Portable Spa & Swim Spa Pre-Delivery Guide

2024

120V & 240V/60Hz Installation
For spas manufactured after:
January 1, 2024

For the Unites States and Canada

LTR5001024, Rev A
11/16/2023

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Locating Your Spa

Pre-Delivery Checklist

Most cities and countries require permits for exterior construction and electrial circuits. In addition, some communities have local codes requiring residential barriers such as fencing and/or self closing gates on property to prevent unsupervised access to the property by children.

Your dealer can provide information on which permits may be required, and how to obtain them prior to the delivery of your spa.

Before Delivery	
1	Choose a suitable location for the spa.
2	Plan your delivery route.
3	Lay a 4-6 inch concrete slab.
4	Install a dedicated electrical circuit.
After Delivery	
1	Place Spa on cement slab.
2	Connect electrical conduit to control box

Planning the Best Location

Electrical Hazard Safety

Do not place your spa within 10 feet (3 m) of overhead power lines.

Consider the Purpose of Your Spa

How do you intend to use your spa will help you determine where you should position it. For example, will you use your spa for recreational or therapeutic purposes? If the spa is mainly used for family recreation, be sure to leave plenty of room around it for activities, and to avoid trip hazards. If the spa is meant for relaxation purposes or therapy you may want to create a specific mood around it.

Plan Your Environment

If you live in a region where it snows in the winter or rains frequently, place the spa near a house entrance. By doing this, you will have a place to change clothes and not feel uncomfortable.

Consider Your Privacy

In a cold weather climate, bare trees and lack of foliage won't provide privacy as it would in the warmer seasons. Think of your spa surroundings during all seasons to determine your best privacy options. Consider the view of your neighbors as well when you plan the location of your spa.

Provide a View With Your Spa

Think about the direction you will be facing when sitting in your spa. Do you have a special landscaped area in your yard that you find enjoyable?

Keep Your Spa Clean

In planning your spa location, consider a location where the path to and from the house can be kept clean and free of debris.

Prevent dirt and contaminants from being tracked into your spa by placing a foot mat at the spa's entrance where the bathers can clean their feet before entering your spa.

Allow for Service Access

Make sure the spa is positioned so that there is at least 3 feet of clearance (1m) on each side of the spa for side panel removal.

Many people choose to install a decorative structure around the spa. With any type of structure on the outside, such as a gazebo, remember to allow proper access to perform maintenance on the unit. Speak with your dealer on special installation if 3 feet (1m) of clearance on all sides can not be met.

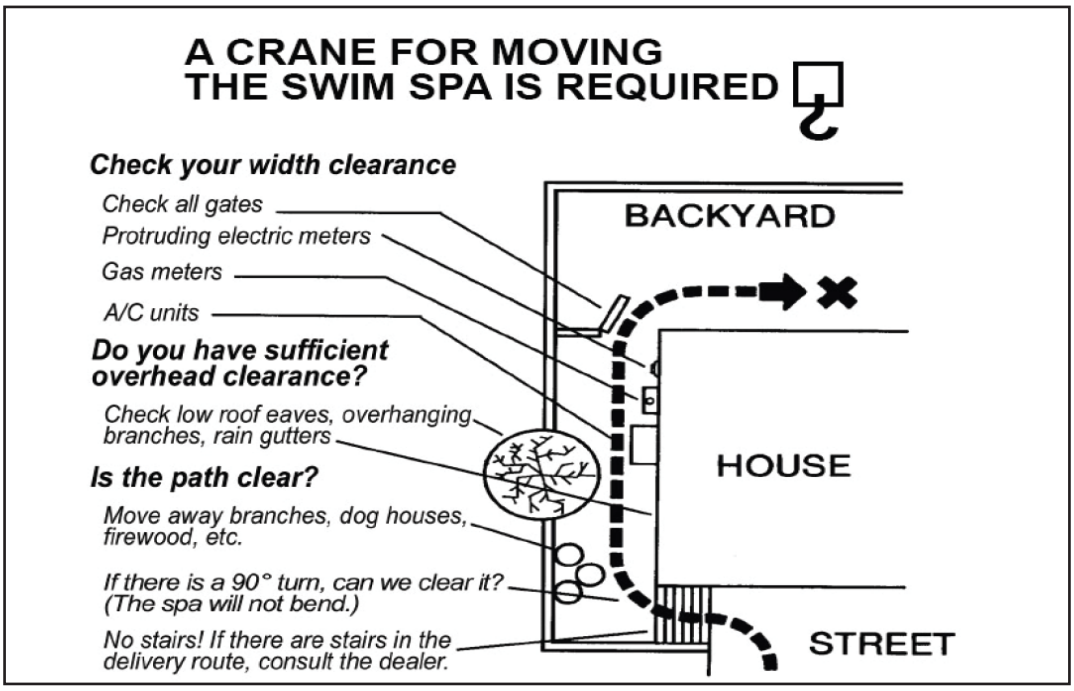
Getting the Spa Into the Property

Check The Dimensions of Your New Spa

During delivery, the spa must remain on the delivery cart at all times. Compare the dimensions to the width of the gates, sidewalks, and doorways along the delivery route. It may be necessary for you to remove a gate or partially remove a fence in order to provide an unobstructed passage way to the spas installation location.

Plan the Delivery Route

- Check the width of gates, doors and sidewalks to make sure your spa will pass through unobstructed. You may have to remove a gate or a section of fencing to allow for adequate width clearance.
- Are there low roof eaves, overhanging branches to rain gutters that could be an obstruction to overhead clearance.
- 8' spas need at least 44" wide gate and a 9' high clearance.
- If the delivery route will require a 90° turn, check the measurements at the turn to ensure the spa will fit.
- Are there protruding gas meters, water meters or an AC unit on your home? These can be obstructions on the delivery path for your spa.
- Are there stairs in your delivery route? If so, you must consult your Calspas dealer prior to delivery to make adequate preparations or adjustments, as in some cases a crane will be needed to move the spa into its final resting place.



Delivery on Challenging Terrain or Limited Access

The use of a crane for delivery and installation is necessary if you are unable to provide an adequate delivery route. It is used primarily to avoid injury to delivery personnel, also to avoid damage to the property and the spa itself. Your Calspas dealer may be able to assist you with arrangements on spa delivery. If your property requires the use of a crane, the cost of the crane is not something included with a standard delivery service of a spa. Failure to do so may lead to damage to the spa, home, and injury to delivery personnel.

Notice: All Swim Spas require the use of a crane to install due to the size and weight of Swim Spas.

Foundation Requirements

Your spa needs a solid and level foundation. The area that is sits on must be able to support the weight of the unit will water and occupants using it taken into account. **If the foundation is inadequate, it may result in a shifting foundation causing stress on the spa frame itself that can result in damage to your spa shell and finish.**

Damage caused by inadequate foundations are not covered under warranty. It is the responsibility of the spa owner to provide a proper foundation.

Place the spa on a elevated 4-6 inch cement slab. Pavers, gravel, brick, sand, timbers, or dirt are not adequate enough to support the weight of the spa.

We recommend contacting a qualified licensed contractor to prepare the foundation to support the weight of the unit

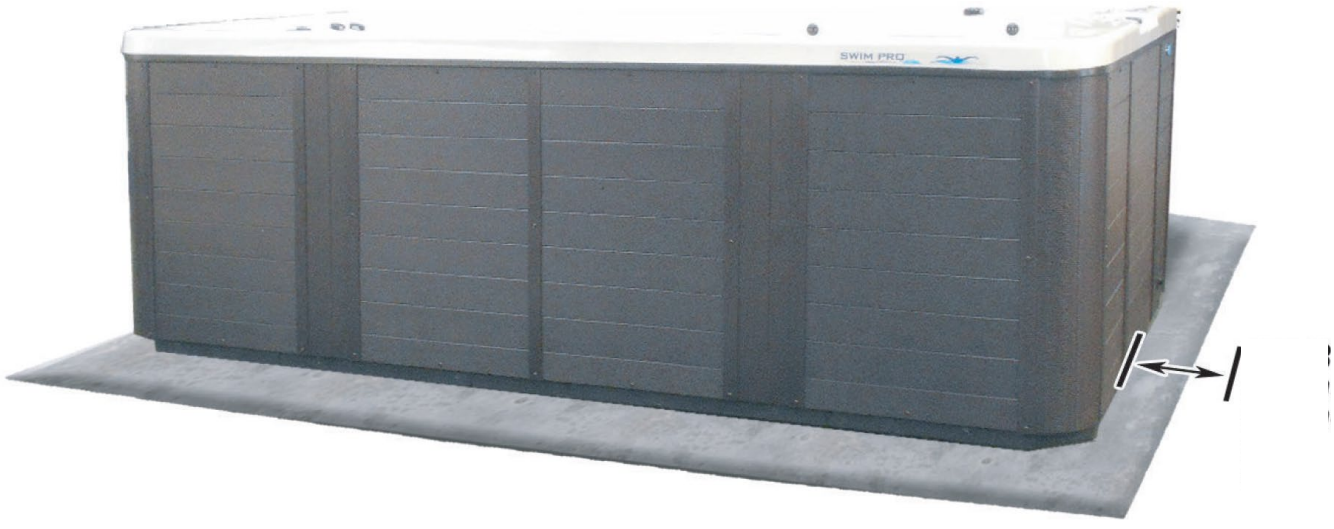
If you are installing the spa indoors, pay close attention to the flooring beneath it. Choosing flooring that will not be damaged or stained.

If the spa is installed on an elevated wooden deck or structure, consult a structural engineer or a licensed contractor to determine the weight limit of the platform you intend to use.

The structure must support 150 Lb per square foot (732 kg/m²).

When calculating the total weight of your new spa when filled and in use. **remember that water weighs 8.33lb per gallon, or 1kg per liter.** The average spa holds about 500 gal/1892 L of water. The water alone is 4,165 lbs, or 1892 kg. Combined with the dry weight of the spa you will note that this spa will weigh approximately 5,000 lbs, or 2267 kg, when full of water.

The foundation must extend 12" (1 foot/30.5cm) from the spa itself on all sides. this will distribute the spas weight accross the whole foundation equally.



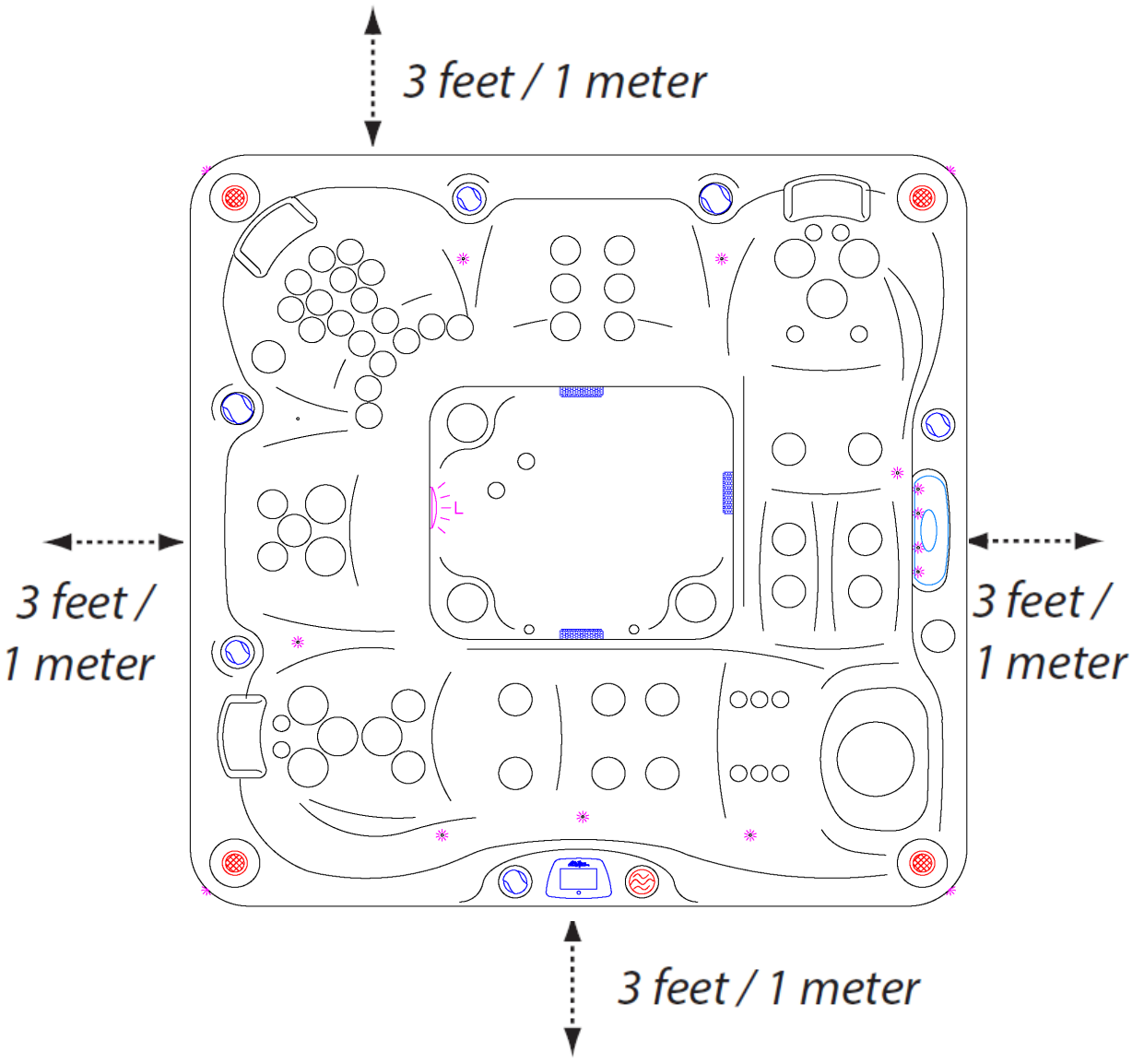
Spa Clearance for Service Access

While you are planning where to locate your new spa, you need to determine how much access you will need for service .

All spa models require a minimum of three feet/1m access to all sides of the spa for potential service. For this reason, the spa should never be placed in a manner where any side is permanently blocked. Examples include placing the spa against a building, structural posts or columns, or a fence.

Spa models require access top all sides in case they need service or repair. See the figure below.

If you are planning to enclose or surround your spa with a deck, make sure there is easy access for service or repair.



Electrical Service Stub-Up

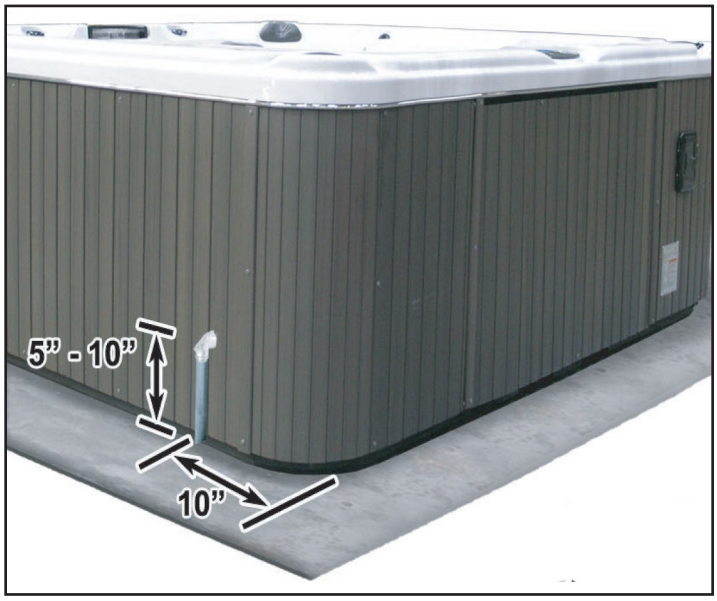
The location of the electrical service cable is a decision each spa owner needs to decide. Running the electrical cable lay on top of the slab looks visually unappealing, and can become a trip hazard.
Most spa owners prefer to bury the electrical conduit before the cement slab is poured to run the electrical cord through the slab itself, the area where the conduit can come up inside the spa is called its stub-up location. The conduit can be fed in through the side of the spa using method one, or method two connecting the conduit internally through the base of the spa itself.

You will need a contractor to lay down a concrete slab before the spa is delivered. The stub up is usually located near the front right corner of the spa. Refer to your spa models line drawing, available to download on our website **www.calspas.com** you may also scan the QR code below. Select your spa model, select the documents tab, and select the line drawing PDF.

The installer will need to drill a hole in the spa cabinet approximately 5”-10”/12-25cm up from the concrete slab. This will be where the conduit will come through and connect to the spa equipment inside.

Method 1: Use a rigid pipe or a metal elbow outside the spa. You can use flex pipe inside the equipment area to run the electrical wire from the elbow to the control box.

Method 2: If you choose to run the electrical conduit internally through the spa, refer to the line drawing of your spa model to know where to safely do so.

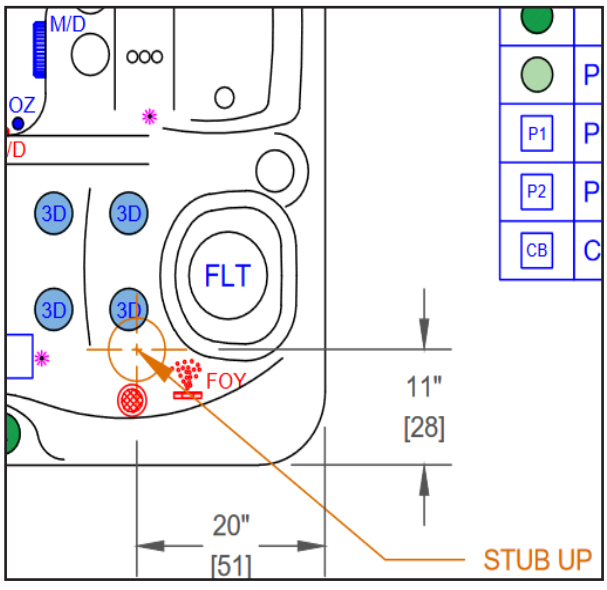


Method 1: Feeding the conduit through the cement slab to line up with your spas front right corner.

Using a pipe and a 90° into a small drilled hole lowers the risk of a trip hazard, and will be visually pleasing compared to running the conduit accross the cement slab.

Method 2: You may also choose to run the conduit internally, following the steps listed above you can use the line drawing as reference to position the electrical stub up though the cement slab before pouring.

Example image below is from a EC740L line drawing.



Website QR Code

Electrical Circuit Requirements

240V 60Hz Electrical Installation

All 240V spas must be permanently connected (hard wired) to the power supply. See the GFCI & wiring requirements below.

These instructions describe the only acceptable electrical wiring procedure. Spas wired in any other way will void your warranty and may result in serious injury or death.

When installed in the United States, the electrical wiring of the spa must meet the requirements of NEC a70 and any applicable local, state, and federal codes.

The electrical circuit must be installed by an electrical contractor and approved by a local building or electrical inspector.

Failure to comply with state or local codes may result in a fire or personal injury and will be the sole responsibility of the spa owner.

The power supplied to the spa must be on a dedicated GFCI protected circuit as required my NEC70 with no other appliances or lights sharing the circuit.

Use copper wire only with THHN insulation. Do not use aluminum wire.

Use the table below and on the next page to determine your GFCI and wiring requirements.

On the following page will be an illustration of a GFCI diagram to assist your electrician with its intended wiring installation.

Wires that run over 100 Feet must adjust their wire gauge down a level. For example a normal 50-Amp 6 gauge circuit with four #6 gauge wires, if this spa were to be moved to be 100 feet away from its main power source, then you would use #4 gauge wire instead.

Control System	GFCI Required	Wires Required	Wiring Diagram
BP501G1 Single Pump Systems	One 40-Amp GFCI	Four #6 AWG Wires	Refer to the following page for the diagram
BP501G1 & BP501X Two & Three Pumps	One 50-Amp GFCI	Four #6 AWG Wires	
BP20X Three or More Pumps	One 60-Amp GFCI	Four #6 AWG Wires	

240 Volt GFCI Diagram USA & Canada (Balboa)

Control System	GFCI Required	Wires Required	Wiring Diagram
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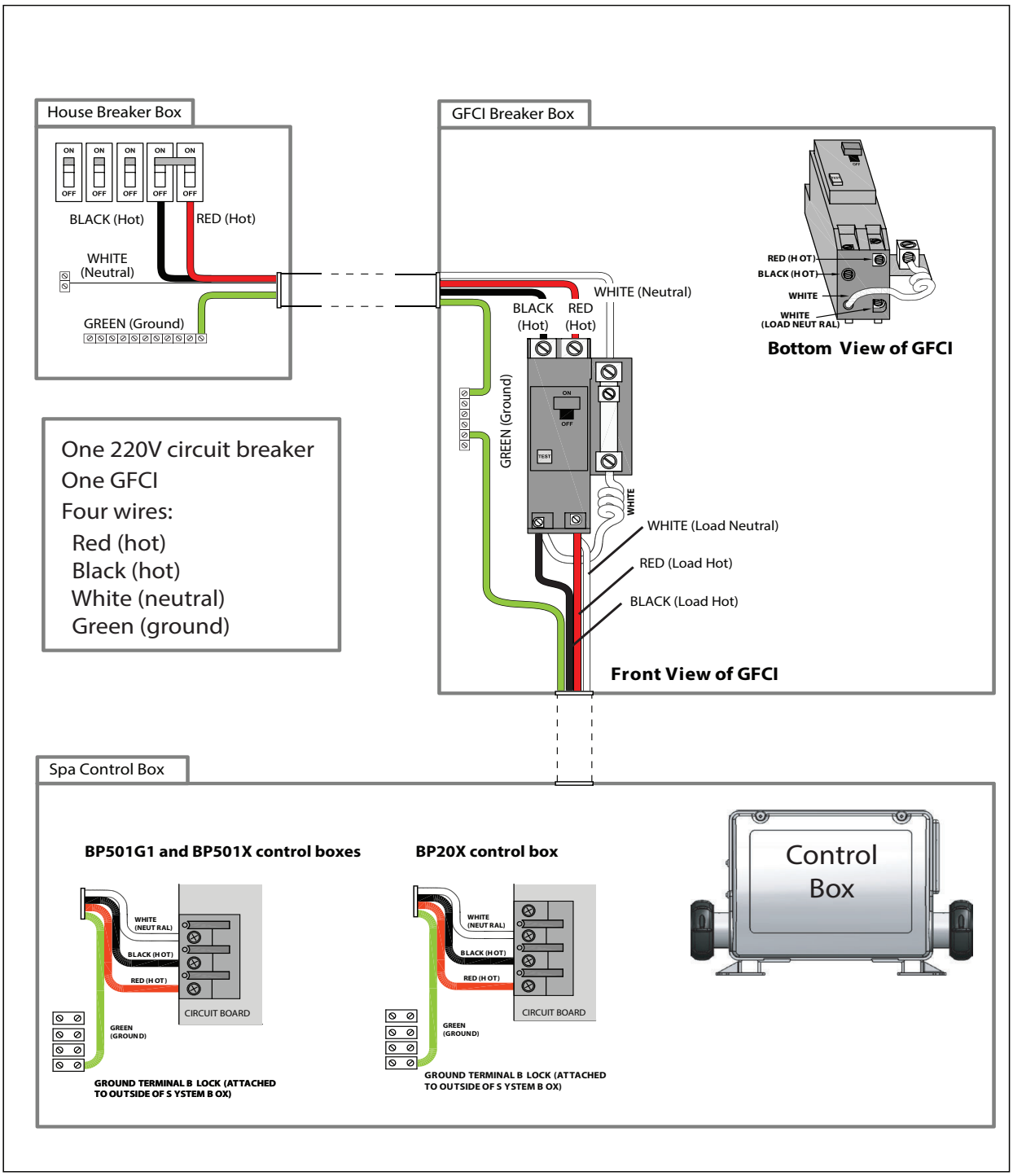
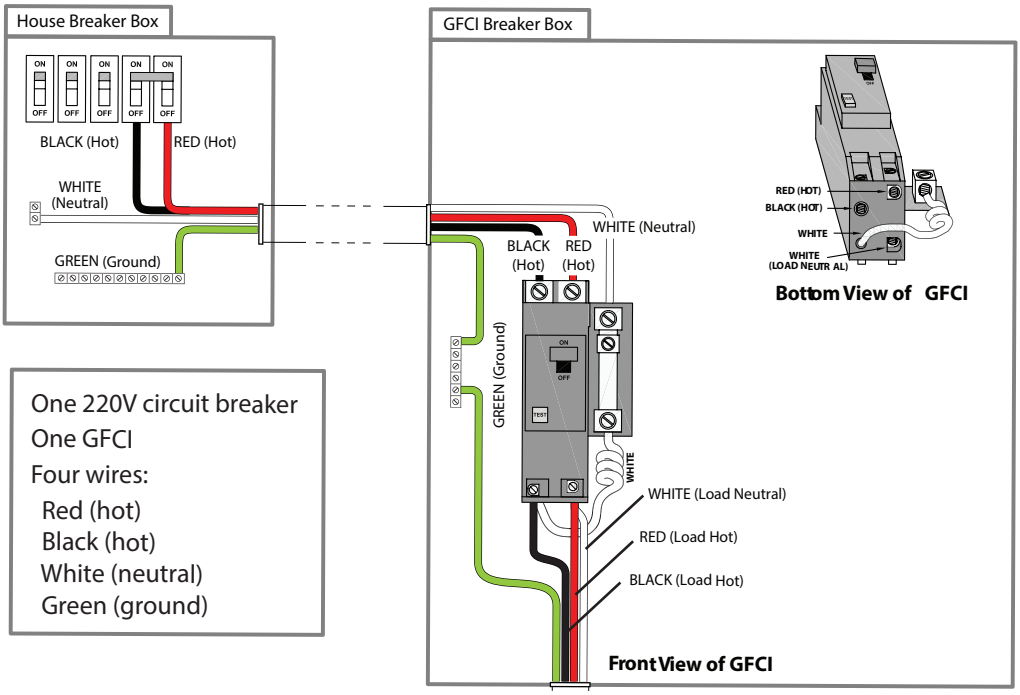


240 Volt GFCI Diagram USA & Canada (Gecko)

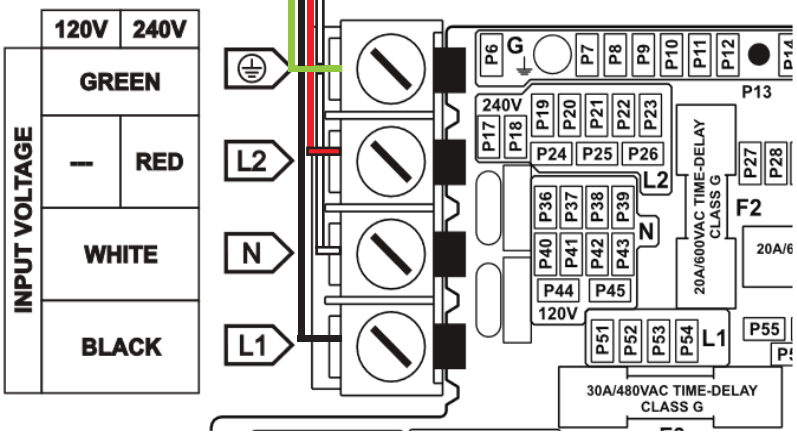
Control System	GFCI Require	Wires Required
IN.YE3 (2 Pump System)	40 Amp	Four #6 AWG Copper Wires
IN.YE5 (3 Pump System	50 Amp	Four #6 AWG Copper Wires
IN.YE5 (4 Pump system)	60 Amp	Four #6 AWG Copper Wires



One 220V circuit breaker
One GFCI
Four wires:
Red (hot)
Black (hot)
White (neutral)
Green (ground)

Refer to this diagram for both:

IN.YE-5-AMP-V3
&
IN.YE-3-AMP-V3



120 Volt GFCI Diagram USA & Canada

Always follow applicable local, state, federal codes, and guidelines

Use only a dedicated circuit for 120V spas, also a 15-amp circuit breaker

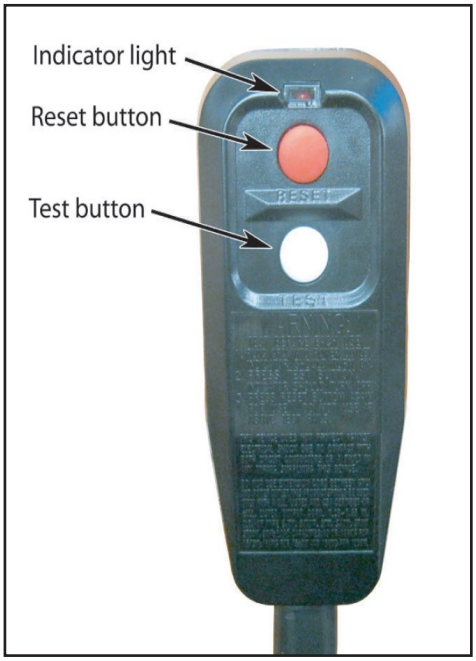
The equipped wire and plug contains an internal GFCI.

The cord-and-plug connection installed with your 120V spa cannot be extended, or extended using an extension cord. The length of the equipped cord is 15 feet (4.6m).

Use a weather-proof receptacle to protect the outlet your spa is connected too. Do not bury or submerge the power cord.

If your power cord becomes damaged, replace it before continuing usage of the spa, as **using a damaged cord can cause an electric shock or fire risk.**

Replacement part number: ELE09700073



240V/60Hz Installation
For spas manufactured after:
January 1, 2024

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