 3 and 4. Place one jumper across pins 2 and 3.
4. Make sure the electrician runs a 30A/40A GFCI breaker. Follow instructions for a 4-wire 240VAC hook up as depicted above.
5. Add hot wire (red) to TB1 position 2 and other hot wire to position 3.
6. Add neutral wire to position 4 and ground to ground buss.

WARNING: If spa jumper wires are not installed correctly damage will occur.

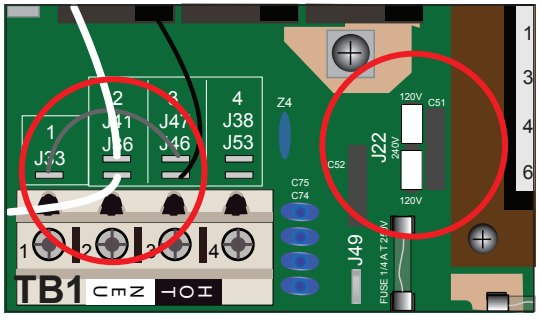
Connection Configuration 120V to 240 VAC Connections side by side for convertible J-315™, J-325™ (North America 60Hz)

If the supplied 10 ft GFCI power cord (US only) cannot reach a dedicated, grounded wall outlet, it is necessary to install a 3-wire, hard-wired connection. These diagrams illustrate that configuration.

For enhanced heater performance the use of a 4-wire power connection is necessary.

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least a #8 AWG (8.4 mm²) solid copper wire.

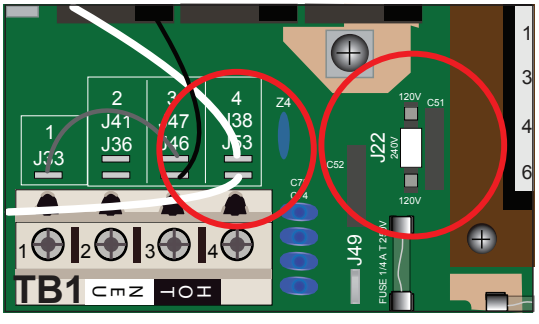
Convertible 120V 3-Wire
(1 hot, 1 ground, and 1 neutral)



Jumper wires at J41 and J36

J22 = 2 jumpers

Convertible 240V 4-Wire
(2 hots, 1 ground, and 1 neutral)



Jumper wires moved to J38 and J53

J22 = 1 jumper

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for J-285™, J-275™, J-245™, and J-235™ Models (North America 60Hz)

This section describes the three power configuration choices (Standard 50 Amp, Alternate 40 Amp or Alternate 60 Amp) for J-285™, J-275™, J-245™, and J-235™ Models.

Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

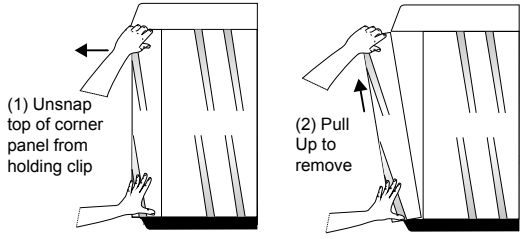
Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. Do not activate power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 50A Configuration** (factory setting) • 240 VAC/50A 3-wire configuration (2 hots and a ground) • 50A dual-pole GFCI breaker (hard wired only) • Current Draw: 26A	In this Standard 50A configuration, the heater does not operate while both jets pumps are running in high-speed. Note: Pump 2 runs only in high-speed.
Config. #2	**Alternate 40A Configuration** (For homes where 240 VAC/50A or 240 VAC/60A power is unavailable) • 240 VAC/40A 3-wire configuration (2 hots and a ground) • 40A dual-pole GFCI breaker (hard wired only) • Current Draw: 36A	If the home's electrical system does not have the full 240V/50A or 240V/60A power available, the spa may be connected to a 240V/40A power source after a qualified technician makes a minor circuit board modification. The heater yields the same rapid temperature rise as in 50A operation, but does not operate while either jets pump is running in high-speed. Note: Pump 2 runs only in high-speed.
Config. #3	**Alternate 60A Configuration** (Optional setting for maximum heater performance) • 240 VAC/60A 3-wire configuration (2 hots and a ground) • 60A dual-pole GFCI breaker (hard wired only) • Current Draw: 45A	If the home's electrical system has the full 240V/60A power available, the spa may be connected to a 240V/60A power source after a qualified technician makes a minor circuit board modification. In this configuration, the heater operates while both jets pumps are running in high-speed. This may be preferable for owners of outdoor spas in cold climates because it will help their spas maintain water temperature during use.

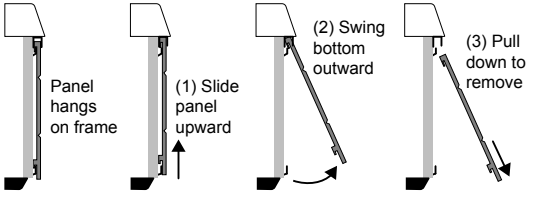
Equipment Access Consideration for All J-200 Models with ProFinish™ Cabinets

Remove the corner panels by grabbing the bottom and gently pulling away from the spa to unsnap it from the holding clip. Pull downward to remove the corner panel. Then grab the bottom of the front (or side) cabinet panel and lift upward to remove the panel from the bottom holder. Swing the bottom of the panel outward to clear the upper hanger. This will require approx. 18 inches of access room between the spa and any other structures. Slide the panel downward to remove from the spa.

Corner Panel Removal (Front View)

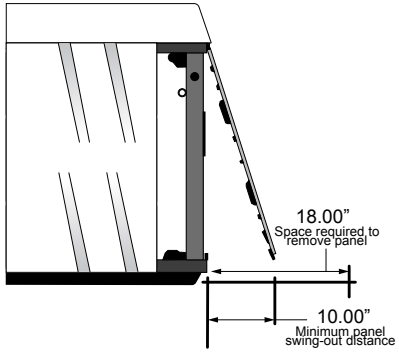


Front / Side Panel Removal (Side View)



Note: The exterior lights on the cabinet panels are connected to the light wires. Take care when removing the corner panels to avoid damaging the wires.

Important Measurements



Installing a 3-Wire 240 VAC Connection for J-285™, J-275™, J-245™, and J-235™ Models

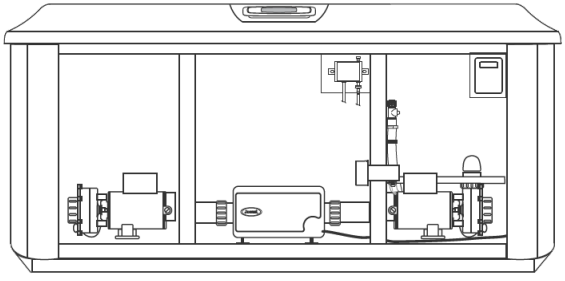
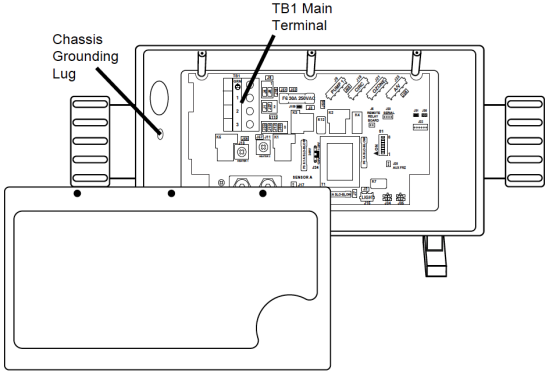


Figure 13: Spa equipment compartment (Spa features subject to change without notice. Component locations vary by model.)

Figure 14:
The Control Box for 3-wire, 240 VAC connection (The location of the TB1 terminal may vary between models.)



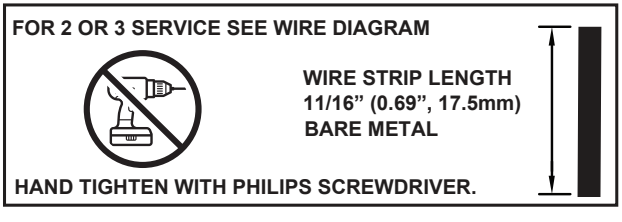
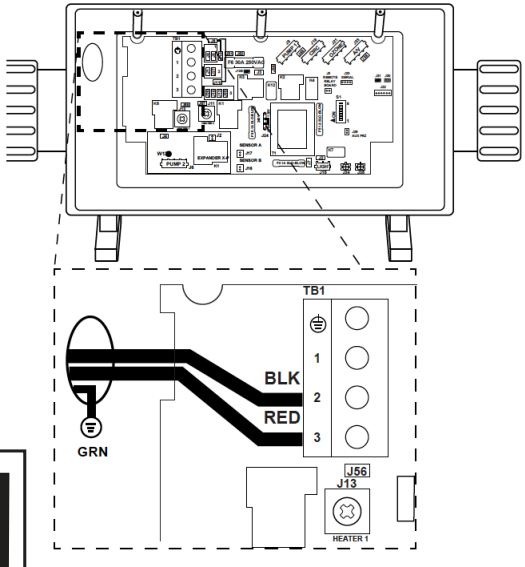
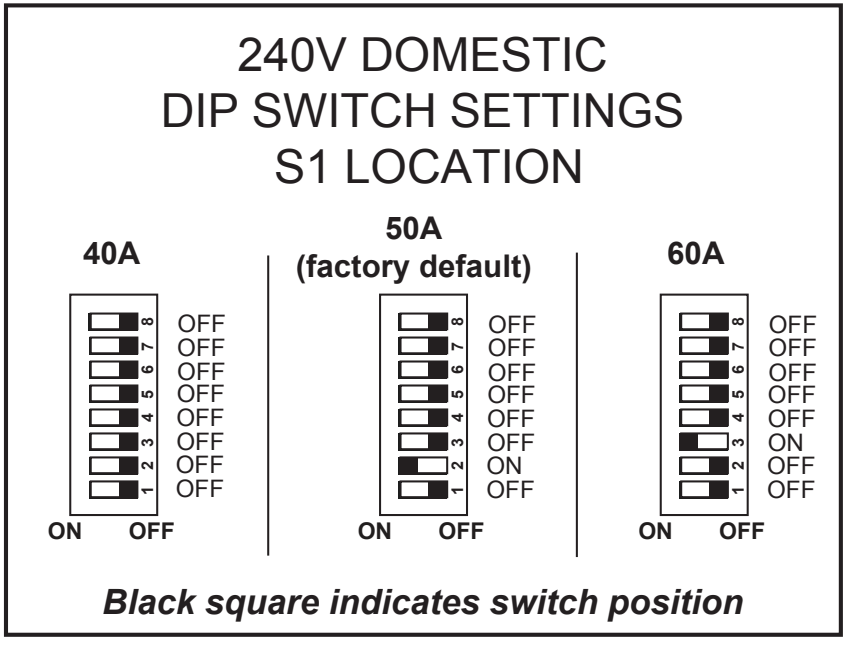


Figure 15
3-wire/240 VAC connection (*Hard Wired Connections Only)*



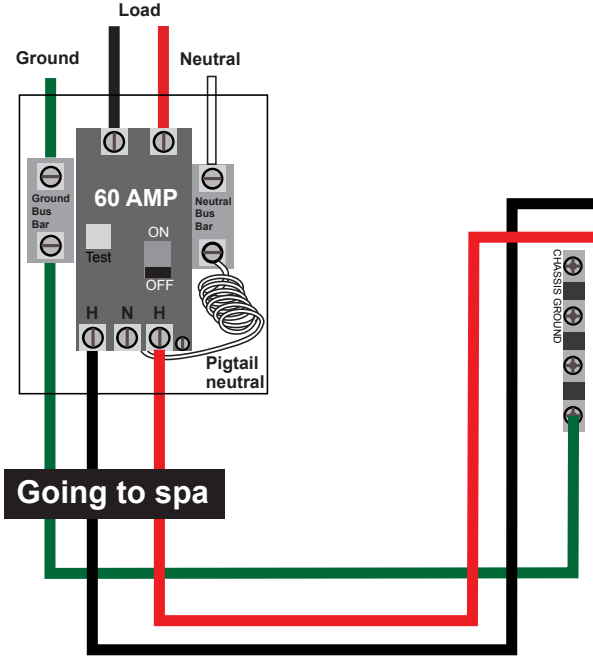
Dip Switch Settings for J-285™, J-275™, J-245™, and J-235™ Models

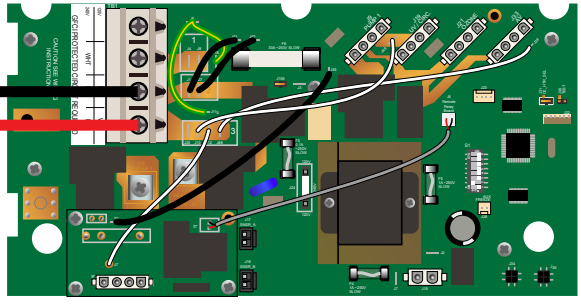


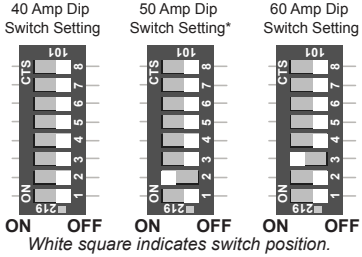
240 VAC Connections for J-285™, J-275™, J-245™, and J-235™ Models (North America 60Hz)

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box







White square indicates switch position.

**50A is the factory default setting*

NO NEUTRAL

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for J-225™ and J-215™ Models (North America 60Hz)

This section describes the three power configuration choices (Standard 15 Amp, Alternate 30 Amp or Alternate 40 Amp) for J-225™ and J-215™ models.

Note	Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

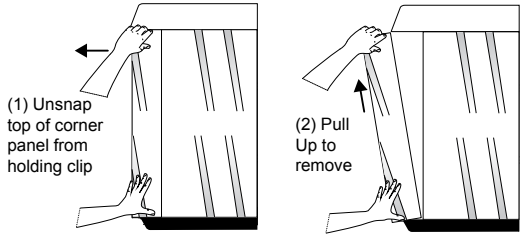
Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. To avoid damage to the spa, do not activate power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 15A Configuration** (factory setting) • 120 VAC/15A 3-wire configuration (hot, neutral, and ground) • 1 kW heater output • Use either the 15A GFCI power cord (supplied only for US models) or a 15A single-pole GFCI breaker (not supplied) • Maximum electrical current draw of 12A	In this Standard 15A configuration, the heater does not operate if the high-speed jets pump is activated. Place the spa within 10 ft (3m) of a dedicated grounded, grounding-type electrical outlet so that the power cord supplied with the spa can be plugged directly into it. Use the power cord shipped from the factory. Using another power cord may void the warranty. If the spa is more than 10 ft (3m) from an outlet, it must be hard wired to a 15A single-pole GFCI breaker.
Config. #2	**Alternate 30A Configuration** • 240 VAC/30A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 30A dual-pole GFCI breaker (not supplied) • Maximum electrical current draw of 20A	If your home does not have 240V/40A power available, connect the spa to a 240V/30A power source. Then, have a qualified technician modify the circuit board to match the power source. In this configuration, the heater yields the same rapid temperature rise as in the 40A configuration. However, the heater does not operate at the same time the high-speed jets pump is operating.
Config. #3	**Alternate 40A Configuration** • 240 VAC/40A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 40A dual-pole GFCI breaker (hard wired only) • Maximum electrical current draw of 31A	In the Alternate 40A configuration, the heater does operate at the same time the high-speed jets pump is operating. It is necessary to have a qualified technician modify the circuit board.

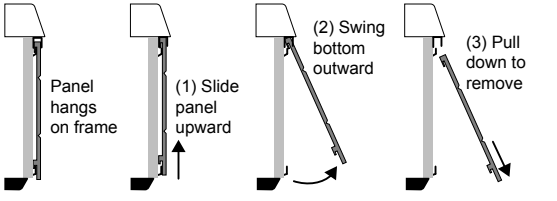
Equipment Access Consideration for All J-200 Models with ProFinish™ Cabinets

Remove the corner panels by grabbing the bottom and gently pulling away from the spa to unsnap it from the holding clip. Pull downward to remove the corner panel. Then grab the bottom of the front (or side) cabinet panel and lift upward to remove the panel from the bottom holder. Swing the bottom of the panel outward to clear the upper hanger. This will require approx. 18 inches of access room between the spa and any other structures. Slide the panel downward to remove from the spa.

Corner Panel Removal (Front View)

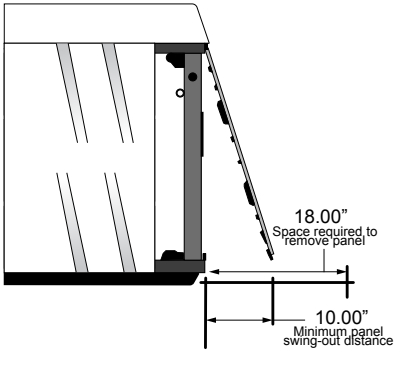


Front / Side Panel Removal (Side View)



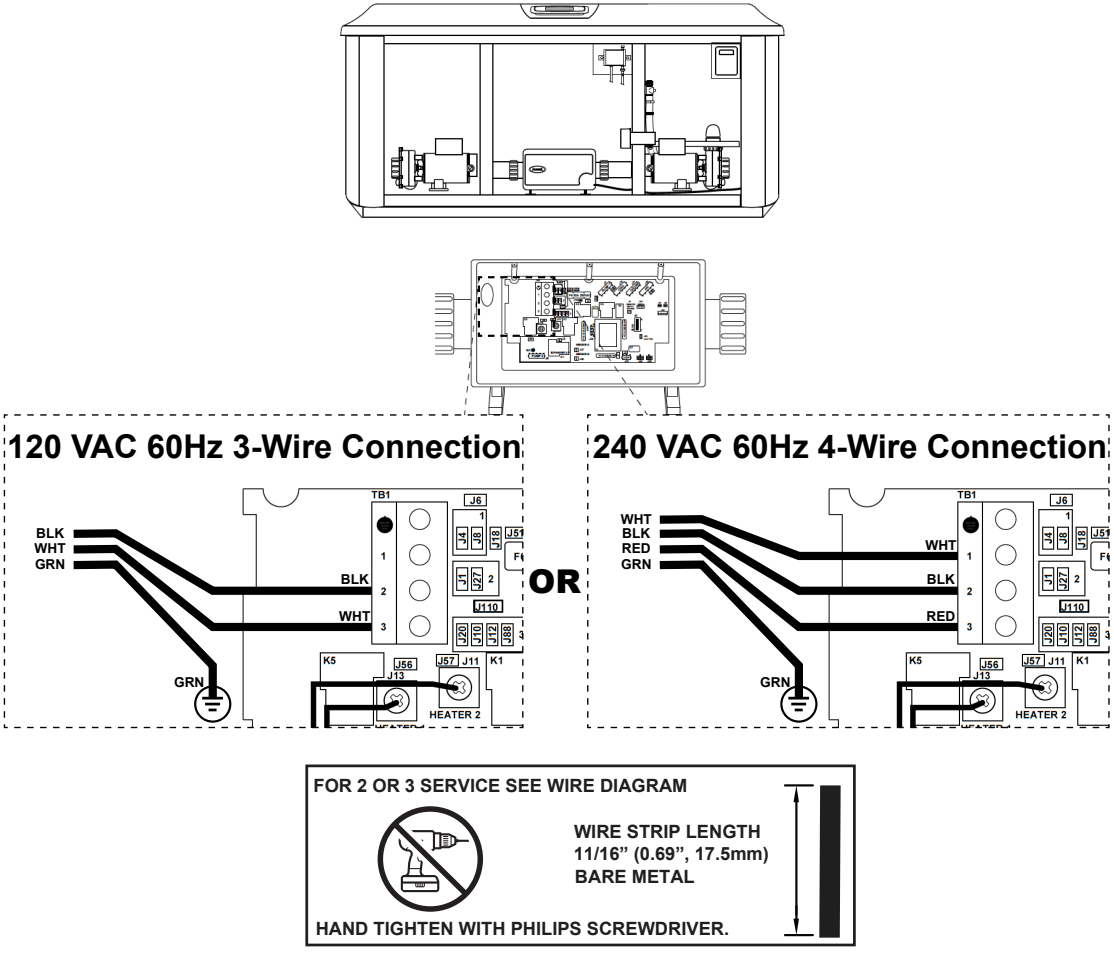
Note: The exterior lights on the cabinet panels are connected to the light wires. Take care when removing the corner panels to avoid damaging the wires.

Important Measurements



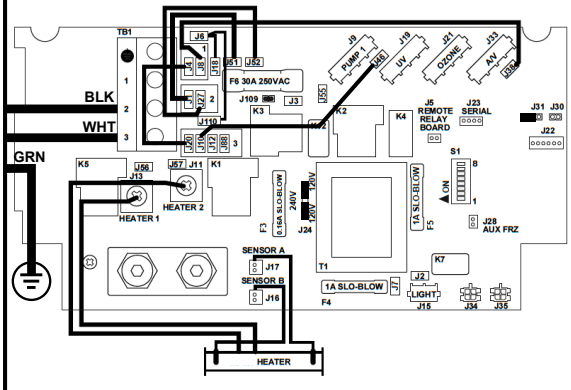
Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: J-225™ and J-215™ Models

Figure 16 The Spa Equipment Compartment (spa features subject to change without notice. Component locations vary by model.)



Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: J-225™ and J-215™ Models

120V 3-Wire Connection



F3 — 0.16A SLO-BLOW

F3 FUSE MUST BE A 0.16A SLO-BLOW FUSE DEFAULT SETTING

240V
120V 120V

J24 JUMPERS MUST BE IN 120V POSITIONS AS SHOWN DEFAULT SETTING

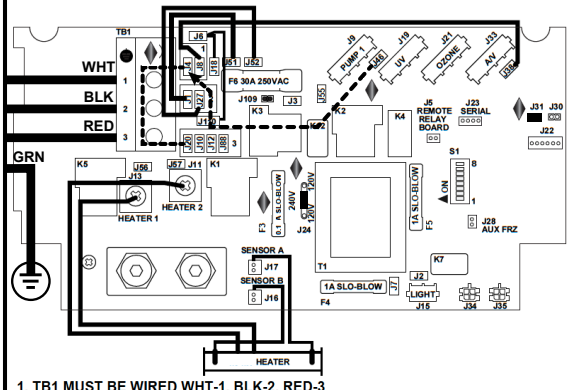
J31

J31 JUMPER MUST BE ON 1 PIN WHEN HEATER IS CONFIGURED AS 120VAC DEFAULT SETTING

ON OFF
3
2

SWITCH #2 AND 3 SET TO OFF WHEN HEATER IS CONFIGURED AS 120VAC

240V 4-Wire Connection



1. TB1 MUST BE WIRED WHT-1, BLK-2, RED-3
2. REMOVE JUMPER WIRE BETWEEN J4 AND J20.
3. MOVE J46 WIRE FROM AREA 3 TO AREA 1
4. CHANGE F3 FUSE TO 0.1A SLO-BLOW
5. REMOVE 1 JUMPER FROM J24, PLACE REMAINING JUMPER ON PINS 2 AND 3.
6. PUT J31 JUMPER ON 2 PINS

F3 — 0.1A SLO-BLOW

F3 FUSE MUST BE REPLACED BY A 0.1A SLO-BLOW FUSE (SUPPLIED WITH PACK)

240V
J24
120V 120V

J24 JUMPERS MUST BE IN 240V POSITION AS SHOWN

J31

J31 JUMPER MUST BE ON 2 PINS WHEN HEATER IS CONFIGURED AS 240VAC

ON OFF
3
2

SWITCH #2 SET TO ON WHEN HEATER IS CONFIGURED AS 240VAC

CAUTION: FOR 4-WIRE 240 VAC HEATER OPERATION. These directions must be followed **before applying power**. Connect the wires as shown at TB1 for a 240V configuration. Jumper wire from J4 to J20 MUST be removed and jumper wire from J46 to J10 MUST be moved to J46 to J4. Jumper at J24 MUST be set to the 240V configuration (one jumper on middle two pins). J31 jumper MUST be moved to cover both pins. F3 fuse MUST be replaced with a 0.1A fuse (supplied with pack). If 40A configuration is being used, Dip switch #2 should be switched to ON.

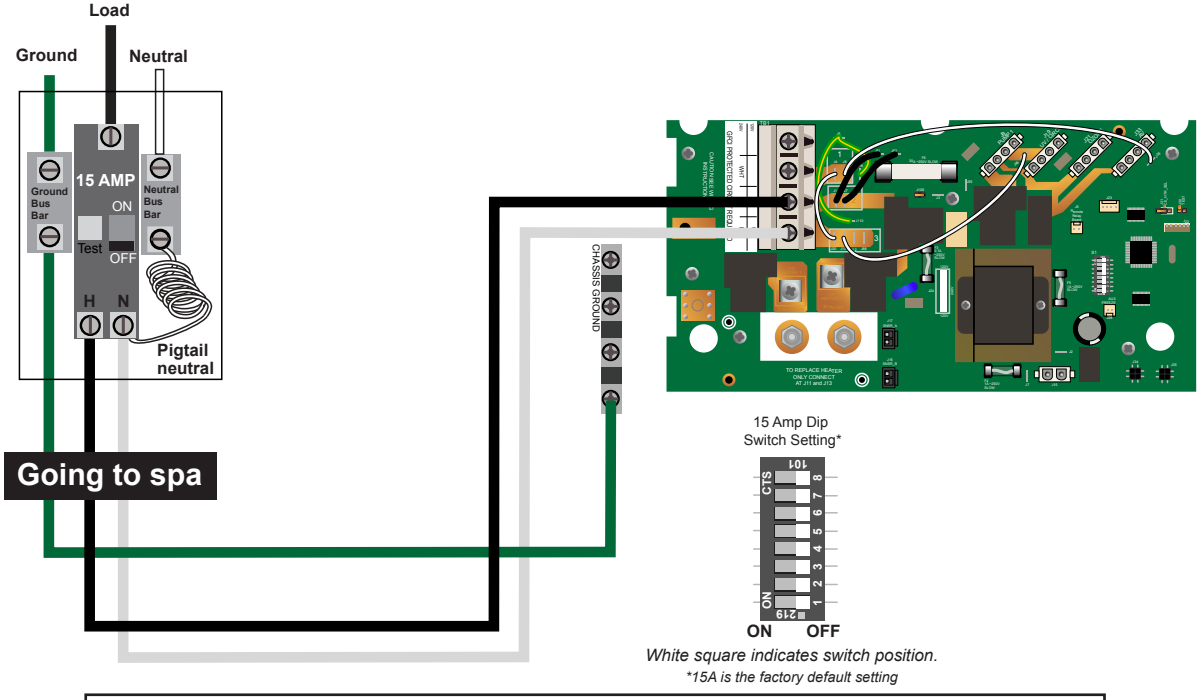
120 VAC Connections for J-225™ and J-215™ Models (North America 60Hz)

If the supplied 10 ft GFCI power cord (US only) cannot reach a dedicated, grounded wall outlet, it is necessary to install a 3-wire, hard-wired connection. These diagrams illustrate that configuration.

For enhanced heater performance the use of a 4-wire power connection is necessary.

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least a #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box



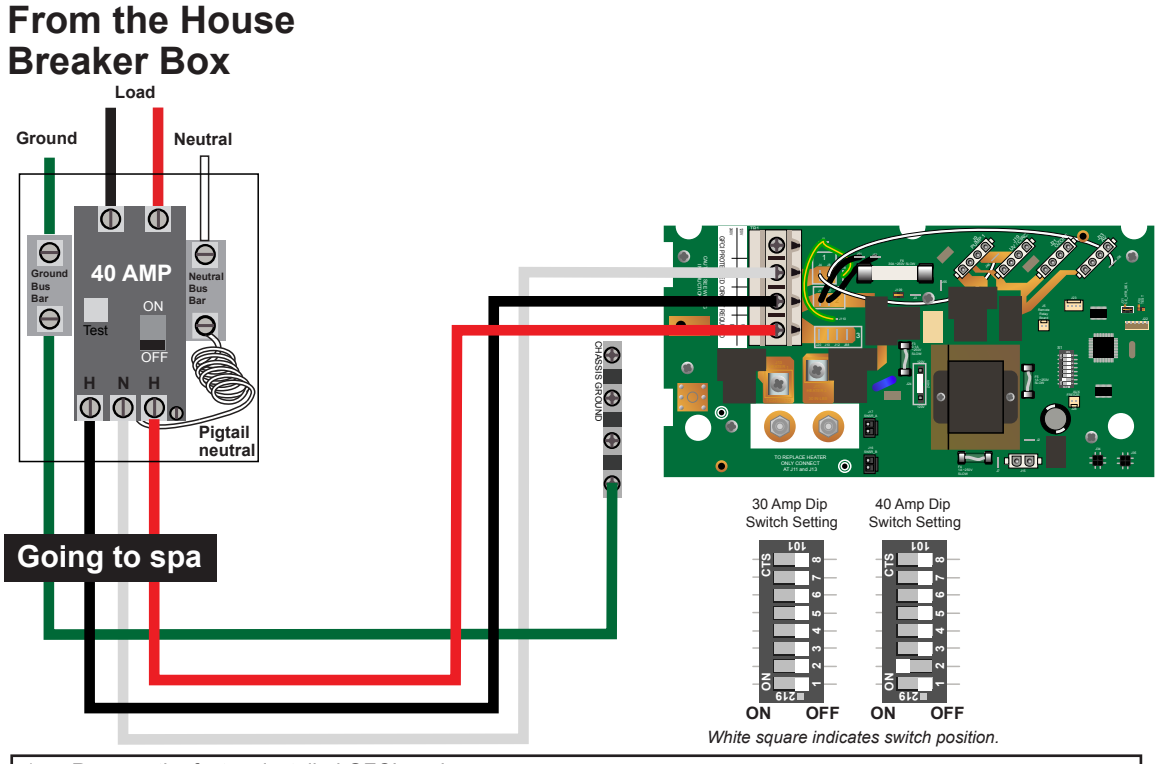
White square indicates switch position.
**15A is the factory default setting*

1. If spa is being hard wired, remove the factory installed GFCI cord.
2. Make sure the electrician runs a 15A GFCI breaker with a 3-wire 120VAC hook up, as depicted above.

WARNING: If spa jumper wires are not installed correctly, damage will occur.

240 VAC Connections for J-225™ and J-215™ Models (North America 60Hz)

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.



White square indicates switch position.

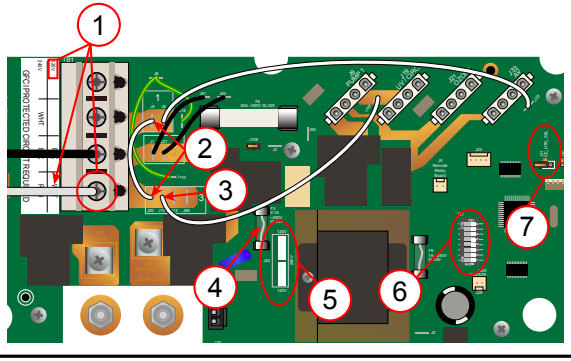
1. Remove the factory installed GFCI cord.
2. On board, remove jumper wire between J4 and J20.
3. On board, find jumper wire from J46 to J10. Move J10 connection to J4.
4. Change F3 fuse to 0.1A Slow Blow fuse supplied in spa packet.
5. Remove one jumper from J24 and place remaining jumper across middle two pins.
6. Put the jumper at J31 across both pins.
7. Make sure the electrician runs a 30A or 40A GFCI breaker with a 4-wire 240VAC hook up, as depicted above.
8. Move white wire at TB1 to position indicated above.
9. Add Red wire to TB1 at position indicated above.

WARNING: If spa jumper wires are not installed correctly, damage will occur.

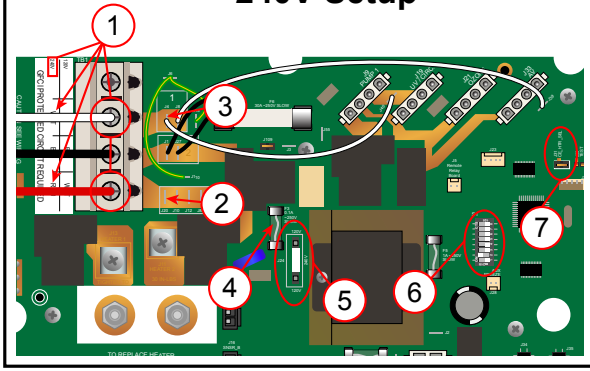
Connection Configuration 120V to 240 VAC Connections side by side for convertible J-225™ and J-215™ Models (North America 60Hz)

Shown in the diagram below are the differences between setting up a 120V Connection and a 240V connection for these spas. Failure to properly configure the circuit board for the appropriate voltage can cause damage to the spa's electronics.

120V Setup



240V Setup



120V 3-Wire Configuration

1. White wire connected to TB1 at position indicated for a 120V connection.
2. Jumper wire between J4 and J20.
3. J46 jumper wire connected to J10.
4. Standard 0.16A fuse at F3.
5. Two jumpers at J24.
6. All S1 Dip switches set to OFF for 15A operation.
7. Jumper at J31 set across one pin only.

240V 4-Wire Configuration

1. White wire moved to TB1 position indicated for a 240V connection. Red wire added, also in indicated 240V position.
2. Jumper wire between J4 and J20 REMOVED.
3. J46 jumper wire MOVED to J4.
4. F3 fuse replaced with 0.1A fuse provided in spa pack.
5. One jumper at J24, set across middle two pins.
6. S1 Dip switch #2 set to ON (40A operation only).
7. Jumper at J31 set across both pins.

Important: When installed in the United States, the electrical wiring of this spa must meet the requirements of the National Electric Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by an electrical contractor AND approved by a local building/electrical inspector.

Power Configurations for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)

This section describes the three power configuration choices (Standard 15 Amp, Alternate 30 Amp or Alternate 40 Amp) for Soul™ and Echo™ 30 Jet & Mood™ models.

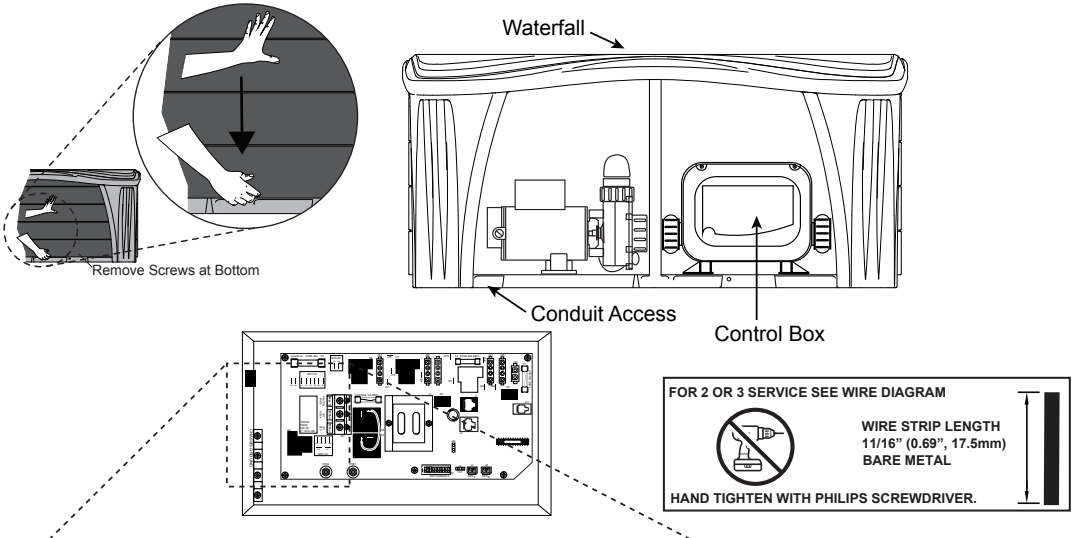
Note Wire size must meet NEC recommendations and is determined by maximum current draw and length of run.

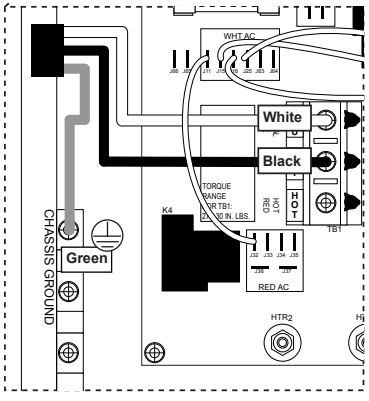
Important: All of the alternative electrical configurations require a qualified technician to perform minor circuit board modifications. To avoid damage to the spa, do not activate power to the spa until these modifications have been made. We recommend Square-D circuit breakers.

Config. #1	**Standard 15A Configuration** (factory setting) • 120 VAC/15A 3-wire configuration (hot, neutral, and ground) • 1 kW heater output • Use either the 15A GFCI power cord (supplied only for US models) or a 15A single-pole GFCI breaker (not supplied) • Maximum electrical current draw of 12A	In this Standard 15A configuration, the heater does not operate if the high-speed jets pump is activated. Place the spa within 10 ft (3m) of a dedicated grounded, grounding-type electrical outlet so that the power cord supplied with the spa can be plugged directly into it. Use the power cord shipped from the factory. Using another power cord may cancel the warranty. If the spa is more than 10 ft (3m) from an outlet, it must be hard wired to a 15A single-pole GFCI breaker.
Config. #2	**Alternate 30A Configuration** • 240 VAC/30A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 30A dual-pole GFCI breaker (not supplied)	If your home does not have 240V/40A power available, connect the spa to a 240V/30A power source. Then, have a qualified technician modify the circuit board to match the power source. In this configuration, the heater yields the same rapid temperature rise as in the 40A configuration. However, the heater does not operate at the same time the high-speed jets pump is operating.
Config. #3	**Alternate 40A Configuration** • 240 VAC/40A 4-wire configuration (2 hots, neutral, and ground) • 4 kW heater output • 40A dual-pole GFCI breaker (hard wired only) • Maximum electrical current draw of 32A	In the Alternate 40A configuration, the heater does operate at the same time the high-speed jets pump is operating. It is necessary to have a qualified technician modify the circuit board.

Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)

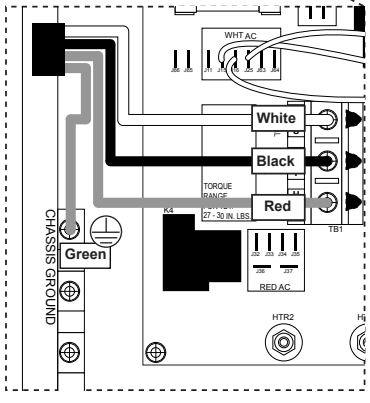
The Spa Equipment Compartment (spa features subject to change without notice. Component locations vary by model. Mood model shown.)





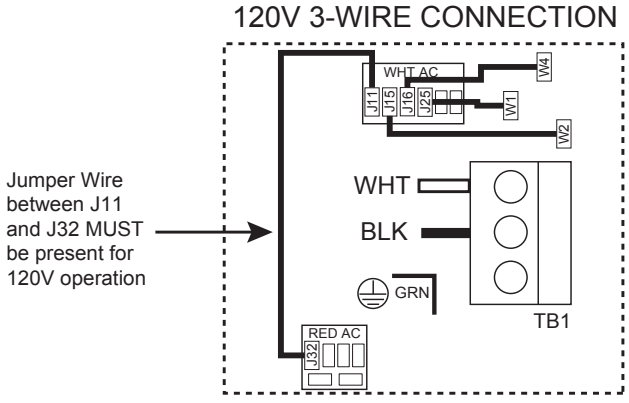
120 VAC 3-Wire connection 60Hz

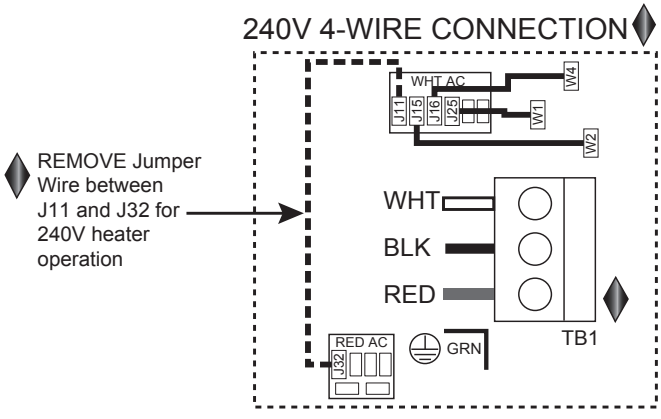
OR



240 VAC 4-Wire connection 60Hz

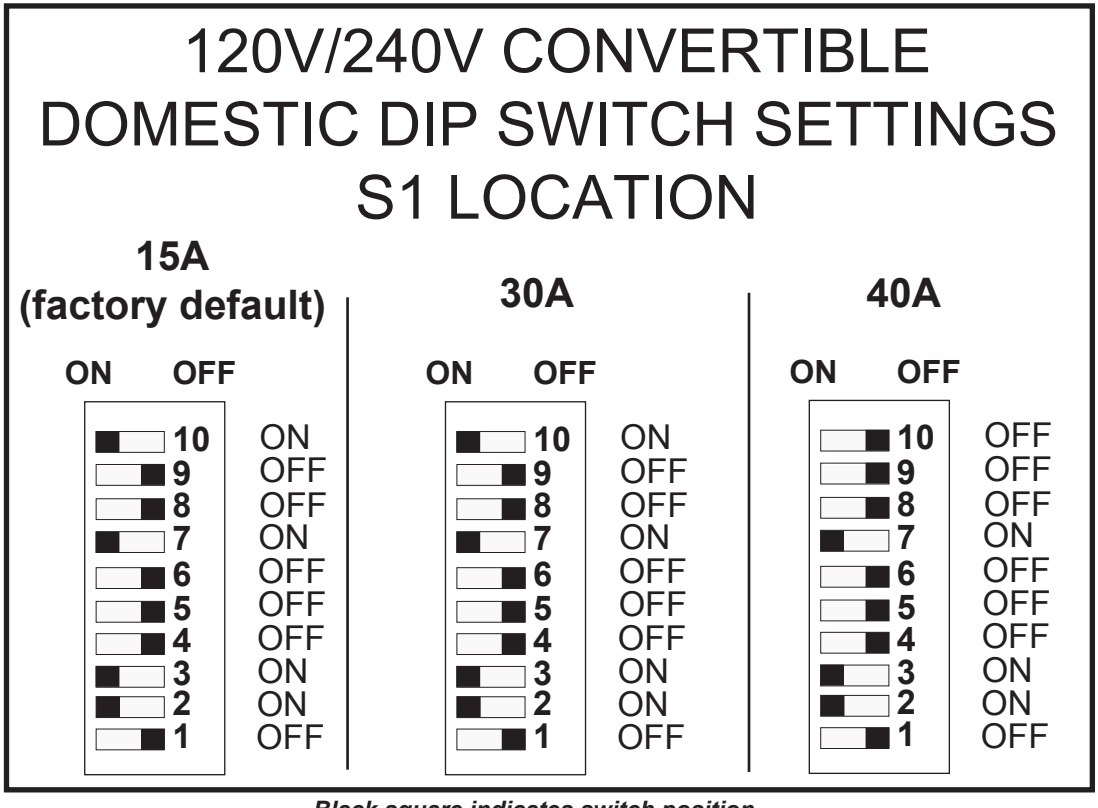
Installing a 3-Wire 120 VAC or 4-Wire 120/240 VAC Connection for: Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)





CAUTION: (FOR 4-WIRE 240 VAC HEATER OPERATION.) The jumper wire between J11 and J32 MUST be REMOVED. Make sure to connect the wires as shown at TB1, for a 240V connection, **before applying power**. Failure to follow these steps will result in damage to the circuit board and/or related components and void the manufacturer's warranty.

Dip Switch Settings for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)



Black square indicates switch position.

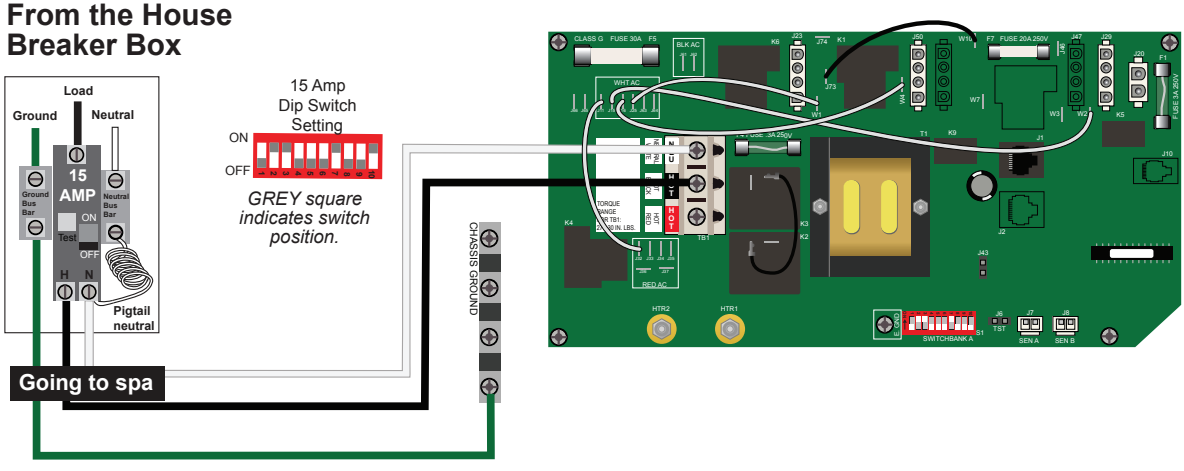
120 VAC Connections for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)

If the supplied 10 ft GFCI power cord (US only) cannot reach a dedicated, grounded wall outlet, it is necessary to install a 3-wire, hard-wired connection. These diagrams illustrate that configuration.

For enhanced heater performance the use of a 4-wire power connection is necessary.

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least a #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box



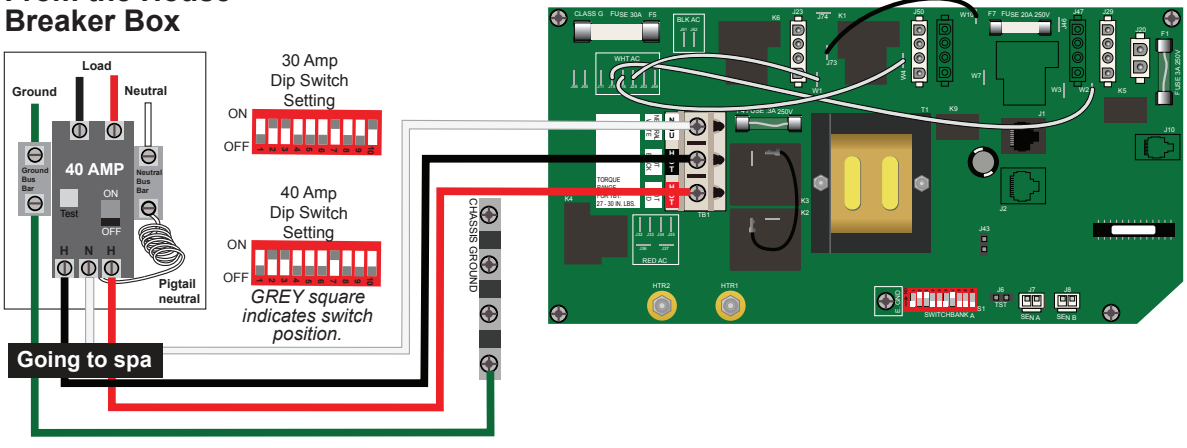
1. If spa is being hard wired, remove the factory installed GFCI cord.
2. On board, insure that the white jumper wire between J11 and J32 is INSTALLED.
3. Make sure the electrician runs a 15A GFCI breaker. Follow instructions for a 3-wire 120VAC hook up as depicted above.

WARNING: If spa jumper wires are not installed correctly damage will occur.

240 VAC Connections for Soul™ 30 Jet, Echo™ 30 Jet & Mood™ Models (North America 60Hz)

A pressure sensitive terminal block (bonding lug) is attached to the outside surface of the load box. This permits the connection of a bonding wire between this point and any metal equipment chassis, metal water pipe, or metal conduit within 5 ft (1.5m) of the spa. The bonding wire must be at least #8 AWG (8.4 mm²) solid copper wire.

From the House Breaker Box



1. Remove the factory installed GFCI cord.
2. On board, remove the white jumper wire between J11 and J32.
3. Make sure the electrician runs a 30A/40A GFCI breaker. Follow instructions for a 4-wire 240VAC hook up as depicted above.
5. Add hot wire (red) to TB1 bottom position and other hot wire to middle position.
6. Add neutral wire to top position and ground to chassis ground buss.

WARNING: If spa jumper wires are not installed correctly damage will occur.

Useful Details About The Spa

The table below provides the spa dimensions and specifications that may be helpful when installing your spa. These specifications are approximate. The filled weight specifications vary depending on the height of the spa's water. The filled weight is the weight of the spa (empty), plus the weight of the water at its maximum potential capacity (filled to the point of overflowing). The filled weight specifications do not include the weight of potential hot tub users who might be inside the hot tub. To ensure proper operation, the spa's water should always be above all the jets, and approximately one inch below all the pillows.

NOTE Always measure your spa before making critical design or delivery pathway decisions. These specifications are subject to change without notice and are for reference only.

Model	Width	Length	Maximum Height	Average Fill Weight	Min. Pad Size
J-495	91 in. (231 cm)	110 in. (279 cm)	43.5 in. (111 cm)	5261 lbs (2386 kg)	4" (102 mm)
J-485	91 in. (231 cm)	91 in. (231 cm)	43.5 in. (111 cm)	4544 lbs (2061 kg)	
J-475	91 in. (231 cm)	91 in. (231 cm)	43.5 in. (111 cm)	4595 lbs (2084 kg)	
J-445	84 in. (213.5 cm)	84 In. (213.5 cm)	43.5 in. (111 cm)	4024 lbs (1825 kg)	
J-435	84 in. (213.5 cm)	84 In. (213.5 cm)	43.5 in. (111 cm)	3824 lbs (1735 kg)	
J-LX	91 in. (231 cm)	91 in. (231 cm)	34 in. (86 cm)	3666 lbs (1663 kg)	
J-LXL	91 in. (231 cm)	91 in. (231 cm)	34 in. (86 cm)	3607 lbs (1636 kg)	
J-385	91 in. (231 cm)	91 in. (231 cm)	38 in. (96.5 cm)	4686 lbs (2126 kg)	
J-375	91 in. (231 cm)	91 in. (231 cm)	38 in. (96.5 cm)	4541 lbs (2060 kg)	
J-365	91 in. (231 cm)	84 in. (213.5 cm)	38 in. (96.5 cm)	4099 lbs (1859 kg)	
J-355	91 in. (231 cm)	84 in. (213.5 cm)	38 in. (96.5 cm)	3815 lbs (1731 kg)	
J-345	84 in. (213.5 cm)	84 in. (213.5 cm)	37 in. (94 cm)	3654 lbs (1306 kg)	
J-335	84 in. (213.5 cm)	84 in. (213.5 cm)	37 in. (94 cm)	3683 lbs (1671 kg)	
J-325	76 in. (193 cm)	84 in. (213.5 cm)	34 in. (86.5 cm)	3413 lbs (1548 kg)	
J-315	76 in. (193 cm)	66 in. (168 cm)	32 in. (81 cm)	2282 lbs (1035 kg)	
J-285	89 in. (226 cm)	89 in. (226 cm)	36 in. (91 cm)	3821 lbs (1733 kg)	
J-275	89 in. (226 cm)	89 in. (226 cm)	36 in. (91 cm)	3776 lbs (1713 kg)	
J-245	84 in. (213 cm)	84 in. (213 cm)	36 in. (91 cm)	3386 lbs (1536 kg)	
J-235	84 in. (213 cm)	84 in. (213 cm)	36 in. (91 cm)	3270 lbs (1483 kg)	
J-225	80 in. (203 cm)	80 in. (203 cm)	33 in. (84 cm)	2954 lbs (1340 kg)	
J-215	80 in. (203 cm)	69 in. (175 cm)	33 in. (84 cm)	2251 lbs (1021 kg)	
Soul 30 Jet	78 in. (198 cm)	78 in. (198 cm)	36 in. (91 cm)	2971 lbs (1348 kg)	
Echo 30 Jet	78 in. (198 cm)	78 in. (198 cm)	36 in. (91 cm)	3150 lbs (1429 kg)	
Mood	78 in. (198 cm)	68 in. (173 cm)	32 in. (81 cm)	2404 lbs (1090 kg)	

Water Capacity And Average Fill Volume

Use approximate average fill for chemical measurement.

Total Spa Volume is the approximate measurement of water it takes to fill the total area inside the spa.

*Average Fill Volume is the approximate measurement of water used to cover all jets but does not touch the bottom of the lowest headrest.

Model	*Average Fill Volume
J-495	500 US gal. (1893 Liters)
J-485	435 US gal. (1647 Liters)
J-475	440 US gal. (1666 Liters)
J-445	380 US gal. (1438 Liters)
J-435	360 US gal (1363 Liters)
J-LX	330 US gal. (1249 Liters)
J-LXL	330 US gal. (1249 Liters)
J-385	460 US gal. (1741 Liters)
J-375	445 US gal. (1685 Liters)
J-365	395 US gal. (1495 Liters)
J-355	360 US gal. (1363 Liters)
J-345	345 US gal. (1306 Liters)

Model	*Average Fill Volume
J-335	350 US gal. (1325 Liters)
J-325	335 US gal. (1268 Liters)
J-315	210 US gal. (795 Liters)
J-285	365 US gal. (1382 Liters)
J-275	360 US gal. (1363 Liters)
J-245	320 US gal. (1211 Liters)
J-235	305 US gal. (1155 Liters)
J-225	280 US gal. (1060 Liters)
J-215	205 US gal. (776 Liters)
Soul 30 Jet	310 US gal. (1173 Liters)
Echo 30 Jet	328 US gal. (1242 Liters)
Mood	254 US gal. (961 Liters)

Jacuzzi®

Your Jacuzzi Hot Tubs Dealer is:

www.jacuzzi.com
14525 Monte Vista Avenue, Chino, CA 91710 / U.S.A.

GME1212 Rev. A 01/2024

©2024 USA, Jacuzzi Hot Tubs. All rights reserved.