Platinum



Owners Manual



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Introduction

Your choice of spa indicates that you are devoted to excellence. The manufacturer appreciates your patronage and takes pride in the tradition of quality spas that our company represents.

In order to get the most out of your spa, we strongly suggest that you take time to read through this manual before you hook up and operate your spa. This will acquaint you with the operating features, hook up procedures, maintenance, safety procedures, ensuring an enjoyable experience right from the start. Manufacturer has tried to anticipate all of your needs and desires; however, if you need any addition information, feel free to call manufacturer.

WARNING!! This manual was written to ensure the proper use and installation your spa. Any modifications to the procedures outlined in this manual may result in your warranty being voided. Please take the time to read this manual to avoid any unnecessary problems with your brand new spa and equipment.

THIS MANUAL AND ITS CONTENTS ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALTHOUGH WE HAVE PREPARED THIS MANUAL AS A CCURATE AND PRECISE AS POSSIBLE, WE WILL NOT BE LIABLE FOR LOSS, INJURY OR DAMAGES CAUSED BY IMPROPER INSTALLATION OR USE OF SPA (IMPROPER OR OTHERWISE).

This Manual Covers The Following Model

Platinum



Date Purchased:		
Date Installed:		
Dealer Name:		
Sno Model and Soviel Number		

1 - 8 0 0 - 7 4 9 - 8 0 0 3 www.EliteSpas.com

Part # 7637

IMPORTANT SAFETY INSTRUCTIONS

When installing your spa and using this equipment, basic safety precautions should always be followed, to include the following:

- **READ AND FOLLOW ALL INSTRUCTIONS!** The following instructions are required by UL 1563 standard to be printed as a condition of their listing this product. They contain important safety information we strongly urge you to read and apply.
- DANGER TO REDUCE THE RISK OF INJURY: Do not permit children to use spa unless they are closely supervised at all times.



PREVENT DROWNING

SPA HEAT SPEEDS UP EFFECTS OF ALCOHOL., DRUGS OR MEDI-CINE, AND CAN CAUSE UNCON-SCIOUSNESS.

IMMEDIATELY LEAVE SPA IF UNCOMFORTABLE OR SLEEPY

PREVENT CHILD DROWNING

WATER ATTRACTS CHILDREN.

ALWAYS ATTACH A SPA COVER AFTER EACH USE AND LOCK.

*ADDITIONAL COPIES MAY BE REQUESTED CALL THE TOLL-FREE NUMBER IN YOUR OWNERS MANUAL.

WARNING SIGN MUST BE POSTED

The WARNING sign (RED) above is packed with your new Elite Spa. This sign must be posted in a prominent place in close proximity to the spa installation site immediately upon completion of spa installation.

- WARNING SIGN It is extremely important that this sign be permanently placed in clear view of any persons using the spa. Occasional spa users may not be aware of some of the dangers hot water poses to pregnant women, small children, and people under the influence of alcohol. If you did not receive a warning sign or your sign has become damaged, please contact your spa dealer or manufacturer.
- **DANGER** A wire connector is provided on this unit to connect a minimum No. 8 AWG (8.4mm2) solid copper conductor between unit and any metal equipment, metal inclosures of electrical equipment, metal water pipe, or conduit, if that item is located within 5 feet (1.5m) of the unit.
- DANGER RISK OF ACCIDENTAL DROWNING: Extreme Caution must be exercised at all times, to prevent
 unauthorized access by children. To avoid accidents, ensure that children cannot use spa unless they are supervised at all
 times. Cover spa and use safety locks to prevent accidents.
- DANGER TO REDUCE THE RISK OF INJURY: The suction fittings in the spa are sized to match the specific water flow created by the pump/pumps. Should the need arise to replace the suction fittings or the pump/pumps, be sure that the flow rates are compatible.
- DANGER RISK OF ELECTRICAL SHOCK: Install at least 5 feet (1.5m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet (1.5m) of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4mm2) solid copper conductor to the wire connector on the terminal box that is proved for this purpose. Do not permit any electrical appliance, such as a light, telephone, radio or television within 5 feet (1.5m) of the spa, unless factory installed.
- Position spa to provide proper drainage, accessibility of electrical compartments.
- For floor recessed spas, install to permit access for servicing from above or below floor.
- NEVER USE AN EXTENSION CORD!
- Consideration should be taken for water splash out. Water can ruin wood floors and some finishes.
- **DO NOT** use a wall switch, ground fault circuit interrupter, circuit breaker, fuse, or plugging and unplugging the spa as a means of turning on or off your spa for normal everyday use.
- DO NOT block access door.
- Set the spa on a firm level (flat) surface. **DO NOT** set spa on blocks as structural damage may occur to spa.
- **WARNING** To reduce the risk of injury. The water in a spa should never exceed 40° C (104° F). Water temperatures between 38° C(100° F) and 40° C (104° F) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

IMPORTANT SAFETY INSTRUCTIONS

• Since excessive water temperatures have a high potential for causing fetal damage during early pregnancy, pregnant or possible pregnant women should limit water temperatures to 38° C (100° F). Before entering a spa, the user should test the water temperature with an accurate thermometer. The tolerances of water temperature-regulating devices vary. The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning. Persons suffering from obesity, medical history or heart disease, low/high blood pressure, circulatory system problems, or diabetes, should consult a physician before using a spa. Persons using medication should consult a physician before using a spa because some medications induce drowsiness while others may affect heart rate, blood pressure and circulation.

HYPERTHERMIA

Prolonged immersion in hot water may induce hyperthermia. A description of the causes, symptoms, and effects of hyperthermia are as follows:

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F (37° C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia include.

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit spa;
- Physical inability to exit spa;
- Fetal damage in pregnant women; and
- Unconsciousness and danger of drowning.

CHOOSING A LOCATION

IMPORTANT: Because of the combined weight of the spa, water and users, it is extremely important that the base upon which the spa rests be smooth, flat, level and capable of uniformly supporting this weight, without shifting or settling, for the entire time the spa is in place. If the spa is placed on a surface which does not meet these requirements, damage to the skirt and/or the spa shell may result. Damage caused by improper support is not covered under warranty. It is the responsibility of the spa owner to assure the integrity of the support at all times. It is strongly recommended that a qualified licenced contractor prepare foundation for your spa.

Manufacturer recommends a poured, reinforced concrete slab with a minimum thickness of 4 inches (10cm). Wood decking is also acceptable provided it is constructed so that it meets the requirements outlined above. The spa must be installed in such a manner as to provide drainage away from the spa. Placing the spa in a depression without provisions for proper drainage could allow rain, overflow and other casual water to flood the equipment and create a wet deck. Install so as to permit access to the equipment, either from above or below, for servicing. Make certain that there are no obstructions which would prevent removal of the cabinet side panels and access to the jets components, especially on the side with the equipment bay doors.

Outdoor Location

In selecting the ideal outdoor location for your spa, we suggest that you take into consideration:

- 1. The proximity to changing area and shelter (especially in colder weather conditions).
- 2. The pathway to and from the spa (free of debris, dirt, leaves as not to be tracked into spa).
- 3. The closeness to trees and shrubbery (leaves and birds could create extra work).
- 4. A sheltered environment (less wind, weather exposure resulting in lowered operation and maintenance costs).
- 5. The overall enhancement of your environment. It is preferable not to place the spa under an unguttered roof overhang since run-off water will shorten the life expectancy of spa cover.

Indoor Location

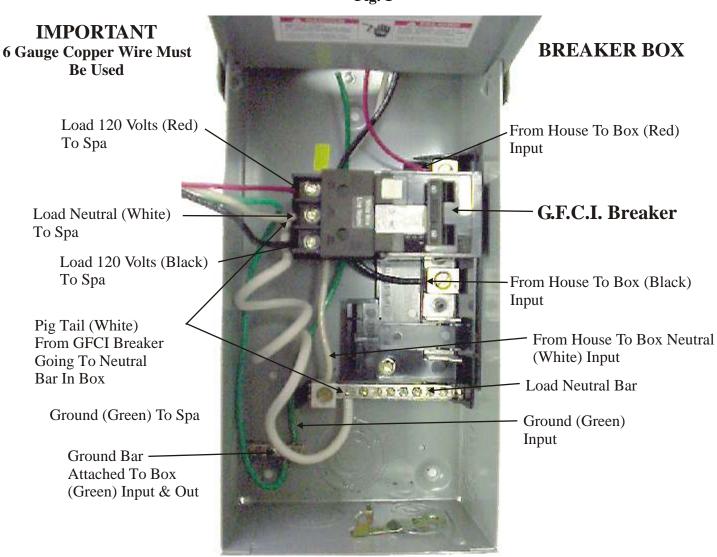
Be sure your spa will fit into the space you have chosen. Proper access into the home is needed to move the spa into place. Ventilation may be needed because of the humidity from the spa. In most cases, a spa cover is sufficient. Be sure to check the load carrying capabilities of the floor you will be installing your spa, as most homes meet the requirement of 80lbs per square foot (manufacturer not responsible). Insure you have proper drainage in the event of a leak or water spill due to over load of spa with people causing water damage (manufacturer not responsible.) Encase of maintenance problems, leave enough room around the spa to work. Choose proper flooring area for spa.

POWER REQUIREMENTS

			AMP		
MODEL	VOLTS	AMPS	LOAD	MARKING	APPLICATION
PLATINUM	M 240	60	48	3 Wire #6 + Grd 3	HYDROQUIP CS6230C

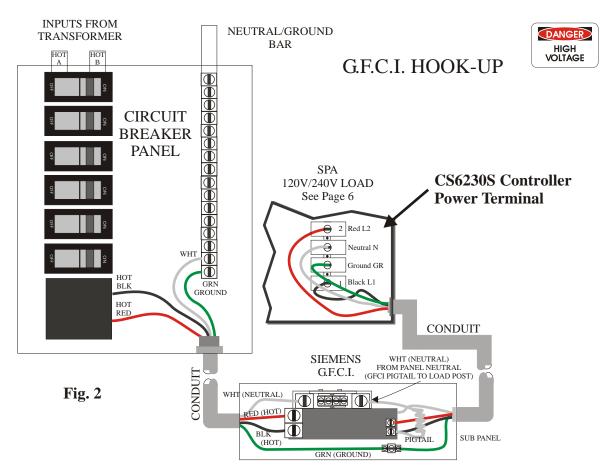
WARNING - ALWAYS USEA CERTIFIED ELECTRICIAN WHEN HOOKING UP YOUR NEW SPA.

Fig. 1



NOTE: The White Neutral Wire from the GFCI MUST be connected to an incoming Line Neutral. The internal mechanism of the GFCI requires this Neutral connection. The GFCI WILL NOT WORK WITHOUT IT.

POWER REQUIREMENTS



An illustration showing the proper electrical connections for 240 volt service has been provided for you. Be sure to follow these and all other instructions carefully. Be sure that all connections are tight before switching on the circuit breaker.

CAUTION! Failure to abide by specification listed may result in damage to equipment and may void the warranty. IF THE SPA IS WIRED INCORRECTLY, YOUR WARRANTY WILL BE VOID ON ANY BURNED OUT ELECTRICAL EQUIPMENT.

G.F.C.I (Ground Fault Circuit Interrupter)

IMPORTANT

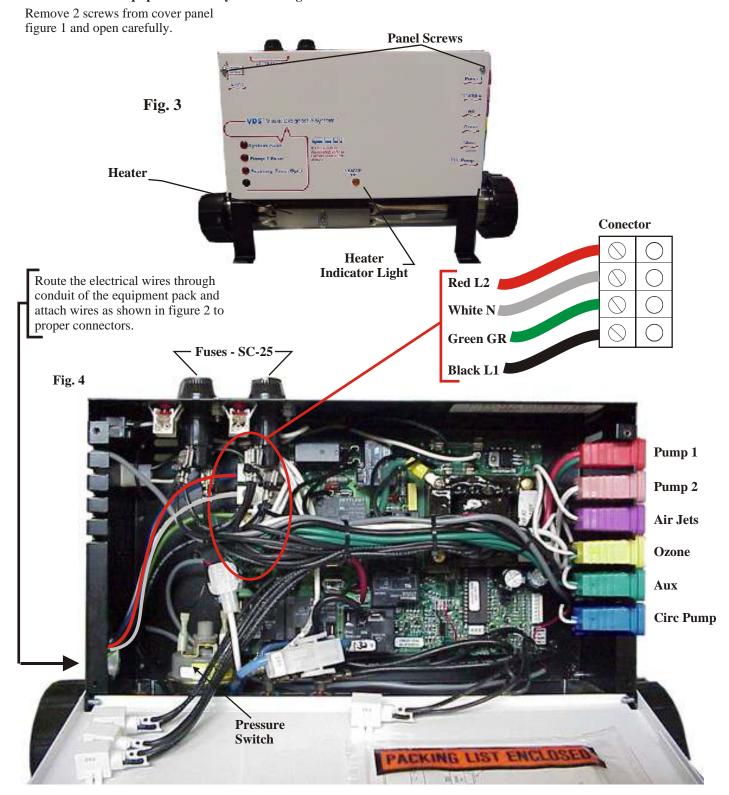
This service must be single phase. High voltage can seriously injure or kill. Always use a certified electrician when hooking up your new spa.

The National Electrical Code states that a service disconnect breaker box (a G.F.C.I. can be used for this purpose) must be located at least 5 feet away from the spa and should be conveniently located near the equipment bay. If it is not in plain sight, keep the disconnect padlocked when in the off position.

Remember, high voltage is still accessible in the housebreaker box even though you have turned off the spa breaker.

CONTROL SYSTEM DIAGRAM

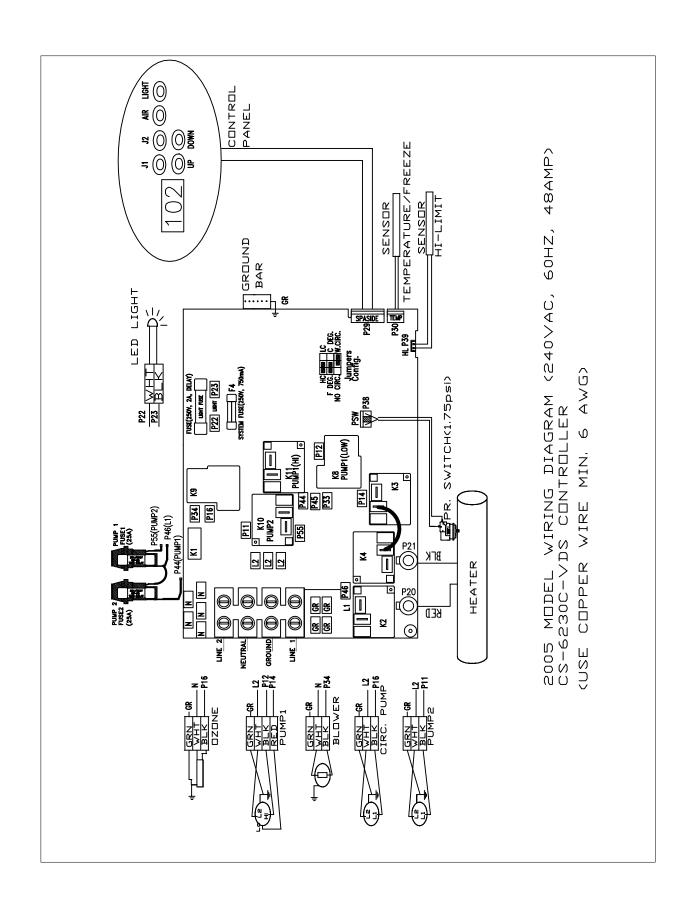
CS6230C Control Equipment Pack System Wiring Directions



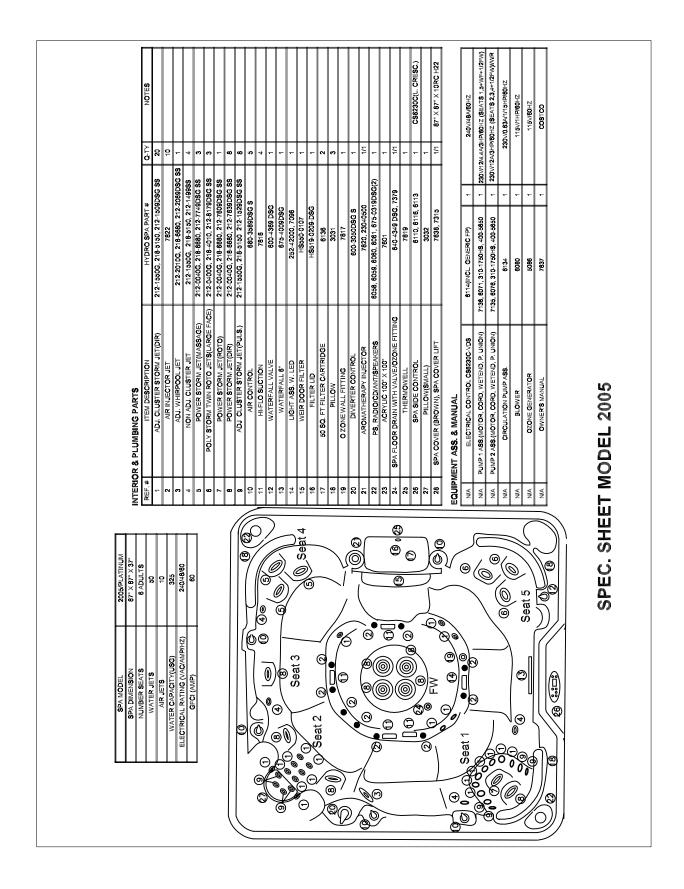
WARNING: FILL THE SPA WITH WATER BEFORE TURNING ON THE POWER.

Once your spa has been filled with water, turn it on and test all of the circuit breakers.

WIRING DIAGRAM



SPEC SHEET



ELECTRICAL WIRING INSTRUCTIONS

IMPORTANT NOTICE: The electrical wiring of this spa must meet the requirements of the National Electrical Code (NEC) and any applicable state or local codes. The electrical circuit must be installed by a qualified electrician and approved by a local building/electrical inspection authority.

- 1. This spa must be permanently connected (hard-wired) to the power supply. No plug-in connections or extension cords are to be used in conjunction with the operation of this spa. Supplying power to the 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 this spa must be a dedicated circuit with no other appliances or lights sharing the power provided by the circuit.
- 3. To determine the current and voltage and wire size required, refer to section "Power Requirements" (Pages 3,4).

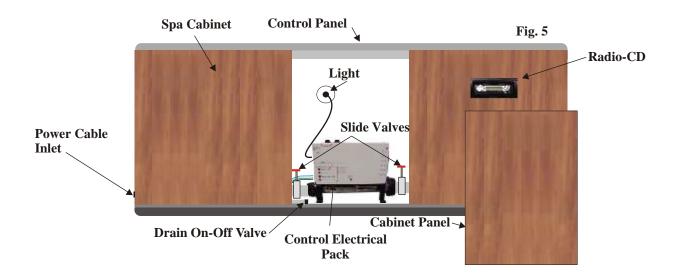
Wire size must be appropriate per NEC and/or local codes.

We recommend type THHN wire

All wiring must be copper to ensure proper connections. Do not use aluminum wire.

When using wire larger than #6 (10mm2), add a junction box near the spa and reduce to short lengths of #6 (10mm2) wire to connect to spa.

- 4. The electrical supply for this product must include a suitably rated circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electrical Code., ANSI/NFPA 70. The disconnecting means shall be accessible, located within sight from spa equipment, and shall be located at least 5 ft (1.52m) horizontally from the inside walls of the spa.
- 5. The electrical circuit supplied for the spa must include a suitable ground fault circuit interrupter (GFCI) as required by NEC Article 680-42.
- 6. To gain access to the spa's power terminal block, remove the screws and cabinet panel on the side of the spa under control panel, then remove the two screws from the control pack.
- 7. A cable inlet (grommet) is located on the left side of the spa cabinet approximately 4" 6" from the from of the spa. Feed the power supply cable through a cable inlet and conduit on the left side of the control box.
- 8. Connect wires, color to color, on terminal block. **TIGHTEN SECURELY!** All wires must be hooked up securely or damage could result.
- 9. Secure the control box door panel with 2 screws, then re-install the cabinet panel under the control panel. Electrical installation is now completed.



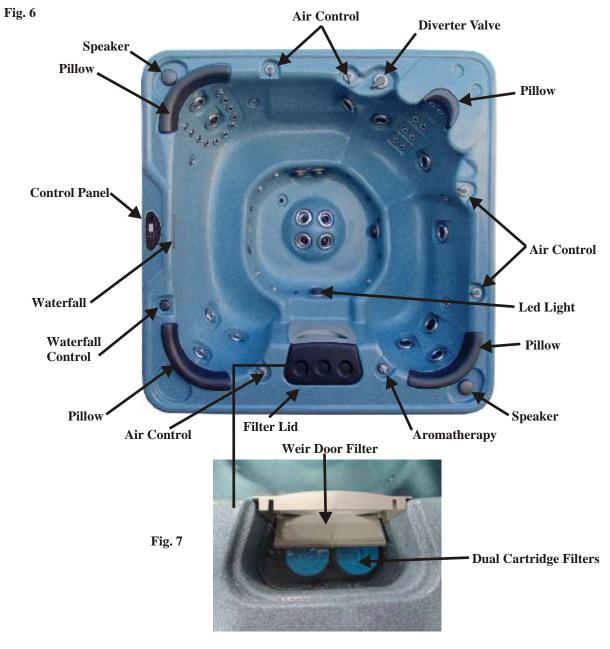
START-UP INSTRUCTIONS

FILLING THE SPA

Clear all debris from inside the spa. At the factory your spa shell was cleaned and polished, but you may want to treat it with a specially formulated spa cleaner available by phone 1-800-749-8003. Make sure the spa has been installed correctly, including electrical wiring connections as specified in the wiring diagram, and the spa is level.

Do Not Over Fill. Never fill your spa with water from a water softener, or use hot water while filling. Ensure that your spa drain is shut off. Remove your filter lid. Place your garden hose into the filter housing and begin filling with clean water. Continue filling spa until the water level is 2 inches above the highest water jet. Remember every person entering a spa displaces a given volume of water, so **adjust water level to number of people who will be entering spa.** If your water is extremely "hard", it is preferable to fill halfway with hard water and the rest of the way with softened water. Or, you may fill the entire spa with hard water if you use a special water additive available by phone 1-800-749-8003.

Always refill spa through one filter housing to purge any trapped air from pump intakes. Failure to do so may cause air to be trapped in the circulation pumps intake creating an air lock, preventing pump from circulating water. Ensure both slide valves are fully open see figure 5 (page 6). Make sure filter cartridge is clean before installing. See "Cleaning the Filter" for specific cleaning procedures (see page 13).



START-UP INSTRUCTIONS

Safety Check

Open the cabinet access door panel and check all pump unions to make sure they are hand tight. Loosening can occur during shipping and handling. Check Slide valves and insure both are open fully, otherwise the circulation pump will not function. Fig. 5.

Turn on Power

Turn on power to spa at the circuit breaker box. The heater, circulation pump, and ozone generator will automatically activate.

Initiating Water Circulation

Depress JETS 1 topside pad on the control panel once to activate pump #1 in low speed and initiate water flow to certain jets, depress pad second time and initiate maximum water flow.

Depress Jets 2 and Blower Pads on the control panel to activate pumps 2 and blower.

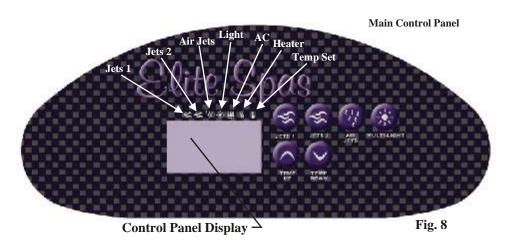
Add Start-Up Chemicals

Add the spa water chemicals as recommended. Refer to Water Quality and Maintenance.

Place Cover On Spa

Keep the insulating cover in place anytime the spa is not in use. It will reduce the time required for heating, thereby minimizing operating cost. The time required for initial heat-up will vary depending on the starting water temperature and the capacity of your spa. Your spa heats about 3 to 5 degrees per hour. Lock cover with safety locks when not in use.

WARNING: RISK OF INJURY. Always check water temperature carefully before entering spa.



Control Panel

Elite Spas are equipped with a main control panel, located on the side of the spa as show above (Figure 8). The main control panel controls all of the spa functions, and uses indicator lights and an integrated LED display to aid in determining the status of the spa Default System Operations: When power is applied, or there is a temporary lost of power, the system will initiate its default programming. The 24 hour circulation pump and ozone generator will automatically activate. The anti stagnation cycle will begin 24-hous after the system has been powered up. The anti stagnation cycle will be active for 2-hours, and will repeat every 12-hours The temperature will be maintained at 100 degrees F. On some spas default setting can be different. All these are user programmable.

Pump 1 Jets 1: Press this key once to turn Pump 1 onto Low speed, press this key a second time to turn Jets 1 onto High speed, a third press will turn the pump off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Jets 1 Icon will appear while the pump is running in High speed and flash while it is in Low speed. If the AC icon appears, an anti stagnation cycle has begun and you will not be able to turn the pump off.

Pump 2 Jets 2: Press this key once to turn Jets 2 on. A second press will turn it off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Jets 2 Icon will appear while the pump is running in High speed.

START-UP INSTRUCTIONS

Air Jets Key. Press this key to turn blower on. A Second press will turn blower off. Blower will run for 20 minutes once you press the blower key unless you turn it off by pressing the blower key a second time. Blower can be used to cool the spa.

Light Key: Press this key to turn the light on. A Second press will turn the Light off. Spa Light is preprogrammed with assortment of lighting effects. When you turn Light off and turn on within 5 seconds it advances to the next effect. When you turn Light off the more than 5 seconds, it remembers that last effect you selected. The next time you turn on Light display same effect. The Light will automatically shut off after 2 hours. The Light Icon will appear while the light is on.

Temperature Set Keys: Press the Up Arrow key to increase the desired temperature. Press the Down Arrow key to decrease the temperature. The temperature can be adjusted in 1 degree F increments from 59 degree F to 104 degree F (5 degree C to 40 degree C). The new setting will remain on the display for 5 seconds as a confirmation. During this time the Set Point icon will be appear to let you know this is the desired and not the actual temperature. After 5 seconds the display will return to the current temperature reading. When the temperature drops to 1 degree F below the set temperature, the heater will be turned on until the temperature is 1 degree F above the set temperature. The heater icon will appear while the heater is on and flash when there is a call for heat and the heater has not yet been activated.

PROGRAMMING ANTI STAGNATION CYCLE

Your controls have been designed to provide best spa water quality, maximum convenience as well as economy of operation. A 24 hour circulation pump with ozone generator provide efficient, continuous spa water filtration, oxidation and sanitation. An anti stagnation system including both pumps and blower improve even more the spa water quality providing intensive water moving in spa, plumbing and air lines to prevent water stagnation. It is very important in cases the user seldom use the spa. The anti stagnation cycle (AC) consists of starting Jet 2, Air Jets for 1 minute to purge water and air lines. Then Jet 1 is turned on in low speed and will run for remainder of the AC. Low speed pump operation helps the water from becoming stagnant and improves filter skimming action to remove debris and suspensions from the water surface, minimizing the "bathtub ring" effect.

AC frequency setting. To set frequency press and hold Jets 1 Key for 5 seconds. Use the temperature keys to set AC frequency (1,2 or 3 times a day). To save the data press the Jets 1 Key within 5 seconds after adjustment. If the Jets 1 Key is pressed second time with in 5 seconds after adjustment the data will be saved and AC will start immediately. If the key is not pressed the data will be saved and AC will start 12 hours later. (Default setting is twice per day).

AC duration setting. To set duration press and hold Light Key for 5 seconds. Use the temperature keys to set AC duration.(60, 120,180,480 minutes). To save the data press the Light Key within 5 seconds after adjustment. If the Light key is pressed second time with 5 seconds after adjustment the data will saved and AC will start immediately. If the key is not pressed the data will save and AC will start 12 hours later. (Default setting is 120 minutes). On some spas, default setting can be different.

OPERATING INSTRUCTIONS

Setting the water temperature

The spa's thermostat provides optimum control of water temperature. The temperature setpoint can be adjusted from 59F(15C) to 104F(40C). To raise the set temperature press the Up button. To lower the set temperature, press the Down button. Set point will be displayed for 5 seconds. Default setting is 100F.

Activate Pumps, Blower

The Jets1, Jets2 button activates the functions of pump1(two speed) and Pump 2(single speed). By pressing Jets1 will activate pump 1 in low speed, the second press activates high speed, and third press shuts the pump off. The Jets2 button controls jets pump 2 which only operates in high speed. Both pumps have a twenty minute default when manually activated. The Air Jets button activates Air blower. Blower has twenty minute default when activated manually.

Light Button. The Light button activates the spa LED Light when pressed. The Light has a two hour default.

Selecting Desired Massage Action

Your spa is equipped to allow you to customize the massage action you desire. The diverter valve allows you to customize the massage action and performance by diverting water between various jets systems. Simply turn the diverter to divert water pressure to various jet groups as desired pressure

Adjusting Individual jet flow

The water flow to the individual jets in your spa can be increased or decreased by rotating the outside jetface.

OPERATING INSTRUCTIONS

Waterfall Feature

The waterfall feature allows you to independently control it for customized soothing effect. The Jets1 button activates the waterfall feature. Waterfall flow can be adjusted rotating on-off valve located near main control panel of spa.

Air Control

Certain jet systems have their own air control valve. Each control introduces air into the water lines that supply that specific jet group. Simply rotate Air control clockwise to close and rotate counterclockwise to open. To minimize heat loss, all air controls should be closed when the spa is not use.

Audio System

Spa equipped with audio system offer enhanced spa enjoyment. This model include a high quality AM/FM/CD stereo receiver with two high quality speakers for unsurpassed sound quality and long life.

Two speakers located on spa corners and designed for manual exposure and retraction. To expose each speaker for audio playback, simply press download on each enclosure to unlatch it's pop-up mechanism, then release. To retract each speaker before covering spa, gently press downward on each enclosure you will feel a slight "click", then release.

Caution: Never step or sit on speaker enclosure. Always retract speakers prior to covering spa.

For details see Stereo Receiver Operational Manual for Users.

Freeze Protection

The system is constantly monitoring the temperature of the water and ambient temperature. If inboard sensor registers an ambient temperature below 41F the systems "Smart Winter Mode" will activate. This mode once activated, will continue for minimum period 24 hours. The system will activate any pumps connected to the system. All pumps starting for one minute at various intervals based on the ambient temperature under the spa skirt.

During the "Smart Winter Mode" the AC indicator will flash while the pumps are running in this mode.

ERROR IDENTIFICATION



Three Flashing Dots with Pump Off

Pressure or Flow Switch Activated: If 3 flashing dots appear below the temperature display while there is no pump operating, turn the pump on. If the 3 flashing dots went away this indicates that the pressure or flow switch was activated although there was no water flow. (Contact manufacturer).



Three Flashing Dots with Pump On

Pressure or Flow Switch Not Activated: If 3 flashing dots appear below the temperature display while the pump(s) is operating, turn the pump(s) off. If the 3 flashing dots went away this indicates that the pressure or flow switch was not activated although there was water flow. Note: A dirty filter limiting the water flow will also cause this error message to appear. (Contact manufacturer).



If the display shows a constant 32 degree F or 125 degree F and this is not the actual temperature or the displayed temperature greatly differs from the actual spa water temperature, a problem with the water temperature sensor has occurred. (Contact manufacturer).



High Temperature

If 3 flashing dots appear in the spa side display and the system detected the water temperature in spa (temperature sensor located in dry well in the spa) 112F or higher the system will shut off the heater and all other outputs will be disabled until the water temperature drops below 110F.



If 3 flashing dots appear in the spa side display and High-Limit LED indicator is illuminated on the system circuit board, an overheat condition has been detected. It is not safe to enter the spa until the error has been corrected. The pumps, blower and other outputs will stay active. Power must be cycled off then back on for system to reset this error.

TROUBLESHOOTING

Nothing Operates

Main Breaker is Off - Set to On.

Sub-Panel Breaker Off - Set to On.

Equipment GFCI Off - Set to On.

Power switch in Off position - Set to On

Over or High Temperature Protection On - Refer to Error Identification (High Temperature)

System Fuse Indicator Illuminated

Replace system fuse

If power to electrical pack is OK (check L1 & L2 power using power test switch) - Replace circuit board or pack

No, Low Or Surging Water Flow

Air Lock in Plumbing System - "Bleed" the system.

Restricted Flow - Insure that the water slide valves are open and that suction fittings are not blocked by debris.

Dirty Filter - Clean or replace filters.

Low Water Level - Increase water level to recommended level.

No Circulation Pump

Water temperature is 4 degrees above set point - Remove spa cover. If the water temperature cools down 1 degree above set point the circulation pump resumes operation.

Circulation pump blue cord lighted and water temperature is ok. Replace circulation pump or circ. pump blue cord.

Circulation pump blue cord not lighted and water temperature is ok. Replace electrical pack.

No Pump 1

Pump 1 cord not plugged into receptacle - Plug pump 1 into red receptacle.

Pump 1 fuse indicator illuminated - Replace Pump 1 fuse and resume normal operation.

Pump 1 red plug not lighted - Replace Circuit board.

Pump 1 red plug lighted - Replace Pump 1 or Pump 1 cord.

No Pump 2

Pump 2 cord not plugged into receptacle - Plug pump 2 into pink receptacle.

Aux. fuse indicator illuminated - Replace Aux. fuse and resume normal operation.

Pump 2 pink plug not lighted - Replace Circuit board.

Pump 2 pink plug lighted - Replace Pump 2 or Pump 2 cord.

No Air Blower Operation

Blower cord not plugged into receptacle - Plug Blower into purple receptacle

Aux. fuse indicator illuminated - Replace Aux. fuse.

Blower purple plug not lit - Replace Circuit Board.

Blower purple plug lit - Replace blower or blower cord.

No Therapy Jet Operation

Jets Not Properly Adjusted - Adjust Jets properly.

Thermal Overload Tripping - Check for restricted flow of water.

Over or High Temperature error - Off-On power to reset.

Water Leaks

Spa Overfilled - Adjust water level.

Too Many People in the Spa - Adjust water level.

Drain-Valve Left Open - Close drain valve.

Couplings or Unions Loose - Tighten or contact your local dealer, or manufacturer.

 $Plumbing \ / \ Connections \ Leaking \ - \ Contact \ manufacturer.$

Water in Air Blower Plumbing - Contact manufacturer.

TROUBLESHOOTING

No Heat

Temperature Not Set Correctly - Adjust Set Point.

Over temperature error.- Off - On power to reset.

Current Limiting Jumper Is On - LC System (jumper 1 on CB is in right side pos on board.) Will not heat if High Speed or Blower is on. Contact manufacturer.

No Power - Reset breaker at service panel.

Low Water Flow - Clean or Replace filters(s).

Pressure switch is open - Replace pressure switch with correct setting 1.5 psi.

Low Water level - Add water to spa.

Over Heat

Temperature Sensor Not in Dry-Well - Place sensor in dry-well.

Temperature Set Too High - Adjust Set Point.

High Ambient Temperature - Remove spa cover.

GFCI Trips Occasionally

Lightning or Electrical Storm, Power Surge, Extremely Humid Conditions, or Radio Frequency Interference - Reset GFCI.

NOTE: GFCI must be properly grounded and bonded.

GFCI Trips Immediately

Defective Component - Contact a qualified service technician or manufacturer for assistance.

Spa Side Control Malfunction

Spa side control cord not plugged - Plug spa side control into system circuit board.

System fuse indicator illuminated - Replace System fuse or replace spa side control.

No Ozone (Ozone generator follows the circulation pump.)

Ozone generator yellow cord not lighted (Circ. Pump on) - Replace electrical pack.

Ozone generator is off and circulation pump is on. Yellow cord lighted - Replace ozone generator.

Spa side control display show a constant 32F or 125F - Check temperature sensor connection to board. If problem is not resolved replace the temperature sensor.

SPA CARE AND MAINTENANCE

Draining and Refilling Your spa

WARNING!

To prevent damage to spa's components, turn off power before draining it. Do not turn the power back on until your spa has been refilled.

To gain access to the spa drain valve, remove the cabinet panel on the side of the spa under the control panel. Fig. 5

Select a safe suitable drainage capable of safely assimilating 325Gallons of water which may contain both unsanitary contaminants and chemical residue that could cause harm to plants and grass.

Locate the drain valve on left side of control box.

Remove the front cap to expose underlying male hose threads.

Attach garden hose to exposed threads.

Gently rotate valve body 1/3 turn counterclockwise to unlock drain valve

Pull the valve body outward to open drain.

After spa drains, perform all steps in reverse order to close drain prior to refilling spa. After refilling spa turn on power to spa and follow the steps under "Start Up Instruction". Always fill your spa through both filter wall fittings.

Filter cleaning and Cartridge Replacement. Turn power off before cleaning filter cartridges.

The Filter cartridges should be checked periodically. In normal use, check them at least once a month. Keep them clean. An obstructed filter cartridges reduce water quality and inhibit proper system performance.

Removable filter cartridges are located inside the filter well. To remove them lift the filter lid, then rotate each filter cartridge counterclockwise to unthread from mating wall fitting.

Remove both cartridges from filter well.

Use a garden hose with straight flow nozzle to wash down the filter element. Work from the top down, holding the nozzle at 45 degree angle, and wash all the pleats with emphasis between pleats.

Rinse until all dirt and debris is gone.

Replacement cartridges may be purchased by phone 1-800-749-8003. Part # 6136.



Care Of The Exterior

Spa Shell

Your spa shell is made of acrylic. Stains and dirt generally will not adhere to the surface. Using a soft rag or a nylon scrubber should easily remove most dirt. Most household chemicals are harmful to your spa's shell. See your dealer for the best product to use. The only products which have passed the manufacturer's test are Soft Towel and Windex. Sodium bicarbonate (baking soda) can also be used for minor surface cleaning. Always thoroughly rinse off any spa shell cleaning agent with fresh water.

NOTES: Iron and copper in the water can stain the spa shell if allowed to go unchecked. Ask your Hydro Spa dealer about a stain and scale inhibitor to use if your spa water has a high concentration of dissolved minerals.

The use of alcohol or any household cleaners other than those listed to clean the spa shell surface is NOT recommended. **DO NOT** use any cleaning products containing abrasives or solvents since they may damage the shell surface. **NEVER USE HARSH CHEMICALS!** Damage to the shell by the use of harsh chemicals is not covered under the warranty.

IMPORTANT: Some surface cleaners contain eye and skin irritants. Keep all cleaners out of the reach of children and use care when applying.

Maintenance Free Cabinet

The Elite Spa consists of a rigid polymer that combines the durability of plastic with the beauty of a redwood looking cabinet. The cabinet will not crack, peel, blister or delaminate. Cleaning consists of simply spraying the cabinet with a mild soap and water solution to remove any stains and residue.

Pillow care

Remove and clean the headrest pillows as needed with soapy water using a cloth or soft-bristle brush. Always remove the pillows when adding chemical shock treatment to the spa water. The pillows can be returned to the spa when sanitizer reading drops below 5ppm. Never attempt to remove the pillows by pulling on them. Grasp pillow with finger tips and gently pry outward from spa shell.

SPA CARE AND MAINTENANCE

Care Of Spa Cover

To clean and condition the vinyl cover:

- Remove the cover from the spa and gently lean it up against a wall or fence.
- Using a garden hose, spray the cover to loosen and rinse away any dirt or debris.
- Using a sponge and/or a soft bristle brush, and using a very mild soap solution (one teaspoon dishwashing liquid with two gallons of water), or baking soda (sodium bicarbonate), scrub the vinyl top in a circular motion. Do not let the vinyl dry with a soap film on it before it can be rinsed clean.
- Scrub the cover's perimeter and side flaps. Rinse clean with water.
- Rinse off the underside of the cover with water only (use no soap), and wipe it clean with a dry rag.
- To condition the cover after cleaning, apply a thin film of vinyl cleaner to the surface and buff to a high luster.

Important reminders:

- DO NOT walk or stand on top of cover (unless you own a "walk-on-cover".
- DO remove snow buildup to avoid breakage of the foam core from the additional weight of the snow.
- DO lock cover locking straps to secure the cover when the spa is not in use.
- DO NOT drag or lift the spa cover using either of the flaps, or the cover lock straps.

Vacation Care Of Spa

Following these instructions to ensure that the water quality of your spa is maintained:

For Short Periods (3 to 5 days)

Adjust the pH Sanitize the water Lock cover for safety

For Long Periods (5 to 14 days)

Set temperature to its lowest level approximate water temperature of 80°F. Adjust the pH Sanitize the water Lock cover for safety

Return Procedures

Sanitize the water following shock procedures Return water temperature to original setting Insure chlorine level had dropped below 5.0 ppm

NOTE: If you plan on not using your spa for periods exceeding 14 days, you may ask a family member or neighbor to assist with your spa maintenance, and if not available you will need to drain or winterize spa.

Winterizing Your Spa

During the cold weather you may not wish to use your spa outside. In this case you may move it to a heated area, or leave it until the weather warms up.

WARNING: Allowing your spa water to freeze will cause severe damage to the spa shell, equipment, and plumbing and **WILL VOID WARRANTY.**

The following steps should protect your spa from freezing:

- Disconnect the spa from the power supply.
- Remove the screws holding your spa excess panel door.
- Open the valve, open the pumps plugs, and the spa will drain by gravity flow.
- Remove the filter cartridge, then clean and store in a dry place.
- Attach a wet/dry shop vac (capable of blowing air as well as vacuuming) into the filter housing.
- Turn blower on and allow it to blow out any water remaining in the plumbing lines. (Should take no more than 5 minutes).
- Reinstall the filter housing.
- Use the shop vac to remove water inside spa blown through jets.
- Use a shop vac and clean towel and remove any remaining water from bottom of spa until dry.
- Leave the drain open.
- Close the spa cover and fasten with tie down safety locks.

Water Quality In Your Spa

The quality of the water in your spa is important and must be kept clean. Your program will vary depending on your water's mineral content, and how often you use your spa, and the amount of people using it.

Here are our suggested step-by-step procedures:

General Information - The three fundamental areas of water maintenance.

Water sanitation is the owners responsibility of maintaining clean quality water in your spa, and is achieved through the regular and periodic (daily), if necessary addition of an approved sanitizer. The sanitizer will chemically control the bacteria and viruses present in the fill water or introduced during the use of the spa. Bacteria and viruses can grow quickly in undersanitized spa water.

The water's chemical balance and pH control are also your responsibility. You will have to add chemicals to maintain proper levels of Total Alkalinity (TA), Calcium Hardness (CH) and pH. Proper water balance and pH control will minimize scale buildup and corrosion of metals, extend the life of the spa, and allow the sanitizer to work at maximum efficiency.

Methods For Testing Spa Water

Accurate water testing and analysis are an important part of effectively maintaining your spa water. You must have the ability to test for:

- Total Alkalinity (TA)
- nH
- Calcium Hardness (CH)
- Sanitizer

Two types of testing methods are recognized and recommended:

- Reagent Test Kit is a method which provides a high level of accuracy. They come in either liquid or tablet form.
- Test Strips are a convenient testing method used by many spa owners. Keep in mind that test strips are susceptible to heat and moisture.

Basic Chemical Safety

When using chemicals, always read the labels carefully and follow directions. Though chemicals protect you and your spa when used correctly, they can be hazardous in concentrated form. Observe the following guidelines:

- Allow only a responsible person to handle spa chemicals KEEP OUT OF THE REACH OF CHILDREN.
- Accurately measure the exact quantities specified, never more. Do not overdose your spa.
- Handle all containers with care. Store in a cool, dry well ventilated place.
- Always keep chemical containers closed when not in use. Replace caps on their proper containers.
- Don't inhale fumes, or allow chemicals to come in contact with your eyes, nose, or mouth. Wash your hands immediately afer each use.
- Follow the emergency advice on the product label in case of accidental contact, or if the chemical is swallowed. Call a doctor or the local Poison Control Center. If a doctor is needed, take the product container along with you so that the substance can be identified.
- Don't let chemicals get on surrounding surfaces or landscaping. Rinse off with fresh water if spilled.
- Never smoke around chemicals. Some of the fumes can be highly flammable.
- Don't store chemicals in the spa equipment compartment.

Adding Spa Chemicals:

- Fold back the spa cover. Carefully remove and set aside the filter lid.
- Push the **JETS1** button to turn on the pump 1 to provide high water flow.
- Carefully measure the recommended amount of chemical and slowly pour it into the filter compartment. Use care not to splash chemicals on your hands, eyes, or on the spa shell surface or cabinet.
- Replace filter lid and run spa for 10 minutes on high speed. Re-install spa cover.

IMPORTANT: Super Cholorination/Non-Chlorine Shock Treatment - **NOTE:** After administering a super chlorination treatment or non-chlorine shock to your spa, leave the cover open for a minimum of 20 minutes to allow the oxidizer gas to vent. A high concentration of trapped oxidizer gas which may exist as a result of the shock treatment (not daily sanitation) may eventually cause discoloration or vinyl degradation to the bottom of the cover. This type of damage is considered chemical abuse and is not covered under the terms of the limited warranty of the spa cover.

Balancing Total Alkalinity (TA)

- The recommended Total Alkalinity (TA) for your spa water is 125-150 ppm.
- Total Alkalinity is measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is referred to as the water's "pH buffer". It's a measure of the ability of the water to resist changes in pH level.
- If the TA is too low, the pH level will fluctuate widely from high to low. Fluctuations in pH can cause corrosion or scaling of spa components. Low TA can be corrected by adding pH/Alkalinity UP (sodium hydrogen carbonate).
- If the TA is too high, the pH level will tend to be high and may be difficult to bring down. It can be lowered by adding pH/Alkalinity down (sodium bisulfate).
- Once the TA is balanced, it normally remains stable, although the addition of more water with a high or low alkalinity will raise or lower the TA reading of the water.
- When the Total Alkalinity is within the recommended range, proceed.

Balancing Calcium Hardness (CH)

- The recommended Calcium Hardness (CH) level for your spa is 150-200ppm.
- Calcium Hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the corrosive nature of the spa's water. That's why calcium-low water (commonly know as "soft" water) is not recommended. It is very corrosive to the equipment, and can cause staining of the spa shell. If the calcium level is too low, we recommend using Calcium Increaser to bring the calcium hardness level to within the recommended range.
- If the CH is too high (commonly know as "hard" water), formation of scale on the spa's shell surface and equipment can result. CH can be decreased by dilution a mixture of 75% hard and 25% soft water will be a good starting point. If soft water is not available, or practical for you, a stain and scale control such as Scale Defense should be added to the spa water, according to instructions on its label.
- Once the CH is balanced, it normally remains stable, although the addition of more water with a high or low calcium content will raise or lower the CH reading of the water.
- When the Calcium Hardness is within the recommended range, proceed.

Balancing The pH

- The recommended pH level for your spa water is 7.4-7.6.
- The pH level is the measure of acidity and alkalinity. Values above 7 are alkaline; those below 7 are acidic.

Maintaining the proper pH level is extremely important:

- Optimizing the effectiveness of the sanitizer.
- Maintaining water that is comfortable for the user.
- Preventing equipment deterioration.

If the spa water's pH level is too low, the following may result:

- The sanitizer will dissipate rapidly.
- The water may become irritating to spa users.
- The spa's equipment may corrode.

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

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

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

If the pH is too high, it can be decreased by adding pH/Alkalinity Down (Sodium bisulfate) to the spa water.

NOTE: After adding pH/Alkalinity Up (sodium hydrogen carbonate) or pH/Alkalinity Down (sodium bisulfate), wait at least two hours before testing the water for pH. Measurements taken too soon may not be accurate.

- It is important to check the pH on a regular basis. The pH will be affected by the bather load, the addition of new water, the addition of various chemicals, and the type of sanitizer used.
- When the pH is within the recommended range, proceed.

Maintaining Sanitizer Level

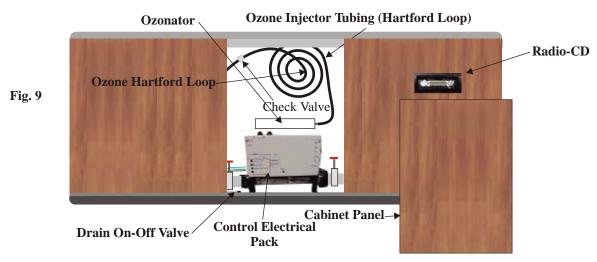
- Sanitizer is extremely important for killing algae, bacteria and viruses, and preventing unwanted organisms from growing in the spa. At the same time, you don't want too high a sanitizer level, or it can irritate your skin, lungs, and eyes.
- Always maintain the sanitizer level in your spa at the recommended level for each type of sanitizer.

Ozone

Hydro Spa's Ozonation System drastically reduces the use of chemicals in the water. This also aids in maintenance requiring less attention from harsh chemicals and less frequency with which they are used.

Replacement Of Ozone Tubing and Ozonator

Call your manufucture to provide you with maintenance service if replacement of ozonator or tubing is required. Remove door panel screws and set door panel aside. The Ozone generator is located above the Control Electrical Equipment Pack shown below or in area. The ozonator plugs into the Control Electrical Equipment Pack. Tubing is mounted above the ozonator and has a Harford Loop as shown below.



Water Terminology

Bromamines: Compounds formed when bromine combines with nitrogen from body oils, perspiration, etc. Unlike chloramines, bromamines have no pungent odor, and are effective sanitizers.

Bromine: A halogen sanitizer (in the same chemical family as chlorine). Bromine is commonly used in stick, tablet, or granular form. **Calcium Hardness:** The amount of dissolved calcium in the spa water. This should be approximately 150-220 ppm. High levels of calcium can cause cloudy water and scaling. Low levels can cause harm to the spa equipment.

Chloramines: Compounds formed when chlorine combines with nitrogen from body oils, urine, perspiration, etc. Chloramines can cause eye irritation as well as having a strong odor. Unlike bromamines, chloramines are weaker, slower sanitizers.

Chlorine: An efficient sanitizing chemical for spas.

Chlorine (or Bromine) Residual: The amount of chlorine or bromine remaining after chlorine or bromine demand has been satisfied. The residual is, therefore, the amount of sanitizer which is chemically available to kill bacteria, viruses and algae.

Corrosion: The gradual wearing away of metal spa parts, usually caused by chemical action. Generally, corrosion is caused by low pH or by water with levels of TA, CH, pH or sanitizer which are outside the recommended ranges.

DPD: The preferred reagent used in test kits to measure the Free Available Chlorine.

Halogen: Any one of these five elements: fluorine, chlorine, bromine, iodine, and astatine.

MPS: Monopersulfate is the non-chlorine oxidizer used with the purification system.

Nitric Acid: The formulation of nitric acid, a highly corrosive chemical, is a byproduct of the ozone generating process. Nitric acid is produced in very small quantities and is readily dissolved in the water stream with ozone.

Oxidizer: The use of an oxidizing chemical is to prevent the buildup of contaminants, maximize sanitizer efficiency, minimize combined chlorine and improve water clarity.

Ozone: Ozone is a powerful oxidizing agent which is produced in nature and artificially by man. Ozone forms no byproducts of chloramines (ozone actually oxidizes chloramines) and will not alter the water's pH.

Pathogen: A microorganism such as bacterium that cause disease.

pH: The measure of the spa water's acidity and alkalinity. The recommended pH for the spa water is 7.4 to 7.6. Below 7.0 (considered neutral), the spa water is too acidic and can damage the heating system. Above 7.8, the water is too alkaline and can result in cloudy water, and scale formation on the shell and heater.

Reagent: A chemical material in liquid, powder, or tablet form for use in chemical testing.

Sanitizer: Sanitizers are added and maintained at recommended residuals to protect bathers against pathogenic organisms which can cause disease and infection in spa water.

Scale: Rough calcium-bearing deposits that can coat spa surfaces, heaters, plumbing lines and clog filters. Generally, scalling is caused by mineral content combined with high pH. Additionally, scale forms more readily at higher water temperatures.

SPA WATER M	IAINTENANCE & TROU	JBLESHOOTING
Problem	Probable Causes	Solutions
Cloudy Water	Dirty Filter/s Excess oils / organic matter Improper sanitization Suspended particles / organic matter Overused or old water	Clean filter or replace. Shock spa with sanitizer. Add sanitizer. Adjust pH and/or alkalinity Run jet pump(s) and clean filter. Drain and refill spa.
Water Odor	Excessive organics in water Improper sanitization Low pH	Shock spa with sanitizer. Add sanitizer. Adjust pH to recommended range.
Chlorine Odor	Chloramine level too high Low pH	Shock spa with sanitizer Adjust pH to recommended range.
Musty Odor	Bacteria or algae growth	Shock spa with sanitizer - if problem is visible or persistent, drain, clean and refill spa.
Organic buildup / scum ring around spa	Build-up of oils and dirt	Wipe off scum with clean rag - if severe, drain the spa, use a spa surface and tile cleaner to remove the scum, and refill spa.
Algae Growth	High pH Low sanitizer level	Shock spa with sanitizer and adjust pH Shock spa with sanitizer and maintain sanitizer level.
Eye Irritation	Low pH Low sanitizer level	Adjust pH. Shock spa with sanitizer and maintain sanitizer level.
Skin Irritation / Rash	Unsanitary water Free chlorine level above 5 ppm	Shock spa with sanitizer and maintain sanitizer level. Allow free chlorine level to drop below 5 ppm.
Stains	Total alkalinity and/or pH too low High iron or copper in source water	Adjust total alkalinity and/or pH. Use a metal deposit inhibitor.
Scale	High calcium content in water - total alkalinity and pH too high	

SPA CARE AND MAINTENANCE RECORD

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WARRANTY

Lifetime Spa Structural Warranty

Elite Spas warrants the spa shell structure against the loss of water though the fiberglass laminate of the shell caused by defects in materials and workmanship for as long as the original purchaser owns the spa. Contact manufacturer if you have any questions concerning warranty issues.

10Year - Elite Spas Surface Warranty

Elite Spas warrants the interior acrylic spa surface against blisters, cracks, or delaminating resulting from a defect in the acrylic surface material for a period of 10 years from the date of purchase, based on the following formula: Retail cost divided by months covered (120), multiplied by months owned = replacement cost.

Lifetime Manifold Plumbing Warranty

Elite Spas warrants the plumbing manifolds, fittings, and parts to be free of defects in materials or workmanship for as long as the spa is owned by the original purchaser.

Electrical Equipment Warranty

Elite Spas warrants electrical equipment and components to be free of defects in materials and workmanship for a period of 2 year from the date of purchase.

Warranty Performance

In the event of a defect covered under the terms of this Limited Warranty, notify manufacturer. Use all reasonable means to protect the spa from further damage. A service representative will repair the spa subject to the terms and conditions contained in this Limited Warranty. The service representative may assess reasonable travel charges, during inspection or repairs. If we determine that repairs are not feasible due to functional defect, we reserve the right to provide a replacement part or spa in lieu of repair. We will replace with a part of value equal to the original purchase. In such event, reasonable costs for removal of the defective spa and delivery and installation of the replacement spa will be the responsibility of the spa owner. We reserve the right to an on-site inspection by an authorized service representative.

Limitations and Exclusions

This limited warranty applies to spas sold after January 1, 2005. This limited warranty applies only to the Original Purchaser and terminates with any transfer of ownership. This limited warranty does not apply to a spa used for any commercial, rental, club purposes, or for any spa used outside of the United States and Canada. The purchaser must establish the date of purchase by dated sales invoice or delivery receipt.

This limited warranty does not cover damage resulting from abuse, misuse, or neglect including any installation, operation, maintenance, or use of spa other than in accordance with the Owner's Manual of the spa. Damage caused by operation of the spa at water temperatures outside the range of 32 degrees F. and 120 degrees F., damage caused by dirty, clogged, or calcified filter cartridges, damage to the spa surface caused by improper use of chemicals or cleaning agents, allowing undissolved spa sanitizing chemicals to lie on the surface, damage caused by improper pH balance or other improper water chemistry, damaged caused by failure to provide even and sufficient support for the spa, are considered abuses and may invalidate this Limited Warranty. Damage caused by repairs or alterations performed by anyone other than an authorized service representative is not covered. Failure caused by accidents, acts of God, nonstructural normal wear and tear, cosmetic blemishes and other causes beyond our control is excluded.

The warranty is in lieu of all other warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. In no event shall manufacturer be liable for incidental or consequential damages.

Disclaimers

The spa owner is required to provide adequate access to the spa for any repair or inspection. Manufacturer shall not be liable for loss of use of the Spa or other incidental or consequential costs, expenses or damages, which my include but are not limited to water damage, or the removal of a permanent deck or other custom fixture. Under no circumstances shall we, or any of our representatives be held liable for injury to any person or damage to any property, however arising. This warranty gives you specific legal rights and you may have other rights. No service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner what so ever.

IMPORTANT WARRANTY INFORMATION

The Warranty Card Must Be Filled Out Completely and Mailed Within Ten (10) Days of Purchase To Validate Warranty.

S. Vito Shac	y signing this warranty card you have read & understand the owners manual in its entirety.		MODEL:	(8 Digit Numbe	
STORE PURCHASED FROM ADDRESS:		۲	CUSTOMER NAME: CUSTOMER ADDRESS:		
CITY:		E PR	CITY:	STATE:	Zip:
STATE:		PLEAS	CUSTOMER PHONE NO: () -	
PHONE NUMBER: () -		_	E-MAIL ADDRESS:		
DATE OF PURCHASE:			SIGNATURE:		DATE:

Elite Spas

Platinum

1 - 8 0 0 - 7 4 9 - 8 0 0 3 www.EliteSpas.com

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