



# 2003 Owner's Manual

US and Canada

*JOURNEY SERIES*

*5000 - 5300*

*ELECTRONIC CONTROL*

Duplication without written consent is strictly prohibited.  
This Owner's Manual is for spas manufactured after August 15, 2003  
Initial Issue - August 15, 2003

Due to continuous improvement programs, all models, operation, and/or specifications are subject to change without prior notice.  
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## **BENEFITS OF OWNING A CAL SPA**

### **Warm Water Workouts**

Almost any exercise that can be done on land, including walking or jogging, can be also done in water. If you have arthritis and you're exercising in a spa or hot tub, however, you'll probably focus on range-of-motion exercises that work the toe, ankle, knee, leg, hip, hand, wrist and shoulder. The size and shape of the hot tub, of course, will determine the specific types of exercises you can do in it. Cal Spas would like to share some tips on the benefits of warm water therapy.

### **Forward Arm Reach**

With both arms, reach straight in front of you. Raise your hands overhead as high as possible, keeping your elbows as straight as you can. If one arm is very weak, use your other arm to help raise it.

### **Elbow Bend**

Start with your elbows as straight as possible, fingers pointing down. Bend your elbows and try to touch your thumbs to your shoulders. Keep your elbows close to your body. You do not have to touch your shoulders. Then relax your elbows and straighten your arms down at your sides.

### **Wrist Bend**

Bend both of your wrists upward and then downward. You can also exercise one wrist at a time by placing your free hand, thumb out, under the exercising wrist. Hands and fingers should be relaxed.

### **Finger Curl**

Curl your fingers into your palm to make a loose fist then straighten them out.

### **Ankle Circles**

While seated, make large inward circles with your left foot, moving it from the ankle. Repeat circles in the opposite direction. Then repeat the exercise with your right foot.

### **Spread Eagle**

While sitting on the edge of a bath seat, straighten one knee. While holding it straight, slowly move it out to the side. Hold it out for three seconds, then bring it back to the center and relax. Repeat these instructions with your other leg.

## SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed.

### READ AND FOLLOW ALL INSTRUCTIONS

**WARNING:** To reduce the risk of injury, do not allow children to use the spa unless they are supervised at all times.

All 110V spas require a DEDICATED 20 AMP GFCI SERVICE. Do not use extension cords.

**NOTE:** This may require a licensed electrician to upgrade your standard receptacle and/or circuit breaker.

All 220V spas require a DEDICATED 50 AMP GFCI SERVICE WITH FOUR #6 AWG COPPER WIRES.

**DANGER RISK OF ACCIDENTAL DROWNING:** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use the spa unless they are closely supervised at all times. (Keep the spa cover on and locked when not in use. See instructions enclosed with your cover.)

**DANGER - RISK OF INJURY:** 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.

**DANGER - RISK OF INJURY:** Never operate the spa if the suction fitting or filter baskets are broken or missing.

**DANGER - RISK OF INJURY:** Never replace a suction fitting with one that is rated less than the flow rate marked on the original suction fitting.

**DANGER - RISK OF ELECTRIC SHOCK:** 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 of metal surfaces if each metal surface is permanently bonded by a minimum No. 8 AWG solid copper conductor to the outside of the spas control box.

**DANGER - RISK OF ELECTRIC SHOCK:** Do not permit any electrical appliances, such as lights, telephones, radios, televisions, and etc., within 5 feet (1.5 meters) of the spa. Never attempt to operate any electrical device from inside the spa.

### WARNING RISK OF INJURY

- a. Before entering a spa, the user should measure the water temperature with an accurate thermometer, since the tolerance of water temperature-regulating devices varies.
- b. 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 spa use exceeds 10 minutes.
- c. Since excessive water temperatures have a high potential for causing fetal damage during pregnancy during early months of pregnancy, pregnant, or possibly pregnant women should always check with their physician prior to spa usage.
- d. The use alcohol, drugs or medication before or during spa use may lead to unconsciousness, with the possibility of drowning.
- e. Person 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.
- f. Persons using medications should consult a physician before using the spa since some medications may induce drowsiness while others may affect heart rate, blood pressure and circulation.

## **Hyperthermia Danger**

Prolonged exposure to hot air/water can induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level 3° to 6° above the normal body temperature of 37°C (98.6°F). While hyperthermia has many health benefits, it is important not to allow your body's core temperature to rise above 103°F. Symptoms of excessive hyperthermia include dizziness, lethargy, drowsiness and fainting. The effects of excessive hyperthermia may include failure to perceive heat, failure to recognize the need to exit, unawareness of impending hazard, damage to pregnant women, physical inability to exit the spa and unconsciousness.

Following these instructions will make your first spa session a pleasurable one.

## **SAVE THIS INFORMATION.**

## **CONTACT INFORMATION**

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

C.A.I. Customer Service Department  
1462 East Ninth Street  
Pomona, CA 91766  
Toll Free 1-800-CAL-SPAS  
Fax 1-909-629-3890  
[www.calspas.com](http://www.calspas.com)

## BASIC SPA INFORMATION

The following operating and maintenance instructions are very important and must be followed carefully. With the proper care and maintenance, your Cal Spa will provide you with years of satisfaction and performance.

Do not be afraid to push buttons or turn knobs to learn about your new Cal Spa, as it is built with quality materials and excellent craftsmanship.

Your new Cal Spa has been engineered with a high-powered water pump that pushes water through various therapy jets, which will relax even the tightest muscles. In addition to the water pressure, you can add air into the spa water with air venturi handles located seat-side that increase the intensity of your massage.

The filtering of this spa is very important. This alone will cut down on cleaning time and use of excess chemicals. We have pre-programmed two filter cycles of two hours for every twelve hours. This can be increased to six hours every twelve hours through the topside control panel.

It is very important to keep the spa covered when not in use for four reasons. The first is heating efficiency. Covered spas will use less electricity in maintaining your set temperature. The second is to protect your spas finish from the sun's ultraviolet rays. The third is it is mandatory to keep the spa covered to maintain warranty coverage. The last, and most important, is to prevent children from drowning in the spa.

Your new Cal Spa comes equipped with an electric heater. Following the directions listed below will ensure the most efficient operation:

1. When not in use, make sure the spa is covered and securely fastened.
2. Set the spas operating temperature within 5° of the desired usage temperature and raise the temperature one or two hours prior to usage.

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

3. If the spa usage exceeds two hours a week, the set temperature should remain at the desired usage temperature.
4. The air venturi handles should be used sparingly. When open, water temperature drops quite rapidly and can also dissipate chemicals.

**NOTE:** Allowing the water temperature to lower more than 10° below the desired usage temperature and reheating prior to usage will cause the heater to operate longer than it normally would maintaining the desired temperature and will increase the operating cost.

The filter needs to be cleaned on a regular basis. This is very simple and only takes a few minutes. The result is increased water clarity and equipment longevity.

The spa water level is very important to the operation of your spa. If the water level is too low or too high, your spa will not operate properly. The water level should be to the middle of the skimmer area when the spa is not being used.

We recommend that your spa water be changed every 4 to 6 months. You may find the need to change your spa water more frequently with heavy use. When empty, your spa should be cleaned with a non-abrasive cleaner, such as Cal Spas All Surface Cleaner, then rinsed thoroughly.

When draining your spa, turn off all power to the spa and attach a garden hose to the hose-bib fixture located on the floor of the equipment area.

When filling your spa, always fill through the skimmer filter canister. Use only regular tap water.

**WARNING:** DO NOT USE SOFT WATER.

## DELIVERY AND SET-UP

Please make a record of the following. It will be valuable if service is required.

Cal Spa Model: \_\_\_\_\_

Cal Spa Serial Number: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Cal Spa Dealer's Phone Number: \_\_\_\_\_

Cal Spa Dealer's Address: \_\_\_\_\_

Most cities and counties require permits for exterior construction and electrical circuits. In addition, some communities have codes requiring residential barriers such as fencing and/or self-closing gates on property to prevent unsupervised access to the property by children under the age of 5. Your dealer can provide information on which permits may be required and how to obtain them prior to the delivery of your Cal Spa.

### **Congratulations!!**

You have purchased a Cal Spa. With a little preparation and care, your spa will give you many years of enjoyment. This section has been designed to provide you with all the information you'll need to ensure a safe, speedy and trouble-free spa delivery and set-up.

### **PLANNING THE BEST LOCATION FOR YOUR SPA**

Here are some of the things that you will need to consider when determining where to place your new spa.

#### **Safety First**

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

Make sure the spa is positioned so that access to the equipment compartment and all side panels will not be blocked. Be certain that your installation will meet all city and local safety codes and requirements.

#### **How Will You 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 recreational or therapeutic purposes? If your spa is mainly used for family recreation, be sure to leave plenty of room around it for activity. If you will use it for relaxation and therapy, you'll probably want to create a specific mood around it.

#### **Environment**

If you live in a climate with snowfall in the winter, place the spa near a house entry. By doing this, you will have a place to change clothes and not be uncomfortable.

#### **Consider Your Privacy**

In a cold-weather climate, bare trees won't provide much privacy. Think of your spas surroundings during all seasons to determine your best privacy options. Consider the view of your neighbors as well, when you plan the location of your spa.

## Provide A View With Your Spa

Think about the direction you will be facing when sitting in your spa. Do you have a special landscaped area in your yard that you find enjoyable? Perhaps there is an area that catches a soothing breeze during the day and lovely sunset in the evening. Consider these things when you plan your location.

## Keep Your Spa Clean

Prevent unclean things from being tracked into your spa by utilizing a foot mat at the entrance where the occupants can clean their feet before entering your spa.

## Allow For Service Access

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. It is always best to design special installations so that the spa can still be moved, or lifted off the ground.

## ELECTRICAL SETUP BEFORE DELIVERY OF YOUR SPA

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

1. All 240V spas must be permanently connected (hard wired) to the power supply. 120V spas may use a G.F.C.I. cord, plugged into a dedicated grounded outlet. Supplying power to a spa which is not in accordance with these instructions will void both the independent testing agency listing and the manufacturer's warranty.
2. The power supplied to the spa must be on a dedicated circuit with no other appliances or lights sharing the power.
3. To determine the current, voltage, and wire size required for the spa configuration to be connected, refer to the following:
  - Wire size must be appropriate per NEC and/or local codes.
  - Wire size is determined by length of run from breaker box to spa and maximum current draw.
  - We recommend copper wire with THHN insulation.
  - All wiring must be copper to ensure adequate connections. **Do not use aluminum wire.**
  - When using wire larger than #6 (10mm<sup>2</sup>), add a junction box near the spa and reduce to short lengths of #4 (10mm<sup>2</sup>) wire between the junction box and the spa.
4. The electrical supply for the spa must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electric Code, NSI/NFPA 70. The disconnection point must readily accessible to the spas occupant. Check with local municipalities for additional code requirements.
5. The electrical circuit for the spa must include a suitable GFCI as required by NEC Article 680-42.



## PREPARING A GOOD FOUNDATION

Your spa needs a solid and level foundation. The area that it sits on must be able to support the weight of the spa and the 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.

**NOTE:** 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.

Place the spa on an elevated foundation (**preferably a 3" concrete slab**). If you are installing the spa indoors, pay close attention to the flooring beneath it. Choose flooring that won't be spoiled 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./ sq. ft.
- \* It is strongly recommended that a qualified, licensed contractor prepare the foundation for your spa.

### Your Cal Spa Retailer Can Help You With Foundation And More

Your retailer has a wealth of information and experience about how to get the most out of your spa. Your spa retailer also has a full line of accessories that are engineered to compliment your spa and increase your enjoyment

# ELECTRICAL INSTALLATION

## 110-Volt Installation

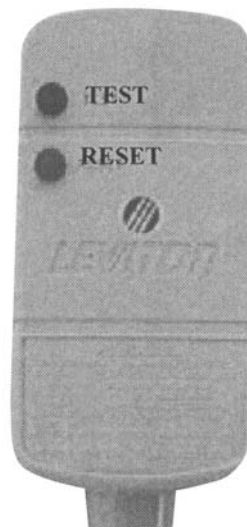
Always follow applicable local, state and federal code and guidelines.

1. Use only a dedicated electrical line with a 20-amp breaker.
2. Do not use an extensions cord.
3. Always use a weatherproof-covered receptacle.
4. Never have your spa within 10' of the receptacle.
5. Do not bury the power cord.
6. A damaged cord must be replaced before next usage.
7. All 110V spas must have a GFCI (**Figure 1**). This can either be a 20-amp GFCI receptacle or a GFCI cord and plug kit (CKIT110 - P/N ELE09700086).
8. GFCI plug should be tested prior to every use. To test the GFCI plug version, please follow these easy instructions.

**NOTE:** Spa should already be plugged in and operational.

- A. Press the button marked 'Test' on the GFCI. The GFCI will trip and the spa will stop operating.
- B. Press the button marked 'Reset' on the GFCI. The GFCI will reset and the spa will turn back on.
- C. The spa is now safe to use.

**WARNING:** IF THE GFCI SHOULD TURN OFF (TRIP) WHILE THE SPA IS IN USE, PRESS THE RESET BUTTON. IF THE GFCI WILL NOT RESET, UNPLUG THE GFCI AND CALL YOUR LOCAL SHOWROOM/ DEALERSHIP FOR SERVICE. DO NOT USE THE SPA.



**Figure 1.** 110V / 20 Amp GFCI Plug.

## 220V Installation

All 220V spas are required to have a dedicated 50-Amp GFCI breaker and should only be wired by a licensed electrician. To ensure proper wiring of your GFCI, follow these diagrams (**Figure 2** and **Figure 3**).

1. Always follow applicable local, state, and federal codes and guidelines.
2. Your new 220V Cal Spa requires a **dedicated, 50-Amp GFCI Service with 4 #6 AWG copper wires**. This will include a black and a red wire for your incoming power, a white wire used for your neutral and a green wire for your ground.

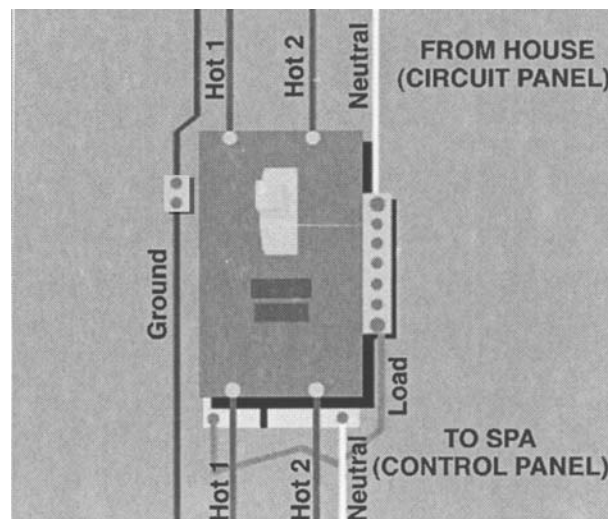
**NOTE:** #6 AWG wire acceptable for a distance of up to 100'. Wire run over 100' must increase to #4 gauge. Please be aware that this is the only acceptable electrical wiring procedure. Spas wired in any other way will void your warranty and may result in serious injury.

**NOTE:** Do not install GFCI breakers in main electrical panel. The further away a GFCI is installed from the spa, the higher the risk of false tripping or resetting of the GFCI breaker.

**NOTE:** C.A.I. can only recommend the use of square-cover Siemens GFCI breakers.

Before each use of your spa, you should check the GFCI. During this test, the spa should be operational.

1. Press the test button on the GFCI. The GFCI will trip and the spa will shutoff.
2. Wait 30 seconds and reset the GFCI breaker (this is accomplished by turning the breaker off then back on). Your spa will be operational in about five seconds.
3. Your spa is now safe to use.



**Figure 2.** GFCI Hook-Up.

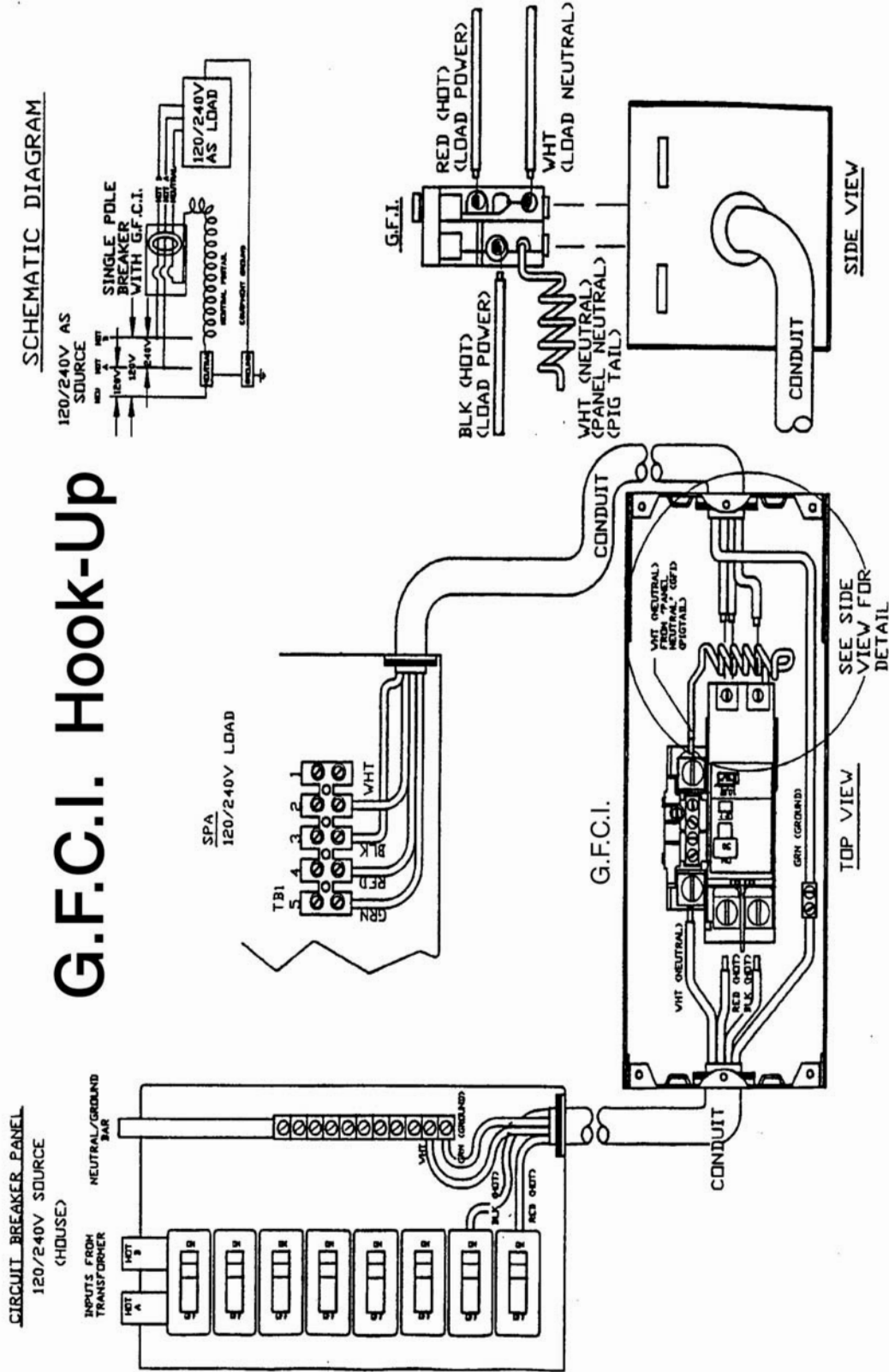


Figure 3. GFCI Hook-Up

## STARTING YOUR PORTABLE SPA

**NOTE:** Be careful not to over-tighten the plumbing fittings.

**NOTE:** Never run the spa with the gate valves closed or without water circulating for long periods of time.

**NOTE:** Never fill your spa with soft water. Soft water makes it impossible to maintain the proper water chemistry and may cause the water to foam, which will ultimately harm the finish of the spa and void your warranty.

### Filling and Powering-Up Your Cal Spa

1. Once the spa has been placed on an approved surface and has been correctly wired by a licensed electrician, inspect all plumbing connections in the equipment area of your spa. Ensure that these connections are secure and that they didn't loosen during shipment.
2. If equipped, open all gate valves, or slice valves, in the equipment area.

**NOTE:** Before operating the spa, these valves must be in the up, or 'open', position.

3. Remove the filter basket and cartridge from skimmer/ filter canister.
4. Place a garden hose in the skimmer/ filter canister and continue filling your spa with **regular tap water** up to the water level (halfway up the skimmer area).
5. Open the air relief valve located on the front of the pump housing.
6. After the air bubbles stop coming out of the air relief valve, hand-tighten the valve until it is closed (do not over-tighten).
7. Once the water is at the correct level, turn on the power at the GFCI breaker.

**NOTE:** Ensure that the 110V spas are connected to the proper electrical outlet.

8. The spa will perform a diagnostic check for 30 seconds. Once complete, the spa will automatically operate at filter speed and continue heating until the spa water temperature reaches 100°F. (This is every electronically controlled default temperature.)
9. Re-install filter and filter basket into skimmer/filter canister.
10. The spa is now ready for use. For operation instructions, see the "5000 and 5300 Electronic Operation" section of this manual.

## FILTER MAINTENANCE

### Portable Spas:

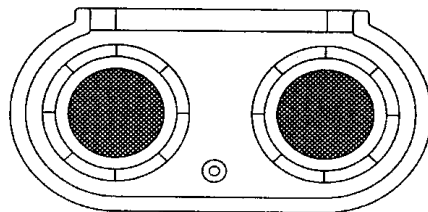
Filtration starts on electronically-controlled spas as soon as the pumps are primed and water flow is steady. As the flow of water goes through the filter, dirt and debris is removed and accumulated in the filter cartridge. As the filter cartridge accumulates dirt and debris, water flow is restricted and jet production is reduced. This can cause your spa to not run or heat effectively.

Clean your filter regularly and replace as needed.

### Filter Cleaning:

Your new Cal Spa has been designed for quick and easy filter maintenance. The filter cartridge should be cleaned once a week.

1. Turn the power off at the breaker.
2. Remove the filter(s) cover - if applicable.
3. Remove the filter(s) basket (align the flat areas on the filter basket and the canister).
4. Remove the filter(s) by pulling up and out.
5. Clean the filter with a garden hose.
  - A. Hold the filter vertically.
  - B. Spray the filter cartridges with a pressure nozzle, starting from the top and spraying down each pleat.
  - C. Turn the filter cartridge over and repeat Step 5B.
  - D. Reinstall the filter cartridge in reverse order of removal.
6. Deep clean filter cartridge(s) every month. Use only a Cal Spa-approved filter-cleaning chemical.



*Filtration System*  
100 Sq. Ft. System

**Figure 4.** Filtration System.

# OPERATING INSTRUCTIONS

Your new Cal Spa is very versatile. You can direct the flow of water and air through various locations throughout your spa.

The following list of features are available on most spas.

## Adjustable Jets (Figure 5)

Almost all of the jets in your spa are adjustable. Rotating the face of an adjustable jet to the left (counter-clockwise) will decrease the amount of water flow through the jet. Rotating the face of an adjustable jet to the right (clockwise) will increase the amount of water flow through the jet.

**NOTE:** Neck jets will be reversed when adjusting pressure.



Storm ZX Jet  
(7" Face)



Storm JX Jet  
(5 1/2" Face)



Micro-Swirl Jet  
(3" Face)



Micro-Flow Jet  
(3 1/4" Face)



Accu-Therapy Jet  
(2" Face)



24-hour Circulation Jet  
(1 1/2" Face)

**Figure 5.** Adjustable Jets

## Cal Zone Quest 2000 Ozonator (Figure 6)

Your new Cal Zone Quest 2000 Ozonator is a state-of-the-art bacteria killing machine. This unit will assist you in maintaining clean and clear spa water, while saving you time and money with spa chemicals.

### Operation

Your Cal Zone Quest 2000 Ozonator will automatically operate during the filter cycles. When the spa is in filtration cycle, the Ozone Indicator light on the topside control panel will light up, letting you know that the control box is sending power to the Cal Zone Quest 2000 Ozonator unit.

The Cal Zone Quest 2000 Ozonator unit also has two forms of operating signals. On the topside control panel there is a yellow light labeled 'OZONE INDICATOR'. This light indicates that the Ozonator is receiving power from the control box. The second operating signal is the most important. Located on the front side towards the bottom, is the ozone-mixing chamber. When operating, the lens will display a purple/black light.

**NOTE:** Due to the nature of the ozone light, it is difficult to see the light during the daytime. This lens should be checked at night or in a shaded area.

### Ozone Servicing

Your new Cal Zone Quest 2000 Ozonator has been engineered to be service-friendly. In the event that you need to replace the ozone cartridge, simply follow the instructions listed on the front of the ozone unit.



Figure 6. Cal Zone Quest 2000 Ozonator



### **Air Venturies (Figure 7)**

Air venturies are the smaller 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 simply rotating the air venturi knob to the left (counter-clockwise) to increase the amount of airflow through the jets. To decrease the amount of airflow through the jets, simply rotate the handle to the right (clockwise).



**Figure 7.** Air Venturies

## 5000 ELECTRONIC OPERATION

When first powered-up, the 5000 Electronic System (**Figure 8**) will perform a self-diagnostic check and then it will automatically heat to, and maintain, a temperature of 100°F until you change the set temperature as listed in the 'Temperature Adjustment' section.



**Figure 8.** 5000 Electronic System.

### Temperature Adjustment (Range 80°F to 104°F)

The display screen will always display the actual water temperature. To display the temperature that the spa is set to, simply depress the 'Temp' pad (**Figure 9**). The set temperature will be flashing on the display panel. Each time you depress the Temp pad, the set temperature will change 1°, either up or down. Letting the display revert back to the actual water temperature, then depressing the temp pad again will allow you to change the direction of the temperature adjustment.



**Figure 9.** 5000 Electronic System 'Temp' pad.

### Standard and Economy Modes

Your new spa is equipped with a Standard and Economy heating feature that gives you complete control of the heating system. When the spa is powered-up, it will automatically start in the Standard Heating Mode. In this mode, the heating system will automatically activate whenever the water temperature drops more than 1° below the set temperature. In the Economy Heating Mode, The heating system will activate during filtration times.

To switch from the Standard Heating Mode to the Economy Heating Mode, simply depress the Temp pad followed by the Light pad. Depress the same sequence to switch back to the Standard Heating Mode.

## Pump Equipment

### One Pump Equipment

Depress the 'Jets' (**Figure 10**) button once to activate the low-speed pump. Depress the 'Jets' button again to activate the high-speed pump. Depress the 'Jets' button a third time to turn off the high-speed.



**Figure 10.** Jets Button.

### Two Pump Equipment w/Out Circulation Pump

Depress the 'Jets' button once to activate the low-speed pump. Depress the 'Jets' pad again to activate the high-speed on pump 1. Depress the 'Jets' button a third time to activate the high-speed on pump 1 and high-speed on pump 2. Depress the 'Jets' button a fourth time and only the high-speed on pump 2 will be on. Depress the 'Jets' button a final time to turn off the high-speed off on pump 2.

### Three Pump Equipment - 5300 Control Box (J-508 Only)

Depress the 'Jets' button once to activate the low-speed pump. Depress the 'Jets' button again to activate the high-speed on pump 1. Depress the 'Jets' button a third time to activate high-speed on pump 1, high-speed on pump 2, and high-speed on pump 3. Depress the 'Jets' button a fourth time and only the high-speed on pumps 2 and 3 will be activated. Depress the 'Jets' button again to turn pumps 2 and 3 off.

### Lights

Depress the 'Light' button to turn the spa light on and off.

**NOTE:** J-505, J-506, J-507 and J-508 have different lighting instructions (see page 21).

### Turbo (Optional)

Depress the 'Options' button once to activate the Turbo system. Depress the 'Options' button again to turn off the Turbo system.

### Setting the Temperature Lock (Figure 11)

This feature allows you to lock a temperature into the system. When engaged, the set temperature will blink off and on, while the 'Temp' button is depressed. However, the user will not be able to change the set temperature. The following will enable you to lock-in a set temperature. Depress the 'Temp' button, then depress the 'Option' button to lock the set temperature. Repeat this step to unlock the set temperature.



**Figure 11.** Temperature Lock.

### Automatic Time Outs

The low-speed pump will automatically turn itself off after 4-hours if it is not turned off manually.

The high-speed pump will automatically turn itself off after 15-minutes if it is not turned off manually.

The optional Turbo system will automatically turn itself off after 15-minutes if it is not turned off manually.

The light will automatically turn itself off after 15-minutes if it is not turned off manually.



**Figure 12.** 5000 Electronic System Temp and Light Pads.

## Setting Filtration Cycles

Your spa will automatically filter itself twice a day. To set the filtration time, turn off the power to the spa at the GFCI breaker. Turn the GFCI breaker back on at the time of day you would like the filtration cycle to begin. The first cycle will start after the spa is powered-up. The second filtration cycle will begin twelve hours later. The filtration cycle duration is preset to two hours (F2). To change the duration of the filtration time, depress the Temp pad, then press the Jets pad (**Figure 11**). Depress the Temp button again to choose from 2, 4, 6, 8 and 12 hours twice a day (**FC** - Filtration Continuous). After selecting the desired filtration cycle duration, depress the Jets pad to exit the filtration program. The circulating pump and ozone generator (optional) will run during filtration cycles.

**NOTE:** The filtration cycle settings of F8 and **FC** are only intended for use with the optional Cal Spa Filtration System.



**Figure 13.** 5000 Electronic System Temp, Light, Jets and Option Pads.

## MULTI-COLORED SPA LIGHT OPERATION

This section will discuss the operation of the Multi-Colored Spa Light that comes in the J-505, J-506, J-507 and J-508 spas. The J-505 and J-506 spa models come with one light-emitting-diode (LED) waterfall and one LED Multi-Colored Spa Lighting harness. The J-507 and J-508 spa models come with two LED waterfalls and one LED Multi-Colored Spa Lighting harness.

### Operating the Multi-Colored Spa Light

1. Turn the spa light on by depressing the 'Light' button on the top-side control panel.
2. To filter through the different color choices, the user must depress the button within 1 to 2 seconds of each button depression to advance to the next color.

**NOTE:** If the user waits any longer than the allotted 1 to 2 second time frame, the next depression will turn the spa light off.

3. To turn the spa light off when not in use, depress the 'Light' button.

### Using the Random Light Feature

1. Turn the spa light on by depressing the 'Light' button on the top-side control panel.
2. Cycle through the color range 2 times. After the last light from the second cycle has been lit, the random light feature will turn on and the spa light will cycle through each individual light.
3. To turn the spa light off when not in use, depress the 'Light' button.

**NOTE:** The slow fade feature will come on right after the color white. The first color for the feature will be green and then slowly goes through the color spectrum. The fast fade does the same thing as the slow fade, only faster.

# Cal Spas Clear Water Plan™

Great spa water is easily achieved when the right chemicals are used and a Clear Water Plan is implemented. The key to clean, clear, safe water is to fully understand how spa water reacts to users, operation and chemicals. This Clear Water Plan will help give you that understanding.

## **IMPORTANT Chemical Safety Notices:**

### **Chemical Directions:**

- All directions in this program are calculated for Cal Spas chemicals only. Other chemicals may have similar names and/or usage descriptions. However, all chemicals are manufactured differently, increasing the likelihood of under or over dosing spa chemicals.
- Failure to follow chemical directions may result in serious injury, sickness and even death.

### **Chemical Usage:**

- Always introduce chemicals to spa water with all pumps operating on high speed.
- Apply chemicals to the center of spa water.
- Always wear protective clothing and eyewear when handling chemicals.
- Spa users that notice skin irritation must immediately suspend spa usage and consult their physician.
- Pregnant women should consult their physician prior to using a spa for both chemical and temperature recommendations

### **Chemical Storage:**

- Chemicals must be stored completely out of the reach of children in an area that is well vented, cool, and dry.
- Failure to provide a proper area for chemical storage may result in serious injury, sickness, fire, explosion and even death.

### **Physical Chemical Hazards:**

- Do not allow chemicals to come in contact with skin, eyes or clothing. As mentioned previously, always wear rubber gloves, protective eyewear and clothing to reduce the risk of chemical contact and irritation.
- Remove and wash clothing that may have been exposed to chemical contact prior to wearing again.
- Inhaling or digesting chemicals will cause serious injury, sickness, and even death.
- Do not mix chemicals. Mixing chemicals together may cause chemical reactions that vary from poor water conditions to fire and explosion.

# Cal Spas Clear Water Plan™

## Safety:

1. This plan and its chemical dosages are intended for Cal Spas Chemicals only. Most chemical manufactures use different chemical formulas and strengths. Cal Spas' chemicals are specially formulated to provide proper chemical balance at lower dosages. Compare labels and dosages and see for yourself. You will get greater protection and performance with Cal Spas Chemicals.
2. Read and follow all printed instructions listed on bottles, packages and owner's manual.
3. Read and follow all printed instructions listed in chemical start-up kits. If Applicable, start-up kit chemicals are often more concentrated than the over the counter full size bottles.
4. Do Not Exceed Chemical Dosages Per Gallon as listed in the owner's manual, chemical bottles, packages, and kits. Most chemical instructions are figured for a 500 gallon spa. However, most spas hold less than 500 gallons. Always use less than the recommended amount of any chemical. It is much easier to add additional chemicals than it is to remove excess chemicals from the spa water.

REMEMBER, LESS IS MORE WHEN DEALING WITH SPA CHEMICALS.

5. Never mix any chemicals together.
6. Never change chemical brands or types without completely draining, flushing and thoroughly cleaning the spa, pillows, and cover first.
7. Be careful not to add certain chemicals on the same day. (Refer to printed instructions on the chemical bottles, packages and Clear Water Plan.)
8. Always protect eyes while introducing chemicals into the spa. A slight breeze may cause powdered chemicals to blow into eyes. Pouring liquids may cause chemicals to splash into eyes. (Protective eyewear should always be worn when handling chemicals)
9. In the event of overdosing a sanitizing chemical (Chlorine, Bromine, etc.), immediately turn off power to the spa and proceed to drain spa water into a safe locally approved area. Carefully rinse pillows, jets, and spa surface with regular tap water. (Avoid spraying water directly into the equipment area.) Refill spa to proper water level, turn power back on, and then set the filtration time to "F6". This will allow water to completely circulate to minimize the risk of chemical damage to your spa. (See setting filtration section of the owner's manual for more information.)

## Why is a Chemical Plan Important

### Time and Expense:

A better understanding of spa chemicals and their usage will help protect you from ugly, unsafe water and the expense associated with clean up. In some cases, it is less expensive to drain the spa and start over than it is to add additional chemicals and filtration time cleaning up bad spa water.

### Chemical Damage:

The most common reason for spa failure is chemical abuse or customer neglect. For example, the pump seal used on a typical spa is the same pump seal used to pump acid solutions for chemical companies. Yet this same pump seal will fail in numerous spas because the owners were not following a chemical plan. Chemical damage is not covered by Cal Spas limited warranty. So, in addition to wasted expenses on excess chemicals, you will find yourself with a huge expense of replacing chemically damaged parts. Even the brand(s) of spa chemicals that claim that they are not as harsh as chlorine or bromine, in fact, are. If you venture off some of these chemicals plans, the damage to your spa can be twice what chlorine or bromine damage would be.

### The Bottom line:

It pays to stick with a simple chemical plan and use a measuring cup rather than the conventional, "Yep, that looks like about 2 ounces".

It sounds funny... but it is a huge issue, that can be easily avoided.

# Stay with the Plan

## **Staying with the Plan:**

Spa owners who enjoy the cleanest water with a minimum time investment, all have one thing in common: they use, and stay with a simple chemical plan. Most chemical manufactures offer a maintenance plan printed in a small booklet, which contains nothing more than how much to use. The Cal Spas' Clear Water Plan describes not only what and when, but why you need to use a particular chemical.

## **Avoiding Problems:**

Spa water issues cannot be fixed immediately. It is much easier, less expensive, and a lot less time consuming to maintain spa water, than it is to troubleshoot and correct water issues. Ask yourself, which is easier, less expensive, and more convenient? Changing the oil in your car four (4) times a year, or replacing the car every two (2) years.

A chemical maintenance plan for your spa is not much different. Follow the Cal Spas' Clear Water Plan, or replace your spa every two years. We know you don't want to become a chemists. You just to enjoy your new spa. That is why the Cal Spas' Clear Water plan is so effective. Just 15 minutes, three days a week and you are ensuring your spa's future.

## **Clear Water Plan Advantages:**

1. Chemical use is minimal.
2. Chemical odor is almost non-existent.
3. Pillows, Spa Covers, and Filter lids last for years.
4. Spa usage is more enjoyable.
5. Water is always clean, clear and safe.
6. Little time invested.
7. No smock required (Chemist Joke).

# Spa vs. Small Pool?

Most people think of spas as nothing more than a small pool. In fact, nothing could be further from the truth. If anything, spas are more like an overgrown bathtub.

An average pool contains 30,000 gallons of water and operates at approximately 70° F (20° C).

An average spa only contains 350 gallons of water and operates at 100° F (38° C).

Since spas have more than 100 times less water than a swimming pool, they are very easily contaminated by bathers.

## **Example:**

Although spa users don't realize it, they perspire a lot. An average person using a spa for one hour will leave approximately 3 pints of perspiration per 350 gallons. A swimmer exercising in a pool leaves approximately one pint of perspiration per 30,000 gallons.

This and other body waste such as skin, oil, and personal hygiene products are left in a very small amount of hot water. The spa becomes prime environment for bacterial growth. In addition, water evaporates leaving a stronger concentration of T.D.S. (Total Dissolved Solids).

As stated before, spas are nothing like swimming pools. The former needs more attention than you may have first thought.

This information is not meant to scare you. It is to make you aware of why a chemical maintenance plan is so important.

Most chemical programs don't provide this type of information to the average spa user. When in reality, without knowing what the possibilities are, you won't be able to prevent problems from occurring or correct them easily.

Cal Spas believes educated spa owners are more able of recognizing a potential problem and correcting it with little effort. Thus, improving the overall spa experience.



## Filters and Filtration:

### **Exclusive Bio-Clean Filter Cartridge:**

The average filter cartridge is designed to remove dirt, sand, minerals, phosphates, bather waste and other solids from the spa. Unfortunately, some spa owners fail to include filter cleaning as part of their chemical maintenance plan. Filters accumulate debris and become prime areas for bacteria growth.

The Cal Spas Exclusive Bio-Clean filter is the only antibacterial filter cartridge on the market today. What does this mean to you? Having a filter cartridge that prevents bacteria growth is simply added protection for those times you forget to clean the filter. We recommend that you only replace your spas filter cartridge with a Bio-Clean filter cartridge for ensured protection and peace of mind.

### **Why do I need to Clean the Filter Cartridge?**

Even though the Bio-Clean filter can protect itself from bacterial growth, it still needs to be cleaned on a regular basis to maximize your spas performance and ensure that heating and filtration systems are functioning correctly. Most filter canisters are manufactured with a bypass. When a filter becomes full of debris, the bypass will open allowing water to flow around rather than through the filter. When this happens, your daily filtration cycles are no longer effective. Another casualty of a dirty filter cartridge, is the loss of water temperature. The spas heating system will only function with the proper amount of water flow through the system. An overloaded filter, can cause the heating system to become inoperable.

### **Cleaning the Filter Cartridge:**

In addition to spraying the filter with a high pressure nozzle, deep cleaning the filter cartridge is also necessary. Even if the filter cartridge may appear clean, you will still need to deep clean it regularly. Minerals and other contaminants are very difficult to see and can get lodged deep into the filter fibers causing water flow issues.

You will need to have an extra filter cartridge on hand for the deep cleaning process. It is necessary to always have one filter either cleaning or drying, and the other installed in the spa. This process will double the filter cartridges overall life and performance.

### **Filter Cleaning:**

1. Place the dirty filter into a bucket with 8 oz. of Liquid **Filter Cartridge Clean.**
2. Soak for a minimum of 24 hours.
3. Remove filter and spray clean with a water hose, and allow the filter to dry thoroughly. (Drying time should be a minimum of two days prior to reinstalling.)
4. Reinstall as described in the Clear Water plan.

### **Filtration:**

Filtration is one of the most important steps you can take ensuring clean, clear water. Regardless of what some people may think, it is far more inexpensive to fix water clarity problems by filtering your spa than it is to use excessive amounts of chemicals, filtration times, and/or water replacement.

Cal Spas' filtration system simply draws contaminated water through the (Exclusive) Bio-Clean filter removing debris from the water. It then pumps the newly cleaned water back into the spa through various jets.

Spas equipped with the optional, Quest 2000 Ozonator will also receive ozone injection into the filtered water for further protection against contaminants during filtration cycles.

Filtration also ensures that chemicals are mixed thoroughly through the water, increasing performance.

### **Filtration Cycles:**

All electronically controlled spas run two filter cycles every day, one every twelve hours. Either the low speed of a two speed pump or separate filter pump will perform the filtration function. We strongly recommend that you set your spas filtration time to the "F4" setting. (See the "Setting Filtration Cycles" section in the owner's manual.) This will allow the spa to filter for four (4) hours every twelve hours. If it seems like a lot, just remember the pool analogy.

# Cloudy Water:

## **Cloudy Water:**

Everyone experiences cloudy water at one time or another.

The number one cause of cloudy water is the spa user and the things they bring into the spa. As discussed before, the average spa holds only 350 gallons of water. What you bring into the spa will stay in the water for some time. Think of the spa as a thorough body wash. Everything that is in your clothes, skin and hair will be washed off and left in the spa water causing cloudy water.

1. Never wash the clothes that you wear into the spa in laundry detergent or fabric softener. Laundry detergent and fabric softener stays in your clothes no matter how well you rinse them. This causes cloudy and foamy water that is almost impossible to clean up. The only thing you can do is wait for it to filter out. Adding Spa Brite, in this case, will only further delay the spas ability to clear up.
2. Never enter the spa with sunscreen or lotion on your skin. Oil is very difficult to remove from the water, and can cause a reaction with some of the chemicals that you may add to your spa, further causing a cloudy water condition. It is best to rinse off prior to entering the spa.
3. Use caution when adding any chemicals to correct a problem. Most cloudy water problems are made worse by the spa owner adding chemical after chemical to correct a cloudy water problem that normally would have cleared up with a little Oxidizer Shock and filtration time.
4. Remember, swimming pool chemicals are completely different than spa chemicals. Entering a spa with wet clothes from a swimming pool can cause a possible chemical reaction to either the spa user and/or the spa water. Always rinse thoroughly when transferring between a swimming pool and a spa.
5. Clean the spas filter(s) regularly as described in the Cal Spas Clear Water Plan.

# Spa Brite: (Water Clarifier)

## **Spa Brite:**

This chemical is used to help clear up cloudy water.

The problem that most spa owners run into is being able to identify when Spa Brite should be used and when it should not be used.

Spa Brite's only purpose is to draw very light debris together and making them large enough to be caught in the filter.

If your water clarity issue is caused by excessive amounts of oils, soap, or bacteria elements, Spa Brite will only add to the clarity problem; an oily, clumpy mess will form around the entire water level of the spa.

## **How to use Spa Brite:**

1. Make sure that your clarity issue is not of an oily, soapy, or bacterial nature. (See Filter, Enzyme Oil Gone, or Oxidizer Shock sections for these issues.)
2. Add 2 oz. of Spa Brite to a spa running on filter speed. Allow spa to filter until water is clear. We recommend placing your spa in filter mode "FC" (24Hour filtration Mode) during this time. (This may take some time, so be patient. See the Setting Filtration Cycles section in your owner's manual.)
3. Clean filter thoroughly between, and after each application of Spa Brite.

# Enzyme Oil Gone: (Oil Remover)

## **Enzyme Oil Gone:**

This chemical will help break-down excessive amounts of body and other oils in the spa water.

Body oil, perspiration, lotions and tanning oil will quickly accumulate in your spa if your not careful.

The best solution is prevention. Always watch what goes onto your body because it will eventually end up in your spa water.

## **How to Use Enzyme Oil Gone:**

1. Add 1/2 oz. of Enzyme Oil Gone to a spa running on filter speed. Allow spa to filter until the spa water no longer feels or looks oily. We recommend placing your spa in filter mode "FC" (24 Hour Filtration Mode) during this time.

(See the Setting Filtration Cycles section in your owners manual.)

2. You may find the need to add this product to your weekly chemical maintenance plan. If so, simply repeat step one (1) once a week. (Weekly dosages do not generally require additional filtration time.)

# Water Temperature and Its Effects:

## **Water Temperature:**

The actual water temperature will greatly effect how efficient your spas chemistry is.

Here is an example of what hot water can do to your water and chemicals.

## **Hot Spa Water: (100° - 104° F)**

1. Increases water evaporation.
2. Increases chemical dissipation.
3. Increases amount of spa user waste.
4. Accumulation of minerals and salts.
5. Increases Total Dissolved Solids (TDS).

As you can imagine, there is an inverse effect with cooler water temperatures.

Does this mean that you should not operate your spa at higher water temperatures? No. We just want you to be aware that your chemical usage will increase or decrease with the actual water temperature.

# Water pH and its Effects:

## **Water pH: (Potential Hydrogen)**

pH is the measurement of the acidic level of water. The normal range of your spas pH level is between 7.2 to 7.8 and can be tested with simple test strips. What will happen to my spa with pH levels either too high or too low?

## **Low pH:**

The lower your pH, the more acidic your water will become. That's right. Acid! Effects of low pH are, dissolving or pitting heaters, manifolds, pump seals, and in some cases the acrylic finish itself.

## **High pH:**

The effects of high pH are increased scaling, calcium deposits, cloudy water, clogged filters and effectiveness of you sanitizers: Chlorine and Bromine.

## **What Affects the pH:**

Everything that is introduced into the spa water has its own pH level, including you. All of these different pH levels can cause conflict with the spa waters ability to maintain its correct pH levels.

## Water pH and its Effects: (Cont.)

### **Example:**

Spa owners that use their spa three (3) or four (4) times a week will have lower pH than spa owners who use their spa once or twice a week. Even the sanitizers (Bromine, Chlorine, etc.) that you use can effect the water's pH levels. Did you know that Bromine has a pH level of 3.0 while chlorine has a pH level of 7.1. Other types of sanitizers have pH levels so low, it's like adding straight acid to your spa.

Be very careful of what you are putting into your water.

### **Chlorine Users:**

Chlorine is very sensitive to pH levels. Readings higher than 7.8 will cause chlorine users to use twice the amount of chlorine to maintain a proper level. If your are using excessive amounts of chlorine with little effect, check the pH and Total Alkalinity levels.

## Controlling pH:

### **Controlling pH:** (Potential Hydrogen)

1. Always follow printed instructions on the bottle and/or packages.
2. Always adjust Total Alkalinity and Sanitizers first.
3. Chlorine users will generally use more "pH / Alkalinity Down."
4. Bromine users will generally use more "pH / Alkalinity Up."
5. Make sure test strips are not wet or outdated prior to testing.
6. Never test immediately after using oxidizer shock.  
(Allow 30 minutes of circulation with the spa cover half off prior to testing.)
7. Always add chemicals when the pump(s) are on high speed.
8. Always premix "pH Alkalinity Down" chemicals in half a bucket of water prior to introducing them to the spa.
9. Never attempt to adjust pH or Total Alkalinity in large increments. Adjustments are made easier, and will stay set longer if you make them in small increments.

### **Do Not Use Vinegar or Baking Soda to adjust pH and Total Alkalinity:**

#### **Vinegar:**

You would need to use 100 times the amount of vinegar to equal 1/2 oz. of Cal Spas "pH / Alkalinity Down". Vinegar will also add a large amount of organic waste in the spa water requiring the need for more sanitizers.

#### **Baking Soda:**

Although very similar to common baking soda, "pH / Alkalinity Up" is different. The primary difference is pH Alkalinity Up's ability to dissolve quickly. Common baking soda will cause a paste like substance to accumulate on the floor and seats of your spa.

## What is Total Alkalinity?

### **Water Total Alkalinity:**

Total Alkalinity is the basic capacity of the spa water to resist change in the pH.

When the alkalinity is low, the pH and alkalinity will change very easily with bather use or chemical adjustment. The opposite will happen when the alkalinity is high. It will take a lot of bathers or chemicals to change the pH and alkalinity levels.

The optimum Total Alkalinity level is between 80 to 100 parts per million (ppm).

# Controlling The Total Alkalinity:

## Controlling The Total Alkalinity:

1. Always follow printed instructions on the bottle and/or packages.
2. Always adjust Total Alkalinity and Sanitizers first even if it throws the pH further off.
3. Chlorine users will generally use more “pH / Alkalinity Down.”
4. Bromine users will generally use more “pH / Alkalinity Up.”
5. Make sure test strips are not wet or outdated prior to testing.
6. Never test immediately after using oxidizer shock. (Allow 30 minutes of circulation with the spa cover half off prior to testing.)
7. Always add chemicals when the pump(s) are on high speed.
8. Always premix “pH Alkalinity Down” chemicals in half a bucket of water prior to introducing them to the spa.
9. Never attempt to adjust pH or Total Alkalinity in large increments. Adjustments are made easier, and will stay set longer if you make them in small increments.

You will be using the same chemicals to lower the pH and Total Alkalinity. (Cal “Spas pH / Alkalinity Down” and “pH / Alkalinity UP.”)

This does create concern with some people of throwing off one level to correct another.

It is recommended to throw off the pH level in an effort to adjust the alkalinity level properly first. This will make it easier to adjust and maintain the pH.

## Questions and Answers

Q: My pH is low and the Total Alkalinity is high. What do I do?

A: Add small amounts of “pH / Alkalinity Down” to bring down the alkalinity level first. Be sure to allow plenty of circulation and standing time for the waters chemical levels to change. This may take anywhere from one (1) to three (3) hours depending on the size of the adjustment. (Smaller adjustment amounts are always better than larger adjustments.) Then you may start adjusting the pH back up, by using “pH / Alkalinity Up” in small amounts at a time.

Q: My pH is high and the Total Alkalinity is low. What do I do?

A: Add small amounts of “pH / Alkalinity UP” to bring up the alkalinity level first. Be sure to allow plenty of circulation and standing time for the waters chemical levels to change. This may take anywhere from one (1) to three (3) hours depending on the size of the adjustment. (Smaller adjustment amounts are always better than larger adjustments.) Then you may start adjusting the pH back down by using “pH / Alkalinity Down” in small amounts at a time.

# Calcium and Scale:

Calcium is one of the few minerals that does not dissolve in hot water. In fact, hotter water makes calcium more of a solid, gritty, chalky substance that attaches itself to the acrylic finish, heater, and everywhere else in the spa. We refer to these conditions as “Scaling”. High pH can also increase the effects of this condition. If left untreated, scaling causes heater, pump, and jet failures; all, of which, are not covered by the spa warranty.

## Prevention and Treatment:

1. Never allow the spas water temperature to exceed 104°F.
2. Check the pH levels and adjust if necessary at least 3 times a week.
3. Never allow the pH level to exceed 7.8.
4. Use “Metal Protector” every time you fill your spa. (See printed instructions on Bottle.)
5. Use “Stain and Scale Defense” weekly as described in the Clear Water Plan.
6. Applying Cal Spas “Fast Sheen” to the spas acrylic surface when you drain and clean your spa will greatly help your spas finish protect itself from scale build-up.

## Calcium Clean-up:

Unfortunately, there is very little that can help you remove calcium or scale completely in a spa. Prevention is the key.

## Cleaning:

When you drain the spa, clean the surface with Cal Spas “All Purpose Cleaner” and rinse well.

## Calcium Hardness: (Hard and Soft Water)

### Do Not Use Soft Water When Filling Your Spa

This is primarily for two reasons.

1. Soft water tends to be very unstable. This means that locking-in pH and Total Alkalinity levels becomes difficult.
2. Soft water becomes quite foamy with very little turbulence. No amount of “Foam Gone” will stop it from foaming for very long.

### What does this mean?

Your spas water needs to have some hardness to it. If you live in an area where the water source is soft, you will need to add 1 oz. of “Liquid Hardness Increaser” to raise water hardness level 7 ppm at a time. This will make your water more manageable.

Please follow all printed instructions on the bottle and use in very small increments.

### Well Water (Very Hard Water)

In some areas, the water that you have may be very hard (i.e. well water). If this is so, fill half of the spa with hard water and the other half with soft water from a water softener.

## Metal Protector (Mineral Control at Start-up)

Your Cal Spas’ Clear Water Plan recommends draining and refilling of your spa every three (3) to four (4) months. Upon doing so, you will want to add 3 oz. of Metal Protector to the center of the spa. Make sure all of the jets are on high speed.

Metal Protector will hold the active minerals in the newly added spa water in a state of “Solution”. The term solution means that minerals in the water are being held in a suspended state, keeping them from bonding to anything in the spa and causing damage. Mineral control is a critical part of maintaining spa components’ performance and longevity.

In addition to fill-up protection from minerals, the Clear Water Plan also recommends the weekly maintenance of mineral protection. This is accomplished by adding a weekly dosage of Stain and Scale Defense. (See the following page for more information.)

**DO NOT USE SPA BRITE OR LIKE PRODUCTS, ON THE SAME DAY YOU ADD METAL PROTECTOR TO THE WATER.** Adding these chemicals on the same day will result in cloudy water.

## Stain and Scale Prevention (Weekly Mineral Control)

As part of your Cal Spas’ Clear Water Plan, weekly protection from minerals are also highly recommended. Add water to your spa weekly, replacing water that has evaporated or spilled over.

Due to water replacement and overall chemical fluctuation, Stain and Scale Defense is an important part of weekly spa maintenance to prevent minerals from damaging spa components and effecting performance.

### Weekly Dosage:

Add 2 oz. of Stain and Scale Defense weekly directly to the center of the spa with all of the jets on high speed.

**DO NOT USE SPA BRITE OR LIKE PRODUCTS, ON THE SAME DAY YOU ADD STAIN AND SCALE DEFENSE TO THE WATER.** Doing so will result in cloudy water.

## Foam Gone (Foam Prevention and Assistance)

As mentioned on previous pages, foamy spa water can be caused by soft water. However, the most common causes of foamy water are the users themselves and the things they bring into the spa. (i.e. clothes, shampoo, and oils.)

Products such as Foam Gone, only mask the problem of foamy water. There is no single chemical that will remove foam from your spa water. The only thing that removes contaminant's that cause foamy water is plenty of filtration, future prevention, and patience.

### **Foamy Water Prevention:**

1. Never wash the clothes that you wear into the spa in laundry detergent or fabric softener. Laundry detergent and fabric softener stays in your clothes no matter how well you rinse them. This causes cloudy and foamy water that is almost impossible to clean up. The only thing you can do is wait for it to eventually filter out.

Note: Adding water clarifier in this case will only further delay the spas ability to clear-up.

2. Never enter the spa with sunscreen or lotion on your skin. Oil is very difficult to remove from the spa water, and can cause a reaction with some of the chemicals that you may add to your spa. In addition, soap and shampoo residues that are normally left on your body after a shower, only increase foamy and cloudy water. It is best to rinse off prior to entering the spa in these cases.

### **Use of Foam Gone:**

Foam Gone should be used sparingly. This product does not remove foam from your water, it only offers a temporary solution.

The recommended amount requires one gentle squeeze of the Foam Gone bottle to each of the heavy foaming areas.

Be sure to avoid applying Foam Gone near the immediate filter area of your spa; it is only effective in the main area. Once filtered out, the water will start to foam in a short amount of time, causing you to use more Foam Gone.

Tip: Add 3 oz. of Foam Gone and 29 oz. of water into a 32 oz. spray bottle and spray where needed.

## Vinyl & Leather Cleaner (Cover and pillow maintenance)

Due to the constant punishment your spa cover and pillows receive, you should protect them by applying Vinyl & Leather Cleaner as a part of monthly maintenance. Cal Spas' Vinyl & Leather Cleaner is specifically designed to protect spa covers and pillows from chemical and ultraviolet damage. It accomplishes this without leaving an oily residue behind that is normally associated with common automotive vinyl protectants.

### **Use of Vinyl & Leather Cleaner:**

Cal Spas' Vinyl & Leather Cleaner should be used sparingly. Incorrect product usage may cause water clarity issues.

### **Spa Covers:**

1. Remove spa cover from spa.
2. Allow spa cover to dry completely.
3. Spray Vinyl & Leather Cleaner to cover evenly and wipe dry.
4. Allow spa cover to dry completely.
5. Reinstall cover on spa.

### **Pillows:**

1. Wipe pillows dry with a soft cloth.
2. Carefully spray Vinyl & Leather Cleaner directly onto pillow.
3. Wipe pillows dry.
4. Allow pillows to dry completely.

**Important:** Do not use automotive vinyl protectants on spa covers or pillows. These products are generally oil based and will cause severe water clarity issues that are difficult to correct.

## Multi-Purpose Cleaner (Spa finish cleaning)

Cal Spas' Multi-Purpose Cleaner is an essential part of maintaining your spas finish. Through normal use, the spa's finish can accumulate dirt, oil, and calcium causing a rough feel and unsightly scum lines. Cal Spas' Multi-Purpose Cleaner is a low detergent, non-abrasive cleaner specifically formulated to clean the spa without damaging its acrylic finish. The most effective solution to minimize cleaning time is prevention. When the following steps are followed, the spas finish will actually start to resist most of the elements that cause calcium build-up and make scum line cleanup easier:

### **Prior to Spa Start-up and Refilling:**

1. Spray Cal Spas' Multi-Purpose Cleaner directly to the spas finish.
2. Wipe clean with a clean soft cloth.
3. Repeat on heavily calcified areas.
4. Wipe spa thoroughly with a wet sponge, rinsing often in a bucket of clean water.
5. Allow spa to dry completely.
6. Apply a coat of Cal Spas' Fast Sheen to the spa entire finish with a soft cloth or sponge.
7. Allow Fast Sheen to dry until white and powdery.
8. Buff clean with a soft cloth, rotating frequently.

### **Periodic Maintenance:**

1. Spray Cal Spas' Multi-Purpose Cleaner directly to the spas finish.
2. Wipe clean with a clean soft cloth.
3. Wipe spa thoroughly with a wet sponge, rinsing often in a bucket of clean water.

### **Use of Cal Spas' Multi-Purpose Cleaner:**

Cal Spas' Multi-Purpose Cleaner should not be sprayed directly into the spa water. Incorrect product usage may cause water clarity issues.

## Fast Sheen: (Spa finish protecting wax)

Cal Spas Fast Sheen is an essential part of maintaining your spas finish. Through normal use, the spas finish can accumulate dirt, oil, and calcium causing a rough feel and unsightly scum lines.

Cal Spas Fast Sheen is a non-oil based wax that is specifically formulated to protect the spas finish from the chemicals and minerals associated with normal spa use.

The most effective solution to minimize cleaning time, is prevention. When the following steps are followed, the spas finish will actually start to resist most of the elements that cause calcium build-up and make scum line cleanup easier:

### **Prior to Spa Start-up and Refilling:**

1. Spray Cal Spas' Multi-Purpose Cleaner directly to the spas finish.
2. Wipe clean with a clean soft cloth.
3. Repeat on heavily calcified areas.
4. Wipe spa thoroughly with a wet sponge, rinsing often in a bucket of clean water.
5. Allow spa to dry completely.
6. Apply a coat of Cal Spas' Fast Sheen to the spa's entire finish with a soft cloth or sponge.
7. Allow Fast Sheen to dry until white and powdery.
8. Buff clean with a soft cloth, rotating frequently.

### **Important:**

Cal Spas Fast Sheen should not be used on spas full of water. Only apply to a clean, cool, dry surfaces. Incorrect product usage may cause water clarity issues.



## Sanitizers: (Bromine and Chlorine)

### How Sanitizers Work:

Sanitizers such as Bromine and Chlorine, basically kill bacteria and other organic waste by breaking them down to harmless levels, thus eliminating them from the water.

You will need to know how each sanitizer performs this task to maximize their efficiency.

### Bromine:

Bromine is generally in tablet form, and requires a small plastic floater to dissolve slowly into the spa water.

With a proper understanding of how it works, it is quite an effective sanitizer, with a bonus of low chemical orders.

Unlike chlorine, bromine can breakdown bacteria and other contaminants to a safe level, then move on to other contaminants with a low burnout rate.

The problem that most spa owners have with bromine is that they don't follow a chemical plan, allowing the bromine tablets to completely dissolve out of the floater. This causes bromine level to go up and down like a Yo Yo.

Not what you want from a sanitizer.

As mentioned before, bromine dissolves slowly into the water. The proper way to manage a bromine system is the following:

## Sanitizers: (Bromine and Chlorine)

### Bromine Management: (500 Gallon Spas at 100° F)

#### Start-up:

1. Add 2 oz. of Go Bro into the spa with all of the jets on high speed. This is your base bromine level as the tablets will take awhile to dissolve enough to manage 500 gallons of water.
2. Add 2 oz. of Oxidizer Shock into the spa with all of the jets on high speed and the spa cover at least half off for 30 min. This will remove any organic materials that may have been left in the plumbing lines after its last draining.
3. Start by placing 3 to 4 bromine tablets into 95% closed plastic floater and place into the spa. (Do not place bromine tablets into the filter basket.)

#### Weekly:

1. Test Bromine level with test strips. Note: Bromine Test levels will vary if spa is equipped with Quest 2000 Ozonator.

Test Levels **With** Quest 2000 Ozonator: 1 to 3 Parts Per Million (ppm)

Test Levels **Without** Quest 2000 Ozonator: 3 to 5 Parts Per Million (ppm)

2. Add one or two bromine tablets to the floater weekly.  
You want to replenish the same amount of bromine tablets equal to the tablet dissolve rate. (Dissolve rate will be faster at higher water temperatures and slower at lower temperatures.) NEVER LET BROMINE TABLETS RUN COMPLETELY OUT OF THE FLOATER.
3. Add 2 oz. of Oxidizer Shock weekly into the spa with all of the jets on high speed and the spa cover at least half off for 30 minutes.  
This will remove organic material from the spa water, freeing-up your sanitizer to attack more bacteria, and other waste. This improves your sanitizers performance level, reduces spa odor, and refreshes your spa water.

## Sanitizers: (Bromine and Chlorine)

### Chlorine:

Chlorine is generally in liquid form. However, in spa applications you will only want to use Granular Chlorine. This is primarily due to Chlorine type and strengths. Unlike Bromine, chlorine can only breakdown bacteria and other contaminants to a safe level once, prior to burning out. The problem that most spa owners have with chlorine, is that levels either get too low from neglect, or too high from trying to play chemical catch-up. As with all spa chemicals, LESS IS MORE. Take your time whenever adding chemicals to the spa water. Allowing proper filtration time and adding chemicals slowly, will greatly improve the length of your spa life and performance. You cannot super chlorinate spas and expect them to last. Be patient and stay with the plan.

### Granular Chlorine:

#### Weekly:

1. Test Chlorine level with test strips. Note: Chlorine Test levels will vary if spa is equipped with Quest 2000 Ozonator.

Test Levels <b>With</b> Quest 2000 Ozonator:	0.5 to 1 Parts Per Million (ppm)
Test Levels <b>Without</b> Quest 2000 Ozonator:	1 to 3 Parts Per Million (ppm)

2. Add 1 to 2 tablespoons of Cal Spas' Granular Chlorine to the spa water weekly. Chlorine dissipation rate will be faster at higher water temperatures and slower at lower temperatures.
3. Add 2 oz. of Oxidizer Shock weekly into the spa with all of the jets on high speed and the spa cover at least half off for 30 minutes. This will remove organic material from the spa water, freeing-up your sanitizer to attack more bacteria, and other user waste. This act greatly improves your sanitizers performance level and reduces spa odor.

## Oxidizer Shock:

### Shock:

All shock is not created equal. The most common shock you will find in pool and home improvement stores is Chlorinating Shock. This will destroy your spas Jets, Pillows, Pump Seals and worse. The only shock that you should put in your spa is Cal Spas' Oxidizer Shock! Oxidizer shock is the safe, easy way to maintain either Bromine or Chlorine spa chemical plans. By using 1 oz. weekly, you are removing burnt-out chemicals, bacteria, and other organic material from you spas water. This will drastically improve chemical productiveness, spa odor, and minimize chemical irritation.

### Using Oxidizer Shock:

1. 1 oz. of Cal Spas Oxidizer Shock\* Weekly.
2. 1 oz. of Cal Spas Oxidizer Shock\* after heavy bather loads.
3. 1 oz. of Cal Spas Oxidizer Shock\* if water has a strong odor.

\*Spa must be running with all of the jets on high for 30 minutes with the cover half off. If necessary you may repeat Oxidizer Shock treatments in 30 minute intervals.

### Big Water Clarity Issue?

1. Identify the water clarity issue first: Is it Soap, Oil, Bacterial, or Chemical Imbalance.
2. Select the proper treatment.
3. Clean the filter cartridge and increase the amount of filtration until the water clears-up.
4. Add 1 oz. of Oxidizer Shock at a time, in 30 minute intervals, with the spa cover at least half off. Make sure all of the jets are on high.
5. Be patient! With few exceptions, spa water will not clean or clear-up overnight. Cloudy water requires proper identification, the correct treatment, and plenty of filtration.

## Cal Spas Clear Water Plan (Start up)

Prior to filling a spa for the first time or after a routine draining, you will want to follow this start-up plan to extend water life and performance.

If you are following either Bromine or Chlorine Clear Water plans, you will notice that both start up processes are the same with the exception of step 4.

As with all chemical dosages listed in the Clear Water Plan, start up dosages are intended for 500 gallon spas. Please adjust chemical dosages to the gallon capacity of your particular spa.

### **Start up:** (500 Gallon Spas)

1. Clean spa thoroughly with Cal Spas Multi-Purpose Cleaner.
2. Apply a protective coat of Cal Spas Fast Sheen to the Acrylic surface.
3. Fill spa to proper water level with normal tap water. (Do not use soft water.)
4. Bromine Plan: Add 2 oz. of Cal Spas Go Brom to establish a Bromine base level Chlorine Plan: Add two tablespoons of Cal Spas Granular Chlorine to the spa water .
5. Pour in 3 oz. of Cal Spas Metal Protector to the center of the spa.
6. Sprinkle 2 oz. of Cal Spas Oxidizer Shock in the center of the spa and leave spa uncovered and turn on the jets for 30 minutes prior to recovering.
7. Allow 24 hours prior to testing and implementing the Bromine or Chlorine Clear Water Plans.

## Cal Spas Clear Water Plan (Bromine)

### **Bromine users**

This plan and its chemical dosages are intended for Cal Spas' Chemicals only. Most chemical manufactures use different chemical formulas and strengths. Only Cal Spas' chemicals are specially formulated to provide proper chemical balance at lower dosages. Compare labels and dosages and see for yourself. You will get greater protection and performance with Cal Spas' Chemicals.

Always read and follow all printed instruction on chemical bottles and packages.

### **Day One (Monday)**

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Add two bromine tablets to floater. (Amount of tablets needed will vary with water temperature.)
3. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information)
4. Add 2 oz. of **Stain and Scale Defense**.
5. Pull the dirty filter from the spa and place into **Liquid Filter Cleaner** solution.
6. Place your extra, cleaned, fully dried filter cartridge in the spa.
7. Vacuum your spa with the **Cal Spas Vac**.

### **Day Two (Wednesday)**

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information.)
4. Pull the filter from **Liquid Filter Cleaner** solution, hose it off and allow to dry.

## Cal Spas Clear Water Plan (Bromine cont.)

### Day Three (Friday)

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Check bromine floater for sufficient amount of bromine tablets. (Add one if necessary.)
3. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information.)
4. Add 1 oz. of **Oxidizer Shock**. (See Oxidizer Shock section for more information.)

### Every Month:

1. Inspect equipment area for leaks, rodents, and insects.

### Every 3 to 4 Months:

1. Drain and clean your spa with **Multi Purpose Cleaner**.
2. Polish the acrylic surface with **Fast Sheen**.
3. Clean and treat spa cover, pillows and Ultra Spa Cabinets with Cover Protector.

### Every 6 Months:

1. Clean and treat redwood spa cabinets and gazebos with **Nu-Spa** redwood stain renewer & brightener.

## Cal Spas Clear Water Plan (Chlorine)

This plan and its chemical dosages are intended for Cal Spas' Chemicals only. Most chemical manufacturers use different chemical formulas and strengths. Only Cal Spas' chemicals are specially formulated to provide proper chemical balance at lower dosages. Compare labels and dosages and see for yourself. You will get greater protection and performance with Cal Spas' Chemicals.

Always read and follow all printed instruction on chemical bottles and packages.

### Day One (Monday)

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Add two tablespoons **Granular Chlorine**. (Chlorine dissipation will vary with water temperature.)
3. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information.)
4. Add 2 oz. of **Stain and Scale Defense**.
5. Pull the dirty filter from the spa and place into **Liquid Filter Cleaner** solution.
6. Place your extra, cleaned, fully dried filter cartridge in the spa.
7. Vacuum your spa with the **Cal Spas Vac**.

### Day Two (Wednesday)

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information.)
4. Pull the filter from Liquid Filter Cleaner solution hose it off and allow to dry.

## Cal Spas Clear Water Plan (Chlorine cont.)

### Day Three (Friday)

1. Test spa water using test strips. (Be sure to check the expiration date prior to use.)
2. Add two tablespoons **Granular Chlorine**. (Chlorine dissipation will vary with water temperature.)
3. Adjust Total Alkalinity, then pH if needed. (See pH and Alkalinity sections for more information.)
4. Add 1 oz. of **Oxidizer Shock** (See Oxidizer Shock section for more information.)

### Every Month:

1. Inspect equipment area for leaks, rodents, and insects.

### Every 3 to 4 Months:

1. Drain and clean your spa with **Multi Purpose Cleaner**.
2. Polish the acrylic surface with **Fast Sheen**.
3. Clean and treat spa cover, pillows and Ultra Spa Cabinets with Cover Protector.

### Every 6 Months:

1. Clean and treat redwood spa cabinets and gazebos with **Nu-Spa** redwood stain, renewer & brightener.

## Frequently Asked Chemical Questions:

**Q: My pH is High and my Alkalinity is low, What do I do?**

A: Adjust your Alkalinity first, even if it throws the pH further off. Use “pH / Alkalinity Up” or “pH / Alkalinity Down” adjust and stabilize your Total Alkalinity level. This will make it easier to adjust your pH levels later and allow them to remain stable longer.

**Q: When is the best time to use Oxidizer Shock?**

A: Every week, as described in Cal Spas’ Clear Water Plan, and after heavy bather loads. You may use Cal Spas’ Oxidizer Shock as often as you like, as long as you allow you spa to run for 30 minutes with the spa cover at least half off.

**Q: How long is the shelf life of Bromine?**

A: As with any chemical you will want to store them in a cool, dry place. When properly stored, bromine will last one year.

**Q: Do I need Metal Protector and Stain and Scale Defense?**

A: Yes. Water sources are becoming more and more mineralized. These chemicals are every bit as important to your spa as Bromine or Chlorine are.

**Q: My skin is becoming irritated after spa use. Why?**

A: You are not using your Cal Spas’ Oxidizer Shock enough and/or your sanitizer level is too high. Because the spa and its chemicals will strip some of your bodies oils away. We recommend that you use a moisturizer after spa use. If you still have skin irritation after these steps, see your doctor.

**Q: How long should I wait to enter the spa after adding chemicals?**

A: With Cal Spas’ Chemicals, the longest you will need to wait is one (1) hour.

**Q: What is the sand like substance in the bottom of my spa?**

A: Oxidized contaminant’s. Spas equipped with the Quest 2000 Ozonator will produce this generally after initial fill up and water additions. The debris is just oxidized solids that were in the water that are now visible. Simply vacuum them out as a part of you weekly plan.

**If you have any questions that were not answered in this guide, please call your local Cal Spas Dealer. They have plenty experience dealing with your local water chemistry and can offer the most efficient solution for you water issues.**

# Cal Spas Chemicals



**BROMINE/CHLORINE STARTER KIT**  
#CHE07000290/#CHE07000295  
When use as directed, this product is effective as a spa and hot tub sanitizer and disinfectant. Treats 250 Gallons for up to 3 weeks.



**VINYL & LEATHER CLEANER**  
#CHE07000620  
Specifically designed to protect spa covers and pillows from chemical and ultraviolet damage.



**FAST SHEEN**  
#CHE07000610  
Unique water based, chemically reactive silicone sealant and polish. Seals, shines and protects spa surfaces.



**BROMINATING TABLETS**  
#CHE07000760/#CHE07000770  
Sanitizer, disinfectant for Spas and Hot Tubs.



**CHLORINATING GRANUALS**  
#CHE07000865/#CHE07000880  
When use as directed, this product is effective as a spa and hot tub water disinfecting agent.



**GO BROM**  
#CHE07000830  
Establishes a bromide bank in spas and hot tubs.



**FILTER CARTRIDGE CLEANER**  
#CHE07000690  
Breaks down organic and inorganic material. Removes calcium scale and mineral deposits.



**LIQUID HARDNESS INCREASER**  
#CHE07000250  
Increases water hardness to reduce corrosion. Helps reduce foaming.



**SPA BRITE**  
#CHE07000580/#CHE07000590  
Clears up cloudy water in spas and hot tubs. Effective at all spa and hot tub temperatures.



**FOAM GONE**  
#CHE07000800/#CHE07000810  
Breaks up existing foam in spa water. Effective at all spa and hot tub temperatures.



**pH-ALKALINITY UP**  
#CHE07000720/#CHE07000730  
Helps Maintain pH in Spas and Hot Tubs.



**pH-ALKALINITY DOWN**  
#CHE07000750  
Lowers pH in Spas and Hot Tubs.



**ENZYME FORMULA**  
#CHE07000600/#CHE07000605  
Emulsifies and biodegrades bodily oils, suntan lotion and other contaminants found in spas and hot tubs.



**METAL PROTECTOR**  
#CHE07000630/#CHE07000640  
Controls water discoloration caused by minerals. Special Extra Strength formula for spas and hot tubs.



**STAIN AND SCALE PREVENTION**  
#CHE07000650/#CHE07000660  
Prevents minerals from damaging spa components and effecting performance.



**OXIDIZER SHOCK**  
#CHE07000680/#CHE07000710  
Destroys organic contaminants and odor causing wastes.

TO ORDER CAL SPAS' CHEMICALS PLEASE CALL  
1-800-CALSPAS



# WARRANTY

## LIMITED

This limited warranty is effective for Journey Series spas manufactured after August 15, 2003



### Spa Shell / Structural Warranty

Journey Spas: C.A.I. warranties against the loose of water through the spa shell due to defects in materials and workmanship for a period of 10 years from the original date of purchase.



### Equipment Warranty

Journey Series Spas: C.A.I. warranties the spas electrical and electronic component-specific, the control system, pumps and air blowers against malfunction due to defects in materials and workmanship for a period of five years from the original date of purchase.



### 5 Year Interior Surface Warranty

Journey Series Spas: C.A.I. warranties the standard acrylic/standard quartz interior surfaces from cracks, blisters, peeling, discoloration and lamination for a period of 5 years from the original date of purchase.



### Plumbing Warranty:

C.A.I. warranties the sure-flo jet inserts and all factory installed plumbing and 'Eliminator' wet end from loss of water due to defects and workmanship for a period of 5 years from the original date of purchase.



### Component Warranty:

C.A.I. warranties the XL heater and Cal Zone Quest Ozonator against malfunction due to defects in materials and workmanship for 5 years from the original date of purchase. This warranty excludes replaceable ozone cartridge, which has a 1-year warranty from the original purchase date of spa.

### Jet Wood Spa Cabinet:

C.A.I. warranties the spa cabinet to be free from defects in material and workmanship for a period of 90 days from the original date of purchase. Seasonal check and surface cracks are not considered defects in material and workmanship, as they are normal characteristics of all wood. Surface stain is specifically excluded from this warranty.

### Extent of Warranty

This limited warranty is only valid on portable models delivered in the continental United States and extends through the selling dealer to the original purchaser at the original site of installation. This guarantee becomes valid at time of purchase and ends either by specified time-frame listed above, owner-transfer, or relocation.

### Warranty Exclusions & Limitations

This guarantee is void if the spa has been subject to negligence, alteration, misuse, abuse, repairs by non-C.A.I. authorized personnel, incorrect electrical installation, acts of God, and any other cases beyond the control of C.A.I. Please refer to the Owner's Manual for examples of exclusions and of common acts invalidating this guarantee.

### Legal Remedies

This limited warranty gives you specific legal rights and you may have other rights, which may vary from state-to-state.

### Disclaimers

This limited warranty provided herein is made with the express understanding that the spa is not an essential device of medical device as defined under State and Federal Law. C.A.I. shall not be liable for loss of use of the spa or other incidental or consequential costs, expense or damages, which may include but are not limited to removal of permanent deck or other custom fixtures or the necessity for crane removal. Any implied guarantee shall have duration equal of the applicable guarantee stated above. Under no circumstances shall C.A.I. or any of its representatives be held liable for injury to any person or damage to any property, however arising.

### Warranty Performance

In the event of a malfunction or defect covered under the terms of this guarantee, the factory authorized selling dealer is responsible for performing all necessary repairs. To obtain service, contact the selling dealer. In the event the consumer is unable to obtain satisfactory customer service from the selling dealer, written notification must be given to the C.A.I. Customer Relations Department within 10 days of the reported failure. There will be no charge for parts or labor on a covered item. However, the service agent may assess a reasonable travel or mileage charge per service call. If C.A.I. determines that repair of a covered item is not feasible, C.A.I. reserves the right to replace the defective merchandise with merchandise equal in value to the original purchase price. In the event Of any guarantee replacement, all removal, replacement, installation and shipping costs are the responsibility of the spa owner.

### Customer Service

For customer service, contact the authorized selling dealer immediately. If you need additional information or assistance, please contact the C.A.I. Customer Relations Department at 1462 E. Ninth St., Pomona CA 91766 OR CALL (800) 225-7727



## PARTS LIST

### Description

### Part Number

#### Plumbing

Accu Therapy Jet (940123MG)	PLU21702702
Micro Flow Jet	PLU21702403
Micro Swirl	PLU21702404
Power Storm ZX	PLU21702741
Power Storm JX	PLU21702740
1" Air Venturi	PLU21700375
On/Off Drain Valve	PLU21400350
Main Drain-Super High Flow Suction 2", Sliver, 2002	PLU21400132
Screen, Large Mesh, Insert, Clean Water System '02	PLU21703103
Vent Wall Fitting, Black	PLU21800625
Diverter Valve, 2"	PLU21300038
Diverter Valve, 1"	PLU21300037
Ozone Injector, Complete	PLU21700601
3/4" Grey Comp Ball Valve	PLU21102002
Gate Valve, 2" X Spigot	PLU21100250

#### OZONE

Cal Zone Quest 2000 w/Grey Plug	OZO18000200
Cal Zone Quest 2000 Replacement Cartridge	OZO18100020
Ozone Check Valve 3/8"Bx3/8"B	OZO18102390

#### HEATERS

XL Heater 5.5 w/Teflon & Switch Assembly 2003	HEA14100401
Heater Union Black 2" Split	HEA14700070
Heater Union w/Out O'ring White 2"	HEA14700080
Heater Gasket 2" O'ring w/Rib	HEA14700030
Switch Pressure Heater	ELE09500200

#### FILTERS

Filter Cartridge, Bio-Clean™	FIL11100190
Filter Locking Flange, Grey	FIL11700134
Filter Canister	FIL11700137
Filter Weir Skimmer	FIL11700138

#### PUMP

Pump 1.5HP 2 SP 2" Wet End	PUM22000390
Pump Assembly 2 HP 2 SP	PUM22000830
Pump, 5HP 2 SP Switchless, Reg Wet Ends	PUM22000927
24-Hour Filtration Pump Assembly	PUM22000975



**Description****Part Number****ELECTRICAL**

Control Box CS 5000	ELE09000197
Control Box CS 5300 '03 (3 Pump)	ELE09000194
Circuit Board 2100 C2100RIA (2000)	ELE09100205
Topside Control Panel, CS 5000'03	ELE09200871
Kit Mount Plastic Sensor Housing	ELE09900240
220V/110V Conversion Kit w/20' Cord Installed	ELE09700086
CD Player, AM/FM, Clarion Marine	ELE09300017
Remote Control, Digital Readout Marine, '03	ELE09300002
Clarion 4" Marine Speakers	ELE09300023

**LIGHTING**

Light Bulb 12 Watts	LIT16300000
Light, LED Spas (OPT860-8, '03)	LIT16000146
LED Waterfall Assembly, 24+1 Lit, 2003	PLU21800601
LED Waterfall Assembly, 24+2 Kit, 2003	PLU21800602

**PILLOWS**

Standard Pillow, #965 Rectangular '03, J-series only	ACC01400863
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**HARDWARE**

Trim Lock Faceplate, "Cal"	HAR13000011
Lip Guard Genesis Chrome 7/16"	HAR13000060

**CABINETS**

Door Panel, Red, Jet Wood Cabinet 26"x43 1/2"	WOO27513193
Door Panel, Red, Jet Wood Cabinet 28"x43 1/2"	WOO27513131
Door Panel, Red, Jet Wood Cabinet 34"x43 1/2"	WOO27513012
Front Access, Red, Jet Wood Cabinet 26"x8 1/2"	WOO27513195
Front Access, Red, Jet Wood Cabinet 28"x8"	WOO27513134
Front Access, Red, Jet Wood Cabinet 34"x12"	WOO27513013
Front Access, Red, Jet Wood Cabinet 34"x16 3/4"	WOO27513024
Round Corner, Red, Jet Wood Cabinet 26"x12"	WOO27513197
Round Corner, Red, Jet Wood Cabinet 28"x12"	WOO27513130
Round Corner, Red, Jet Wood Cabinet 34"x12"	WOO27513014
Side Panel, Red, Jet Wood Cabinet 26"x50 1/4"	WOO27513181
Side Panel, Red, Jet Wood Cabinet 26"x60 1/4"	WOO27513138
Side Panel, Red, Jet Wood Cabinet 28"x59 1/2"	WOO27513132
Side Panel, Red, Jet Wood Cabinet 28"x68"	WOO27513136
Side Panel, Red, Jet Wood Cabinet 34"x68"	WOO27513011
Side Panel, Red, Jet Wood Cabinet 34"x77 1/4"	WOO27513022

**Description****Part Number****CABINETS**

Door Panel, Grey, Jet Wood Cabinet 26"x43 1/2"	WOO27513194
Door Panel, Grey, Jet Wood Cabinet 28"x43 1/2"	WOO27513159
Door Panel, Grey, Jet Wood Cabinet 34"x43 1/2"	WOO27513017
Front Access, Grey, Jet Wood Cabinet 26"x8 1/2"	WOO27513196
Front Access, Grey, Jet Wood Cabinet 28"x8"	WOO27513135
Front Access, Grey, Jet Wood Cabinet 34"x12"	WOO27513018
Front Access, Grey, Jet Wood Cabinet 34"x16 3/4"	WOO27513029
Round Corner, Grey, Jet Wood Cabinet 26"x12"	WOO27513198
Round Corner, Grey, Jet Wood Cabinet 28"x12"	WOO27513129
Round Corner, Grey, Jet Wood Cabinet 34"x12"	WOO27513019
Side Panel, Grey, Jet Wood Cabinet 26"x50 1/4"	WOO27513199
Side Panel, Grey, Jet Wood Cabinet 26"x60 1/4"	WOO27513139
Side Panel, Grey, Jet Wood Cabinet 28"x59 1/2"	WOO27513133
Side Panel, Grey, Jet Wood Cabinet 28"x68"	WOO27513137
Side Panel, Grey, Jet Wood Cabinet 34"x68"	WOO27513016
Side Panel, Grey, Jet Wood Cabinet 34"x77 1/2"	WOO27513027