

# OWNER'S MANUAL



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## IMPORTANT SAFETY INSTRUCTIONS

WHEN INSTALLING AND USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

**WARNING-**To reduce the risk of injury do not permit children to use this products unless they are closely supervised at all times.

### **DANGER-RISK OF ACCIDENTAL DROWNING.**

Extreme Caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children can not use the spa unless they are supervised at all times.

A ground terminal (pressure wire connector) is provided on the control box inside the unit to permit connection of a minimum No. 8 AWG (8.4MM<sup>2</sup>) solid copper bonding conductor between this point and any metal equipment, metal water pipe, metal enclosure of electrical water pipe, metal enclosures of electrical equipment, or conduit within five feet (1.5M) of the unit.

**DANGER-**To reduce the risk of injury to persons, DO NOT remove suction fittings.

The Suction fittings on 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 that the flow rates are compatible. Never operate the spa if the suction fittings are broken or missing. Never replace a suction fittings with one rated less than the flow rate marked on the original suction fittings.

**INSTALL THE SPA** So proper drainage is provided for the compartment containing electrical components.

**DANGER RISK OF ELECTRICAL SHOCK-** Install at least 5 Feet (1.5M) from all metal surfaces. (A spa may be installed within 5 feet of a metal surface if each metal surface is permanently connected by a minimum NO.8 AWG(8.42mm<sup>2</sup>) solid copper conductor attached to the wire connector on the terminal box that is provided for this purpose). National Electrical Code: ANSI/NMFP A70-1993.

## **IMPORTANT SAFETY INSTRUCTIONS**

**DANGER-RISK OF ELECTRICAL SHOCK-** Don't permit any electrical appliance, such as a light, telephone, radio or television within 5 feet (1.5M) of the spa.

### **WARNING- TO REDUCE THE RISK OF INJURY**

- A.** The water in the spa should never exceed 40 degrees Celsius (104degrees F)  
Water temperatures between 38 degrees C (100 F) and 40 degrees C (104F ) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10 minutes) and for young Children
- B.** Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa temperature to 38 degrees C (100F).
- C.** Before entering a spa, the user should measure the water temperature with an accurate thermometer, since the tolerance of water temperature regulating devices vary.
- D.** The use of alcohol, drugs, or medication, before or during spa sue, may lead to unconsciousness with the possibility of drowning.
- E.** Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulation system problems, or diabetes, should consult a physician before using a spa.
- F.** Persons using medication should consult a physician before using a spa since some medication may induce drowsiness, while other medication may affect heat rate, blood pressure and circulation.



## **MANUFACTURERS DO'S AND DON'T**

**DO** Make sure the spa is connected to a ground fault circuit interrupter (GFCI) protected circuit. This GFCI is required by the Nation Electrical Code (NEC). And must be installed by licensed electrician. Test the GFCI monthly.

**DO** Test the water with your hand before entering the spa to be sure it is comfortable.

**DO** Remember that wet surfaces can be slippery. Take care when entering and exiting the spa. Only enter by way of the steps in the spa. Do not step on the spa edges or filter lids.

**DO** Use the thermal cover when the spa is not in use. Empty or full.

**Do** Take steps to prevent the intrusion of sand and dirt into the spa.

**Do** Maintain proper water chemistry.

**Do** Clean the filter cartridge weekly.

**DON'T** Use the spa for long periods of time at temperatures over 104F.

**DON'T** Operate the spa without water. Turn the circuit breaker off before emptying the spa and while it is empty.

**DON'T** Store Chemicals in the spa's equipment compartment.

**DON'T** Open the electrical box. There are no user serviceable parts inside.

**DON'T** Operate the pump(s) on Hi-speed for extended periods of time with the cover on Extended hi-speed pump operation will cause a slow heat build-up due to water friction, which could trip the spa's hi-limit thermostat.

## WARNINGS

Prolonged immersion in water that is warmer than normal body temperature can result in a dangerous condition known as HYPERTHERMIA. The causes, symptoms, and effects of hyperthermia may be described as follows: Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 degrees F. The symptoms of hyperthermia include dizziness, fainting, drowsiness include (1), unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit the spa (4) Physical inability to exit the spa, (6) Fetal damage in pregnant women, and (6) unconsciousness resulting in a danger of drowning.

**WARNING-** The use of alcohol, drugs or medication can greatly increase the risk of fatal hyperthermia in spas. Persons taking medications that induce drowsiness such as tranquilizers, antihistamines or anticoagulants should not use the spa. Pregnant women and persons with a medical history of heart disease, circulatory problems, diabetes or high blood pressure should consult their physician before using the spa.

Children are especially sensitive to hot water. At no time should children have unsupervised access to the spa. The use of elevated decking may encourage children to climb onto the thermal cover- **IT IS DESIGNED AS A SAFETY OR CHILD RESISTANT COVER!**

Every thermal cover from is provided with locking straps

**Install the locks for your child's safety.**

### Location of your spa

Your new spa is self-contained and in most cases portable, however there are some things you need to consider when determining where to locate your spa for maximum enjoyment and warranty protection.

### Owner Responsibility

It is your responsibility, as the owner of your spa, to check with your local council building surveyor or private building surveyor regarding the legal requirements associated with the delivery and installation of your spa. As the spa is a portable spa, you may not need a council permit for installation.

### Position

Your spa needs to be positioned so that access to the spas equipment, which is located in most cases at the front of the spa, will need to be accessible for service of power connection. In most SPA'S an appropriate amperage cord and plug will be provided running from the back of your spa. It is Spa's recommendation that you have access to all sides allowing at least 1.5 meter access around all 4 sides of your spa.

### Drainage

Ensure that the spa is not in a low or flood able position, as this could cause electrical equipment to ! (R) short! or dangerous to spa users. Your spa comes with a drain valve, usually located in the base of the equipment compartment. Ensure that you consider access to this drain socket, and that gravity drainage onto the garden, or a waste outlet is available

### Privacy

Think of your surrounds to determine your best privacy options. Consider the view from your spa, as well as your neighbours.

### View

Think about the direction you will be facing when sitting in your spa. Which seat will you be sitting in the most, and which direction you will be facing.



### **Cover**

Most covers fold in half, but not all spas are square, so some covers can only fit and fold one way. Consider how you will fold the cover in half, or will there be a low overhead obstruction? Is there sufficient space to store the cover when you take it off? Are you best to have a cover lifter? Which one is best for your site? What room you need for a cover lifter?

### **Safety**

Do not place your spa within 1.5 metres of overhead power lines. Check Local Council Regulations for fencing.

### **Ventilation**

If your spa is enclosed ensure that there is adequate ventilation. Spas produce considerable amounts of moisture, which could damage walls and ceilings over time.

### **Access in and out of the spa**

Ensure that you have considered access in and out of the spa. As most spas are approx 900mm high, getting in and out is difficult. You may need steps C where will you place them.

### **Weather**

Will you be able to use the spa on windy days? Will you be enjoying its use in the evening or during the hours of darkness? Your spa has been designed to evenly support the weight of the spa, the water and the spa users.

The spa requires a good, solid, level, flat foundation. If the foundation is not adequate, the spa may stress and crack, thus voiding any warranty given by Spa. It is the responsibility of the spa owner to provide a proper foundation.

### **Surface and Slab Requirements**

Your new spa must be placed on a 100mm, thick reinforced concrete slab. Ensure that the concrete has cure for at least one week before setting the spa in place. A typical spa, filled with water, could weigh as much as 2500 kgs and if the concrete is not fully cured, it could easily crack. An uneven or cracked pad or the use of shims of any kind may cause the spa to buckle, distort and/or crack and will void the warranty on your spa. It is recommended that the concrete slab or paving is at least 200mm bigger than the spa base size, to allow some after thought spa repositioning changes, and foundation strength.

## SET UP AND INSTALLATION

If the concrete slab is to be exceptionally larger than the spa base size, consider having the remaining area with a slight fall (5-10mm over 2m) in one direction away from the base of the spa to allow surface water to run off. Otherwise, allow for a small drain channel between the other surface area and the spa, so as to avoid other surface water getting under your new spa. See your brochure for spa dimensions.

### Wood Decking

Wood decking is suitable provided the structure is strong enough to take the weight of the spa when full of water. An engineer! structural report is essential for balconies. If you wish to place a portable spa into a deck, it is recommended to place the spa onto a slab and build the deck AROUND the spa. The spa needs approximately 500mm access to all 4 sides of the spa for any future service work. Therefore you need to allow for access panels(trap door) in your deck.

When placing the spa into or onto a deck, it is important that it can handle the weight of the spa, the water and the people in it. Small spas will weigh around 1.5-1.7 tons with water and people. Large spas weigh around 2.2-4.5 tons. In general, you need to cater for a load of 550kg per square meters To ensure that a deck can withstand the weight of a spa, the foot well area is the most important to reinforce, either with a vertical support post under the foot well, or more commonly, a thick timber or steel beam running horizontally under the foot well area.

**NOTE: DO NOT, UNDER ANY CIRCUMSTANCES, PUT YOUR SPA ON ANY SOFT SURFACES LIKE GRASS, SAND, CRUSHED ROCK OR DIRT. ANY SURFACE THAT HAS A TENDENCY TO SETTLE UNEVENLY WILL PUT PRESSURE AND TENSION ON THE SPA STRUCTURE AND MAY VOID THE WARRANTY.**

The electrical supply to your new spa will require a dedicated circuit with no other power appliances or sockets sharing the power.

This is important, as if there are any other appliances drawing amperage from what your new spa requires, then your new spas electrical parts may burn out in a short time. Electrical burn-out due to incorrect amperage **WILL NOT** be covered by warranty.

## SET UP AND INSTALLATION

Unless you have been advised otherwise, your new spa must be permanently connected. (i.e. hard wired to the main household power supply or into a 15amp plug). The electrical supply must be installed by a qualified licensed electrician to comply with all regulations and standards specified by the Electrical Authority.

Ensure that your electrician installs at the main house supply:

A suitable rated RCD (Residual Current Device)

A suitable rated circuit isolating switch that is no closer than 2m from the spa, which is accessible for the homeowner for turning the spa off and on.

Your electrician will want to know how many amps your new spa draws. Electrical Requirements for your Spa.

If your spa requires  
dedicated 15amp plug:

**It means you need**

Between 2 & 2.5 metres from the 15amp circuit back of the spa

A qualified electrician must install

If your spa requires  
32amp circuit:

**It means you need**

1 phase, dedicated, hard wired, 32 amp circuit

A circuit breaker and RCD in your power box

At least enough cable in flexible conduit to reach your spa pool control box.

An isolating switch close to the spa

No power points within 2m from the spa

A qualified electrician to do the installation and deliver a certificate of compliance

If your spa requires  
40amp circuit:

**It means you need**

1 phase, dedicated, hard wired, 40 amp circuit

A circuit breaker and RCD in your power box

At least enough cable in flexible conduit to reach your spa pool control box.  
An isolating switch close to the spa  
No power points within 2m from the spa  
A qualified electrician to do the installation and deliver a certificate of compliance.

**NOTE: Only a qualified electrician can legally do this work.**

Owning a spa is fun, relaxing, therapeutic, but more importantly we must look after our investment to keep it healthy and economical, thus avoiding unnecessary premature repair costs.

Detailed below is a simple step-by-step procedure to follow:

### Filling Your Spa

Before filling your spa, please tighten the barrel unions. The barrel unions are two big plumbing nuts located at the wet end of each pump and heater element. These can sometimes come loose during transportation.



Shut Off Valve Jets

Check that the shut off valves are all in the open position lengthways along the piping or pulled up (for inverted type).



Check that all jets are in the open position. Anti-clockwise to turn your jets on.

When re-filling your spa, do so through the filter or diverter valve. (Tip!! When draining and re-filling your spa the filters should be cleaned, along with the spa surface, jets and behind the headrest. The latter three can be cleaned with methylated spirits.)



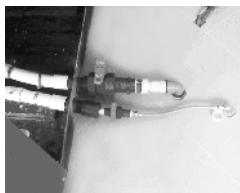
### Filter Box Diverter Valve

Fill your spa with water. This should always be done through the filter or diverter valves to stop air locks forming. Heat to desired temperature then test water balance and adjust pH, total alkalinity and chlorine. (Ref: Water Quality & Maintenance section)

**Please see your Spa Dealer for suggested water treatments**

### Draining Your Spa

If you use your spa say once or twice a week, the need to drain your spa will be less frequent than a spa owner who uses their spa three or more times a week. Therefore, it would be recommended that a spa be drained at least every 4 - 5 months. Your drainage valve is positioned at the front on the inside of the cabinet, this has a garden hose connection at the end. Simply connect your hose, turn the valve anti clockwise and your spa will begin draining.



**NOTE: Be sure the power to your spa is turned off before draining. Damage to equipment due to dry running is not covered under warranty.**

### Sanitizing Your Spa

Proper sanitization of your spa is important. Ensure you maintain residual sanitiser levels to product recommendations (refer to instructions on product). Use test strips to measure your sanitiser levels.

### Shock Dosing Your Spa By Adding Chlorine Concentrate

Removing a build up of body fats and oils is important not only for health reasons but also for maintaining an inviting sparkling clear spa.

Remove cover from spa and leave off for a minimum of 1 hour. With pump and filter running, add 40gms of Chlorine Concentrate per 1500 litre spa or 25gms per 1000 litre spa. This should be added at least once a week or after heavy use. Continue to run spa pump/s for at least one hour as per step one.

(Ref: Water Quality & Maintenance section)



### Cleaning Your Filters

You should clean your filters regularly. Once a week you should remove your filters and hose any debris out of them with a high pressure hose. Once a month you should soak your filters in a cartridge filter cleaning solution and then hose off with a high pressure hose.



**IMPORTANT:** When you remove your filters, ALWAYS ensure that the power to your spa is off before doing so! If you leave your power on and anything is drawn into your pump or heater, causing either to fail, fault will not be covered under warranty.

### When Your Spa Is Not In Use

If you are going away for a period longer than 2 months, it is recommended that you turn your spa off and empty it. It is important to remember to leave the cover on even while empty to protect the shell.

If you are going away for a few days or weeks, do not turn your spa off completely. Turn the temp down to 15 degrees, so that the filtration cycles are still functioning but the spa doesn't heat.

**NOTE:** AT NO TIME SHOULD YOU LEAVE YOUR SPA IN DIRECT SUNLIGHT FOR PROLONGED PERIODS OF TIME. PLEASE MAKE SURE YOU PLACE THE COVER BACK ONTO THE SPA AFTER EVERY USE OR CHEMICAL APPLICATION. FAILING TO COVER YOUR SPA FROM DIRECT SUNLIGHT MAY DAMAGE YOUR SPA SHELL AND VOID ALL WARRANTY.

### Important Tips To Remember:

**IF WATER QUALITY IS POOR:** Clean filters, test and balance water and run spa for an hour.

**EVERY TIME YOU EMPTY YOUR SPA:** Remove and clean the jets if stiff or scratchy. If jets do not turn or spin, this is due to chemical build up and/or sand/grit behind them.

**FROM TIME TO TIME:** Protect your cabinet with oil when showing signs of weathering. Wipe or paint on. Rub in/off excess.

To adjust the water flow to fully open position on the Exhilarator and Excess spa jets, simply rotate the jet face in an anti clock wise direction until you come to a stop. Your spa jet is now operating at full pressure.

To reduce the flow, simply rotate the jet face in a clockwise direction. When the jet is in the closed position you will still feel a small amount of flow from the jet. This is perfectly normal. The jets have been designed to allow small amount of water through to protect the pump, in case all the jets were turned to the off position.



### Removing Your Spa Jets

To remove the spa jets, simply turn the spa jet in an anti-clockwise direction to the fully open position. Then turn it a little more and pull the jet towards you, your jet will now come out of the jet body Removing Spa Jets

### Replacing Your Spa Jets

Place the jet face back into the jet body and with the palm of your hand rotate it in an anti-clockwise direction You will feel the jet click into place. Your jet is now fully operational..

### Interchanging Your Spa Jets

Yes you can. Simply follow the remove and replace steps to interchange your jet faces to another section of your spa

### Altering the Nozzle on the Therapy Jet

With the palm of you hand, rotate the jet face in an anti-clockwise direction (about a  $\frac{1}{4}$  of a turn). This will loose the jet face enough so that you can adjust the jet

nozzle to its new position. Once you have located the nozzle, to its new position, simply tighten the jet face by rotating the jet face in clockwise direction (about a  $\frac{1}{4}$  of a turn).

### **Maintenance of Your Spa Jets**

Your spa jets should require very little maintenance. However, you should occasionally remove the jets, rinse clean in soapy water, then thoroughly rinse before placing them back in your spa. Maintain your water balance I accordance with the manufacturers specification to enjoy many years of trouble free operation.

Please Note: All jet removals and replacements should be done when the pump or pumps are switched off.

THESE RECOMMENDATIONS ARE A GUIDELINE ONLY AND MUST BE CONFIRMED BY YOUR OWN TESTING.

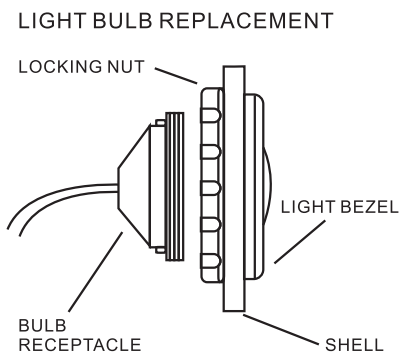
**PLEASE NOTE: YOU SHOULD NEVER USE POOL GRADE CHEMICALS IN YOUR SPA. ANY DAMAGE TO EQUIPMENT CAUSED BY USING POOL GRADE CHEMICALS WILL NOT BE COVERED UNDER WARRANTY.**

**YOU SHOULD HAVE YOUR WATER TESTED PROFESSIONALLY AT LEAST ONCE A MONTH ON TOP OF TESTING WEEKLY YOURSELF!**

**WHENEVER ADDING CHEMICALS TO YOUR SPA REMEMBER THAT IT WILL TAKE TIME FOR THE CHEMICALS TO MIX INTO THE WATER, DON'T GET HASTY, LEAVE IT TO MIX IN FOR 20-30MIN**

### Replacing light globe

1. Turn on power off to spa.
2. Remove timber / wood plastic panel behind where the under water light is situated.
3. There is a plug with two wires going into the back of the light.
4. Remove this plug by turning anti-clockwise with two fingers only.
5. Replace faulty light globe with a new one (obtain part from your authorized the spa dealership)
6. Replace parts and put the timber panel back on.



### **Fresh Filling your Spa with Ozone**

Fill your spa. Once your spa is filled, turn the spa on and set the temperature at your desired level. Place Nature 2 cartridge onto filter tray. On lily pad filter models, attach sticks onto base of nature 2 cartridge and place stick down into centre of filter. Once spa has reached desired temperature, test your water with test strips. Simply dip a test strip into the water, pull it out and compare the color pads with the charts as per instructions on the back of the bottle.

The TA Total Alkalinity should be between 80-120ppm. If the TA is below 80ppm you will need to increase it. do so you will need to add a Total Alkalinity increaser. Follow the directions on the back of the bottle for how much to add. It is best to just bring it up to 120ppm as it will rise over time and you may not be able to reduce it.

Once TA is at required level, test again for the pH. If the pH is lower then 7.2 when tested you will need to increase it. To do so you will need to add a pH increaser, add small amounts until correct pH level is acquired. If the pH is higher then 7.8 when tested you will need to reduce it. To do so you will need to add a pH degreaser, add small amounts until correct pH level is acquired.

When you have the TA and pH inside these ranges, depending on the chemical brand you are using you may need to lock down the pH using a pH locking mechanism. Using a TA and pH Balancer will do the trick. Once added, leave pumps to run for 30 mins.

After the TA and pH Balancer has mixed into the water, remove the cover and turn the set temperature back up to desired level. Add 75 grams of chlorine ! lithium hypochlorite! and turn pump(s) and blower on high. Leave run with the cover off for 30mins.

### **Weekly Maintenance with Ozone:**

Once a week, simply dip a test strip into the water, pull it out and compare the coloured pads with the charts as per instructions on the back of the bottle.

The TA ! Total Alkalinity! should still be in range. 80-120ppm. If the TA is below 80ppm you will need to increase it

Once TA is at required level test again for the pH. If the pH is lower than 7.2 when tested you will need to increase it. To do so you will need to add a pH increaser, add small amounts until correct pH level is acquired.

If the pH is higher then 7.8 when tested you will need to reduce it. To do so you will need to add a pH decrease, add small amounts until correct pH level is acquired.

When you have the TA and pH inside these ranges, depending on the chemical brand you are using you may need to lock down the pH using a pH locking mechanism.

After TA and pH Balancer has mixed into the water remove the cover and turn the set temperature back up to desired level. Add 75 grams of chlorine ! lithium hypochlorite! and turn pump(s) and blower on hi. Leave to r with the cover off for 30min.

If the water is cloudy you may need to use a water clarified. This is a flocculating agent. Usual causes of this are a lack of chlorination, suntan lotion, shampoo, soap products, hair gel or spray on/fake tan. The best way to combat this is to ensure anybody with any of the aforementioned products on their body, has a shower before using the spa.

If your spa is foaming up you may need to use a de-foamed. Generally one cap-full is enough but double check with the bottle as brands vary, leave to mix into water for several hours for best results. Causes of foam can be the same causes of cloudy water and/or pH level being out.

### **After every time you use the Spa**

Mild usage (Low bather load) Less than an hour spent in the spa. Add 1 teaspoon of Lithium Hypochlorite per person to the spa water, turn the pump(s) on hi and leave to run for 5min with the cover off, replace the cover and leave to re-heat.

Heavy usage (High bather load) 4 hours spent in the spa with people in and out. Add 75 grams of Lithium Hypochlorite to the spa water, turn pump(s) on hi and leave to run with the cover off for 30min, replace cover and leave to re-heat.

NOTE: An Ozone Spa is not dependent on high amounts of Lithium Hypochlorite (Chlorine), however it is suggested in doses recommended.

Please refer to your specialist for the best water maintenance in your local area.

### **Fresh Filling Your Spa Without Ozone**

Fill your spa, once spa is filled turn the spa on and set the temperature at your desired level.

Once spa has reached desired temperature test your water with test strips. Simply dip a test strip into the water, pull it out and compare the color pads with the charts as per instructions on the back of the bottle.

The TA Total Alkalinity should be between 80-120ppm. If the TA is below 80ppm you will need to increase it. To do so you will need to add a Total Alkalinity increaser. Follow the directions on the back of the bottle for how much to add. You are best to just bring it up to 80ppm as it will rise over time and you may not be able to reduce it.

Once TA is at required level test again for the pH. If the pH is lower than 7.2 when tested you will need to increase it. To do so you will need to add a PH increaser, add small amounts until correct pH level is acquired.

If the pH is higher than 7.8 when tested you will need to reduce it. To do so you will need to add a pH decreases, add small amounts until correct pH level is acquired.

When you have the TA and pH inside these ranges, depending on the chemical brand you are using you may need to lock down the pH using a pH locking mechanism. Using a TA and pH Balancer will do the trick. Once added, leave pumps to run for 30 mins.

After the TA and pH Balancer has mixed into the water remove the cover, turn the set temperature back up to desired level. Add 75 grams of chlorine ! lithium hypochlorite! and turn pump(s) and blower on hi. Leave to run for 30min. After 20 min pump(s) and blower will turn off or reduce to low speed and continue heating.

Test your bromine level. If your level is very low and you are using granulated bromine, add 1 cap of bromine, turn pump(s) onto hi and leave running for 30min. Re-test your water, if still low add smaller amounts until required.

Level is achieved. If you are using bromine tablets, place several tablets in your bromine dispenser and leave overnight to acquire required level. If after a couple of days the bromine levels are still not up to required level you may need to turn up the dispersion level on your bromine dispenser.



### Weekly Maintenance Without Ozone

Once a week simply dip a test strip into the water, Pull it out and compare the color pads with the charts as per instructions on the back of the bottle.

Once TA is at required level test again for the pH, if the Ph is lower then 7.2 when tested you will need to increase it. To do so you will need to add a pH increaser. Add small amounts until correct Ph level is acquired.

The TA Total Alkalinity should still be in range 80-120ppm, if the TA is below 80Pmm you will need to increase it.

If the Ph is higher than 7.8 when tested you will need to reduce it. To do so you will need to add a ph decrease, add small amounts until correct ph level is acquired.

When you have the TA and Ph inside these ranges, depending on the chemical brand you are using you may need to lock down the ph using a pH locking mechanism.

After TA and Ph balancer has mixed into the water remove the cover and turn the set temperature back up to desired level. Test your residual bromine reading. If it is under required level add granulated bromine until it reaches required level. If you are using bromine tablets check your bromine dispenser. It may need more tablet added to it.

Add 75 grams of chlorine Lithium Hypochlorite and turn pump(s) and blower on hi. Leave to run with the cover off for 30 min.

If the water is cloudy you may need to use a water clarifier. This is a flocculating agent. Usual causes of this are a lack of chlorination, suntan lotion, shampoo, soap products, hair gel or spray on / fake tan. The best way to combat this is to ensure anybody with any of the aforementioned products on their body, has shower before using the spa.

## WEEKLY MAINTENANCE WITHOUT OZONE

If your spa is foaming up you, may need to use a de-foamer. Generally one cap-full is enough but double check with the bottle as brands vary, leave to mix into water for several hours for best results. Causes of foam can be the same causes of cloudy water and or Ph level being out.

### **After Every Time You Use The Spa:**

Mild Usage: (low bather load) less than an hour spent in the spa. Add 1 teaspoon per person of chlorine to the spa water, turn the pumps on Hi and leave to run for 5 min with the cover off, replace the cover and leave to Re-heat.

Heavy usage (High bather load) 4 hours spent in the spa with people jumping in and out, Add 75 grams of chlorine to the spa water, turn pumps on Hi and leave to run with the cove off for 30 min, replace cover and leave to re-heat.

Please refer to your specialist for best water maintenance in your local area.

## HELPFUL HINTS



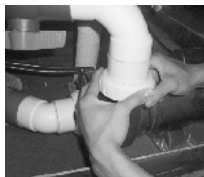
### Diverter Valves

Some spas are fitted with diverter valves. Diverter valves are for transferring water from one area to another. If you find them tight or stiff, turn the spa off at the power point, lift off the handle, hold the outside of the diverter and screw anti-clockwise, remove centre gate out of housing, wipe any sand or dirt from the gate, wipe down inside housing. Sand scratches with light sand paper and put back together. Diverter handles breaking due to stiffness is not a warranty item.



### Air Controls

Air Controls, affect the pressure of your jets by adding air. You may have more than one air control on your spa, each of which will be associated to a certain group of jets. By opening an air control when the pump is on, air will be drawn into the water flow. When an air control is turned anti-clockwise it is on & when turned clockwise it is off. For best heating efficiency turn air controls to the off position when the spa is not in use.



### Airlocks

If you have emptied and refilled your spa and the pump comes on but there is no water movement in your spa, the spa is probably suffering from an air lock. To get the air out of your pump, turn the spa off and find the filtration pump, which is situated inside the spa cabinet. Locate the pipe which goes into the top of the pump. This has a large nut, which is called the barrel union. Undo anti-clockwise until you hear the air escape. When the water comes out, re-tighten. This should fix the airlock. Sometimes you have to start the pump again to remove the air. To prevent this from happening, always fill the spa through the filter box.



### Touchpad

If you are experiencing 3 flashing dots on the touchpad try turning off the power for 10-15 minutes. This should reset the electronics. If the lights are still flashing, check and open the water valves, clean your filters, increase water level or follow the airlock procedure. If this does not work, please notify your local service agent for further information. For other touchpad information, refer to your Quick Reference Card.

## HELPFUL HINTS



### Headrest

If your headrest are dirty, clean them with a vinyl cleaner. If your headrest are becoming discoloured and you have ozone fitted, this is a natural oxidizing process from the ozone gas and this is not covered under warranty. This also can be caused by over chlorination. However, it is recommended that you remove the pillows from the spa after every use. Be careful when removing/refitting pillows. If broken, they are not covered by warranty.



### Wood-plastic Cabinet

To rejuvenate your timber cabinet, use Spa exterior timber treatment available from your authorized Dealer. This procedure is recommended once a year.



### Spa Cover

To clean your spa cover, simply use warm soapy water and hose off, being careful not to get soapy water into the spa. If you want to prolong the life of your hardcover and preserve its finish, use a Bio Guard product called ! Cover Renew or a similar product. The spa has small holes in the underside. These holes are for condensation, which builds up inside the cover. Do not hold the cover by the seals (between the two halves). They are not handles, and will break. The hardcover is not designed for sitting, jumping or lying on.

**PLEASE MAKE SURE YOU PLACE THE COVER BACK ONTO THE SPA AFTER EVERY USE OR CHEMICAL APPLICATION. AT NO TIME SHOULD YOU LEAVE YOUR SPA IN DIRECT SUNLIGHT FOR PROLONGED PERIODS OF TIME WITHOUT THE COVER ON AS THIS MAY DAMAGE YOUR SPA SHELL AND VOID ALL WARRANTY.**

### Scum Lines

If you are experiencing scum lines around your spa, you can do 1 of 2 things. Either, get a plastic scourer (so as not to damage the spa) and run it around the waterline of your spa, or turn power off and drain spa completely. Once drained, wipe the whole shell with mentholated spirits. Refill to correct level before turning spa on.

## TROUBLESHOOTING

Chromatherapy lighting system: installed at the time of manufacture are warranted to be free of manufacturing defects for a period of one year.

Stereo System: Not under warranty.

### **1 year cabinet warranty**

The cabinetry is warranted to maintain its structural integrity for a period of one year from the original date of purchase. Wood staining and normal weathering of the surface of wood panels is excluded from coverage.

### **NO BLAME Heater element**

The element in your spas is protected by a special isolation coating that takes the worry out of maintaining water chemistry (PH). Please Note: The spa No blame element gives added protection against corrosion, improperly balanced (Ph) may effect other components of the spa, or may cause harmful skin irritation. Preventive maintenance is suggested.

### **WARRANTY PERFORMANCE**

In the event of a defect covered by this warranty, notify your dealer within 10 days of the time the defect is discovered. Upon proof of purchase by dated purchase receipt, SPA or its authorized representative will correct the defect within the terms and conditions contained in this warranty. There will be no charge for in-home service labor during the first year. You may as its sole option, May elect to substitute a spa or component of equal value, either new or reconditioned to correct a defect. Such replacement shall assume as its warranty. It remaining portion of the warranty on the original products. If the entire spa needs to be substituted because the repair is not feasible or repair can not be performed in the field, reasonable costs to pick up the defective spa and return it or delivery and install the replacement spa will be responsibility of the spa owner.

### EXCLUSIONS

The warranty is void if spas or its representative determines that the spa has been subjected to any alterations or repair by anyone other than an authorized representative of Spas are not approved for commercial applications. The Spa will not be responsible for the cost of replacement parts or labor cost of any spa found to be used in a commercial application. This warranty shall also be voided if there is evidence that the spa has been subjected to misuses, abuses, negligence, improper installation or operations other than in accordance with the instructions in the owner's manual including but not limited to damage to components caused by improper PH, balance or other improper water chemistry maintenance (use of chlorine based products other than dichloride voids all warranties) or by failure to maintain and clean the filtration system, damage to components or spa surface caused by operating the spa at water temperature outside the range of 30 degrees F (freezing) and 120 degree F (excessive heat) damage to the surface caused by leaving the spa uncovered while empty of water and in direct exposure to sunlight, damage caused by improper or incorrect electrical hook-up, modifications to internal electrical assembly box and grounding system. by electrical installations done by anyone other than licensed professional in non-conformity with state and local code or by power surges or spikes or damage caused by Acts of God or conditions beyond the control of spas.

### Disclaimer

Except as expressed herein there shall be no other warranty or obligations expressed or implied, oral or statutory. Spa or any of its authorized agents shall not be held liable for injury or loss of use of your spa, chemicals or any other incidental or consequential costs, expenses or damages which may include but are not limited to the removal of buildings, doors, decks or other custom features. Under no circumstances at all shall Spa be liable for any reason or cause in excess of the amount paid for the product. A post registration number must be produced for extended warranty.



