Cal Spas

Limited Edition

LES-LG & BG Editions

2026

LTR20251183-LG

Made in USA

"From the Finest Components Around the World"™

Cal Spas Home Resorts

Owners Manual

Congratulations, You are now the proud owner of the finest spa built. Now you will experience true comfort and relaxation as you never had before. We at Cal Spas® focus on quality, design, and comfort to create a truly luxurious experience like no other. Welcome to the Cal Spas family.

It is important that you register your Cal Spas product as soon as possible. This can be done by taking a few minutes to complete an online registration form on our website. Allowing us to efficiently help you with parts, support, or other inquiries.

https://calspas.com/register-your-spa.php

Locating the Spa Serial Number

You will need your spas serial number, This serial number is placed on the exterior of the spa. The plate is placed on the lower right hand side when facing the front of the spa. This serial number is unique to your spa, and can be used to order parts, file a warranty claim, and is used in the registration process to activate your spas warranty.

Model: _____

Spa Serial Number: _____

Purchase Date: _____

Dealer's Phone Number: _____

Dealer's Address: _____

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Cal Spas®,Adjustable Therapy System™, ATS™, Cal Premium™, Cal Select™, Cal Stone™, XL™ Heater, and Ultimate Fitness Spa Series™, are registered trademarks. Due to continuous improvement programs, all models, operation, and/or specifications are subject to change without prior notice.

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12/3/2025 Rev B

Contact Information
For customer service or service technicians, please contact your authorized dealer immediately. If you need additional information and/or assistance, contact

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IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

When using and installing this spa, basic safety precautions should always be followed, including.

Danger: RISK OF SEVERE INJURY OR DROWNING!

- NO DIVING, diving may result in injury or death.
- Do not allow children to be in or around the spa unless a responsible adult supervises them.
- Keep the spa cover on and locked when not in use
- See instructions enclosed with your cover for locking procedures.

Danger: SUCTION ENTRAPMENT HAZARD, RISK OF SEVERE INJURY OR DROWNING!

Suction in suction fittings when broken, damaged, cracked, or unsecured can cause severe injury and or death due to the following entrapment hazards.

- **Body Entrapment:** A negative pressure applied to a large portion of the body or limbs can result in entrapment.
- **Hair Entrapment:** Hair can be sucked in or caught within the suction fitting.
- **Evisceration/Disembowelment Entrapment Risk:** Negative pressure applied directly to the intestines through a damaged/unprotected suction outlet. This can result in Evisceration/Disembowelment.
- The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings, or the pump, be sure the flow rates are compatible.
- The suction fitting is made with chemical resistant plastic, that will last over a finite period of time. This component will degrade and become brittle after constant exposure to sanitizers. When performing maintenance on the spa, inspect suction fittings for any cracks or damage.
- When the spa is in operation, suction is created within the suction fittings. Persons within the spa should not be leaning on, stepping on, or making contact with suction fittings.

Danger: RISK OF SEVERE INJURY FROM ELECTRIC SHOCK OR DEATH FROM ELECTROCUTION.

- Install the spa at least 5 feet (1.5 meters) from all metal surfaces. As an alternative, a spa may be installed within 5 feet (1.5 meters) of metal surfaces if each metal surface is permanently bonded by a minimum of 8 gauge AWG solid copper conductor to the outside of the spas control box.
- DO NOT permit any external electrical appliances, such as lights, telephones, radios, television, etc, within 5 feet (1.5 meters) of the spa. Never attempt to operate any electrical device from inside the spa.
- Replace any damaged power cord immediately.
- Never bury any power cord, a proper conduit must be used.
- Connect to a proper grounding-type receptacle or to a proper grounding post in the GFCI and breaker.

Warning: RISK OF HYPERTHERMIA (OVER-HEATING) CAUSING SEVERE INJURY, BURNS, WELTS, OR DEATH

- Water temperature in excess of 104°F (40°C) may be detrimental for your health.
- The spa water should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult.
- Lower water temperatures are recommended for young children, and when the spa use exceeds 10 minutes.
- Before using the spa, the user should measure the water temperature since the tolerance of water temperature regulating devices varies.
- **Do not use the spa if drugs, alcohol, or prescription medications were consumed before or during use. In an altered state of mind, the human body can not react properly to changes in temperature. This increases your risk of hyperthermia, injury, drowning, or death.**

Warning: REDUCE RISK OF HEAT RELATED INJURY OR DEATH

- Prolonged exposure to hot air or water can induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level between 3°F (2°C) to 6°F (4°C) above the normal body temperature of 98.6°F (37°C). While using warm spa water has many health benefits, its important to make sure that your body's core temperature does not rise above 103°F (39.5°C).
- High water temperatures have a high potential for causing fetal damage during pregnancy. Women who are pregnant, or think they are pregnant should always check with their physician prior to spa usage.
- The use of alcohol, drugs or medication before or during spa use may lead to unconsciousness, with the possibility of drowning.
- Persons suffering from obesity, a medical history of heart disease, low or high blood pressure, circulatory system problems or diabetes should consult a physician before using the spa.
- Persons using medications should consult a physician before using the spa since some medications may induce drowsiness or impair judgment. Other medications or drugs may affect heat rate, blood pressure and circulation.

HYPERTHERMIA

- Symptoms of excessive hyperthermia include dizziness, lethargy, drowsiness and fainting. The effects if excessive hyperthermia may include:
  - Failure to perceive heat
  - Failure to recognize the need to exit the spa
  - Unawareness to impending hazards
  - Fetal damage to pregnant woman
  - Physical inability to exit spa
  - Unconsciousness

Swim Spa Temperatures

- When using a swim spa for exercise or for leisurely swimming, never set the swim spa water temperature above 80°F. Temperatures above 80°F can hinder the bodies ability to cool down and cause unnecessary cardiovascular stress.

Caution: Sanitation

- Spa water must be regularly treated by an approved spa sanitizer, whenever water is present inside of the spa. Failure to do so will result in possible contact with waterborne illness & algae growth. Additionally this may cause possible damage to pumps and hardware. Always drain the spa if the spa will encounter a shut down that can last more than 2-3 days.

WARNING: People with infectious diseases or diarrhea should not use a spa or hot tub.

WARNING: To avoid injury, exercise caution when entering or exiting the spa/swim spa.

WARNING: Do not use the spa or swim spa immediately following strenuous exercise.

WARNING: Prolonged immersion in a spa or hot tub may be injurious to your health.

CAUTION: Maintain water chemistry in accordance with the manufacture's instructions.

WARNING: NO DIVING, diving may result in injury or death.

READ AND SAVE THESE INSTRUCTIONS

Preparing for Your Spa

Pre-Delivery Checklist

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

Before Delivery

- ☐ Plan your delivery route
- ☐ Choose a suitable location for the spa
- ☐ Lay a 5-8 cm concrete slab
- ☐ Install dedicated electric supply

After Delivery

- ☐ Place spa on Slab
- ☐ Connect electrical components

Planning the Best Location

Pre-Delivery Checklist

Do no place your spa within 10 feet (3m) of overhead power lines.

Consider How You Will Use Your Spa

How you intend to use your spa will help you determine where you should position it. For example, will you use your spa for therapeutic purposes? Recreational use? If your spa is intended for recreational use make sure to leave plenty of room around it for activity. If you intend to use the spa for relaxation and therapy, you will probably want to create a specific mood around it

Plan for Your Environment

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

Consider Your Privacy

In cold-weather climate, bare trees wont provide much privacy. Take into consideration year round climate when looking for the best privacy options for you spa. Consider the view of your neighbors as well

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 home you find enjoyable? A area that takes advantage of a good view, or a favorite spot that catches a soothing breeze throughout the day.

Keep Your Spa Clean

In planning your spa's 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 the spa. Place a bath mat next to the spa entrance to allow users to clean their feet before going into the spa. Sunscreen and tanning lotions that don't properly absorb into the skin will contaminate the water, adjust filtration times if needed.

Note: some sunscreens require application 15-20 minutes before exposure to water.

Allow for Service Access

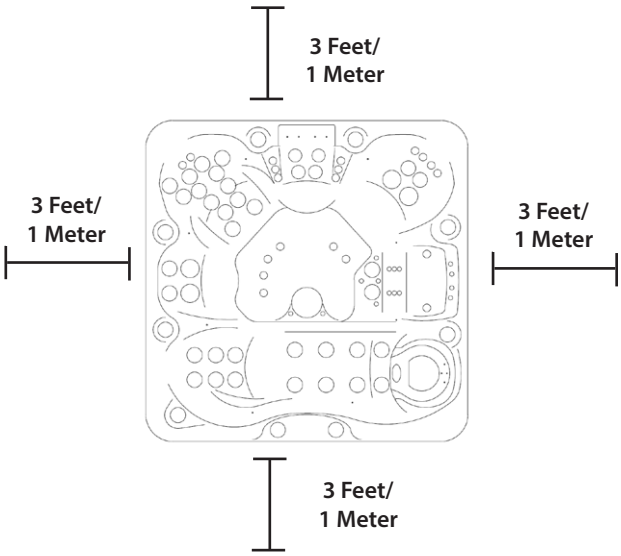
Make sure the spa is positioned with access to all side panels to access internal equipment. It is important that all side panels are not blocked.

Many people choose to install a decorative structure around their spa, if you are installing your spa with any type of structure on the outside, such as a gazebo, remember to allow access for service. We recommend designing surrounds for your spa that can easily be moved or lifted off the ground.

Clearance for Service Access

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

All spa models require a minimum of three feet (one meter), of 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, columns, walls, fences, or raised embankments.



If the spa is surrounded by a deck, ensure that there is easy access for service or repair. Decks should have the ability to be accessed or removed easily, some decks are built in segments for easy removal.

Spas require access in all sides in case they need service or repair. Additional service costs can be applied by the servicing dealer if a crane or additional manpower and equipment is needed to access the internals of the spa.

Preparing a Good Foundation

***NOTE:** We strongly recommend that a qualified, licensed contractor prepare the foundation for your spa. Damage caused by inadequate or improper foundation support is not covered by the warranty. It is the responsibility of the spa owner to provide a proper foundation for the spa.*

Your spa needs a solid and level foundation. The area that it sits on must be able to support the weight of the spa, with water and occupants who use it. If the foundation is inadequate, it may shift or settle after the spa is in place, causing stress that could DAMAGE YOUR SPA SHELL AND FINISH. Place the spa on an elevated 3 to 4” / 30 cm concrete slab. Pavers, gravel, brick, sand, timbers or dirt foundations are ***not*** adequate to support the spa. If you are installing the spa indoors, pay close attention to the flooring beneath it. Choose flooring that will not be damaged or stained. If you are installing your spa on an elevated wood deck or other structure, it is highly recommended that you consult a structural engineer or contractor to ensure the structure will support the weight of 150 lbs per square foot (732 Kg/m^2).

Opening the Front Panel For Electrical Access

Cal Spas are designed with innovative snap in panels and corners. In order to access the control box for electrical hook up, plumbing, or pumps inside of your spa, you will need to remove the corner panels and the front panel. The following tutorial is designed to illustrate the process of removing/reinstalling any corner panel, and any side panel.

Caution: Pinch Points.

When snapping panels back into place your spa, be cautious of your hand position. Avoid placing your fingers or hands over the edges of corners or panels, it may result in injury once panels lock into place.

Before starting, make sure you wear gloves when removing any panel from your spa.

Caution

Begin by removing support screws from the spa corners and the panels. These can be removed using a drill or a screwdriver with a Philips #2 screw bit. Every side of the spa has support screws.

Step 1

In order to remove the front panel, the front corners of the spa must be removed prior to removing the front panel.

Note: Spa corners use support screws as well. Remove the screws from the corners. Do not pull on corners held down by any screw.

Step 2

Once the corner is removed, place aside with great care of not bending or stepping on the corner.

Repeat the removal process with the remaining corner(s) based on your service access needs.

Step 3

Once both corners are removed, place one hand under the front panel and one hand on either corner.

Once prepared, pull both the center and your chosen corner at the same time to release the panel.

Caution: Brace for the weight of the panel once it is removed. Failure to do so can result in injury such as pinched fingers, cuts, or other injuries.

Step 4

Once the panel is removed, use the wooden support boards to move your panel around if needed.

Note: Do not move your spa panel using the white clamp in mechanism.

Step 5

Once the front panel has been removed, your electrician or contractor may perform the necessary electrical work to power the spa.

Once the required work is completed, retrieve the panel and align the cabinet mounted plastic clamp with the bottom spa mounted plastic retainer.

Note: In order for the panel to align, the plastic clips must be leveled with each other. If the panel is misaligned, remove and reinstall the panel.

Step 6

Once the panel is aligned, apply medium pressure to the bottom center of the panel to secure it into place. Similarly apply pressure to the top center of the panel as well. You may also use the bottom of your fist to tap the panel back into place.

Note: The panels are secured once you hear and feel a *thump* securing the plastic clamp together with the base.

Step 7

Upon securing the front panel, proceed with installing the corners.

Similarly to how the corners were removed, align the corner with the lip of the spa, and ensure the top of the corner is under the black weather stripping of the spa shell. Reinstall the removed screws to secure the corner in place.

Removing Shipping Materials

Your Cal Spa is wrapped with a white shrink wrap designed to protect the acrylic shell from scratches and damage. Thoroughly inspect the plastic wrapping for any tears and or damage that may have occurred during shipping. It is expected to see some scuffs or small tears at the base and corners of the spa, as the spa is pushed and shifted around in transport.

Note: Do not use a box cutter or knife to remove this plastic wrapping, if a blade is used you may cut the plastic wrapping at the bottom base of the spa, avoid slicing near the corners or the top of the spa.

Depending on the type of spa, a piece of wood is placed on the side panels of the spa to protect it in shipping. The wooden supports are installed with several 7/16” (11mm) bolts, once the spa is in its final resting place, remove these with an 11mm socket.

240 Volt Electrical Installation

NOTE: 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. The electrical circuit must be installed by an electrical contractor and approved by a local building or electrical inspector. Failure to comply with state and local codes may result in a fire or personal injury and will be the sole responsibility of the spa owner.

All 240V spas must be permanently connected (hard wired) to the power supply. When installed in the United States, the electrical wiring of this spa must meet the requirements of the NEC 70 and any applicable local, state, and federal codes. The power supplied to the spa must be on a dedicated GFCI protected circuit as required by NEC 70 with no other appliances or lights sharing the power. Use copper wire with THHN insulation. DO not use aluminum wire. Use the table below to determine your GFCI and wiring requirements. Wires that run over 100 feet must increase wire gauge to the next lower number. For example: A normal 50 amp GFCI with four #6 AWG copper wires that run over 100 feet would require you to go to four #4 AWG copper wires.

GFCI Wiring Requirements

Control System	GFCI Breaker	Wire Specifications
NEO 2100 One Pump Systems 240v Two Pump Systems 240v	One 40 Amp GFCI Breaker	Four #6 AWG Copper wires, for spas within 100 feet of the electrical source. Four #4 AWG Copper wires, for spas between 100-200 feet from its electrical source.
Neo 2100 Three Pump Systems 240v	One 50 Amp GFCI Breaker	Four #6 AWG Copper Wires spas within 100 feet of the electrical source. Four #4 AWG Copper wires, for spas between 100-200 feet from its electrical source
Neo 2100 One Pump System 120v	One 15 Amp protected circuit. (GFCI plug is pre-installed onto the spas electrical cord)	ONLY USE THE PROVIDED ELECTRICAL CORD. ANY MODIFICATIONS FOR DISTANCE MUST GO THOUGH YOUR DEALER.

Electrical Requirements

Professional installation of the spas 240v electrical system is mandatory for both the safe operation of the spa, and for warranty coverage. Failure to properly install an independent 240 volt GFCI may lead to dangerous risks such as electrical shock, electrical fires, damage to the spa or property, and the risk of possible injury or death of persons inside of or within the perimeter of a improperly installed spa.

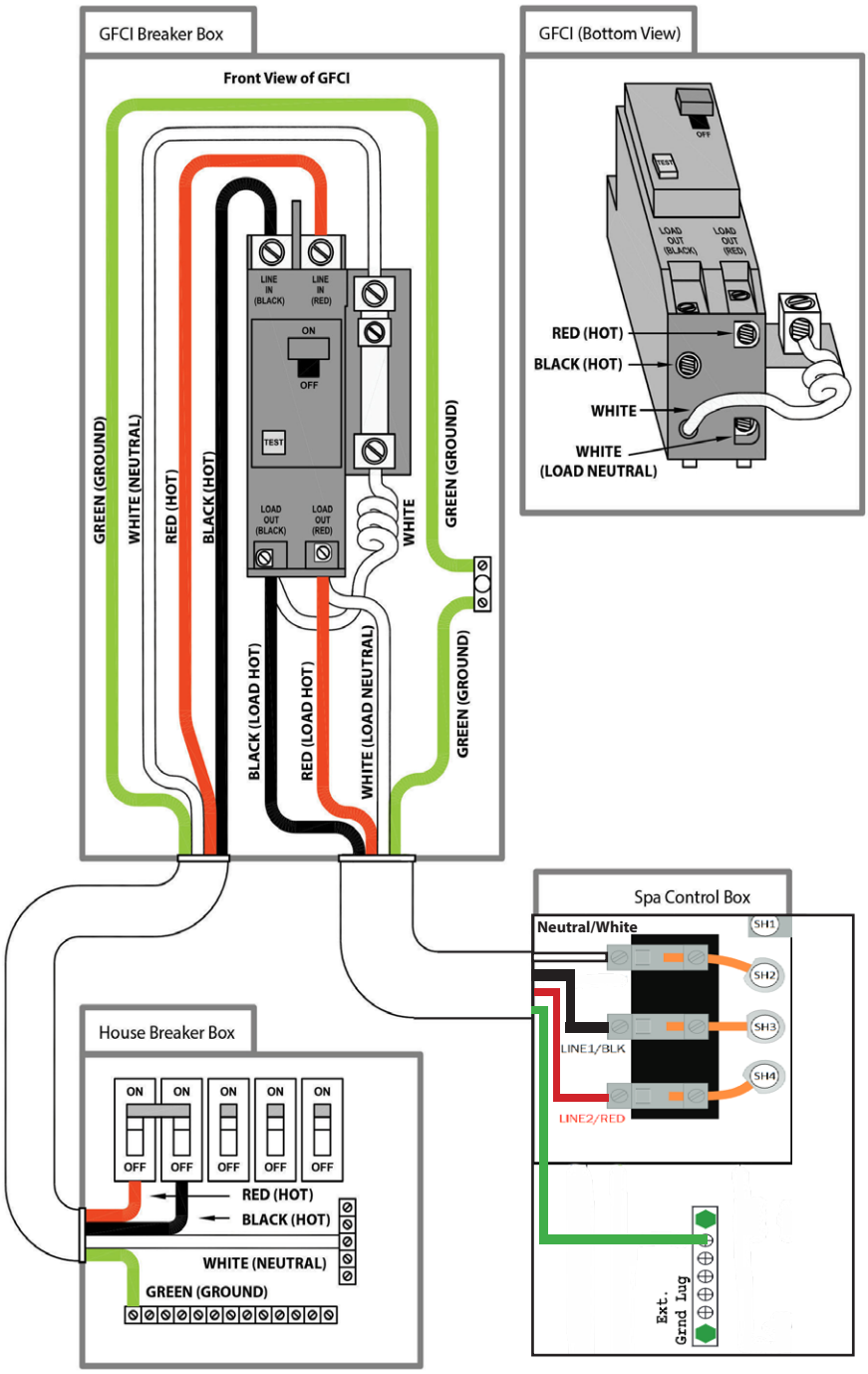
NEO Wiring Diagram

Mandatory Wiring Requirements

- 6 Gauge Copper Wiring for All Wires for Spas Within 100 Feet of the House Breaker Box.
- 50 Amp GFCI Breaker Certified for Use in USA & Canada.
- Use Proper Colored Wiring, the Installation Must Match the Diagram.
- This GFCI is Wired to an Independent Circuit From the House Breaker Box, With No other Electrical Loads.

Additional Information

- Aluminum wire must not be used in this installation
- 4 gauge wire is recommended if the circuit is longer than 100 feet.
- Failure to properly follow any mentioned mandatory requirements will void the warranty of your spa, American Spas is not liable for any damages (physical or monetary), injury, or fire damage from improperly installed spas. It is the responsibility of the spa owner, to comply with all specified electrical requirements within this owners manual.



120 Volt Electrical Installation

Always follow applicable local, state and federal codes and guidelines.
Use only a dedicated electrical line with a 15 amp breaker.
Cord-and-plug connections may not use a cord longer than 15 feet (4.6 m) and must be plugged into a dedicated 15 amp GFCI connection (NEC 680.42(A)(2)). Do not use extension cords!
Always use a weatherproof-covered receptacle.
Receptacle shall be located not less than 5 feet (1.5 m) from and not exceeding 10 feet (3.0 m) from the inside wall of the spa. (NEC 680.43(A))
Do not bury the power cord. If your cord becomes damaged, replace it before next usage.
All 120V spas must have a GFCI. This can be either a 15 amp GFCI receptacle or a 15 amp GFCI cord and plug kit as shown (CKIT110 - P/N ELE09700086).

Testing the GFCI plug

Test the GFCI plug prior to first use and periodically when the spa is powered.

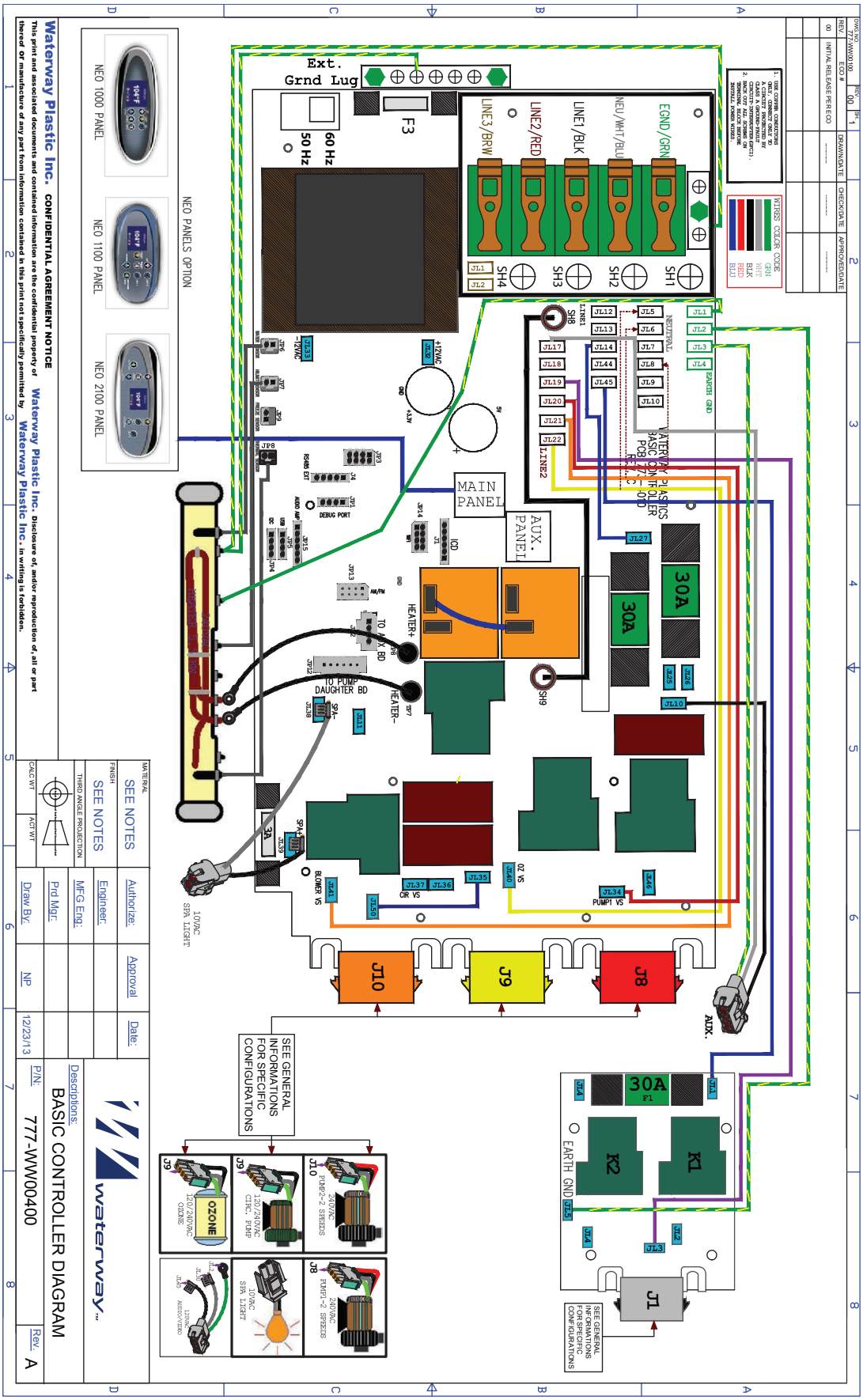
1. Plug in the GFCI into the power outlet. The indicator should turn on.
2. Press the TEST button. The GFCI will trip, the indicator will turn off, and the spa will stop operating.
3. Press the RESET button. The GFCI will reset, the indicator will turn on again, and the spa will turn back on.

The spa is now safe to use.

If the GFCI trips while the spa is in use, press the RESET button. If the GFCI does not reset, unplug the spa and call your local Cal Spas dealer for service. DO NOT USE THE SPA!

WIRING DIAGRAM 777-WW00400-A with DB1 2SPD Daughter Board

*Diagrams are for contractors/technicians for reference.

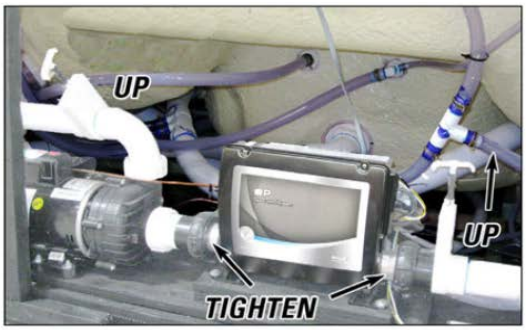


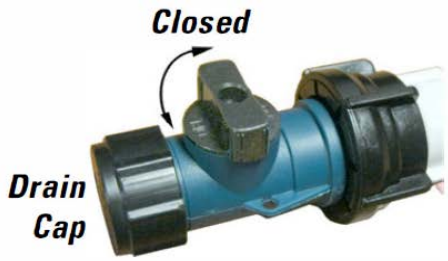
Step 1. Inspect the Spa Equipment.

Inspect all plumbing connections in the equipment area of your spa.

- Make sure unions connected to the equipment pack are tight (do not over-tighten)
- If your spa has gate valves, make sure they are in the upright position.
- Make sure the drain valve is closed and capped.

This image is for illustration purposes only. The spa Control box may appear differently than the illustration within your spa.





Note: Never run the spa with the gate valve closed or without circulating water for long periods of time.

Step 2. Remove the Filter Cartridge.

If you have a skimmer like this:

Teleweir filter skimmer

- 50 square feet filtration
- Spoked cap

Rotate and remove the locking ring (Color may vary). Remove the skimmer cap and barrel, grip the filter by the handle and unscrew it from the canister. Replace and lock the locking ring and slid the skimmer cap and barrel back into the canister. Once the spa is filled you can remove the skimmer cap and barrel again to reinstall the filter.

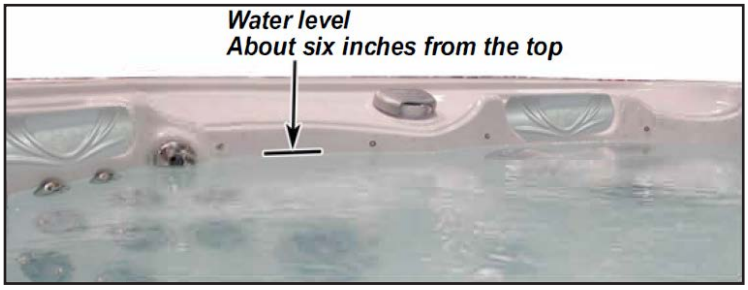
The skimmer and barrel are locked in place during shipping with a retainer ring. The retainer ring must be un-locked and removed in order to slide the skimmer upward to remove the filter cartridge.

When removing the filter cartridge, you may remove the filter by turning it counter clockwise. The filter must me removed gently to not damage the threaded fitting inside of the filter canister.

After removing the filter, reinstall the retainer ring to the canister, then reinstall the skimmer, this skimmer must be able to move up and down with your water level. In the follow-ing step you will fill your spa with water through the filter canister.

Step 3. Fill the Spa

Place the water hose inside the filter canister. Fill your spa with regular tap water about six inches from the top. If the water level is too low or too high, your spa will not operate correctly.



NOTE: Never fill with soft water.
Soft water made through some home filtration systems make it impossible to maintain proper water chemistry, and may cause water foaming. This can damage the finish of the spa and void your warranty.

You may fill your spa with well water, but only if the following preconditions are followed.

1. Purchase and use a pre-filter that can attach to the end of a hose. This pre-filter is absolutely necessary in order to remove reactive metals and other dissolved solids that are found in well water.
2. Perform a Total Dissolved Solids (TDS) and metals test, this can be performed by a qualified person after filling up the spa, before initial use. Most dealers and pool supply stores can perform this test.

Step 4. Power Your Spa

When the spa is filled to the correct level, turn on the power at the GFCI breaker (ensure that the 120V spas are connected to their dedicated proper electrical outlet.)

Step 5. Prime the Main Pump

The system will enter priming mode when powered up for the first time. **Priming Mode** will scroll through the display on the control panel. In this mode all devices including pumps and lights are operable, you may press the jet buttons on and off to help prime the pumps. After a few minutes the system will exit priming mode.

Step 6. Install filter into the filter canister

Note: Make sure you have removed and soaked the spa filter cartridge in a bucket of water for at least 30 minutes. This will remove air pockets inside of the filter.

When re installing the filter cartridge, do not over tighten the filter, the threaded bit inside of the filter housing is made of a corrosion resistant ABS plastic. Excessive torque will break the internal threads within the filter housing.

Step 7. Test and Adjust Water Chemistry

Test and adjust the water chemistry.

Step 8. Let the Spa Heat Up

After a period of 5-15 minutes the priming mode will finish. The heater will then activate, put the spa cover on and let the spa heat to the desired set temperature.

During the initial power up the spa, it will consume a large amount of energy to raise the water in the tub to your desired hot tub temperature. Cal Spas are designed for high efficiency, once the temperature within the spa is reached, the spa will use lower amounts of energy to maintain the temperature.

Note: Cal Spas are designed to retain heat, if it is desired to lower the water temperature the spa does not contain a cooling feature. To lower internal temperature of the spa, lower the set temperature on the control panel and open the tub during the evening or night to help release the heat captured within. You may also drain 1/4 of the water within and refill with new water to lower temperatures rapidly.

Priming the Primary Pump

New owners often have difficulty the first time they start their spa and the pumps fail to prime. This can be frustrating but these instructions should help you resolve any issues with air pockets inside of the primary pump or other priming issues.

Sometimes air can become trapped in the primary pump while filling up the spa, although this should be preventable by filling your spa through the filter basket, there is a chance that an air pocket can still form even when following the proper steps. Initially it may seem that the pump is not working, with some sound coming from the pump but no water movement.

Note: When a pump has an airlock, continuing to operate the pump experiencing an air pocket issue can damage the pump. Do not operate the pump until this airlock issue is fixed.

Start Up: Priming Mode

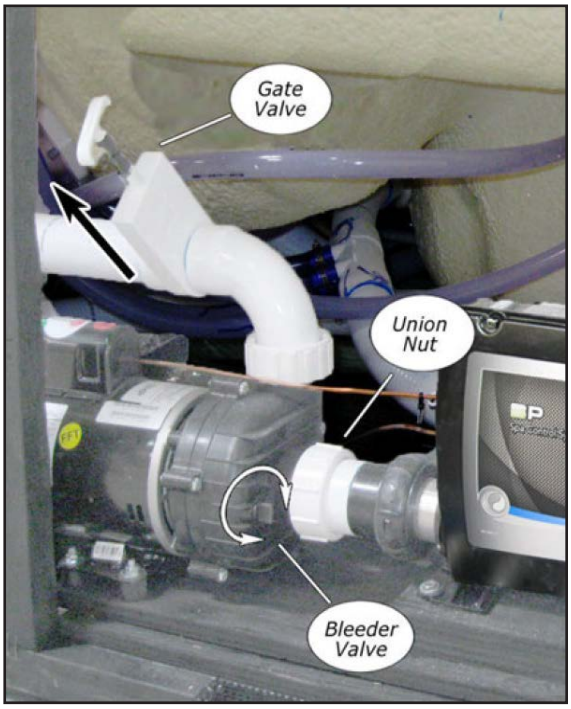
When the spa is powered up for the first time, the spa will enter priming mode. During this mode all devices within the spa is operational. You may wait for 10-15 minutes for the heater to engage, this period of time resets when a secondary pump is activated or if the primary pump is activated for high speed.

The spa will automatically exit priming mode.

Bleeding Air from the Pump

IF you have tried priming the pump by pressing the jet or jet 1 button on and off again with no results, you will need to bleed the pump manually.

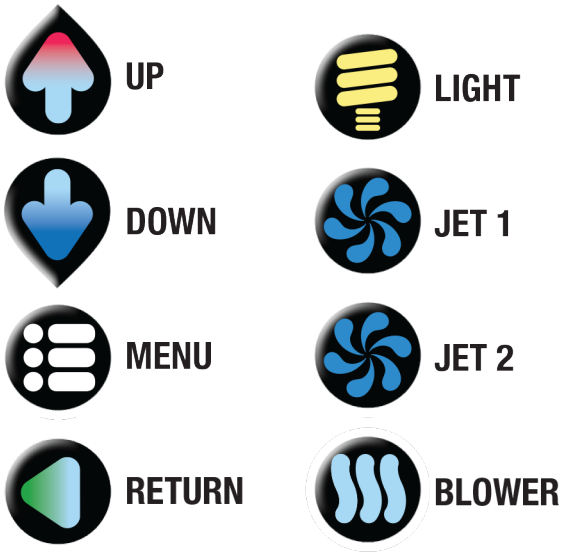
1. Shut off power to the spa.
2. Using a philips head screwdriver, remove the front panel from the spa directly underneath the control panel, and locate the main pump.
3. Ensure that the gate valves are open
4. Place rags or towels under the plastic wet end of the pump where the spa plumbing connects into the pump
5. On the plastic wet end there will be a plastic hex headed bleeder valve that can be opened to bleed air trapped inside of the pump
6. Do not fully remove the nut, there are grooves within the nut that allows air to escape. Water will begin to trickle once the air pocket has been removed, tighten down the screw again with light torque.
7. If bleeding the pump is unsuccessful, loosen the pump unions with plumbing channel locks to remove any trapped air between the pump and the heater.
8. Turn the spa power back on and press the Jet button to prime the pump again.

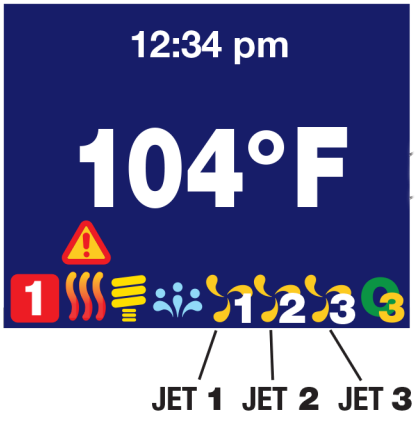


This image is for illustration purposes only.
Control box may appear a different color or brand.

NEO 1100 Wave

Your Limited Edition spa is equipped with a NEO 2100 control system. Depending on the number of pumps inside of your spa, you may have additional jet buttons on the right hand side of the Controller (topside). The following pages will show how to navigate the spas control panel, with instructions on how to set temperature, filtration, time, and other features.



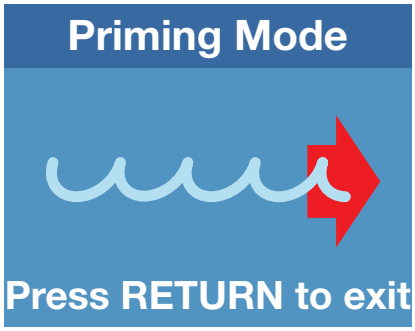


MAIN SCREEN:

The main screen displays current time, water temperature, and status of the system accessories. The screen below from bottom, left to right indicates LIGHT ON, BLOWER ON, JET 1 at low speed, and JET 2 at high speed.

PRIMING MODE:

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



SPA OPERATION:

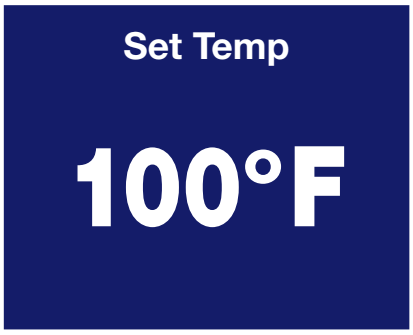
Turn system accessories ON and OFF by pushing the button on the right side of panel (LIGHT, JET 1, THERAPY, JET 2…) These accessories have timeout defaults from the manufacturer and will turn OFF automatically after the time has expired. Default Timeout time for LIGHT is 60 minutes; THERAPY is 15 minutes; JET at low speed is 60 minutes; and JET at high speed is 15 minutes. The user can change these default times in "DEVICE TIMEOUT" setting menu.

MENU NAVIGATING:

- MENU: use to enter setting menu and sub-menu screens. For screens with several settable fields (example: DATE-TIME screen), use MENU button to navigate between different fields within the screen.
- UP and DOWN: use to navigate between different options or changing values of a field.
- RETURN: use to confirm the setting and goes back to previous screen.

SETTING TEMPERATURE:

To change water Set Temperature, use UP and DOWN buttons to set the desired temperature. The screen will display "SET TEMP" with the current set temperature. After 5 seconds without change to the set temperature, the screen will go back to the MAIN screen with the current water temperature displayed. Changing the Set Temperature will turn on a pump so that the controller will be able to get an accurate water temperature and determine if the water needs to be heated.



HEATER:

When the heater pump turns on the HEATER START-UP icon will appear if heat is needed. The Heater will turn on and the HEATER icon will appear after 5 minutes

SELECTION ICONS:

- FILTER CYCLE 1
- FILTER CYCLE 2
- FILTER CYCLE 3
- FILTER CYCLE 4
- LIGHT ON
- HEATER ON
- HEATER START-UP
- ENERGY SAVING HEAT MODE
- VACATION HEAT MODE
- CLEANER CYCLE
- POLLING CYCLE
- TEMPERATURE LOCK
- PANEL LOCK
- OZONE ON
- JET ON LOW SPEED
- JET ON HIGH SPEED
- BLOWER ON
- SPECIAL TEMP SELECT
- OPTION

PANEL TIMEOUT:

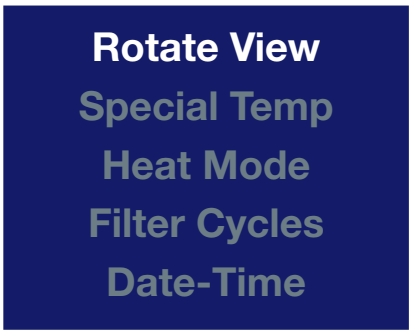
If a user is in the Settings Menu and no button is pushed within 15 seconds, the screen will timeout. The current screen setting will be lost and the panel will revert back to the MAIN screen.

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

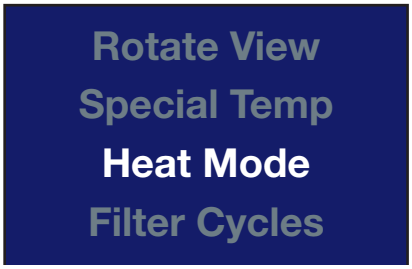
ENTER SETTING SCREENS:

Press MENU button to display a list of Setting screens.

Use UP and DOWN to navigate between various Setting screens.



Press MENU again to enter a particular Setting screen or press RETURN to go back to MAIN screen.

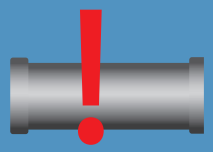


SETTINGS EXPLAINED:

- **ROTATE VIEW:** Rotate the view 180 degrees. The UP and DOWN buttons also swap when rotated. • With ROTATE VIEW highlighted, press MENU to enter ROTATE VIEW setting. Use UP/DOWN to select desired setting and RETURN to confirm the setting and exit.
- **SPECIAL TEMP:** To temporarily heat spa to 105°F or 106°F once, and return to previous temperature setting. • With SPECIAL TEMP highlighted, press MENU to enter SPECIAL TEMP setting. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **HEAT MODE:** select STANDARD heating mode (polls every Energy Interval) for most users or ENERGY SAVING mode (polls every other Energy Interval) or VACATION mode (set temp set to 60°F). • With HEAT MODE mode highlighted, press MENU to enter setting. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **FILTER CYCLES:** set up filter cycle START TIME, DURATION, and DAY for filtering the spa. For FILTER CYCLE 1 and 2, if DURATION is set to ZERO the system will do a purge cycle at the start time setting. • With FILTER CYCLE highlighted, press MENU to enter. Select a FILTER CYCLE and press MENU again to enter the TIME/DURATION setting screen. In this screen, press MENU to move between HOURS, MINUTES and DAYS; use UP/DOWN to change the values and RETURN to exit and confirm the setting. FILTER CYCLES 3 & 4 by default are OFF. To set them, enter START TIME, DURATION and enable ALL DAYS or a specific day.
- **DATE-TIME:** set up Date and Time for the spa. • With DATE-TIME highlighted, press MENU to enter the DATE-TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to confirm the setting and exit.
- **DEGREE F/C**: displays spa temperature in Celsius or Fahrenheit. This option is only available for 60 Hz countries. Unit automatically displays Celsius for 50 Hz. • With DEGREE F/C highlighted, press MENU to enter the DEGREE F/C setting. Use UP/ DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **TIME DISPLAY:** displays spa time in AM/PM or 24 hour time. • With TIME DISPLAY highlighted, press MENU to enter TIME DISPLAY setting. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **GENERAL INFORMATION:** Displays general information for the spa. • With GENERAL INFORMATION highlighted, press MENU to enter the GENERAL INFORMATION menu. Use UP/DOWN to view different pages and information, press RETURN to exit the page. This screen will indicate which plug should be inserted to correct side connector.
- **LANGUAGES:** To select various languages for the spa display. • With LANGUAGES highlighted, press MENU to enter and select a specific language. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **DEVICES TIMEOUT:** allows changes to timeout setting for various devices. LIGHT can be set to a maximum of 4 hours; PUMP in high speed and BLOWER can be set to a maximum of 1 hour; and PUMP in low speed can be set to a maximum of 2 hours. • With DEVICES TIMEOUT highlighted, press MENU to enter and select various devices setting. Use UP/DOWN to select the desired time setting and RETURN to confirm the setting and exit.
- **PANEL LOCK:** provides a choice to select PANEL for locking all panel buttons except MENU button; use TEMP to lock UP/DOWN button for changing set temperature; and MENU to lock MENU button (push and hold MENU button more than 15 seconds to unlock the Menu). • With PANEL LOCK highlighted, press MENU to enter PANEL setting. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **NO HEAT TIME:** set the time frame for not allowing the heater to turn on. • With NO HEAT TIME highlighted, press MENU to enter the NO HEAT TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; use UP/DOWN to change the values and RETURN to confirm the setting and exit.
- **SERVICE MODE:** *only available for Authorized Dealers and Spa Manufacturer.*
- **DEMO MODE:** To demonstrate all device capabilities of the spa. • With DEMO MODE highlighted, press MENU to enter DEMO MODE setting. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.
- **SERENITY MODE:** Set to turn off all outputs and provide quiet while in the spa. • With SERENITY MODE highlighted, press MENU to enter and select a specific time. Use UP/DOWN to select the desired time setting. Press MENU again to navigate to EXIT/START. Select the desired option and RETURN to confirm the setting and exit.
- **ENERGY INTERVAL:** Only available for Non-Circ systems. • With ENERGY INTERVAL highlighted, press MENU to enter the ENERGY INTERVAL setting. Use UP/DOWN to select the desired minutes (15-240) and RETURN to confirm the setting and exit.
- **SILENT TIME (FUNCTIONS PAUSE):** Only available for Non-Circ systems. Set the time frame for no polling during night or other desired periods. • With SILENT TIME highlighted, press MENU to enter the SILENT TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; use UP/DOWN to change the values and RETURN to confirm the setting and exit.
- **CLEANER CYCLE:** Only available for Non-Circ systems. To turn on filtration after using the spa for short cleaning period. • With CLEANER CYCLE highlighted, press MENU to enter and select a specific duration. Use UP/DOWN to select the desired time setting. Press Menu again to navigate to Exit/Start. Select the desired option and RETURN to confirm the setting and exit.
- **BLUETOOTH**: Only available with Bluetooth module in the system. To use the control panel and play music from mobile devices. • With BLUETOOTH highlighted, press MENU to enter BLUETOOTH menu. In this screen, use UP/DOWN to select an option and MENU will execute or enter the selected option. Press RETURN to exit BLUETOOTH menu.
- **RESET WI-FI**: Only available with Wi-Fi module in the system. This is used to reset Wi-Fi module. • With RESET Wi-Fi highlighted, press MENU to enter. Use UP/DOWN to select the desired setting and RETURN to confirm the setting and exit.

ERROR SCREENS:

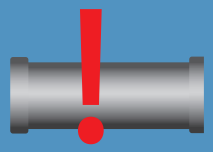
Plumbing Error



Press RETURN to clear

Error caused when SENSOR 1 and SENSOR 3 have been plugged in incorrectly. Swap the SENSOR 1 and SENSOR 3 plug in controller to correct this problem.

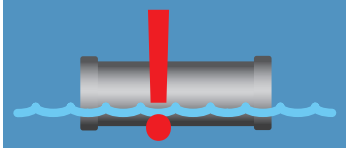
Insufficient Flow



Press RETURN to clear

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

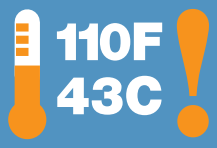
Low Flow



Press RETURN to clear

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

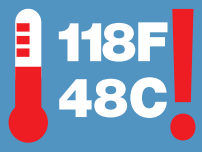
Water Overheat



Press RETURN to clear

Wait for water temperature to cool down.

Heater Overheat



Press RETURN to clear

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

Potential Freeze

Press RETURN to clear

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

Sensor 1 open

Press RETURN to clear

Check SENSOR 1 connection.

Sensor 1 short

Press RETURN to clear

Check SENSOR 1 connection or replace SENSOR 1.

Sensor 2 open

Press RETURN to clear

Check SENSOR 2 connection.

Sensor 2 short

Press RETURN to clear

Check SENSOR 2 connection or replace SENSOR 2.

Sensor 3 open

Press RETURN to clear

Check SENSOR 3 connection.

Sensor 3 short

Press RETURN to clear

Check SENSOR 3 connection or replace SENSOR 3.

LED Lighting

Press the "Light" button on the topside controller to turn the spa light on. If your spa has optional perimeter LED lights, they will also activate.

1. **Cycle:** When you press the "Light" button on and off repeatedly the LED will cycle between a variety of colors that the RGB light can support.

Each time you press the button it will immediately advance to the next color in sequence and will eventually enter different light pattern modes.

2. **Flashing:** Once you have cycled through all of the colors, another press of the "Light" button will produce a flashing pattern.

3. Fading cycle: The next phase of operation when you push the LIGHT button is a slower and/or fast fade random transition from one color to the next.

- If a spa is equipped with more than 100 points of light the slow fading cycle will flicker during a color change.
- Every air valve is equipped with 2 LED points.
- The waterfall takes 4 points of light.

Spas with exterior LEDs work in the same mode as described above. The variations in color and patterns provide you multiple customization options.

Diverter Knobs

Diverter knobs are 1" and 2" knobs located around the top of your spa. They allow you to divert water through jets from one side of the spa to the other, of in most cases from floor jets to all jets. This is accomplished by rotating the diverter knob to the left (counter-clockwise), decreasing the amount of water flow through a section of jets. To increase the amount of water flow through the other section of jets, rotate the handle to the right (clockwise)

Air Venturis

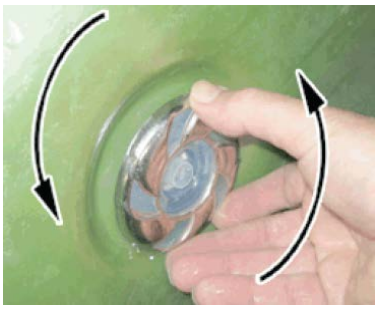
Air venturis are the 1" knobs located around the top of your spa. Each one will let you add a mixture of air with the jet pressure. This is accomplished by rotating the air venturi knob to the left (counter clockwise) to increase the amount of air flow. To decrease the amount of airflow through the jets, rotate the handle to the right (clockwise)

Waterfall (option)

Some Cal Spas are equipped with a waterfall feature, with LED lights inside the housing. The flow of the waterfall water can be adjusted in most spa models by turning the primary water diverter inside of your spa.

Jets

Standard Jets



Almost all of the jets in your spa are adjustable. Rotating the jet face clockwise will increase water pressure, and counter clockwise to reduce pressure on that specific jet. Neck jets are the opposite, with clockwise movement to decrease force, counter clockwise to increase.

Swim Jets (FA-1325)

In spa models designed for swimming or recreational exercise have specialized swim jets. These jets do not have adjustable flow, but additional force can be applied to these jets by opening air ventruis connected to the spa jet.

This jets angle can also be adjusted, to be slightly angled higher or lower, to accommodate different body types and swimming styles. This can be done by gently pushing the opening of the jet up or down.

Electrical Power Efficiency Tips

Your new spa comes equipped with a 5.5kWh electric heater. Follow the directions listed below, it will help ensure the most efficient spa operation. Some models have the option to combine your spa with a Gecko "in-Temp" heat pump, this information is still relevant to spa owners with either the standard 5.5 kWh heater or the add on heat pump .

Note: This method is only for spa usage under two hours a week.

- Keep the spa operating temperature about 5F below your usual preferred temperature when not in use. Raise the temperature to your preferred temp about one or two hours before you enter the spa to save on energy costs if your usage is within the range of two hours per week.
- If you use your spa more than two hours a week total, keep the set temperature at your desired temperature.
- The air venturis should be used sparingly when open, water temperature drops depending on ambient temperature as this air is now being injected into the water.

Allowing the water temperature to lower more than 10F below the desired usage temperature, and reheating it prior to usage, will cause the heater to operate longer than keeping the spa about 5F below. This will increase your operating costs. We recommend getting your spa up to your desired temperature, and then lowering the set temperature by 5F once its reaches the desired temperature. Our spas are designed to retain as much heat as possible to ensure your save on long term costs.

*Note: The most electrical power is consumed in the initial fill up, as the tap water needs to be brought up to hot tub temperatures.

ATS Therapy Seat System

Pump Button (On/Off):

Press the "Pump" button to activate the ATS system. The pump will turn on full speed with letter "H" displayed in the LCD panel, the pump LED light will turn on. Press the pump button a second time to tun off the ATS system. In order to use the pulse features within the ATS system you must press "Pump" button before pressing "Pulse".

Pulse Mode Button:

Once the main pump is activated and is running on H mode, press the "Pulse" button. The previously selected pulse mode number will appear on the LCD screen. There are a total of 9 pulse modes, this can be changed using the "Up" and "Down" buttons. You may press the "Pulse" button again to exit pulse mode and enter high speed "H" mode.

Up/Down Buttons:

These Buttons only function when the ATS system is in pulse mode. When toggling the "Up" and "Down" arrows cycle through 9 modes and a demo mode "d". In demo mode the seat will cycle through all 9 modes for 30 seconds on each number. You an exit demo mode by pressing the "Up" & "Down" arrows or allow demo mode to complete all 9 thirty second cycles.

Time Out:

The pump has an automatic shut off after 15 minutes of continuous operation. When using any selected pulse mode the mode will last for only 15 minutes. If you plan to use the ATS system for an extended period of time the follow section will explain how to use the system without engaging the overheat protection of the ATS pump.

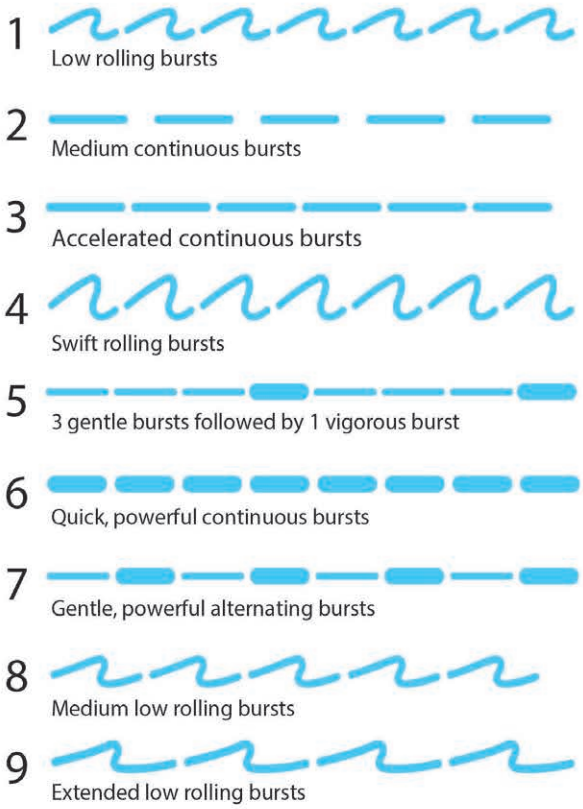
Pump Protection:

When the pump is set for any pulse mode, the pump will surge in temperature. The pump is designed with a overheat protection to ensure longevity of the system. To avoid the thermal cut out from activating you may select a pulse mode, after the first mode ends press the "Pump" button for high speed for at least 5 minutes. When the pump will rapidly cool when set to high speed mode. After 5 minutes of use you can once again press the "Pulse" button and select your next massage mode.

Note: Always activate the high speed pump between therapy numbers to prevent the pump from over heating.

Pump Purge:

To prevent water stagnation within the ATS plumbing, The ATS pump will kick on once a day to purge. This occurs every 24 hours and will run for 20 seconds, showing a "P" on the display.



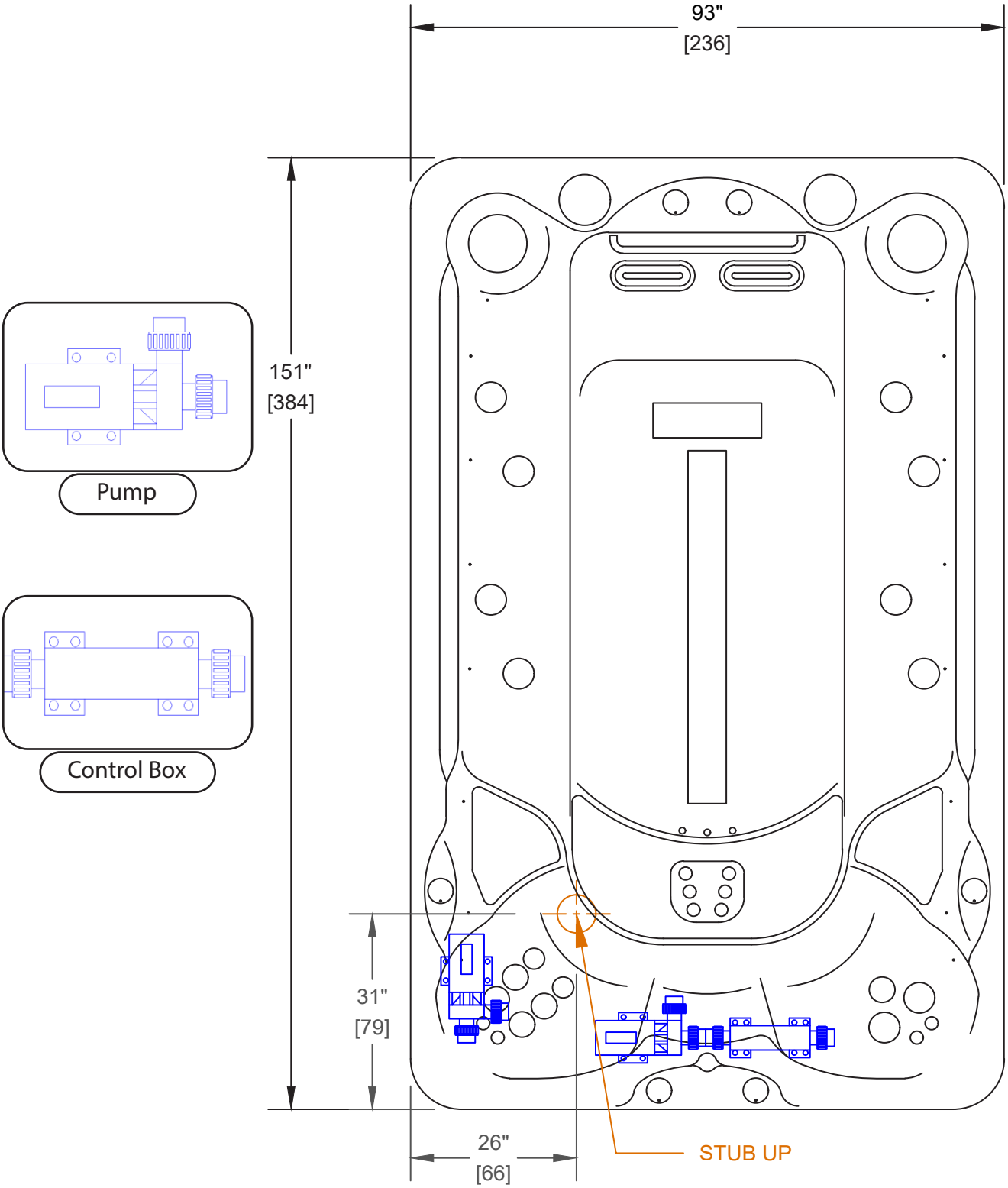
ATS Temp Sensor:

The ATS sensor is used to monitor temperature to prevent the ATS system from freezing or overheating. If the temperature is too cold the pump will kick on full speed and show "F" on the display to prevent freeze damage. If the system is too hot, all pump operations on the ATS seat deactivates and the letter "C" will appear on the display. Depending on temperature the pump may activate in high speed mode to cool the pump down, the thermal cut out may activate, and will stop all pump operations for 30 minutes.

If there is a sensor issue a flashing letter "E" will display on the controller. The ATS system will operate for one cycle but after the 15 minute cycle ends a flashing "L" will display on the controller. Contact your dealer for service to replace or fix the sensor within the ATS system.

LES FA-1325 Diagram

Note: All Spas including swim spas require a minimum of 3 feet clearance on all sides for accessibility for technicians to perform repairs or maintenance. Service providers may charge a fee for poor access which would require movement of the spa by crane or removal of objects/decks obstructing access.



Water Clarity

This section is intended for new spa owners who are not familiar with adjusting spa water chemistry. Everyone's knowledge with maintaining water quality is different, but there are some general concepts you need to know.

Water maintenance is not difficult, however it is something that requires regular attention. The most important thing to understand about taking care of your spa water, is that preventative action is easier than corrective action when balancing chemistry and maintaining water clarity

Before beginning, we recommend you become familiar with some water quality terms and their definitions within this following section.

1. Chemical Balancing

Learning how to properly balance your water.

You will need to test and adjust the chemical balance of your spa water, this is not a difficult task but it must be done regularly. Important areas to focus on with water chemistry is the calcium hardness, total alkalinity, and the pH range.

Spa owners with salt generators will need to perform a total dissolved solids and phosphate test.

2. Sanitation and Shock

Learning how to properly sanitize and shock your spa.

Sanitizers kill bacteria and viruses and keeps your water clean. A low sanitizer level will allow microbes to grow quickly in the spa water . We recommend using either granulated chlorine or bromine as your sanitizer.

You also need to add shock to the water to stimulate the chemical sanitizer. How much you use and how often you use sanitizers, depends on how frequently the spa is used.

3. Filtration

Learn how to properly clean your filter

Cleaning your filter cartridge is the easiest and most effective thing you can do to keep your spa water clear.

A clogged dirty filter will cause the heater and pump to work harder than they need to, possibly causing them to fail.

The spa's heating system will only function with the proper amount of water flow through the system.

4. Consistency

Make checking your spa part of your daily routine.

Clear water requires regular maintenance. Establish a routine based on a regular schedule, testing your water on a daily basis.

Maintaining your water quality helps the enjoyment of your spa and extends the lifetime of spa components by preventing damage from neglect and chemical abuse.

Water Quality Terms and Definitions

The following chemical terms are used in this section. Understanding their meaning will help you to better understand clear water maintenance. Words in bold type are defined in this table.

Bromine / Bromamines	Bromine is an efficient sanitizer chemical for spas. When used as a **sanitizer**, bromine forms compounds called bromamines. Bromine can be added to the spa or automatically generated. . Bromamines are compounds formed when bromine combines with nitrogen from body oils, perspiration, etc. Unlike chloramines, bromamines have no pungent odor and are effective sanitizers.
Chlorine / Chloramines	Chlorine is an efficient sanitizing chemical for spas. We recommend using sodium dichlor-type granulated chlorine because it is totally soluble and nearly **pH** neutral. When used as a **sanitizer**, chlorine forms compounds called chloramines. . Chloramines are compounds formed when chlorine combines with nitrogen from body oils, perspiration, etc. Chloramines can cause eye irritation as well as having a strong odor. Unlike **bromamines**, chloramines are weaker, slower **sanitizers**. To remove chloramines, see the description of **shock** below.
Calcium Hardness	Abbreviated as CH. Calcium hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the **corrosive** nature of the spa's water and is why soft water is not recommended. The low CH level can cause **corrosion** to the equipment and can cause staining of the spa shell.
Corrosion	The gradual wearing away of metal spa parts, usually caused by chemical action. Generally, corrosion is caused by low **pH** or by water with levels of **TA**, **CH**, **pH** or sanitizer which are outside the recommended ranges.
Dichlor	Also called sodium dichlor. It is a type of chlorine and is frequently used when **shocking the water**. An effective **chlorine**-based powdered **oxidizer** and **sanitizer**. Dichlor works by oxidizing waste product in the water such as **bromamines** and **chloramines** and causing them to burn off.
Monopersulphate or MPS	Frequently used when **shocking the water**. An effective non-chlorine-based powdered **oxidizer** that works well with both **chlorine** and **bromine**. It works by oxidizing waste product in the water such as **bromamines** and **chloramines** and causing them to burn off.
Oxidizer	**Shocking the water** with an oxidizing chemical prevents the buildup of contaminants, maximizes **sanitizer** efficiency, minimizes combined **chlorine** and improves water clarity.
Ozone	Ozone is a powerful oxidizing agent which is produced in nature and artificially. Ozone forms no by-products of **chloramines** (ozone actually oxidizes chloramines) and will not alter the water's **pH**.
pH	The pH level is the measure of the balance between acidity and alkalinity. Low pH causes the water to be too acid, which will cause **corrosion**, whereas high pH causes the water to be too alkaline, which will cause **scaling**. See page for testing for and balancing pH.
ppm	The abbreviation of "parts per million", the standard measurement of chemical concentration in water. Identical to mg/l (milligrams per liter).
Sanitizer	Sanitizer is a chemical added to the water to kill bacteria and viruses and keep the water clean. The two sanitizers we recommend are **chlorine** and **bromine**

Scale	Rough calcium-bearing deposits that can coat spa surfaces, heaters, plumbing lines and clog filters. Generally, scaling is caused by mineral content combined with high **pH**. Additionally, scale forms more readily at higher water temperatures.
Shock	Also called shocking the water, shock treatment, or superchlorination. Shocking the water is adding significant doses of **dichlor** or **MPS** to **oxidize** non-filterable organic waste and to remove **chloramines** and **bromamines**. Shock treatment breaks down organic waste contaminants which cause odor and cloudy water.
Total Alkalinity	Abbreviated as TA. Total alkalinity is the measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is important for **pH** control. If the TA is too low, the **pH** will fluctuate out of control, and if it is too high, the **pH** becomes difficult to stabilize.
Trichlor	Used as a pool **sanitizer**. NEVER use trichlor in a spa. Trichlor is extremely acidic and will lower the **pH**, causing corrosion to equipment. Using trichlor will void your warranty.

Water Testing Methods

There are two testing methods to choose from:

Test strips are a convenient testing method commonly used by spa owners.

The reagent test kit is a method which provides a high level of accuracy but is more expensive and more difficult to use if not experienced with this testing method.

Adding Chemicals to the Spa

IMPORTANT: All spa water chemicals, including MPS (Shock), chlorine, granulated pH increaser or decreaser, granulated total alkalinity increaser, calcium hardness increaser, liquid stain and scale inhibitor, and liquid de-foamer must always be added into or in front of the filter compartment while the primary jet is running for a minimum of 10 minutes.

1. - Fold back the cover.
2. - Press the Jets button or Jet 1 button
3. - Carefully measure the recommended amount of chemical and slowly pour it into the filter area. Use care not to splash chemicals on your hands, clothes, eyes, or spa surface/siding
4. - Close the spa cover

Warning: High sanitizer levels can cause discomfort to the user's eyes, lungs, and skin. Always allow the sanitizer level to fall into the recommended range before using the spa.

IMPORTANT NOTE REGARDING SHOCK TREATMENT: After administering shock to your spa, leave the cover open for a minimum of 20 minutes to allow the oxidizer gas to vent into the atmosphere. A high concentration of trapped oxidizer gas which may exist as a result of the shock treatment (not daily sanitation) may eventually cause discoloration or vinyl degradation to the bottom of the cover. This type of damage is considered chemical abuse and is not covered under the terms of the limited warranty.

Balancing Water Chemistry Levels

Maintaining spa water chemistry can be tricky, especially since there are many methods of keeping your water clear and clean. Note: We do not recommend a specific brand of chemicals.

See a spa dealer for guidance and recommendations on spa chemicals and supplied needed, as water chemistry varies from region to region. Various chemicals often sold under brand names, but a spa dealer can advise you on generic chemicals that are often less expensive than proprietary brands.

Balancing the Total Alkalinity (TA)

Total Alkalinity is a measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is referred to as the waters "pH Buffer". In other words its a measure of the ability of spa water to resist chemical changes in the pH level.

TA too high pH will be too high and may be difficult to stabilize pH	180 160 140	*Add an alkalinity decreaser*
TA balance	120 100 80	*Ideal TA balance*
TA too low pH will fluctuate wildly	60 40 20	*Add an alkalinity increaser*

If the TA is too low, the pH level will fluctuate widely from high to low. Fluctuations in pH level can cause corrosion or scaling of the spa components. Low TA can be corrected by adding sodium carbonate (pH/Alkalinity Up).

If the total Alkalinity is too high, the pH level will tend to be high, and my be difficult to bring down. ilt can be lowered by using sodium bi-sulfate (pH/Alkalinity Down).

Once the TA is balanced, it normally remains stable, although the addition of more water with a high or low alkalinity will raise or lower the TA reading of the water.

When the Total Alkalinity is within the recommended range. Proceed to the next step.

Balancing the Calcium Hardness (CH)

Calcium Hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the corrosive nature of spa water, thats why Calcium - low water (Soft Water) is not recommended. It is very corrosive to the equipment and can cause stains in the spa shell.

CH too high Causes scale to deposit on spa and equipment	275 250 225	*Dilute the spa with soft water*
CH balance	200 175 150	*Ideal CH balance*
CH too low Causes equipment corrosion	125 100 75	*Add a calcium hardness increaser*

if the CH is too high (Hard Water) formation of scale on the spa shell & surface can result. You can use a generic calcium remover to remove hardness from water. CH can also be decreased by dilution (75% Hard water, 25% Soft water) will usually yield a reading within the correct range. If soft water is not available or practical for you, a stain and scale inhibitor should be added to the spa water, according to label instructions.

If the CH is too low, add CH Increaser.

Once the CH is balanced, it normally remains stable, although the addition of more water with a high or low calcium content will raise or lower the CH reading of the water.

When the CH is within the recommended range proceed to the next step.

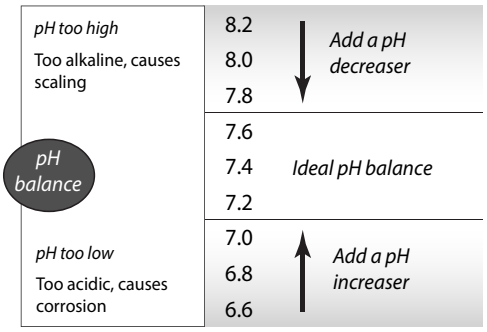
Balancing the pH

The pH level is the measure of acidity and alkalinity. Values above 7.8 are alkaline; those below 7.2 are acidic. Maintaining the proper pH level is extremely important for optimizing the effectiveness of the sanitizer, maintaining water that is comfortable for the user, and preventing equipment deterioration.

If the spas water's pH level is too low, the following may result:
The sanitizer will dissipate rapidly

- The water may become irritating to spa users
- The spas equipment may corrode
- Bacteria and algae spikes can occur.

If the pH is too low it can be increased with sodium hydrogen carbonate (pH/Alkalinity Up) to the spa water.



If the pH level is too high, the following may result:

- The sanitizer is less effective
- Scale will form on the spa shell surface and equipment
- The water may become cloudy
- The filter cartridge may become obstructed.

If the pH is too high, it can be decreased by adding sodium bi-sulfate (pH/Alkalinity Down) to spa water.

Note: After adding sodium hydrogen carbonate or sodium bi-sulfate, wait two hours before testing the spa water again for pH. Compounds take time to fully dissolve into the spa water, initial reading may not be accurate

Its important to check the pH on a regular weekly basis. The pH will be affected by the bather load, the addition of new water, the addition of various chemicals, and other sanitizer used. When the pH is within the recommended range, proceed to begin the sanitation process.

Sanitation and Shock

Sanitizers kill bacteria and other organic waste by breaking them down to non-harmful level which are filtered out. Before you fill your spa, you need to decide which chemical sanitizer you wish to use. Consult your Cal Spas dealer for the right decision with regards to your lifestyle and spa usage.

We recommend granulated chlorine or bromine as your sanitizer. Both work well when maintained regularly. DO NOT USE TABLET OR COMPRESSED SANITIZERS. Use of these sanitizers will void your warranty.

Note: DO NOT USE Trichlor. Trichlor is very acidic and the hot temperature of the spa causes it to dissolve too fast, it will cause damage to your spa and will void your warranty.

Whichever chemical you decide to use, do not take shortcuts. It will provide you with clean, safe, clear, spa water with a minimum of effort. Spa owners with an ozonator still need to use a chemical sanitizer. Whenever you test chemical levels, your test strip will likely have a test for chlorine or bromine. Make sure you sanitizer falls within the range shown on the next page.

Whenever you test your chemical levels, your test strip will likely have a test for chlorine or bromine. Make sure your sanitizer falls within the range shown on page 39.

The traditional sanitizer set up process continues on Page 39

In Line Bromine Canister

Within certain LES spas, there is a in-line bromine canister system. This canister contains a mineral activator and a canister of bromine. These two cartridges work hand in hand to activate and maintain a constant level of bromine sanitizer. Allowing you to enjoy your spa with added peace of mind.

The following section will explain how to properly set up your in-line bromine system, and how to maintain a proper bromine level.

*****The LES FA-1325 does not support/include the bromine cartridge system.***

Before proceeding with the set up of the bromine cartridge, make sure the following steps have been done.

- Fill the spa and verify that there is no air lock within pump 1. This can be prevented by filling up the spa through the filter canister. If an airlock is detected, refer to page 20.
- Balance the water chemistry within your spa. The bromine canister can release bromine at a consistent and reliable rate only if the following water parameters are met. If your water is not within this range, **the use of spa chemicals to balance the water must be done before activating either of the cartridges. Additionally, add 1-2 tbs of chlorine to the spa to ensure it is sanitary during the set up process (2-4ppm).**

pH	7.2-7.8
Total Alkalinity (ALK)	80-120ppm
Hardness (TH)	150-250ppm
Total Dissolved Solids (TDS)	<1500
Cyanuric Acid	0-50ppm

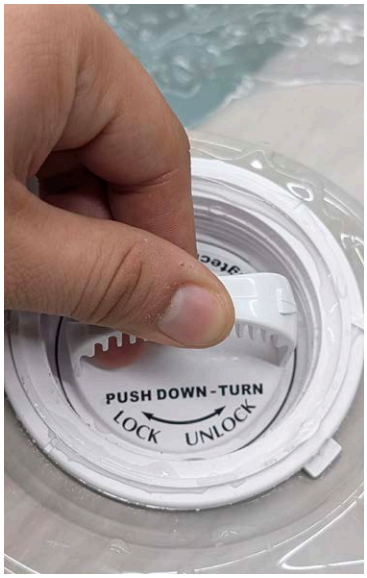
- Once these parameters are met, you may proceed to the following page.

Initial Bromine Set - Up

Once proper spa chemistry is reached, **turn off the power to the spa** and open the bromine canister by turning the gray colored cap counterclockwise to unfasten it.

Follow the printed twist off instructions within the bromine canister to properly open and remove the internal canister housing.

Note that the canisters may have plastic wrapping to ensure shelf life of the cartridge before use. Make sure the plastic is removed from the canisters before using for the first time.



1. First, remove both cartridges and place the mineral cartridge on top, and the bromine cartridge on the bottom. Both cartridges have ridges that snap them into place, allowing for fast installation & replacement.

2. When setting up the canister, the mineral cartridge must be set to the maximum strength level of level 6. Set the bromine level as mentioned on the data table on pg 35. I**n the first 1-2 days of spa activation the spa should not be used**, in order to build up the bromine bank, inside of the spa. This is why it is important to place chlorine granules inside the spa, to provide sanitation during this period. Each cartridge can be manually adjusted by turning the cap on the top of each cartridge to the desired level.

3. Reinstall the in-line housing with the newly adjusted cartridges and lock into place. Then re-install the gray cap of the bromine canister.

Bromine levels should reach between 6-10ppm to be considered safe for spas using bromine as their sanitizer. The sanitizer is released during filtration times within your spa, meaning that the longer your filtration cycles are, the more bromine and clarity your water will have.

Test the water once per day every day, until the desired bromine range is reached. Once this bromine level is reached, turn the power off to the spa and open the bromine canister if it is necessary to adjust the bromine cartridge strength level. More information on cartridge adjustment is found on the following page.

The amount of filtration and the bromine level selected is based on several factors. The following table can be used as a general guide to maintain your bromine levels within your spa after reaching the initial 6-10ppm. After the initial start up, the bromine level should reach around 6-8ppm when testing on a regular basis.

Model	Filtration Time (Minimum)	Mineral Level	Bromine Level
LES-743BG (7 x 7)	4 hours	Level 6 (Full Strength)	Level 3
LES-743LG (7 x 7)	4 hours	Level 6 (Full Strength)	Level 3
LES-753BG (8 x 8)	4-6 hours*	Level 6 (Full Strength)	Level 4
LES-753LG (8 x 8)	4-6 hours*	Level 6 (Full Strength)	Level 4

Will vary due to usage and additional water volume.

Warning: Never allow the bromine level to fall below 5.0ppm. Low sanitizer levels can increase the chances of spreading or contracting waterborne illnesses.

After heavy use, it is advised to increase the bromine cartridge level by one level for the following day to help bring the bromine level back to the 6-7ppm range.

Use a silicone lubricant on the black o-ring inside of the bromine canister at least two times a year to prevent leaks.

Additional Information

If as a spa owner you intend to run a 24hr filter cycle or a filter cycle longer than 8 hours, the free bromine minimum level within the spa must be maintained at 6ppm.

It is the responsibility of the spa owner to maintain a safe sanitizer level within the spa, bromine level and filtration time may be adjusted based on the bather load/contamination encountered by the spa.

Cartridge Life Expectancy

Replace the Mineral cartridge every 4 months, or whenever draining & refilling the spa.

Replace the bromine cartridge when empty, Life of the cartridge is affected by several factors such as the tubs size and the bather load. Regular water testing will ensure the cartridge is changed in a reasonable time. The average life expectancy of these cartridges may vary between 2-4 weeks based on spa usage

Always consider wearing gloves when interacting with bromine or any spa chemicals. Replacement cartridges can be purchased through your dealer, or Online by common resellers such as Amazon, Ebay, Leslie's, or your local spa supply store. The cartridge replacement kit can be found using the Manufactures Sku #, you may also search for replacement cartridges using the following names below.

Manufacture Sku: 01-14-3856
Frog-Serene Bromine Cartridge
Frog-Serene Mineral Cartridge

Bromine Level Specification

In order for bromine to be an effective sanitizer within a warm body of water, the ppm range must be at a minimum of 6ppm. Cal Spas does not advise maintaining a level lower than this, due to an increased risk of contracting or spreading waterborne illness.

Avoid having your bromine level above 11ppm, as this might cause irritation when inside of your spa.

How to Lower Bromine Levels

In order to lower bromine levels, the bromine cartridge must be set to level 1 or it must be removed to stop the introduction of bromine until the bromine level falls to 6ppm.

1. Turn off the spa.
2. Remove the cover lid of the bromine cartridge.
3. Remove the in-line housing, and adjust the bromine cartridge.
4. Reinstall and secure the in-line housing to the canister, replace the cover lid.

Common Questions

"My water is cloudy yet I have the proper bromine level and normal Bromine levels"

- You may need to increase the current total filtration time by an additional 1-2 hours. This may also occur when the spa is operating with a contaminated filter, deep clean or replace the filter.

I don't desire to continue using cartridges, can sanitize my spa as a traditional spa?

- You may switch to using traditional chlorine granules if the system is no longer in use. Remove both the mineral and bromine cartridges, and reinstall the empty in-line housing back into the bromine canister. It is also advised to do this switch after performing a water change to establish a new baseline for proper water care.

After you choose a sanitizer, you will need to establish a baseline and maintain it regularly.

Sanitizing your spa with either chlorine or bromine is a very similar process. Each sanitizer has its advantages and disadvantages. Sanitizer helps neutralize bacteria that can cause illness and other organic matter. Some of the key differences between the two sanitizers are mentioned below.

Bromine: Creates less of an odor and it is less irritable to the skin than chlorine. Additionally, unlike chlorine when bromine combines with bather waste and other contaminants in the water it remains an effective sanitizer that requires a shock to reactivate. Bromine is also far less pH dependent than chlorine. Always remember that bromine itself is not a sanitizer, it needs to be activated with a bromine shock chemical in order to be effective, speak with your spa dealer for more information.

Chlorine: The most commonly recognized sanitizer is chlorine. However, the effectiveness of chlorine depends heavily on the pH level of the spa water. In order to get the most effective and economical benefit of chlorine, you must maintain a consistent pH level of between 7.2-7.6; a disadvantage of using chlorine is that when chlorine combines with bather waste and other contaminants, not only does it loose its sanitizing ability, it can cause odors and irritate eyes and skin to individuals with sensitive skin or prolonged spa exposure.

Testing For:	Ideal Range (ppm) Minimum Maximum
Chlorine Level	**3.0 - 5.0**
Bromine Level	**6.0 - 11.0**

Note: If you choose to use bromine or chlorine we do not recommend the use of a floater. You have more control over the sanitizer levels by adding sanitizer as needed. Chemical abuse will void your warranty.

Starting with fresh water/pre-filtered well water:

1. Establish a baseline by adding either granulated chlorine or bromine.
   - Use a half ounce of chlorine for every 500 gallons of water
   - Use half an ounce of bromine for every 100 gallons

2. Run the Jets for 10 minutes (Press/toggle the pump 1 button/icon)

3. Test the water, make sure the pH, TA, and CH levels all fall within the ranges shown in the previous pages, make adjustments as needed.

4. After balancing the water, if you are using bromine to sanitize your spa, you must activate your bromine. You will need to shock-oxidize the bromine inside of your spa. Depending on the size of your spa, usually you must add one to two ounces of shock, refer to the instructions inscribed in your chemical of choice.

5. Test the water again, when the water is balanced, your spa is ready to use.

Shocking the Water

In addition to using a chemical sanitizer, you will periodically need to shock the water. Shocking the water helps remove burned-out chemicals, bacteria, and other organic material from your spa's water and improves your sanitizer's effectiveness.

Do not use chlorinating shock, which can damage the spas jets and pump seals. Only use Oxidizer shock. It can be used with either bromine or chlorine sanitizers.

Add two ounces of oxidizer shock per 500 gallons once a week, after heavy bather loads, or if the water has a strong odor. The spa must be running with all of the jets on high for 30 minutes with the cover open. If necessary repeat the oxidizer shock in 30 minute intervals.

Filtration & Cleaning

The filter is the part of your spa that removes big and microscopic debris from the water to maximize your spas water clarity. Regular maintenance must be done to maximize the spas filtering performance and heat efficiency.

It is extremely important that you never run the spa without a filter, there is a possibility that debris may be sucked into the plumbing, damaging the spa pumps and heater.

Cleaning the Filter

In addition to spraying the filter down with a hose to remove surface debris, the filter must be deep cleaned every so often to dissolve scale and particles that are trapped within the pleats of the filter. Even if the filter looks clean, scale and other particles hide deep within the filter fibers restricting water flow. If the filter is not properly cleaned this will cause flow issues within the spa heater creating a heater malfunction. We recommend cleaning your filter at least once a month or every two weeks depending on spa usage.

Cleaning the filter

1. Remove the filter by unscrewing the filter counterclockwise from the top of the filter, do not use excessive force when removing or installing the filter.
2. Place the dirty filter into a bucket of water where the filter is completely submerged in water. Add the desired filter cleaner of choice, on average most manufactures recommend 8 ounces of chemical cleaner, verify the amount used on your chemical instructions.

Note: It is recommended to obtain a spare filter to use in the spa when performing maintenance on the dirty filters. This way you can rotate the filters and extend their lifespan.

3. Soak the filter for a minimum of 24hrs
4. Spray the filter with a water hose, with careful attention between filter pleats.
5. Reinstall the filter, Do not over-tighten.

UV Light Water Treatment

In some Cal Spa models an optional UV light could be purchased to assist in sanitizing your spa. The UV light is always operating in the background whenever the spa is powered on. This UV light assists the disinfection of your spa by breaking down viruses and bacteria that could linger in the spas water. The UV light works in tandem with your regular sanitation regiment. For optimal sanitation, replace this UV light every 1-2 years.

General Water Care Schedule

Prior to each use	Test the spa water. Adjust chemical levels as necessary. Shock the water by adding ½ teaspoon of sodium dichlor per 250 gallons or 1 teaspoon of MPS per 250 gallons.
After each use	Add an ounce of oxidizer after heavy bather loads
Once a week	Check the filter well and inside the filter pipe for leaves and foreign matter. Test the spa water. Adjust chemical levels as necessary. Shock the water by adding ½ teaspoon of sodium per 250 gallons or 3 teaspoons of MPS per 250 gallons. If your water source is high in calcium, add stain and scale preventer.
Every two to four weeks	Deep clean your spa's filter . How often you clean your filter depends on how much you use your spa. There is no harm in frequently cleaning your filter and will only help your spa's efficiency.
Every two to four months	Change the spa water. How often you change the water depends on how much you use the spa. When you change the water, you will need to: • Clean and polish the acrylic surface • Clean and treat the spa cover and pillows • Deep clean the filter • Refill your spa
Each time you refill the spa	Follow the section "Filling and Powering Up Your Portable Spa"

Generic Names for Chemicals

Water Chemistry Common name	Usual chemical name	Common brand names
pH Up	sodium hydroxide	pH Increaser, pH Up, pH Plus, pH Booster
pH Down	sodium bisulfate sodium bicarbonate (baking soda) sodium carbonate	pH Decreaser, pH Down, pH Minus, pH Subtracter, Dry Acid
Alkalinity increaser	sodium carbonate sodium bicarbonate (baking soda)	Alkalinity Increaser, Alkaline Up
Alkalinity decreaser	sodium bisulfate	Alkalinity Decreaser, Alkaline Down
Calcium increaser	calcium chloride	Calcium Increaser, Calcium Up, Calcium Plus, Hardness Increaser
Calcium decreaser	N/A To decrease calcium hardness, drain several gallons of water from the spa and refill using a mixture of 75% hard water and 25% soft water, or use a stain and scale inhibitor.	

Sanitizers		
Common name	**Usual chemical name**	**Common brand names**
Chlorine	sodium dichlor	Both chlorine and bromine are available under numerous brand names
Bromine	sodium bromide	

Shock		
Common name	**Usual chemical name**	**Common brand names**
MPS	monopersulphate	MPS Shock, Oxy-Spa, SeaKlear
Dichlor	sodium dichlor	Dichlor Shock

Note: Dichlor (chlorine) is both a sanitizer and a shock. Monopersulphate (MPS), when used as a shock, can be purchased alone as non-chlorinated shock or combined with dichlor, which makes it significantly more effective than MPS alone.

Other chemical additives		
Common name	**Usual chemical name**	**Common brand names**
Stain and scale inhibitor	These are usually proprietary chemical formulations and cannot be purchased as a single generic chemical.	Metal Stain Gone, Scale Inhibitor, Stain and Scale Preventer, Stain and Scale Defense
Foam inhibitor		Foam Gone, Foam Down, Defoamer
Clarifier		Water Brite, Spa Bright, Water Clarifier, Clear Water, Natural Clarifier, Brite & Clear

Do NOT use these in your spa:

- Sodium hypoclorite (household bleach)
- Trichlor

Common Water Chemistry Questions

Question : Why is the use of a floater not recommended to sanitize my spa water?

Answer: We do not recommend the use of a floater for three reasons:

- The floater is unable to control the rate at which the sanitizer is dissolved into the water. When a floater is placed into a spa the sanitizer levels inside the spa can be extremely high. High sanitizer levels over a period of time will cause chemical burns and discolor the spa shell, jets, pillows, and spa cover underside. The use of floaters tends to lead to negligence of spa water sanitizer levels as well. Once the sanitizer is all dispensed and the floater is not checked daily, the low sanitizer level will allow viruses, algae and harmful bacteria like Legionella (Legionnaires disease) and E-Coli to grow.

- Floaters tend to stay in one area of the spa most of the time, causing this area to be exposed to extreme sanitizer levels. Most commonly a floater will become trapped near the filter weir or a seat, causing chemical damage to the section of the spa.

- The floater may allow small chunks or pieces of the concentrated sanitizer to fall out of its housing causing the chunks to settle at the bottom, causing pitting or chemical blisters to the spa shell. For this reason we advise you to use granulated chlorine or bromine as granulated sanitizers are designed for dissolve quickly inside of the spa with your jets activated. Chemical abuse is not covered under the terms of the limited warranty.

Question : When I open my spa, I smell chlorine. How to I get rid of the smell?

Answer: There are two types of chlorine in your spa. the first is "Free Chlorine" which is chlorine molecules that are available to sanitize your spa. This free chlorine does not have an odor. The second is chloramine, which is a byproduct of chlorine that has already been used/expended to sanitize. Chloromanes generate the strong chlorine smell most spa owners experience. This can be eliminated by shocking your spa water, if you smell chlorine in the water, its time to shock.

Question: Why can't I fill my spa with soft water?

Answer: Soft water is essentially the same as regular water except in one regard that is important for spa chemistry and that is calcium levels. The calcium inside of the water has been replaced by sodium, which can be corrosive to heaters, pumps, and other plumbing equipment which will become expensive to replace. Calcium is needed for certain chemicals to properly function as well. Only use potable water that has not been treated with a water softener.

Question: I am concerned about the amount of chemicals my family is exposed to, do I really need to use as many chemicals in large amounts?

Answer: While there should be concern of over exposure to any chemical being unhealthy, spa chemicals when used correctly are designed to be effective and beneficial. In the case of spa water, the chemicals we recommend are import ant to protect the user from waterborne illness, including skin infections and disease causing pathogens, chemicals also help to prevent corrosion of spa components.

Question: Why isn't water chemistry damage (chemical abuse) covered under warranty?

Answer: The chemical levels and water quality of the water in the spa are directly under your control. With proper basic care the spa will provide many years of hot water relaxation. If you are unsure about water chemistry, reach out to your spa dealer.

Do's and Dont's

- Do add chemicals slowly into the front of the filter compartment/weir with jet one operating for at least 10 minutes.
- Do use special care if using baking soda to clean either the interior or exterior plastic surfaces.
- DON'T use swimming pool muriatic acid to lower pH.
- Don't splash pH increaser additives on the siding.
- Don't Use compressed sanitizers, The use of bromine sticks or tablets in floaters may become trapped in a lounge or cooling seat, and in some cases sink to the bottom of the spa. This may cause discoloration or stress on the spa shell.
- Don't use a floater type sanitation system as a low or no maintenance solution to your spa maintenance. Floating dispensers can become trapped in one area and cause an over sanitation (or chemical burn) of the particular area, damaging acrylic, jets, and pillows. If the dispensers setting is too high, the higher concentration can also cause chemical burn damage throughout the spa. This kind of chemical damage can be done by both bromine and chlorine sanitizers.
- Don't use a sanitizer which was not designed for spas.
- Don't use household bleach (liquid sodium hyperchlorite).
- Don't broadcast or sprinkle the chemicals onto the water surface. This method can cause chemically induced blistering on the spa surface (chemical abuse).

Bather Load

"Bather Load" is the term used to describe the number of people using a spa, combined with the length of usage, and the frequency of usage. All these factors have a great effect on the spa water. The higher the bather load, the more chemicals need the be added and a longer filtration time will be needed.

Recommendations are designed for spas with average bather load (3 to 4 people=, 15 minutes of usage, three times a week at 100 degrees). If your bather load exceeds these guidelines, and you experience water quality problems, increase the amount of filtration first, (go to the next higher filtration number) then if water quality is still not adequate, consult the advice of your Cal Spas dealer for additional chemical or system recommendations. Be sure to give them your bather load information.

Ozonator

The ozone generator releases ozone into the spa water. You will still need to test for chlorine/bromine and occasionally replenish it to return the sanitizer level back to baseline. **For spas without a circulation pump, "Pump 1" will run at low speed and the ozonator will run during filtration.**

The spa's control system is factory programmed with one filter cycle that will run in the evening, aligning with lower energy rates in that time slot. The time and duration of the filter cycle can be set according to your needs. In addition, a second filter cycles can be enabled. Filtration time may need to be increased with a heavy bather load.

Make sure water diverter valves are turned all the way to the left or right, and never left in the center position during filtration cycles. When the diverter valve is in the center potion, there is not enough suction from the pump in order to inject ozone into the spa. The ozonator will generate ozone, but it would not be injected into the water effectively.

Troubleshooting Water Clarity

Problem	Probable Causes	Possible Solutions
Cloudy Water	• Dirty Filter • Excessive oils/ Organic matter • Improper sanitation • Suspended particles/organic matter • Overused or old water	• Clean filter • Shock spa with sanitizer • Add sanitizer • Adjust pH and/or alkalinity to recommended range • Run jet pump and clean filter • Drain and refill spa
Water Odor	• Excessive organics in water • Improper sanitation • Low pH	• Shock spa with sanitizer • Add sanitizer • Adjust pH to recommended range
Musty Odor	• Bacteria or algae growth	• Shock spa with sanitizer • Adjust pH to recommended range

Problem	Probable Causes	Possible Solutions
Organic Buildup/ Scum Ring Around Spa	• Buildup of oils and dirt	• Wipe off scum with clean rag - if severe, drain the spa, use a spa surface and tile cleaner to remove the s cum and refill the spa
Algae Growth	• High pH • Low sanitizer level	• Shock spa with sanitizer if problem is visible or persistent, drain, clean and refill the spa
Eye Irritation	• Low pH • Low sanitizer level	• Adjust pH • Shock spa with sanitizer and maintain sanitizer level
Skin Irritation/ Rash	• Unsanitary water • Free chlorine level above 5ppm	• Shock spa with sanitizer and maintain sanitizer level • Allow free chlorine level to drop below 5 ppm before spa use
Stains	• Total alkalinity and/or pH is too low • High iron or copper in source water	• Adjust total alkalinity and/or pH • Use a stain and scale inhibitor
Scale	• High calcium content in water - total alkalinity and pH too high	• Adjust total alkalinity and pH - If scale requires removal, drain the spa, scrub off the scale, refill the spa and balance water • Use a stain and scale inhibitor

Chemical Abuse

Chemical abuse is defined as negligent/careless use of both recommended spa chemicals, and use of prohibited chemicals. The spa shell is designed to last for many years, but when the shell is exposed to excessive chemicals, or improper chemical application; this can cause reactions on the shell that can cause pitting, cracks, bubbling, and other blemishes on the shell.

Spa jets, pillows, and other components are designed to withstand sanitizer levels within the range mentioned in this manual. Excessive sanitizer use will cause oxidation of the interior of the spas metals and other components, which can cause rust/oxidation of jets, deterioration of spa pillows, speakers and plastics, and damage/oxidation of the spa cover.

Components & materials damaged by chemical abuse are not covered under warranty. Depending on the extent of damage the entire spa warranty can be voided, as stated in the limited warranty.

Removing and Re-seating Pillows

You can remove the pillows for cleaning and maintenance quickly and easily. This method works for all pillow types.

Grab the lower edge of the pillow with both hands and firmly pull up, as you do this the pillows inserts will pop out of the holes.

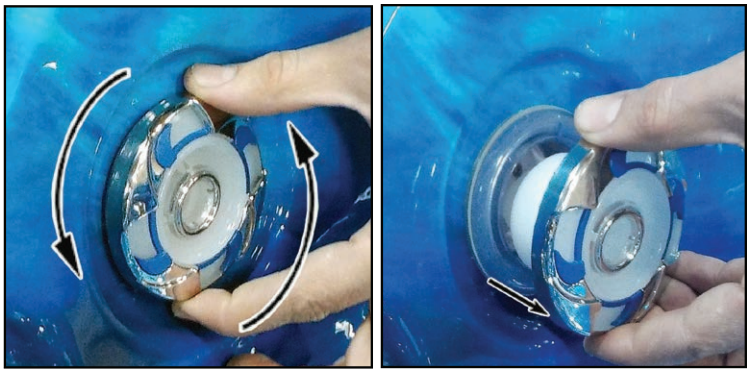
Re-seat the pillows by aligning the pillow inserts with the holes and striking the pillow hard enough for the insert pegs to pop back in place.

Jet Removal and Replacement

Jets can be easily removed for cleaning.

Grasp the outer lip/rip of the jet and turn it counter-clockwise until it completely stops, you may feel the jet loosen and pop out a bit, pull the jet outward. The jet will be very snug and may require additional turning force to pop-out. **DO NOT PRY OUT JETS**

To replace the jet, place it in the fitting and turn clockwise until it click into place and can be rotated freely to open and close water flow again.



Note: have the jets turned off when removing jet inserts, it will be easier to remove when there is no water flow through it.

Draining Your Portable Spa

Your spa should be drained every four to six months for cleaning and maintenance and refilled with fresh tap water. Before you begin turn the power off to the spa at the breaker and remove your filters.

Step 1. Locate Your Drain

Pull the knob out of the cabinet. The cabinet drain is screwed into the drain pull knob.

For spas with drain inside the spa

Using a Phillips screwdriver, remove the screws to the access panel and open it. Locate hose ending with the ¾ inch hose-bib fixture as shown below.

Step 2. Remove the cap

Make sure the valve is in the closed position, then unscrew and remove the cap.

Step 3. Connect Valve to a Hose

Attach a garden hose to the hose-bib fixture. Place the other end of the garden hose where you would like the water to drain too.

Step 4. Drain the Spa

Turn the valve on the hose-bib fixture to open the drain. When the spa has drained completely, turn the valve on the hose-bib fixture, remove the hose and replace the cap.

Winterizing (Cold Climate Draining)

Depending on your region in your country, the temperature could drop below 32F(0°C). If you are one of those regions, we recommend that you always have your spa full of water and running at normal spa temperatures between 80°F - 100°F (26.7°C - 37.8°C). This will help reduce the risk of water freezing in your spa and inside of the spa equipment.

WARNING: If you find the need to drain your spa, be aware of the potential risk of water freezing in your spas equipment and plumbing, even if the directions below are followed perfectly, there is no guarantee that your spa will not suffer freeze damage. Freeze damage is not covered under warranty.

1 - Open all filter covers.
2 - Remove the filter baskets and filters
3 - Drain your spa completely.
4 - Vacuum water from the spa's main drain fitting with a wet/dry vacuum
5 - Open the bleeder valves on the pumps
6 - For spas equipped with a UV light, loosen the quarts tube nut to let the water drain from the UV light chamber.
7 - Disconnect the unions from both sides of the pump.

Note: Do not use antifreeze to treat your spa, irreversible damage will occur to seals and spa finish.

8 - Blow out any remaining water out of the jets, suctions, filter canister, and equipment area with a wet/dry shop vac.
9 - When it has completely finished draining, replace the quarts tube in the UV lamp chamber, and tighten the nut. Close the bleeder valves and re-connect the unions on the pumps.
10 - Replace the filter basket and filters.
11 - Cover your spa with a good spa cover and an all weather tarp to ensure neither rain nor snow enters the spa.

Cleaning and Replacing the Filter

Filtration is one of the most important steps you can take to ensure clean, clear water. It is far less expensive to fix water clarity problems by properly filtering your spa than using excessive amounts of chemicals, excessive filtration times, or by water replacement.

Vacation Care

You can leave your spa unattended for up to two weeks if you follow these instructions

Note: Always lock your spa cover using the cover locks if you plan to be away from home and the spa is filled with water, these instructions will help maintain your water quality for up to two weeks. Use of the spa during this period of time by guests or family can affect the clarity and conditions of the spa.

Select a low range temperature of 80F (27C)

Note: Platinum Spas & Escape Spas with Gecko systems, Refer to filtration mode "Away From Home"

1. Use a test strip, Adjust pH, AK, and CH if necessary.
2. Shock the spa water with your selected sanitizer (Add either bromine or chlorine)
3. Lock the spa cover to the cover locks.
4. When you return, test the water again and adjust pH and shock the water again.

If you will not be using your spa for longer than 14 days and the spa is not able to be maintained, we recommend following the cold climate procedure to prevent algae growth, bacteria, and spa damage.

Spa Cover and Locking System Installation

The spa cover can be considered one of the most important parts of your spa. The spa cover helps retain the heat inside of your spa in all different types of weather. The cover works as a lid on a thermos, when the spa is not in use the cover helps lower the amount of time the spas heater has to run for. Using the cover will help lower your operating cost of your spa when the spa is not in use.

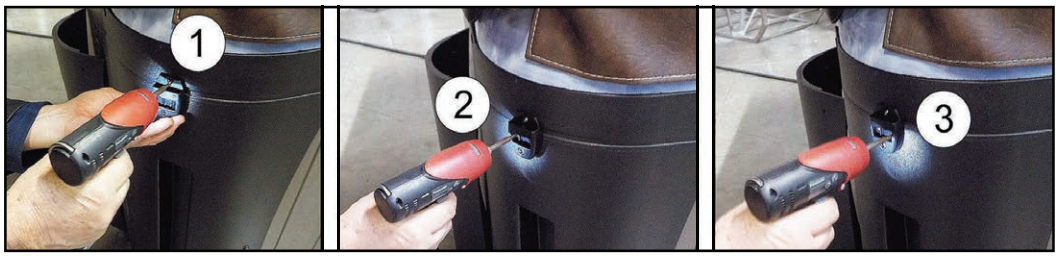
Note: The cover is constructed of rigid foam and metal, but it is not meant to support weight for your safety, do not sit, stand, or lie on the cover, nor should you place objects on top of the spa cover

- Covered spas will protect your spas finish from the suns ultraviolet rays.
- You are required to use the spa cover to maintain warranty coverage.
- Covering your spa prevents children or pets from drowning in your spa.

Step 1 Place cover on spa. Make sure it is correctly positioned, with the skirt of the cover wrapping over your spa shell. This helps prevent blistering and cracking from sun exposure.

Step 2 Position the tie-down hardware (attached to the straps of your cover) on the side of the spa so they are easily reached by the cover tie-down straps.

Step 3 With the straps pulled tight (but not overly right), lightly pre-drill the location for screw placement. Gently drill 3 holes - one for each screw slot in the lock.
Note: Use a low torque drill, or use the lowest setting on your drill, do not drill in the screw all the way as the corners are designed with an air pocket inside to retain heat inside of your spa. Too much force lay deform the shape of the corner and would not look as appealing.



Step 4 Use a screwdriver to finish screwing in the three screws, repeat this process for the remaining 3 corners.

Step 5 Keep the cover fastened down at all times when not in use, locking hardware may be locked with a key (provided in the packaging of the spa cover)

Step 6 The provided key will allow you to lock down your spa cover. We recommend locking your spa cover when the spa is not in use. Store your key somewhere safe, away from children.

WARNING
AVOID
DROWNING
RISK

FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN INJURY OR DROWNING
NON-SECURED OR IMPROPERLY SECURED COVERS ARE A HAZARD.
REMOVE COVER COMPLETELY BEFORE ENTRY OF BATHERS.
ENTRAPMENT POSSIBLE.
KEEP COVER ON SPA AND LOCKED WHEN NOT IN USE

Spa Cover and Shell Maintenance

Spa Cover and Pillows

Due to constant punishment your spa cover and pillows receive, you should protect them by applying a vinyl cleaner as part of your monthly maintenance plan. Use a product that is specifically designed to protect spa covers and pillows from chemical and ultraviolet light damage without leaving an oily residue behind that is normally associated with common automotive vinyl protectants. Fabric covers can use outdoor UV protectant sprays commonly found in home & garden departments.
Warning DO NOT use automotive vinyl protectants on spa covers of pillows. These products are generally oil-based and will cause severe water clarity issues that are difficult to correct.

Spa Shell

Each time you drain the spa, before you refill it you should clean your spa shell with an all purpose cleaner and apply a coat of surface protectant. Use a mild detergent, non-abrasive cleaner specifically formulated to clean the spa without damaging acrylic finish.

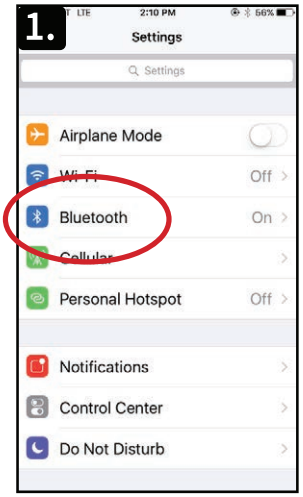
Use a non-oil based surface protectant that is specifically formulated to protect the spa's finish from the chemicals and minerals associated with normal spa use.

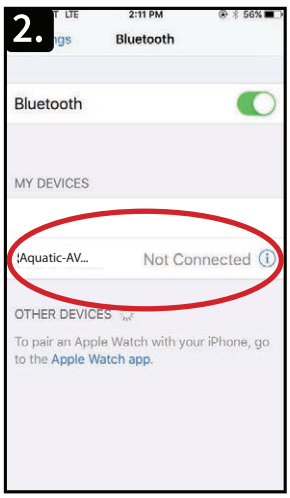
Using the Freedom Sound System

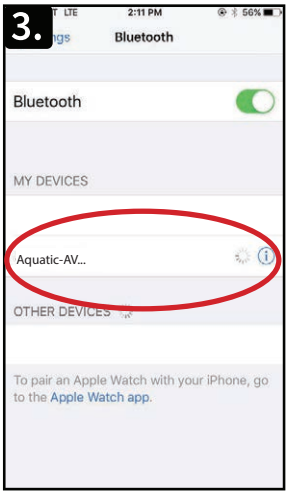
The Freedom Sound System entertainment option contains a Bluetooth-enabled speaker system that is available for certain Cal Spa models. Any Bluetooth-enabled device can be used to play audio though your spa. Before you can use the sound system you need to pair the Bluetooth module to your device. The antenna is located within the spa cabinet. The speaker system takes a direct input from your device, Bass and treble can be adjusted within your device/app settings. Follow the Pairing procedure, the example shown below is from an iPhone device. Your device may appear differently.

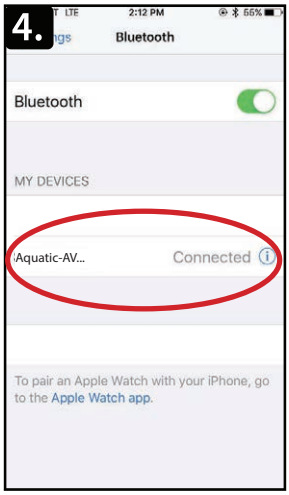
1. Select Bluetooth from your device's options list ensure that Bluetooth is turned on.
2. Select "Aquatic AV" from the list of available devices to pair.
3. Your iPhone may ask for a code to pair with the speakers, the code is 0000 (Android devices-no code needed)
4. Allow your device to pair with the spas Bluetooth module.
5. When the devices have been connected, the device Aquatic AV will be highlighted.

Note: All sounds from your device will be played through the sound system, including system sounds and telephone notifications.









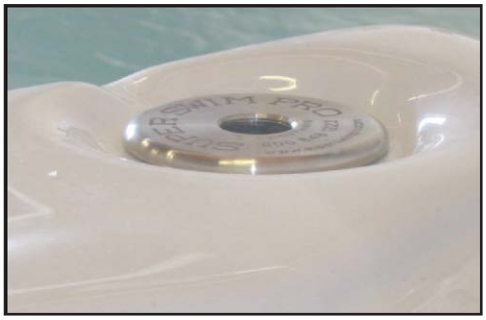
Air Injection/Resistance

Use the control panel to start and stop jets, and use the air ventruis at the end of the spa next to the main hand rail of the spa to inject air into the swim jets. Although the FA1325 is not designed as a fitness spa, the swim jets installed in this spa will allow users to do moderate swimming exercises. When air is introduced to the spa jets, water resistance increases, giving you the ability to control your swimming resistance. You may also adjust the angle of the main swim jets to push water upward or lower to increase buoyancy and resistance.

*** In the FA-1325 the number of Air Venturis & style may vary.*

Swim Tether

Although the LES FA-1325 is not a dedicated fitness spa, the spa is equipped with a swim tether base, and anchor points for fitness equipment. The swim tether pole has three pieces and assembles easily. Slide the ends of the top and middle sections into the middle and bottom sections.



Insert the tether in the anchor hole when you are read to use it. Buckle the strap around your waist, it is easily adjustable and can accommodate most sizes as its designed as a one fits most.

Exercise Equipment

Optional Add on Item**

Important: Always consult your physician before starting any exercise activity or fitness program, the exercise equipment is designed for resistance training using elastic bands. When these bands are stretched the bands are under high tension. Improper use or failure to connect the exercise equipment can lead to injury, under high tension these bands can snap back towards the user or to others in or near the spa. Always inspect all of the exercise equipment and their connections before beginning any exercise. Never use any damaged equipment, and only use this equipment for its intended purpose.

The exercise kit contains

- Two hand grips
- Two 6" elastic bands
- Two 18" elastic bands
- Two 25" elastic bands
- Two rowing bars

Connecting the Exercise Equipment

The drawings starting on page 57 show the exercise kits placement in the LES FA-1325. Refer to the following pages to learn where the proper anchor points are within your swim spa.

Anchor Points for Fitness Straps

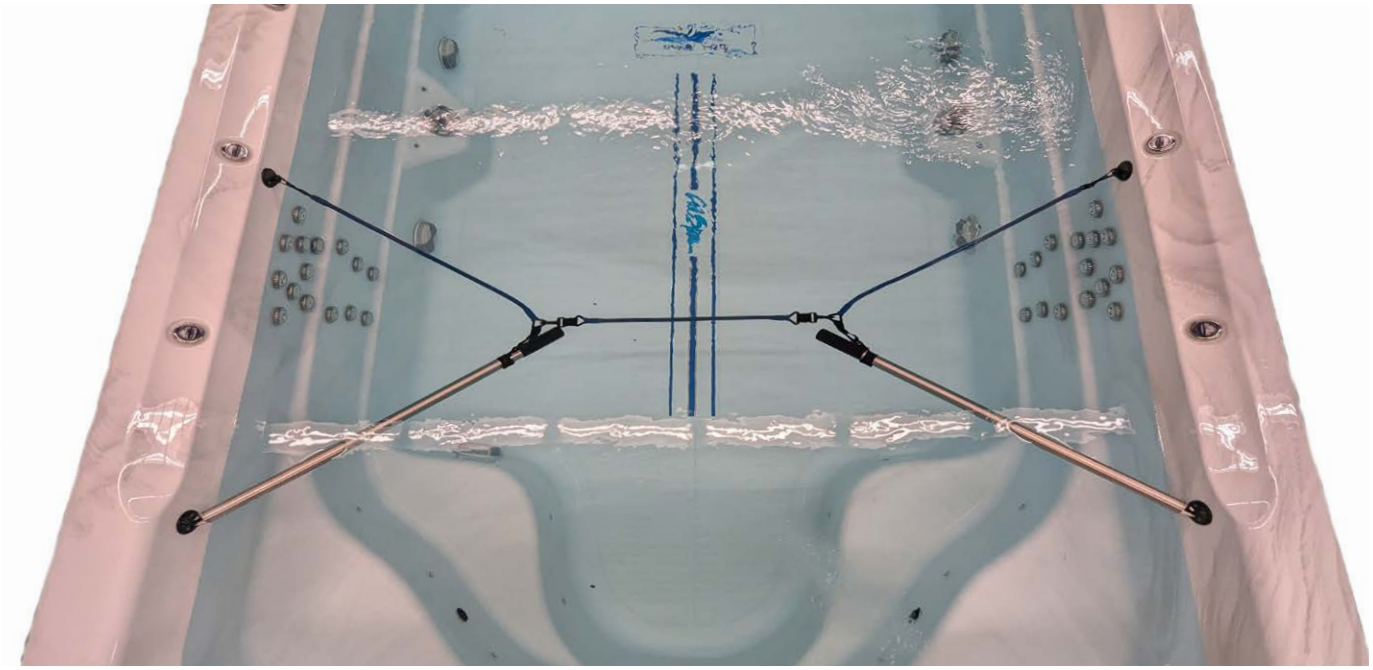
There are there are several different anchor points within your Family Fun Spa. These anchor points can be used to install fitness equipment including the row bars and fitness straps. All equipment within the fitness equipment pack uses plastic clips or metal hooks

Swim spas are not included with fitness equipment, this is an add on accessory. You can purchase this equipment from your dealer, or from our website at www.quickspaparts.com.

Note: When attaching the row bar align the row bar to hook towards the front of the spa. These row bars slide onto the anchor point by lining up the row bar into the anchor, hook and slide it.

Hook the row bar with caution to avoid scratching the acrylic within your spa.

When the fitness equipment is not in use, do not leave the elastic straps/bands, handles, or row bars inside of the spa. After each use dry the equipment with a towel and store within its provided duffel bag. Avoid exposing the elastic bands to prolonged sunlight exposure when not in use.



*For illustration purposes only**

Refer to page 55 for proper placement of exercise straps/equipment

The Fitness straps should be used to secure the row equipment in place. First secure the row itself with a anchor point, a 25" strap will be used on each side. The smaller 18" strap should be used to connect the two rows together.

Note: Always be cautious when setting up the fitness equipment, the straps have tension once they are set in the row position, and have tension when used to do other warm up exercises.

The kit is designed to do a variety of different stretches and exercises. The Family Fun Spa has multiple anchor points that can be used to suit a variety of desired exercises.

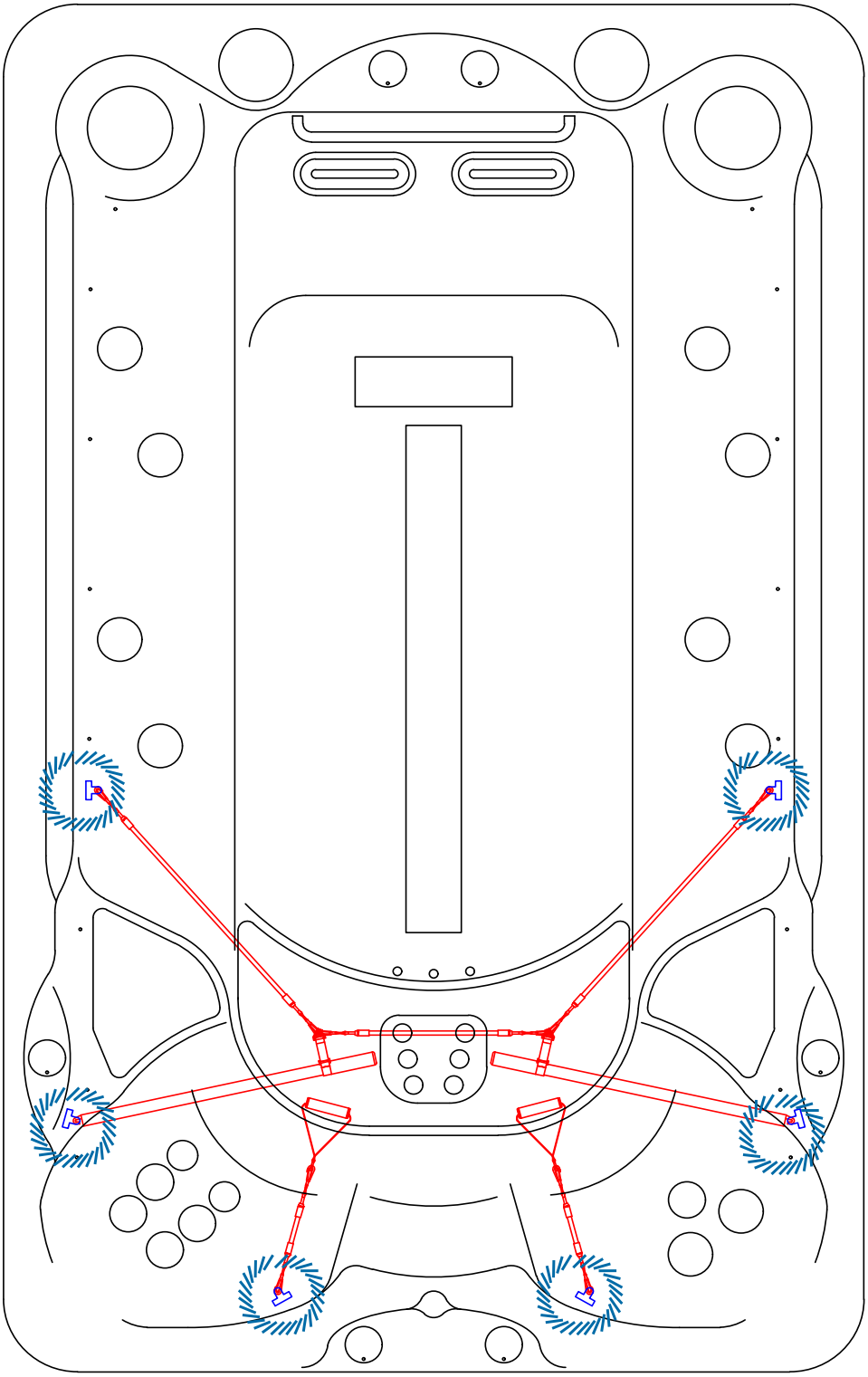
Note: Always proceed with caution when using elastic bands, improper operation can snap the bands and cause damage to the spa or personal injury.

The diagrams below show where each of the anchor points are. Each point is circled within the diagram. These diagrams also show the expected position of each strap style

Note: The center anchor point is not circled. This is meant for a swim tether.

LES FA-1325

= Anchor Point



Basic Troubleshooting

The troubleshooting guidance provided here is intended to cover the most common problems a spa owner may encounter. For more in-depth troubleshooting, go to www.calspas.com/troubleshooting.

Symptom	Possible Solutions
Problems starting up	
Pump won't prime	See priming instructions
Breaker keeps shutting off	Reset the GFCI breaker. If this continues, contact your dealer or a qualified spa technician.
Power and system problems	
System won't start up or breaker keeps shutting off	Power may be shut off. Turn on GFCI circuit breaker. If this continues, contact your dealer or a qualified spa technician.
Control panel doesn't respond	Turn on or reset the GFCI circuit breaker. If this does not solve the problem, contact your dealer or a qualified spa technician. If you hear the pump running but the control panel doesn't respond, contact your dealer
Spa does not turn off	Spa may be trying to heat up. Check if spa is in Ready or Rest mode In cold climates, if spa is not equipped with full foam or any kind of insulation, it will try to maintain the set temperature. Set the spa to low temperature range and set the temperature to 80°F. Spa may be in filter cycle. If it is, this is normal and no adjustment is necessary.
Message on the control panel	There may be a problem. See Diagnostic Messages
Heat problems	
Spa water does not get hot	Spa may be in low temperature range. Set the spa to high temperature range. The filter may be dirty or may need to be replaced. Clean or replace the filter. The water level may be too low. Fill the spa with water level at 4 to 6 inches from the top. The temperature is not turned up high enough. Raise temperature on topside control. Cover the spa. The cover will keep heat in the spa and help keep heat from escaping. Make sure cover is on at all times when spa is not in use. The heater element may be old, deteriorated, coated with scale, or defective. Contact your dealer for more assistance. The gate valves may be partially or completely closed. NEVER OPERATE YOUR SPA WITH THE GATE VALVES CLOSED!

Symptom	Possible Solutions
Spa overheats - temperature greater than 110°F / 43°C	Overheating can occur during summer months and may not necessarily indicate a malfunction. When it occurs, a message code may also appear on the control panel. Temperature may be set too high. Turn the set temperature down to a lower temperature. Filtration time may be too long. Turn the filtration cycles down during the warm months. The spa may not be properly ventilated. Make sure the front of the spa is not blocked to allow air flow. High speed pumps may have been running too long. Limit pump running time to no more than 15 to 30 minutes.

Water pressure problems

Low water pressure	Jet valves may be partially or fully closed. Open the jet valves. Filter cartridge may be dirty. Clean or replace the filter. Pump may have airlock. Remove airlock by priming spa The suction fittings may be blocked. Remove any debris that may be blocking them. The filter skimmer may be blocked. Remove the blockage. Gate valves may be closed. Open gate valves. Note: Never operate your spa with the gate valves closed! Spa may be running in filtration mode. Press JETS or JETS 1 button to turn on high speed pump.
No water pressure (no water stream from any jets)	Power may be switched off. Turn the power back on. The pump may be defective. After you have tried all other troubleshooting, contact your dealer for assistance.
Jets surge on and off	Water level may be too low. Add water to normal level.

Pump problems

Pump runs constantly – will not shut off	There may be a problem with circuit board. Contact your dealer.
Noisy pump	The water level may be too low. Fill the spa with water level at 4 to 6 inches from the top. Filter cartridge may be dirty. Clean or replace the filter. Pump may have airlock. Remove airlock by priming spa The suction fittings may be blocked. Remove any debris that may be blocking the suction fittings. Gate valves may be closed. Open gate valves. Note: Never operate your spa with the gate valves closed! Air may be leaking into the suction line. Contact your dealer for assistance. Debris may be inside the pump. Contact your dealer for assistance. Noise may be a sign of damage. Contact your dealer for service.

Symptom	Possible Solutions
Pump turns off during operation	Automatic timer may have completed its cycle. Press JETS or JETS 1 button to start the cycle again. Pump may have overheated due to the vents on the equipment door being blocked. Make sure the front of the spa is not blocked to allow air flow. The pump motor may be defective. Contact your dealer for assistance.
Pump has a burning smell while running	A burning smell may be a sign of damage. Contact your dealer for service.
Pump does not run	Pump may have over heated. Let it cool for an hour and try operating the spa for a shorter time. Power to the spa may be shut off. Turn on or reset the GFCI circuit breaker. If this does not solve the problem, contact your dealer or a qualified spa technician.

"Thermal Creep"

Cal Spas are designed with energy-efficient components and systems that are meant to sustain heat generated by the equipment, which is then cycled back into the spa water. In hot weather or in situations where the spa is set to extended run times, Thermal Creep may occur. Thermal Creep is a condition where the measured water temperature can be higher than the set temperature. To manage Thermal Creep you may:

Vent your cover. This means placing a folded cloth about ¾" (2cm) thick under all four corners of the cover before you lock the cover down.

Open your cover. Opening the cover at night will also quickly cool the water down if desired.

Open all air controls. Set your filtration cycles to run during the cooler times of the day or night.

Reduce the length of your filter cycles.

Visit your local dealer for additional guidance.

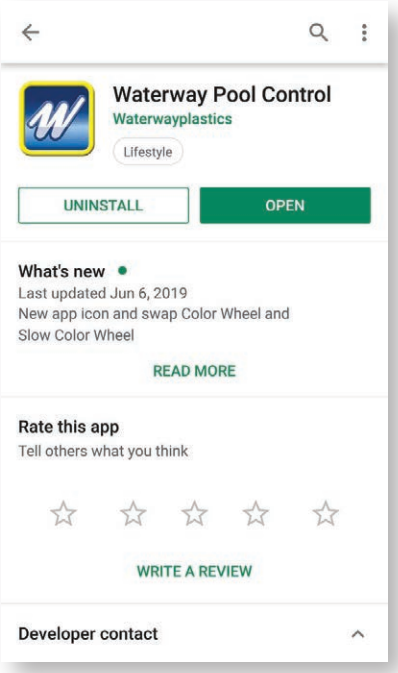
Since Thermal Creep only occurs in well-insulated hot tubs, it is not indicative of something that is wrong with your spa or its equipment.

NEO Wifi Spa Control Module

Your LES Spa may be equipped with a Wifi Control Gateway. This module houses a wifi antenna that communicates between your home wifi network and your spa. It is important that this housing is not obstructed against a wall or by dense shrubs/trees. For best communication, its ideal to have this wifi housing facing towards the homes router.

Part Number: ELE0531

The following pages will contain instructions on how to download the Waterway Pool Control app. The app will allow spa owners to communicate with the spa through the Internet, allowing spa owners to control their spa when they are away from home.



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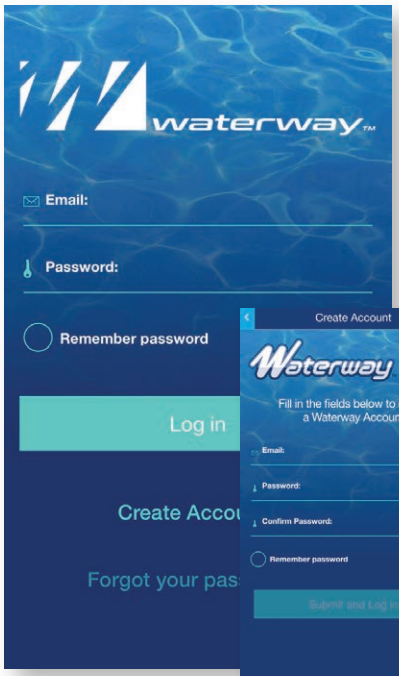

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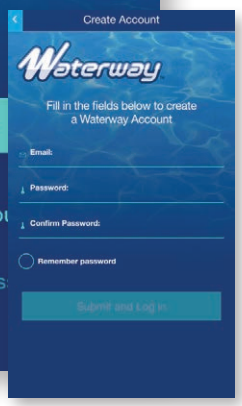

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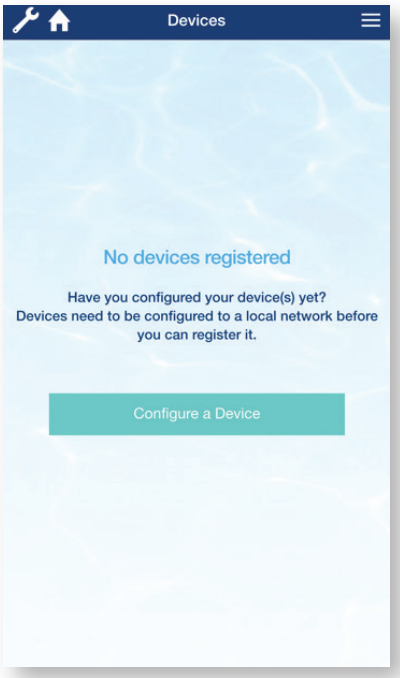

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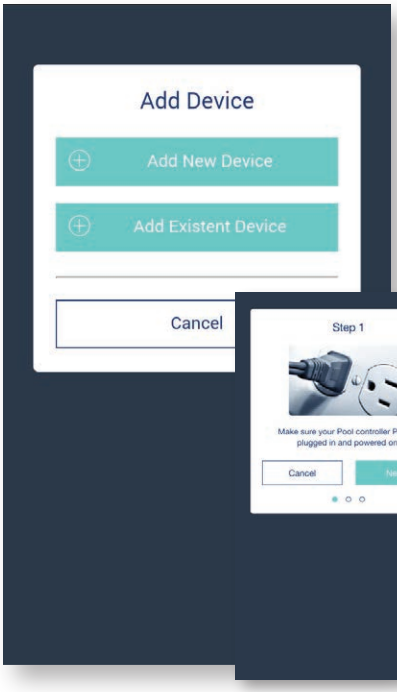

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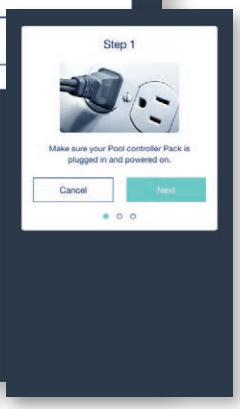

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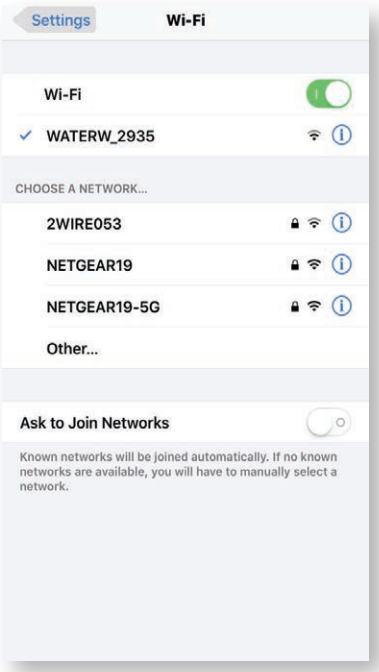
1. Download and install the App from the App Store or Google Play.
2. Select **Create Account**.
3. Enter your email address, password, confirm and submit.
4. Select **Configure a Device**.
5. Select **NEO Spa Control**.
6. Select **Add New Device**.
7. Make sure your NEO Spa Control is on and select **Next**.



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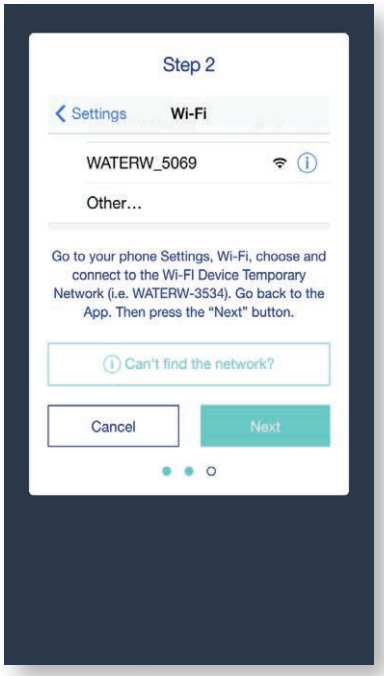

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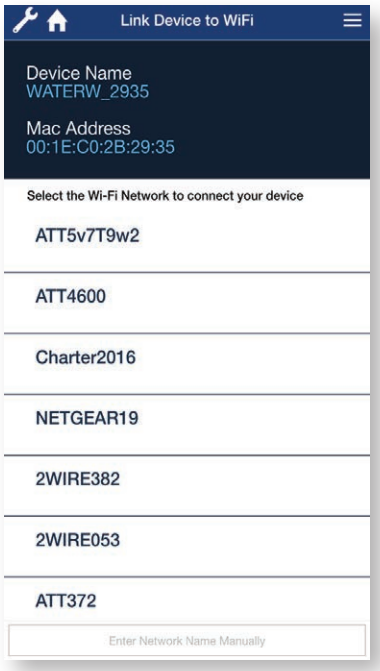

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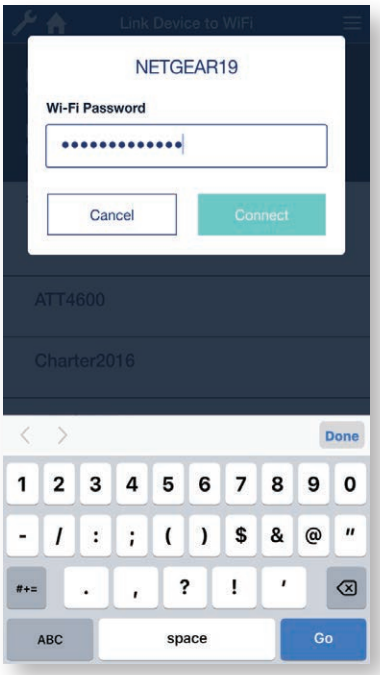

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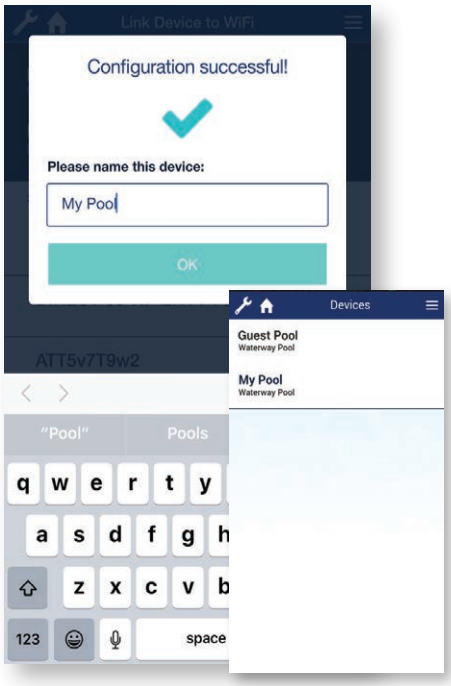

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8. Go to your phone Settings, Wifi, and connect to the 'WaterW-xxxx' network.

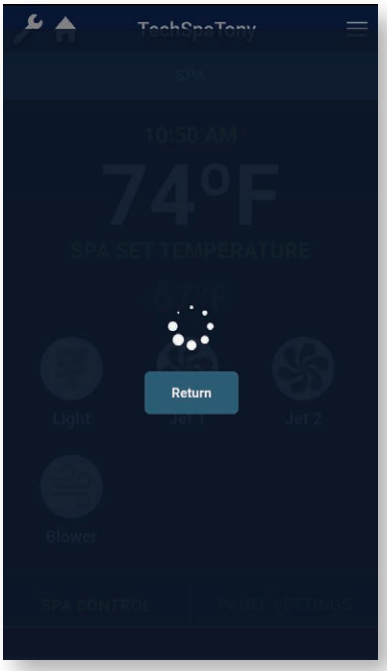
9. Return to the Waterway App and Select **Next**.

10. Select your 2.4 Ghz home network from the list (if your network name is not listed, it can be entered manualy).

11. Enter your home network password and select **Connect**.

12. The device will configure and connect to your 2.4 Ghz home Wi-fi network. Name your spa and select 'OK'.

13. Select the configured device to connect. i.e. MySpa.



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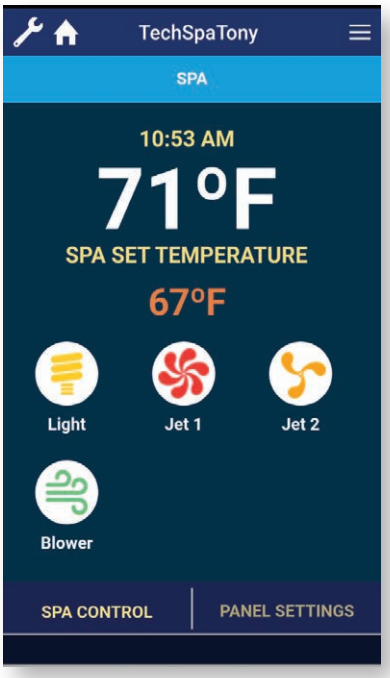

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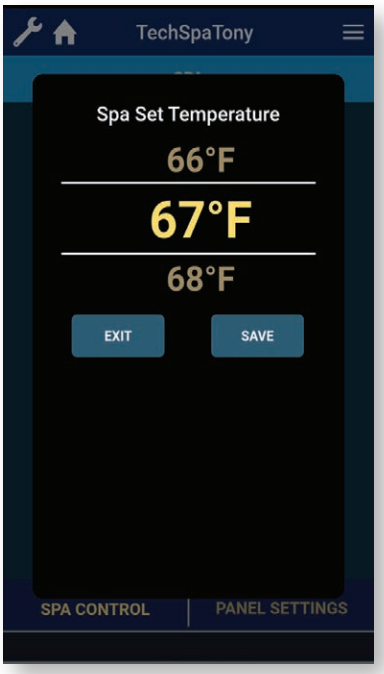

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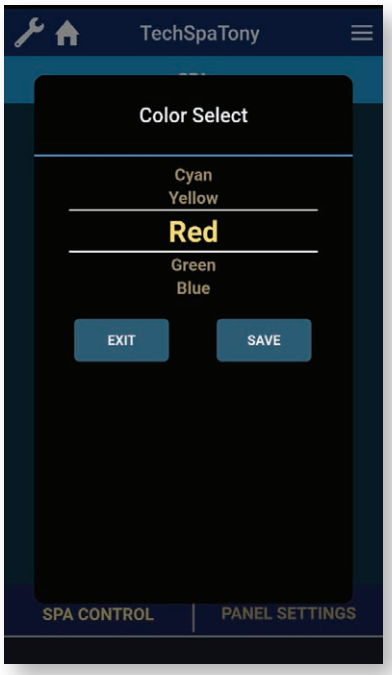


18

14. The App is connecting to the device.

15. The Spa Control screen is displayed.

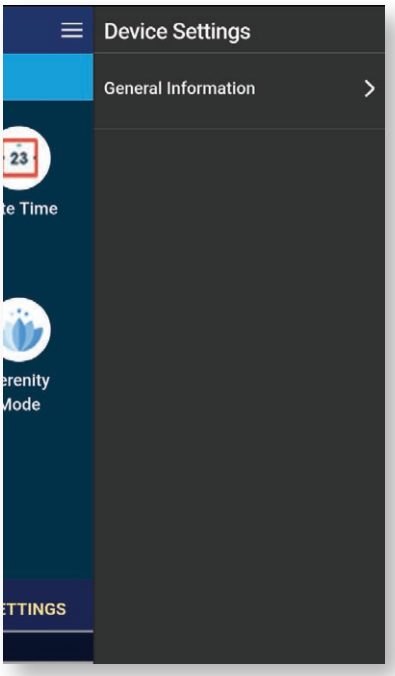
16. The Light, Jets, and Blower can be turned on and off. Select **'Spa Set Temperature'** to adjust the set temp.

17. Swipe up or down to adjust the temperature.

EXIT to go back or

SAVE to save the setting.

18. If a multicolor light is installed, select Light, then choose a color and **SAVE**.



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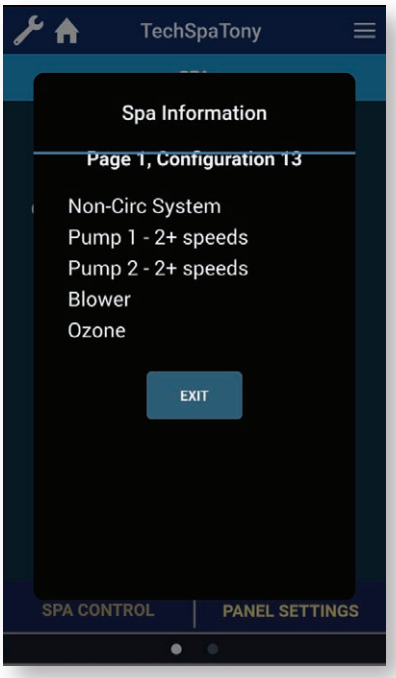

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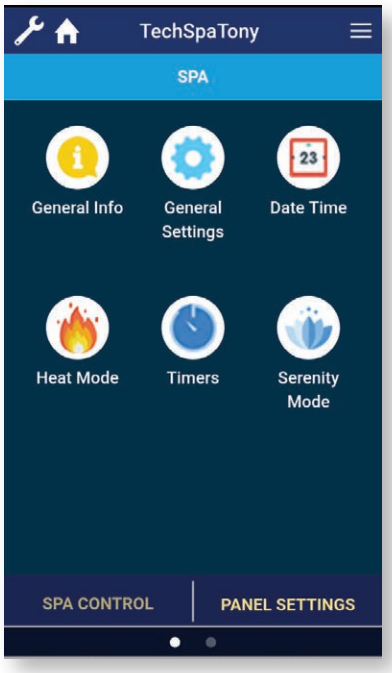

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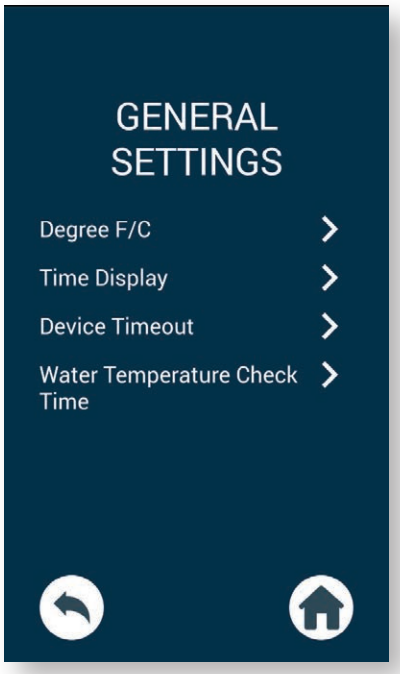


23

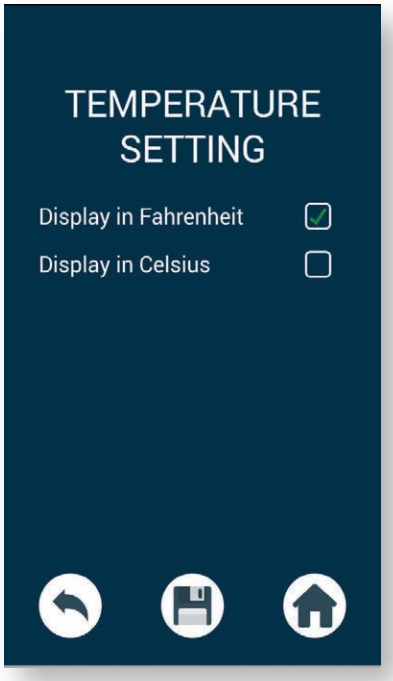
19. Select ≡ to view Device Settings.

20. Select General Information to view the NEO Configuration.

21. Select **Panel Settings** to display the settings for the NEO.

22. Select **General Info** to display information about the NEO controller.

23. Select **General Settings** to display the options listed.



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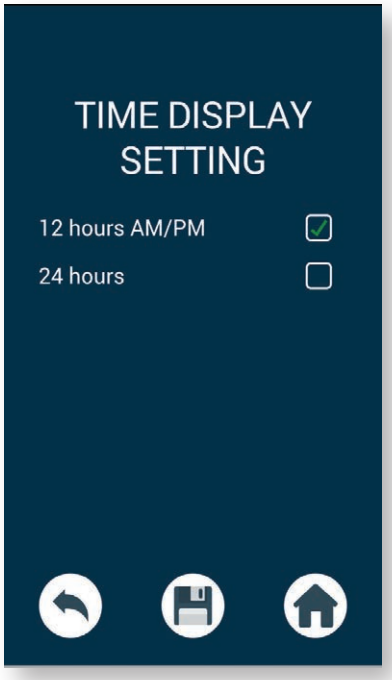

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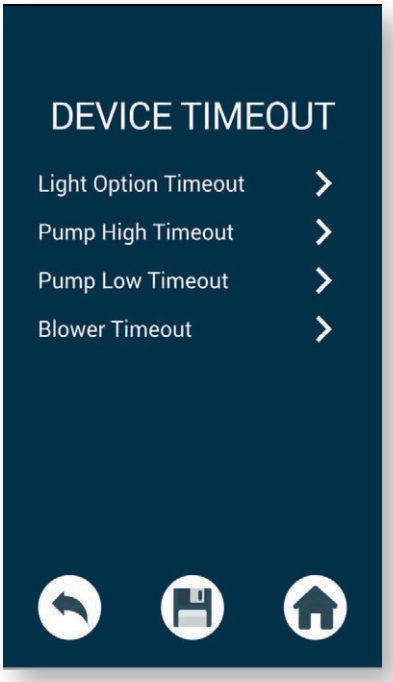

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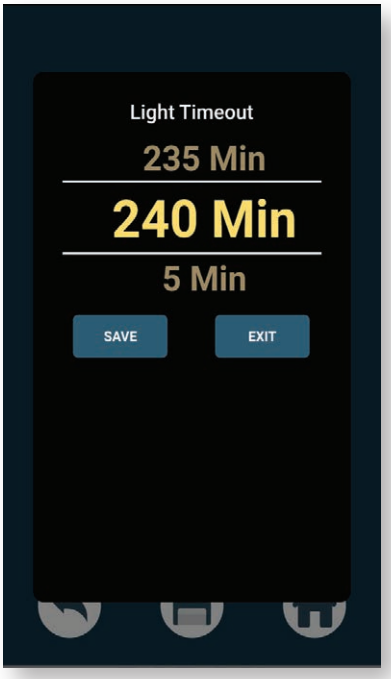

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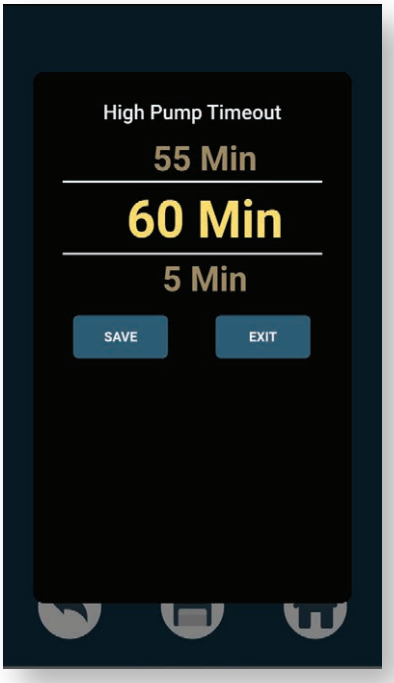


28

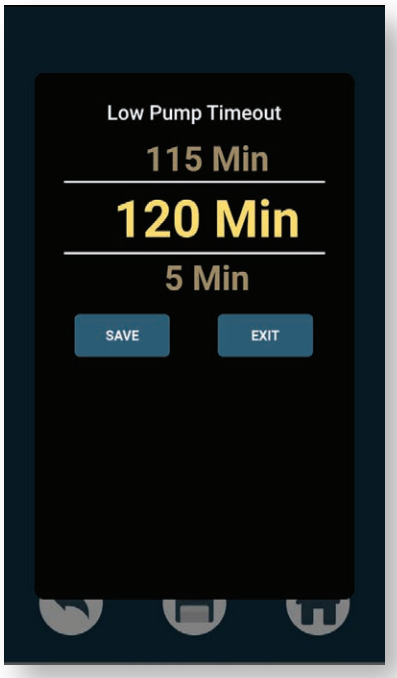
24. Select **Degree F/C** to choose between Fahrenheit or Celsius.

25. Select **Time Display Setting** to choose between 12 hours (AM/PM) or 24 hours.

26. Select **Device Timeout** to show a list of devices that can be adjusted.

27. **Light Timeout** can be as low as 5 minutes or as high as 240 minutes.

28. **High Speed Timeout** can be as low as 5 minutes or as high as 60 minutes.



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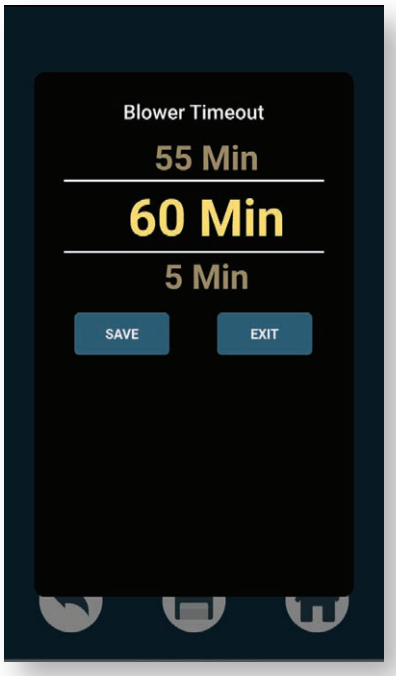

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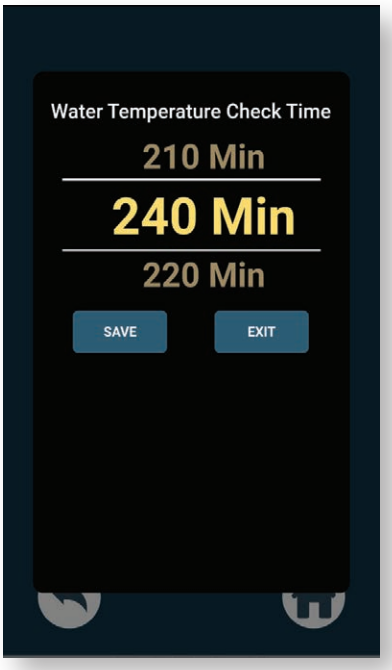

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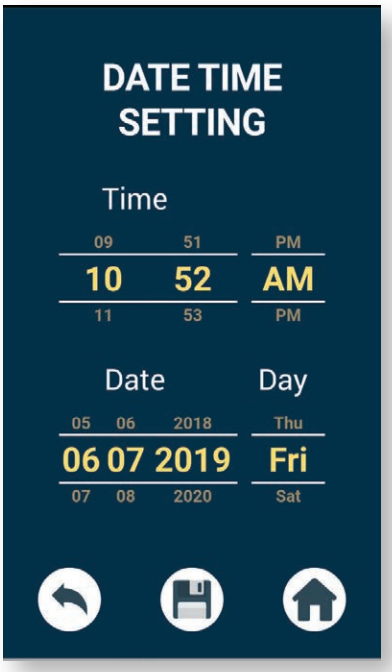

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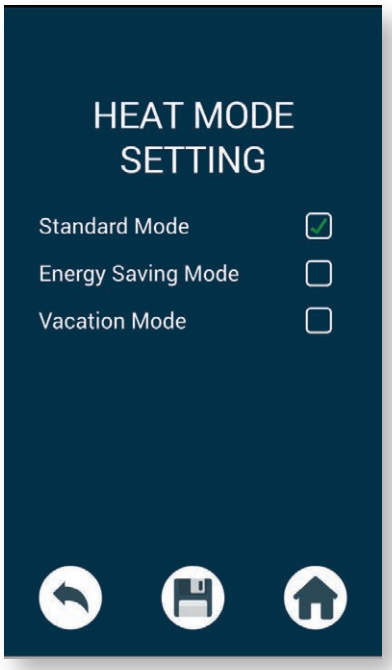

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29. **Low Speed Timeout** can be as low as 5 minutes or as high as 120 minutes.

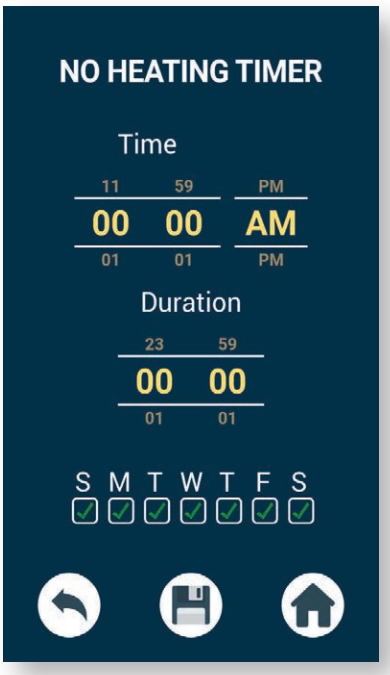
30. **Blower Timeout** can be as low as 5 minutes or as high as 60 minutes.

31. **Water Temp Check Time** can be set as low as 15 or 30 minutes or as high as 240 minutes.

32. **Adjust** date and time by moving fields up or down. Select Save to set.

33. **Heat Mode** sets the number of Temp Check times between cycles.

34



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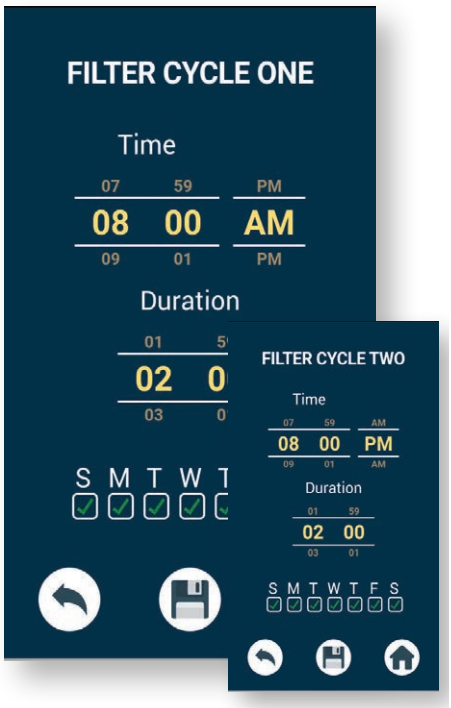

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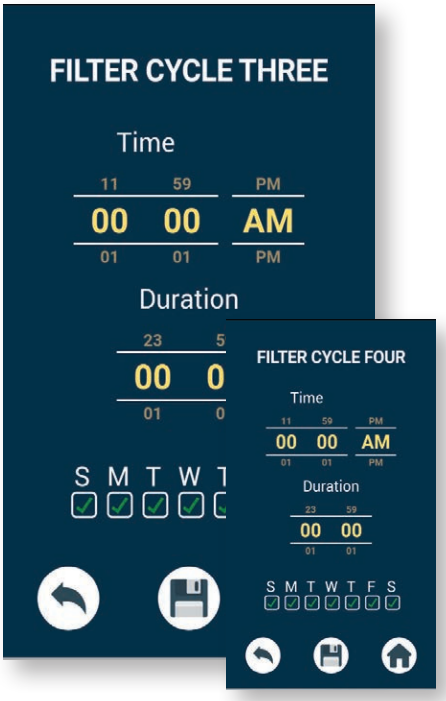

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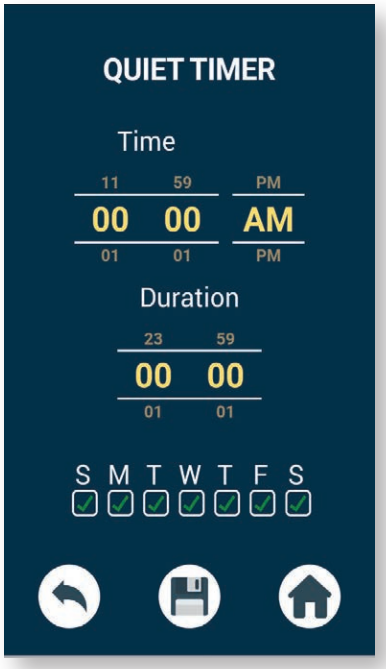


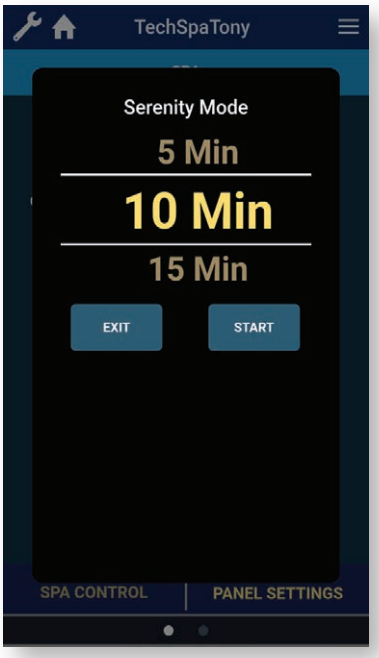
37

34. Select **Timers Settings** to display a list of timers that can be adjusted.

35. Select **No Heating Timer** to set the times that the NEO will not heat the spa.

36. Each filter cycle can be customized. By default; Filter Cycle 1 = 8:00 am, 2 hrs and Filter Cycle 2 = 8:00 pm, 2 hrs.

37. Select **Quiet Timer** to set the times that the NEO will not run pumps.



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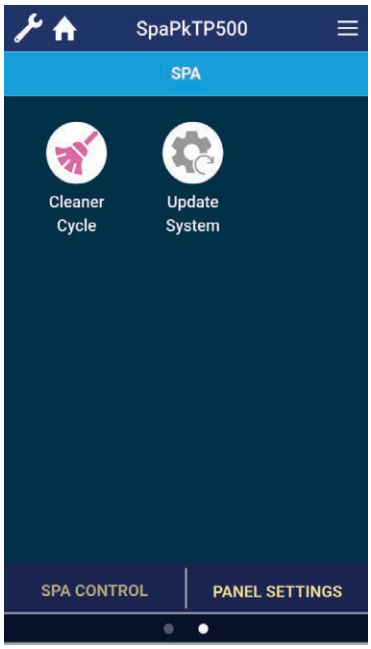

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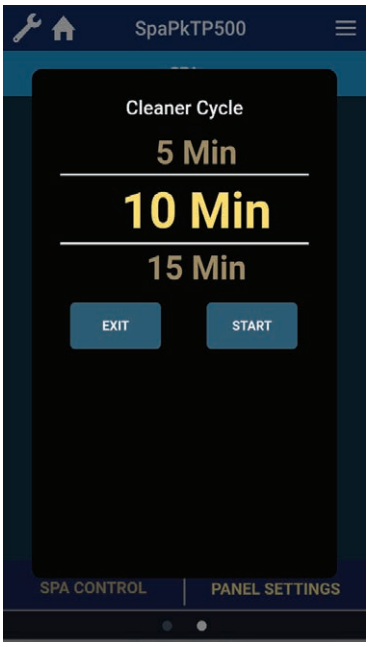

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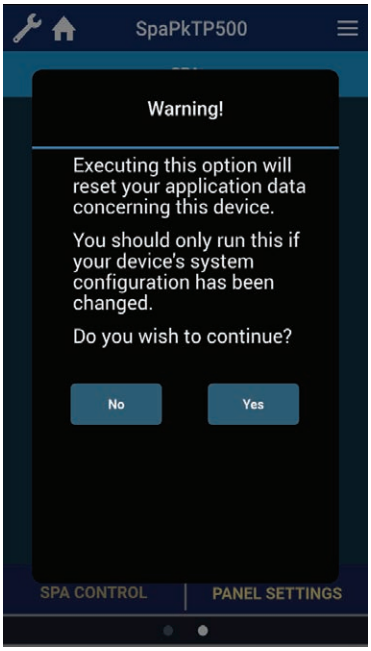

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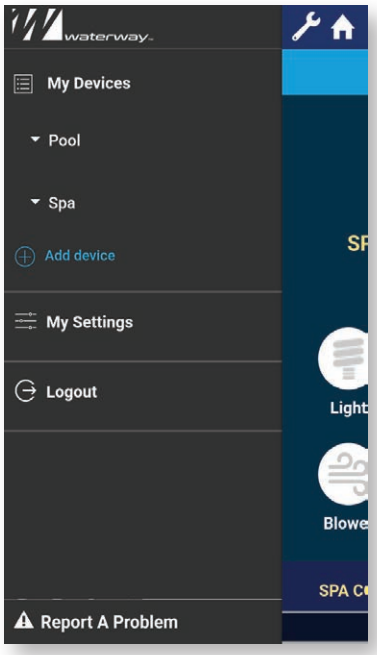

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38. Select **Serenity Mode** to temporarily stop pumps from running.

39. Swiping to the right displays **Cleaner Cycle** and **Update System.**

40. Select **Cleaner Cycle** to set the number of minutes for the cycle to run. **START** will start the cycle.

41. Select **Update System** to update the App if the Configuration has been changed on the NEO.

42. The **WRENCH** icon displays account settings for the App.

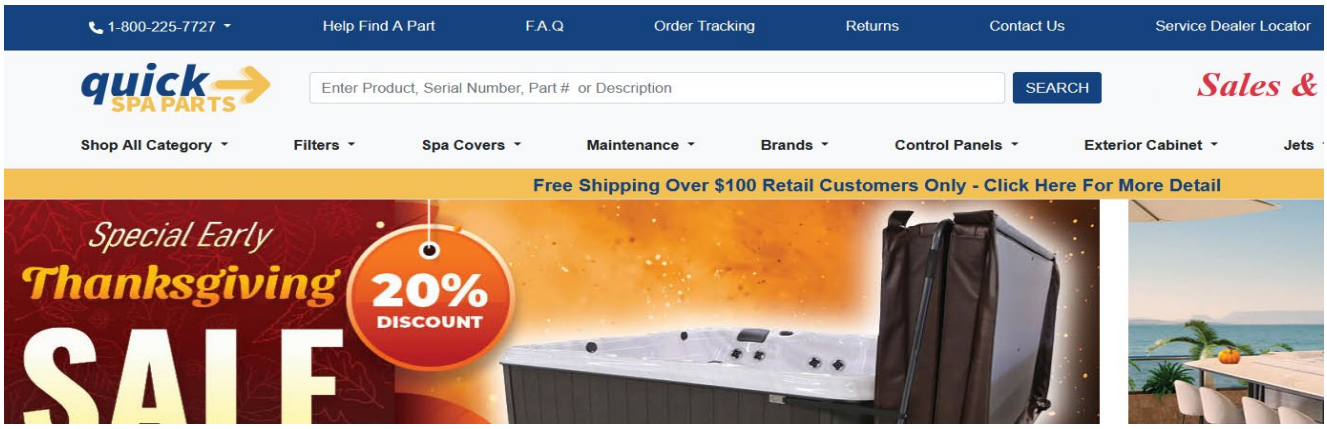
quick SPA PARTS

The fastest tool to find replacement parts and accessories

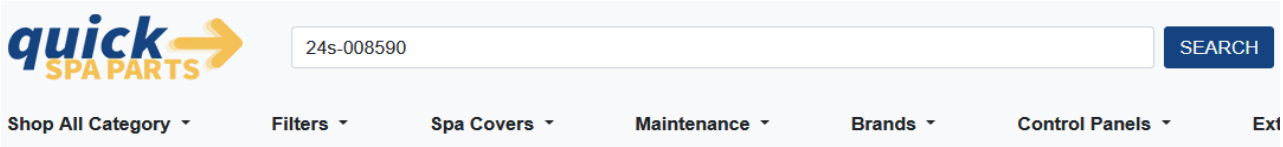
Buying replacement filters, parts, or accessories is part of spa ownership, but finding commonly replaced or ordered parts for your spa model is made easy, and just a few clicks away. Using your spa serial number, you may look up and find your exact spa model and find these components.

Website: WWW.QUICKSPAPARTS.COM

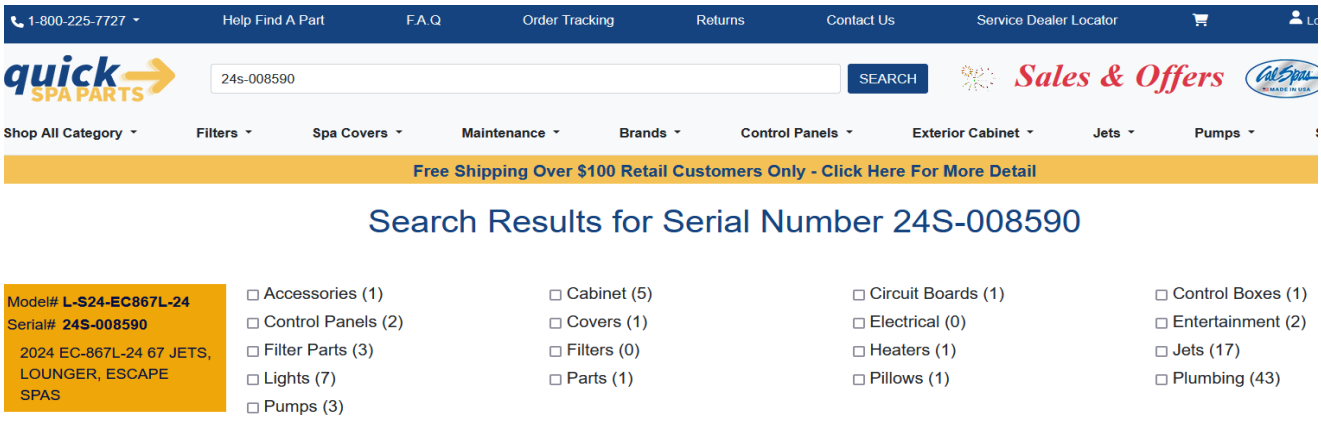
***Note: Images in this guide are for example purposes, no deals or offers shown in these images are accurate. Always check our website for promotions or exclusive offers/discounts*



Quickspaparts is our factory parts website, where you can get multiple components for your spa, including common universal components. We intend for our spas to last you for many years to come, therefore we want to ensure the process of ordering common parts, is as easy as it can get.



Using your spas serial number (located in the front cabinet, on the bottom right), type this serial number in the quick spa parts search bar to find general components for your spa.



Using your serial number will bring up common components that most spa owners would search for when replacing components. Not all components will appear in the search results, if that is the case reach out to your spa dealer for ordering certain components.

Note: If you dealer is no longer in service, or you have inherited or purchased a used spa. You can contact us directly at customerservice@calspas.com with your spa serial number and an image of the needed component.

Replacement Parts

*** Replacement part availability is subject to change. Cal Spas reserves the right to provide new versions of the part if the part is no longer available. Further information can be found in the Limited Warranty*

2 Inch Cluster Storm Directional Jet (Blue Velocity Style)	PLUCS2441001S-CBL
2 Inch Cluster Storm Twin Jet (Blue Velocity Style)	PLUCS2441021S-CBL
3" Mini Storm Directional Jet (Blue Velocity Style)	PLUCS2442001SS-CBL
3" Mini Storm Multi Massage Jet (Blue Velocity Style)	PLUCS2442051S-CBL
4" Poly Storm Directional Jet (Blue Velocity Style)	PLUCS2443001SS-CBL
4" Poly Storm Rotating Jet (Blue Velocity Style)	PLUCS2443021SS-CBL
5" Power Storm Tri-Directional Jet (Blue Velocity Style)	PLUCS24444011S-CBL
5" Power Storm Multi Massage Jet (Blue Velocity Style)	PLUCS2444051S-CBL
5" Adjustable Whirlpool Jet (Blue Velocity Style)	PLUCS2394001S-CBL
2" Water Diverter (Blue Velocity Style)	PLUCSS6053301-CBL
Air Control Valve (Blue Velocity Style)	PLUCS6630701-CBL

2" Euro Directional Black Jet (LES FA-1325)	PLU29920-612-400
3" Micro Flow Directional Jet (LES FA-1325)	PLU29930-112-400
4" Maxi Flow Directional Jet (LES FA-1325)	PLU29940-112-400
5" Power Storm Directional Jets (LES FA-1325)	PLU29950-071-400
Rip Current Swim Jet (LES FA-1325)	PLUCS210-5168S-DSG
2" Water Diverter Valve (LES FA-1325)	PLUCS6053301-CBL
Air Control Valve	PLUCS6630701-CBL
Stainless Steel Handrail	FIX21304015
75 Sq Ft. Filter Cartridge	FIL517-4619LC-DSG
50 Sq Ft. Filter Cartridge	FIL50-5D13H15FCT-3

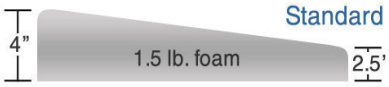
1 LED Light String	LIT16100330
2 LED Light String	LIT16100331
4 LED Light String	LIT16100332
1 to 3 LED extension cord	LIT16100335
1 to 1 LED Extension cord	LIT16100338
Interior Light without Logic	LIT16100337
Main Light Housing, LED lens	LIT630-7048
Spa Cover Locks and Keys	ACC01800026, ACC01800020

Covers

All spa covers are designed with a tapered height, angling downward from the center to the sides to drive off rain and prevent water from pooling. The covers listed below are filled with either 1 lb., 15. lbs., or 2.0 lbs. foam.

Basic
4” - 2.5”
1.5 lbs. foam

Deluxe
5” - 3”
2.0 lbs. foam



	Taper Dark Brown Basic	Taper Black Basic	Taper Gray Basic	Taper Dark Brown Standard	Taper Black Standard	Taper Gray Standard
64” x 84” Fits spa model: PPZ-537L	COV6484BDB-3	COV6484BBK-3	COV6484BG-3	COV6484SDB-3	COV6484SBK-3	COV6484SG-3

	Black Deluxe	Taper Black Deluxe	Taper Dark Brown Deluxe	Taper Gray Deluxe
84” x 84” (7 foot spas)	N/A	COV8484SBK-3 (Standard)	COV8484SDB-3 (Standard)	COV8484SG-3 (Standard)

Additional Parts

Primary Suction Fitting
Part#:PLU644-5419-HLGV

50 Sq Ft Filter Housing Grey
Part#: FIL517-4909LC-HLG

LIMITED WARRANTY

This Limited Warranty is extended to the original purchaser of the spa produced by Lloyd's Material Supply company, Inc. Which Manufactures the Cal Spas brand portable spa manufactured after January 1st, 2025 and installed for residential use in the United States of America and Canada. This Warranty begins on the date of delivery of the spa, but in no event later than one year from the date of manufacture.

Limited Edition Spas		Coverage Period
Structural	Warrantied against spa shell collapse, leaks caused by the shell, or dangers of structural integrity due to defects in the spa shell.	**5Years**
Shell Surface	Warrantied against spontaneous blistering, cracking, or delaminating of the interior spa shell.	**2 Years**
Equipment & Controls	Electrical Equipment- limited to spa pumps, standard heater, and control system/panels, are warranted against malfunction due to defects in workmanship or materials.	**3 years**
Plumbing	Warrantied against leaks/cracks due to defects in workmanship or materials	**3 Years**
Spa Cabinet	Warrantied against defects in workmanship or materials. Normal wear and weathering of the finish will occur naturally over time and are not defects.	**1 Years**
Sanitation	Salt cells & bromine generators are warrantied against defects in workmanship or materials, this includes sanitation control panels & electrical.	**1 Year**
Ozone/UV	Ozone Generators and UV treatment systems are warranted against defects in workmanship and materials. (Excluding UV bulbs older than one year)	**1 Years**
LED Lighting	LED lights are warranted against malfunction due to defects in workmanship and materials	**2 Years**
Sound System	The Freedom Sound System is warranted against malfunction due to defects in workmanship and materials. This does not cover normal wear and tear.	**1 Year**
Spa Cover	The spa cover is warranted against malfunction due to defects in workmanship and materials. This does not cover normal wear and tear.	**1 Year**
Parts & Labor	Parts and labor charges for approved warranty claims that are covered by this limited warranty.	**3 Year**

Warranty for Other Components

The fuses, headrests, cal grip, labels, and filters are warrantied to be free of defects in workmanship and material at the time of delivery. All other factory-installed components not mentioned specifically, including, but not limited to the wood frame, jets, diverter valves, filter lids, and other mechanical components, are warranted against malfunction due to defects in workmanship and material for two years from the original date of delivery. This warranty is void if the spa has endured neglect, chemical abuse, or use of unapproved chemicals or components.

Structural

This limited warranty covers defects within the spas fiberglass structural shell. This includes sudden spa shell collapse, leaking through the shell, and separation between the spa shell and spa acrylic, caused by faulty bonding. This does not include separation due to micro-abrasions, pin holes in the shell, or warping/bubbling due to sun exposure. This limited warranty does not apply when abuse of the spa shell is evident. This includes but is not limited too, heavy impact craters, fractures on the spa surface due to poor spa care, sun exposure, or reckless use of the spa, and chemical abuse of the spa. This warranty does not cover damage caused by unleveled ground. Spas must rest on level ground, ideally on a cement slab of 3-6" of thickness depending on the spa weight. Spas that are not placed on a leveled foundation are prone to cracks, delamination, and compromised structural rigidity of the spa. It is the responsibility of the spa owner to ensure that the spas foundation is leveled and inspected before placing the spa.

Shell Surface

This limited warranty covers defects on the spas acrylic surface due to workmanship or materials. This covers wrinkles on the acrylic, blistering, peeling, delamination, or spontaneous cracking. This warranty does not cover shell damage caused by chemical abuse, improper water chemistry, excessive sun exposure, micro-abrasions, or damage caused by impacts or sharp objects. This warranty does not cover discoloration, or deterioration of the spa shell when exposed to improper chemistry levels, hard water, soft water, or chemical abuse.

Equipment and Controls

This limited warranty covers malfunction of factory installed spa control systems, spa control panels, spa heater, and spa pumps due to defects in workmanship or materials. This covers sudden control box failure, malfunction of control panels or control boxes, malfunctioning heaters, and malfunctioning spa pumps. This warranty coverage is void if the electrical installation of the spa does not follow the outlined diagrams and specifications, mentioned in this manual. Failure to properly follow the specified GFCI requirements, wire type, wire thickness, compliance with NEC guidelines and local codes will void your warranty. This warranty does not cover acts of god or nature that can damage spa equipment, such examples are flooding, lighting strikes, wildfires, or other scenarios out of the control of the manufacturer.

Plumbing

This limited warranty covers leaking of water through plumbing joints, tees, hoses, water features, and jet body grommets due to defects in workmanship and materials. This warranty does not cover damage caused by chemical abuse, improper water chemistry, or use of unapproved chemicals/sanitizers. This warranty does not cover freeze damage caused by frozen water expanding within the plumbing of the spa. The winterization procedure within this manual does not guarantee freeze damage prevention. The best method to ensure the spa does not encounter frozen water within the plumbing is to have the spa operating during the colder months of the year. This warranty does not cover freeze damage or damage to the plumbing due to acts of god and/or nature including but not limited too snowstorms, blizzards, power outages, etc. This warranty does not cover oxidation or warping of jets due to chemical abuse or exposing an empty spa to the elements with no secured cover.

Spa Cabinet

This limited warranty covers defects in workmanship and materials of spa cabinet panels. This warranty applies for warping of spa panels, cracking of corners and panels without clear impact markers, and buckling of spa panels. This warranty does not cover natural wear and tear, which occurs with plastics exposed to the sun. This warranty does not cover panel damage from excessive heat sources, calcium/water-spot build up from sprinklers or irrigation systems, or impact damage. Each claim for spa cabinets are evaluated on a case by case basis, it is the responsibility of the spa owner to acknowledge environmental factors, that can affect the maintenance of the spas cabinet panels. Using plastic spa protectants can prolong the life of your spa panels is highly recommended in high UV index climates. Deterioration/fading of color, natural wear and tear of plastic materials is expected over time, and is not considered a defect in materials. This coverage does not extend nor cover acts of god or nature that can damage spa panels, such examples are flooding, high winds, wildfires, tornadoes or other scenarios out of the control of the manufacturer

Sanitation

This limited warranty covers malfunctions of factory installed Salt Systems and Bromine generators, which are warranted against malfunction due to defects in workmanship or materials. This includes the salt cell, sanitizer control panels, bromine generator, and power supplies for Cal Salt systems. This warranty does not cover negligent operation of sanitizer systems, chemical abuse, damage caused by improper water chemistry, or disregard of specified data points for safe operation; including but not limited to, incorrect ppm levels of salts, excess operating hours of the Cal Salt cell, or improper maintenance of sanitation components. The spa filter is not a part of this warranty, and is considered a disposable item subject to regular wear and tear.

Ozone/UV Systems

This limited warranty covers malfunctions of factory installed Ozone and/or UV water treatment systems. This includes leaks through welded components, water back-flow into the ozone generator, and short circuited Ozone or UV systems. This warranty does not cover UV bulbs that are older than 10 months, the UV light must be replaced every 10-12 months as this is normal wear and tear of component. This warranty is voided if alterations/modifications of these systems are evident, or if the spa electrical connections were not installed in accordance to defined specifications within this manual, evidence of chemical abuse, and acts of god and/or nature.

Sound System

This limited warranty covers malfunctions of factory installed sound system components. This includes the sub-woofer/amplifier, speakers, speaker grills, power supply, or Bluetooth antenna. Natural wear and tear of speaker cones is not covered by this warranty, nor are deterioration of speakers exposed to chemical abuse.

Spa Cover

The spa cover is warranted against defects of materials and workmanship for the defined period mentioned in this warranty. Exposure to UV rays on untreated or poorly maintained spa covers are not covered by this warranty. It is the responsibility of the spa owner to use spa UV plastic protectants on their spa covers, especially in high UV index climates. Exposure to UV light without proper treatment leads to problems such as cracking/peeling of vinyl covers, and sudden fading of color. This warranty does not warrant against damage caused by chemical abuse, nor yellowing or oxidation of the spa cover when exposed to excess sanitizer. If a defect is found within the first 90 days of ownership, your Cal Spas dealer and Cal Spas can directly assist the spa owner filing a claim and replacing the spa cover if deemed necessary. Shipping/freight costs are not covered in this warranty, and are the sole responsibility of the spa owner. Images of the cover from all sides including the top and underside are necessary to file a claim. If a defect were to become present after the 90 day period, you may reach out to your spa dealer to file a warranty claim. The selected representative will be able to determine if a new spa cover sleeve is needed or if a foam core is needed based on the type of defect.

Genuine Cal Spas Parts & Accessories

This Limited Warranty is void if Lloyd's Material Supply Company, Inc., Manufacturer of the Cal Spas brand or its designated representative determines that the spa has been subjected to damage or failure due to installation of aftermarket parts that are not genuine Cal Spas branded parts and accessories. This disclaimer includes, but is not limited to filters, UV bulbs, ozone systems, salt systems, replacement parts and other accessories. Genuine Cal Spas brand parts and accessories are built to our highest standards of quality, durability and performance, and they are designed to work with your spa to ensure optimal performance and function. Only parts/components approved by Cal Spas should used when preforming a warranty repair. If parts are required to complete a warranty claim, the cost of the parts are covered by this warranty. Approved labor and genuine part costs are covered when a warranty claim is approved, the cost of shipping parts/components is not covered by this warranty, and its the sole responsibility of the spa owner.

Performance

This warranty begins on the date of delivery of the spa, but in no event later than one year from the date of manufacture. To obtain service in the event of a defect covered by this Limited Warranty, notify your Cal Spas dealer or Cal spas as soon as possible and use all reasonable means to protect the spa from further damage. Upon proof of purchase, a designated service representative will correct the defect subject to the terms and conditions contained in this Limited Warranty. There will be no charge for parts or labor to repair the defect, although providing access to affect the repair is your responsibility as the spa owner. Freight charges for replacement parts is the responsibility of the spa owner. Parts and components can be shipped to the servicing dealer or to the customer. The servicing dealer may charge the owner a travel/service fee as well as a diagnose fee if the cause of the issue is unknown, these charges are not covered under warranty. Your spa dealer nor Cal Spas is responsible for damages or costs to rebuild decks, cement structures, or other decor/structures placed against the sides of the spa. Minimum clearance of 3 feet on each side is mandatory for all spas. In the event that the spa is removed to a repair facility for repair and reinstalled, the cost of removal and re-installation will be your responsibility as the spa owner. If Lloyd's Material Supply Company Inc., The manufacture of the Cal Spa brand determines that repair of the covered defect is not feasible, it reserves the right to provide a replacement spa of equal or lesser value to the original purchase price. In such an event reasonable costs for removal of the original spa, shipping costs from the factory for the replacement spa, and delivery and installation of the replacement spa will be the responsibility of the spa owner. The replacement spa will carry the balance of the original spa's warranty. Spa covers are not included. This warranty ends either by specified time frame, owner-transfer of the spa, relocation, or installation of any component other than by the manufacture. If the desired spa is more expensive than what the spa owner originally financed or paid for, the price difference shall be paid by the spa owner. Additional costs can be incurred if the use of heavy machinery such as a crane, bulldozer, etc, is considered necessary to access, remove, or perform a repair/correction to the affected spa.

Warranty limitations

This Limited Warranty is void if Cal Spas or its designated representative determines that the spa has been subjected to alteration, neglect, misuse or abuse, or freight damage caused by the common carrier; any repairs have been attempted by anyone other than a designated representative; or if the failure is caused by accident, acts of God or other causes beyond the control of the Manufacturer including acts of nature (damage caused by animals, rodents, or other pests) are not covered by this warranty. Additionally; the limited warranty is void for spas that were subject to neglect, misuse and abuse including any installation, operation or maintenance of the spa other than in accordance with the instructions contained in the owner's manual provided with the spa, including but not limited to the failure to maintain proper water chemistry, chemical balancing, the use of abrasives or improper cleaners, and the use of non-genuine parts and accessories. This Limited Warranty does not provide coverage for any item attached to or installed on the spa after the date of manufacture or for gaining access to any component for repair or replacement. Spa units in commercial use are excluded from any coverage whatsoever. The spa owner accepts liability for repair work performed by anyone other than Lloyd's Material Supply Company Inc, or a designated Cal Spas representative. This Limited Warranty is void if damage occurs to the spa shell because of excessive heat buildup due to failure to cover a spa that is empty while exposed to direct sunlight.

Proration of Warranty

Units determined by the manufacture to be non-repairable will be replaced on a prorated basis with the same or a comparable unit. The owner will be charged 1% of the current retail cost for each full month of ownership from the date of purchase through the date failure is determined to be non-repairable. This charge will be waived during the first 6 months of ownership. [example]: Product failure is determined during seven months of ownership. Owner will be responsible to pay for 7% of the products current cost. As the spa owner you have the choice to replace the spa, with a spa equal to or less than the value of the originally financed/purchased spa; if the desired replacement spa is of a higher cost than the originally financed/purchased spa, the spa owner will pay the difference of price, including any percent value lost over time through the spas proration period. The cost of shipping a new spa and its installation is not covered by this warranty as stated in the "Performance" section of this warranty.

Limitations

The manufacture disclaims all warranties, expressed or implies, in fact or in law, to the extent allowed by your State's law, including the warranty of merchantability and fitness for use, except as stated specifically herein. All warranty service must be performed by the manufacture or its designated representative using authorized Cal Spas parts. No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of this limited warranty in any manner whatsoever. The manufacture will not be responsible for any statements or representations made in any form that go beyond, are broader than, or are inconsistent with any authorized literature or specifications furnished by Cal Spas. Extended warranties or care plans offered to you by a spa dealer is an agreement strictly between the spa owner and the spa dealer, out of the control of the manufacture of Cal Spas.

Disclaimers

Lloyd's Material Supply Company, Inc., Manufacture of Cal Spas brand and its representatives shall not be liable for any injury, loss, cost, or other damage whether incidental or consequential, arising out of any defect covered by this limited warranty, including without limitation, loss of use of the spa and cost for removal of defective produce even if the manufacture was advised of the possibility of damage. The liability of the manufacture under this limited warranty, if any shall not exceed the original amount paid for the defective product. Coverage under this limited warranty shall commence as of the original date of delivery and the duration of such coverage shall not extend for any reason whatsoever beyond the stated time periods. These disclaimers shall be equally applicable to any service provided by the manufacture and its designated representatives.

Legal Rights

This limited warranty gives you specific legal rights. You may also have other rights that vary from state to state depending on consumer regulations. Some states do not allow limitations on how long an implied warranty lasts, so this time limitation may not apply to you.

Additional Disclaimers

Spa owners who have purchased a Cal Spa, and the spas final resting place is not in the United States or Canada, Cal Spas will be able to send components and parts directly to the spa customer if the original Cal Spa dealer is not within range of the spa. It is the responsibility of the spa owner to find a experienced electrician, plumber, or technician to perform the necessary repairs. A preliminary over the phone technical meeting with a Cal Spas representative is necessary, to ensure the experienced laborer is familiar with the spas operation, and recommended repair methods. Labor costs of a repair in such circumstances must be first approved by a Cal Spas representative, before moving forward with any repairs covered in this warranty. It is advised to request a labor quote from said experienced laborer, and to send this quote to a Cal Spas representative. If all prerequisites are met and the repair is approved, Cal Spas will reimburse the cost of labor directly to the spa owner upon completion of repairs. Reimbursements of charged labor will be sent as a check to the spa owners residence, with a varying estimated disbursement window.

For all repairs/warranty claims within the United States and Canada and other nations, may be required to send parts/components back to Cal Spas when deemed necessary. In some circumstance where shipping the component/part is necessary, Cal Spas will provide a shipping label to send the affected or requested components/parts. It is the responsibility of the spa owner to properly package and secure the package for shipping. In some circumstances only images and proof of purchase would be necessary to file a warranty claim, in such circumstances if a Cal Spas representative deems that the parts do not have to be returned, follow all local regulations and laws to properly dispose of said components.

LES Part Replacement Policy

Spa owners who have purchased a LES Cal Spa, benefit of owning one of the best spas in the industry at a lower than average market price. Availability of certain components such as Jets, Pillows, Diverters, etc, are subject to change due to demand. Lloyds Material Supply Company Inc, manufacture of the Cal Spas brand reserves the right to offer new substitution parts that meet or exceed the performance of the original component within your spa. Replacement components that fall under these circumstances may have small differences such as changes in color, finish, or appearance. Installing replacement components inside of your spa will not renew or extend the original warranty within your spa.

CONTACT INFORMATION
For customer service, please contact your authorized dealer immediately. If you need additional information and/or assistance, contact:

Lloyd's Material Supply Company, Inc.
Customer Service Department
1462 East Ninth Street
Pomona, CA 91766.

Toll Free: 1-800-CAL-SPAS
Fax: 1-909-629-3890

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