

Spa Owner's Manual

SPERTUB

NOTE: Important Safety Instructions. Please read and follow all instructions before installing, operating or enjoying your spa.

Please refer to the operational video that is supplied with spa.

Save these instructions for future reference.







A BRIEF HISTORY OF SPAS

During the 5th century B.C., the mineral springs in Greece and the Aegean Islands served as healing clinics. At one particular clinic on the Island of Cos, a Greek physician Hypocrites practiced medicine while writing extensively on hydrotherapy.

In the province of Leige, Belgium mineral springs were favored for centuries by notables and royalty, including Russian Czar Peter the Great and German Kaiser William II. Mineral springs in those days were very similar to today's spas in that both were used for the apeutic and recreation purposes.

The ancient Romans, after a day of conquering the world, retreated to the pleasures of their mineral springs. In fact, many well-preserved mineral springs built by the ancient Romans still exist today in places as far off as Bath, England and Tiberias, Israel. After the fall of the Roman Empire in the 5th century A.D., the number of mineral springs decreased. It was not until the renaissance, mysteriously enough that they again became popular. This raises an interesting question: Does the use of mineral springs or spas result in great thinking, or do great thinkers resort to the use of mineral springs or spas?

Your new SPORTUB™ is the modern machine for today's great thinkers and athletes of any age. The spa blends many advanced features to help you enjoy the complete benefits of heated, moving and filtered water for therapy and relaxation. Baja Products, Ltd. is the originator of the acrylic spa, and has built world class products since 1969. We wish you years of enjoyment and relaxation with your new Baja spa. Please take a few minutes to read the valuable safety instructions and operating features described in this manual.

DIRECTORY

SAFETY INSTRUCTIONSPAGE	HE COL
INSTALLATION GUIDELINESPAGE	2
ELECTRICAL – GENERAL INFORMATIONPAGE	4
120 VOLT INSTALLATION PAGE	5
240 VOLT INSTALLATION	5
GROUND FAULT INTERRUPTERPAGE	5
120 VOLT OZONE GENERATORPAGE	6
INITIAL START UP	6
EQUIPMENT FEATURES	0
SPA CONTROLLER FUNCTIONSPAGE	8
EQUIPMENT MODULE	8
WINTER & SUMMER PROGRAM MODESPAGE	
WARM WEATHER CONDITIONS PAGE	10
INSTALLING YOUR PURIFICATION DISPENSERPAGE	10
JET & FILTER OPERATIONPAGE	10
CHROMO-THERAPY LED LIGHTING SHOWSPAGE	11
REGULAR SPA MAINTENANCE	11
SPA MAINTENANCE SCHEDULEPAGE	12
CLEANING THE ACRYLIC SURFACE	12
SPA CABINET INSTRUCTIONSPAGE	12
CABINET DRAIN VALVE INSTALLATIONPAGE	13
GENERAL TROUBLESHOOTINGPAGE	13
CONTROLLER ERROR INDICATORSPAGE	14
	15
Date Model#	

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

READ AND FOLLOW ALL INSTRUCTIONS.

- WARNING To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3. A wire connector is provided on this unit to connect a minimum No. 8 AWG (8.4mm²) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe or conduit within 5 feet (1.5 m) of the unit.
- 4. For Cord-Connected (Convertible) Units:
 - a) Replace damaged cord immediately.
 - b) Do not bury cord.
 - c) Connect to a grounded, grounding-type receptacle only.
- 5. If the supplied cord and plug are not used, the electrical supply for this product must include a suitably rated switch or 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 must be readily accessible to the spa occupant but installed at least 5 feet (1.5 m) from spa water.
- 6. **DANGER Risk of Accidental Drowning.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.
- 7. **DANGER Risk of Injury.** The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible.
 - Never operate spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
- 8. **DANGER Risk of Electric Shock.** Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet 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 provided for this purpose.
- 9. **DANGER Risk of Electric Shock.** Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a spa.
- 10. WARNING To avoid injury, exercise caution when entering or exiting the spa or hot tub. Wet surfaces can be slippery.
- 11. WARNING Do not use a spa or hot tub immediately following strenuous exercise.
- 12. WARNING Prolonged immersion in spa or hot tub may be injurious to your health.
- 13. **CAUTION** Maintain water chemistry in accordance with manufacturer's instructions.
- Do not use the spa alone.
- 15. People using medications and/or having an adverse medical history, should consult a physician before using a spa or hot tub.
- 16. People with infectious disease, infections, skin sores or open wounds should not use a spa or hot tub.
- 17. It is recommended that people shower before and after using the spa.
- 18. Disconnect all electrical power before attempting any kind of service to the electrical module.
- 19. Always use unbreakable containers around the spa. Never use glass.
- 20. Never walk, climb, play or jump on the insulated cover of your spa. Never use the spa unless the cover has been completely removed. Do not rely on the cover as a safety cover for children. Children must be supervised when they are in or around the spa.

IMPORTANT SAFETY INSTRUCTIONS, CONT'D

- 21. A fence around your spa with a self-closing and self-latching gate can be the best protection against unauthorized use. If your spa is indoors, lock the door to the room to keep out unauthorized users.
- 22. CAUTION Adequate drainage must be provided if the equipment is to be installed in a pit. Install to provide drainage of compartment with electrical components.
- 23. For units for use in other than single-family dwellings, a clearly labeled emergency switch shall be provided as part of the installation. The switch shall be readily accessible to the occupants and shall be installed at least 5 feet (1.52m) away, adjacent to, and within sight of the unit.

24. WARNING - To reduce the risk of injury:

- a) 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.
- 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 water temperatures to 38°C (100°F). Pregnant or possibly pregnant women should consult a physician before using a spa or hot tub.
- c) Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.
- d) The use of alcohol, drugs, or medication before or during spa use 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, circulatory 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 heart rate, blood pressure, and circulation.
- g) Leave the spa immediately if nausea, dizziness or headaches occur. Immediately cool the body by taking a cool shower or apply cold towels or ice packs. Seek medical attention if the symptoms persist.
- 25. 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 37°C (98.6°F). The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness and fainting.

THE EFFECTS OF HYPERTHERMIA INCLUDE:

- (1) Failure to perceive heat.
- (2) Failure to recognize the need to exit spa.
- (3) Unawareness of impending hazard,
- (4) Fetal damage in pregnant women,
- (5) Physical inability to exit spa or hot tub, and
- (6) Unconsciousness resulting in the danger of drowning.

WARNING - The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.

- 26. Inform all occasional users of these precautions.
- 27. For units with an Integral GFCI:

WARNING - This product is provided with a ground-fault circuit-interupter at the end of the cord. The GFCI must be tested before each use with the product operating, push the test button on the GFCI. The product should not operate. Push the reset button on the GFCI and the product should operate normally. If the product fails to operate in this manner, there is a ground current flowing indicating the possibility of an electrial shock. Disconnect the power until the fault has been identified and corrected.

28. SAVE THESE INSTRUCTIONS.

VIRGINIA GRAMME BAKER APPROVED SUCTIONS - In accordance with VGB Compliance the suction fittings installed in the Baja Spa have replacement dates on them. Please refer to the date codes on these suction fittings.

INSTALLATION GUIDELINES

- 1. Locate your spa on a solid, level surface that is structurally strong enough to support its filled weight.
- Installations on wooden decks or balconies should be checked to insure that the floor can support the weight of the full spa and the persons using it.
- 3. A reinforced poured concrete slab (min. 4" thick) is recommended. However, wood decking is also acceptable, provided it is constructed so that it meets the requirements outlined above.
- 4. The spa must be installed in such a manner as to provide drainage away from the spa.
- Spas which will be installed into a floor or wood deck must be installed to permit access to the equipment for servicing.
- Do not install the spa under any electrical wires.
- In selecting the ideal outdoor location for your spa, we suggest you take into consideration the following:
 - A) The view you'll have from the spa.
 - B) The proximity to your home for change and/or shelter (this is very important in cold weather).
 - C) A sheltered environment, providing protection from wind and weather if needed.
 - D) The overall enhancement of your yard or room.
 - E) Do not place the spa under a non-guttered roof overhang.
 - F) Indoor installations require provisions for proper ventilation.
 - G) Check local codes for building and fence requirements.
 - H) Water is carried and splashed out by the user, be sure the spa is not located in an area or on a surface that may be damaged by water. (Examples: Carpeting, 2nd floor in house, etc.)
 - Indoor spas should be installed in rooms constructed of materials that will not be damaged by high humidity.

ELECTRICAL

GENERAL INFORMATION

All electrical connections must be accomplished by a qualified electrician in accordance with the National Electrical Code and in accordance with any local codes in effect at the time of installation. All electrical connections must be made in accordance with the wiring information in this manual or on the back of the field wiring access panel of the Equipment Module.

Connections must be made using copper conductors only. Field provided conductors, circuit breakers or fuses must be sized to accommodate the total amperage load of the Equipment Module.

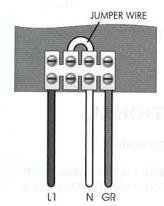
WARNING: Improper electrical connections or conductor sizing may cause the Equipment Module to operate improperly, create the potential for an electrical hazard and may void the warranty.

CAUTION: Use only approved pressure type wire splicing or connectors suitable for the size and type of wiring used.

The electrical supply for the product must include a suitably rated switch or 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 must be within sight and readily accessible to the user of the spa. It must be installed at least 5 feet (1.5 m) from the spa.

Connect a NO. 8 AWG (8.4mm) solid copper bonding conductor between the Equipment Module bonding lug and all other electrical equipment and exposed metal in the vicinity as may be needed to comply with local regulations.

A PERMANENTLY CONNECTED SPA is one that is complete with pumps, heater, lighting fixtures and spa side controls.



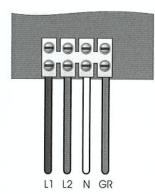
120 VOLT INSTALLATION

The provided power supply cord must be connected to a receptacle with a minimum circuit breaker size of 15 amperes. No other electrical appliance or fixture should be used on this circuit. The heater will provide approximately 1100 watts (1.1 kw) of heat when the pump is operating in low speed and thermostat is calling for heat.

WARNING: Under no circumstances should an extension cord be used. Use of an extension cord will seriously degrade the performance of the equipment module and can create an electrical hazard.

240 VOLT INSTALLATION

THE FOLLOWING INSTRUCTIONS ARE FOR 240 VOLT - 40 AMPERES APPLICATIONS



The following instructions must be followed for a permanently connected equipment module designed to operate at 240 Volts. The heater will provide 4500 watts (4.5kw) of heat when the pump is on low speed and the thermostat is calling for heat.

IMPORTANT: Always refer to the product data label (Located on top of Control Box) for specific electrical information. (Line 1, Line 2, Neutral) #8 AWG Minimum and Ground #10 AWG Minimum.

WARNING: Remove jumper wire for 240 installation (refer to 120 volt installation diagram).

- 1. Connect input wiring as shown. When connected to 240 Volts, the equipment module requires a 3-wire electrical service, plus ground (line 1, line 2, Neutral, Ground), and requires a minimum supply conductor ampacity of 40 Amperes.
- 2. Close the wiring access panel.

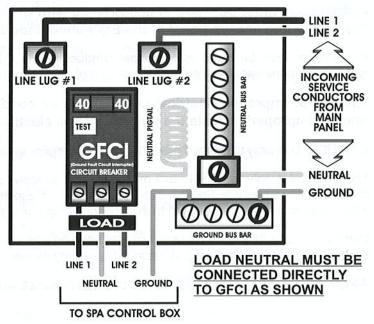
ELECTRICAL, CONT'D

GROUND FAULT INTERRUPTER

Ground-Fault Circuit-Interrupters and Load Neutral Connection

Most 240 volt panel mounted Ground-Fault Circuit-Interrupter's (GFCI's) are provided with a "LINE" neutral connection lead. Since the GFCI itself is a 120 volt device, this wire must be connected to the neutral buss bar in order for the GFCI to function properly.

Many GFCI's are also provided with a "LOAD" neutral connection terminal. The purpose of the "LOAD" neutral connection terminal is to allow the connection of 120 volt devices to the 240 volt GFCI. If the circuit being connected does not contain any 120 volt devices, the LOAD neutral connection is not used, and the GFCI will provide protection of all 240 volt devices connected. A "LOAD" neutral terminal connection is NOT needed in order for the GFCI to function.



120 VOLT OZONE GENERATOR 120 VOLT OZONE GENERATOR INSTALLATION (OPTIONAL)

The Sportub series are equipped with an ozone feed line ready for the addition of optional ozone generator.

Located under the spa lip and above the equipment pack please find the coiled ozone feed line with built in check valve. Connect this line to the barb fitting provided on the ozone generator leaving the excess tubing coiled under lip. This line is connected to a dedicated ozone injection spa jet.

The yellow 3-prong plug located on the equipment pack supplies power to the ozonator. Make sure the electrical pin configuration is matching and then plug in the ozonator. This receptacle is ON (hot) at all times. Ozone will be injected into spa automatically whenever the pump is operating on low speed (Filtration).

WE RECOMMEND THAT YOU FOLLOW ALL INSTRUCTIONS PROVIDED BY THE OZONE GENERATOR MANUFACTURER.

INITIAL STARTUP

WARNING: In order to check for leaks, the following steps are performed without the skirting in place. To prevent risk of electric shock, do not use spa at this time.

- Make sure the power supply is OFF.
- 2. Check to see that the Black Drain Valve (located to the left side of Equipment Module) is closed.
- 3. Fill the spa with water to the center line of the skimmer. Bleed air from the filter and equipment module by opening the air relief plug (located at top of the filter). Tighten plug when finished.

<u>IMPORTANT NOTE:</u> The Equipment Module must never be operated without water in the spa, serious damage to the heater and/or pump could result.

4. The slide valves on each side of the Equipment Module should be open (the valve is open when the handle is pulled out, closed when it is pushed in).

IMPORTANT NOTE: Valves snap lock into place in "open" and "closed" positions.

- 5. Check all plumbing connections for water leaks. Although spas are fully checked at factory, shipping & delivery might cause a leak. Call your dealer or Baja directly if there is a problem.
- 6. Before power is applied, refer to and become familiar with the spa side control operations.
- 7. Apply power to the Equipment Module.
- 8. Push the button marked "PUMP". The Pump will now operate at low speed. Press button twice for High speed. It is very important that the pump be operating for several minutes to assure that all air has been removed from filtration system.
- 9. Temperature reading will be displayed on digital control. Increase heat set temperature to desired setting.

EQUIPMENT FEATURES

NOTE:BEFORE FILLING SPA, PLEASE FAMILIARIZE YOURSELF WITH THE FEATURES OF THE EQUIPMENT MODULE & CONTROL

SPA CONTROLLER FUNCTIONS





PUMP KEY: (If the heater setting has been set above the actual water temperature, the pump will activate on its own as the water is heated on low speed). Press this key once to activate the low speed of the pump, press the key a second time to activate high speed and pressing it a third time will turn the pump off. The red indicator above the PUMP key will illuminate while the pump is on in high speed and flash in low speed. After 20-minutes, the pump will shut off automatically unless done so manually. If a filter cycle is active, the "filter cycle" indicator will be illuminated (the PUMP indicator WILL NOT be on during filtration). NOTE: You may not be able to turn the pump off if it has started a filtration cycle or if the spa is calling for additional heating. This is easily identified by observing the status of the "Heater On Indicator" or the "Filter Cycle Indicator".





LIGHT/ENTER KEY: Use the spa's light key to turn NIGHTSCAPE on and off. The Light Icon will appear while the light is on. Lights are preprogrammed with an assortment of light shows. When you press the Light key off and then on again within five seconds, it advances to the next show. When you turn NIGHTSCAPE off and leave it off for more than five seconds, it "remembers" the last show you selected. The next time you turn NIGHTSCAPE on, it will display the last show programmed. (See page 11 for show schedule.) The light will automatically shut off after 2 hours.





TEMPERATURE SET KEY: Press and hold the Temperature Set key to increase the temperature. Release, press and hold again to lower the temperature. The temperature can be adjusted in 1°F increments from 59°F to 104°F (5°C to 40°C). The new setting will remain on the display and the Temperature Program indicator will illuminate for 5-seconds to confirm the setting.



EQUIPMENT FEATURES, CONT'D

PROGRAMMING FILTER CYCLES: You may choose to filter the spa 1, 2 or 3 times per day as required to keep the water clean and sanitary. Press and hold the Pump Key for 5 seconds. The current setting will be displayed as F1, 2 or 3. Use the Up & Down Temperature Arrow keys to increase or decrease the frequency of the filtration cycles per day. The filter cycle is now set. To start a filter cycle immediately, press the Pump key. The cycles will repeat every 8, 12 or 24 hours within a 24-hour period starting from the time programmed. It is recommended to schedule the filtration cycles so they do not interfere with sleeping hours.

PROGRAMMING FILTER CYCLE DURATION: You may choose to filter your spa 1–8 hours per cycle as requried to keep the water clean and sanitary. Press and hold the Light Key for 5 seconds. The current duration of the filter cycle will be displayed as D1–8. Use the Up & Down Temperature Arrow keys to increase or decrease the duration of the filter cycle. The duration is now set. To start a filter cycle immediately, press the Light key while the duration setting is still displayed.

HEATER OPERATION: When the water temperature drops 1°F lower than the desired temperature, the heater will be turned on until the water temperature reaches the desired temperature plus 1°F. The Heater On Indicator will appear on the function panel when it is on. The Heater On Light Indicator will blink on the function panel whenever there is a call for heat and the heater has not yet been activated.

FREEZE PROTECTION: When the system senses cold temperatures, it will automatically engage the freeze protection mode for a monitoring period of 24 hours. During this time, the pump will operate for 1 minute every 2 hours to circulate warm water through the plumbing. When the pump is running due to this feature, the Filter Cycle Indicator on the spaside panel will blink. Filter Cycles will operate as determined by the programing and will not be affected by the Freeze Protection Mode.

HIGH TEMPERATURE PROTECTION: If the water temperature exceeds 112°F at the High Temperature probe, the system will display the message HL and will turn the heater off. After the water temperature has cooled down, pressing any key on the spaside panel control will allow the system to restart. If the spa water temperature does not seem to be elevated, the HL reading may have been caused by poor water flow or electrical line interference (e.g. thunderstorms, voltage surges, etc.). Simply reset and monitor the system. See Troubleshooting, page 14. NOTE: The Freeze Protection Circuit is in effect at all times that there is power applied to the system and will automatically engage if needed.

DEFAULT SYSTEM OPERATIONS: When power is applied, or there is a temporary loss of power, the system will initiate it's last programmed temperature setting. If a power loss condition is experienced, the spaside display will blink until any key is pressed. This feature is to let the user know that a power failure has occurred.

SETTING FAHRENHEIT AND CELSIUS DEGREES: Press and hold the light key for 5-seconds, the display will change to either setting. When the desired display is shown the display has been set and nothing else must be done. **NOTE:** If the spa is being used during the filter cycle, the cycle will be suspended for a period of 40-minutes.

IF A POWER OUTAGE SHOULD OCCUR: It will be necessary to reprogram the filter cycle start time. The temperature setting will be retained.

EQUIPMENT MODULE

Your Baja Spa is equipped with exclusive "Smart Cords". These cords have internal illumination to let you know that power is being supplied to the components connected to them. This is a helpful troubleshooting feature should a problem with a component arise.



WINTER PROGRAM MODES

Smart Winter Mode: The system is constantly monitoring the temperature with its circuit board mounted sensors. If the sensor registers an ambient temperature below 59°F, the systems "Smart Winter Mode" will activate. This mode, once activated, will continue for a period of 24-hours. The system will activate any pump connected to the system that has not been turned on in the last 2-hours, for 1-minute to prevent freezing. The frequency of this cycle may increase as the ambient temperature drops.

During the "Smart Winter Mode", the filter cycle indicator will flash while the pump(s) is running in this mode. If the spa is to be drained for an extended period of time, consult your local retailer for winterizing your spa completely due to potentially extreme weather conditions.

If it is desired to keep water in the spa during the time of year when freezing may occur, the heater will operate as required to prevent the water from freezing. In the event of electrical power interruptions, regardless of cause, the heater and pump will stop operating and freeze protection will be lost. This could result in freeze damage to the spa, spa plumbing and/or Equipment Module components. Such damage is not covered by the Equipment Module Warranty.

If the spa is to be drained for an extended period of time, consult your local retailer for Winterizing your spa completely due to potentially extreme weather conditions.

WARM WEATHER CONDITIONS

Since your spa will normally be expected to maintain warm to hot water to be ready for your use, a great deal of attention has been directed to the energy conservation detail of insulation so as to keep electrical costs down.

This energy conservation feature may cause an inconvenience during warmer times of the year. During warm periods of the year, the temperature within the equipment compartment can elevate to a point that the pump will automatically turn off for a short period of time (15-30 minutes) to allow the pump to cool down before automatically restarting. This cool down feature will not harm your spa but serves only to protect the pump from damage and as an indicator that it is too hot. To minimize this occurrence, refrain from using your Hydrotherapy Jets for prolonged periods of time during warm seasons.

INSTALLING YOUR PURIFICATION DISPENSER

There are several ways that the water chemistry can be maintained in your Baja Spa. As the photos indicate below, Baja's built in KLEEN H20 dispenser incorporates the filter lid for either chlorine / bromine tablets or a Nature 2 purification system. The Nature 2 purification system is only recommended for personal use or family spa installations. Chlorine/Bromine or similar is recommended for regular and heavy bather installation. It is very important to maintain proper PH levels between 7.2 - 7.6.



Chlorine/Bromine: Insert Tablets, set and adjust dial. Check every 1-2 weeks.

Nature 2: Insert Cartridge, replace every 4 months.

CAUTION:

ALWAYS CONSULT YOUR DEALER FOR RECOMMENDATION AND MAINTENANCE DETAILS. CONSULT YOUR NATURE2 OWNER'S MANUAL BEFORE INSTALLING PURIFICATION SYSTEM.



JET & FILTER OPERATION

AIR CONTROL

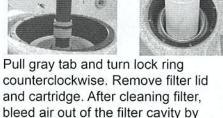


Open air control fittings when in HIGH speed Jets mode to provide air mix to jets. On/Off Toggle.

FILTER REMOVAL

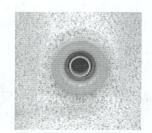


pump on low speed.



opening the air relief valve & turn

TURBOSTREAM®



Turn outer ring to direct flow from TurboStream® to Poly Storm & Cluster Storm Jets.

(ST1050 only)

CHROMO-THERAPY LED LIGHTING SHOWS

1. WHITE	Solid white light.	
2. SLOW DANCE*	Slowly cycles through white, yellow, blue, red, green and magenta in 9-second intervals.	
3. SUNBURST	Solid yellow-orange light.	
4. BLUE	Solid blue light.	
5. RED	Solid red light.	
6. GREEN	Solid green light.	
7. MAGENTA	Solid magenta light.	
8. TIDAL FADE*	Slowly fades through green and blue in 13-second intervals.	
9. SUNSET*	Slowly fades through red, yellow and magenta in 9-second intervals.	
10. COLOR BURST*	Colors cycle through white, yellow, blue, red, green and magenta in 1-second intervals.	

^{*} These effects begin at a slightly faster speed, then slow down after one or two seconds.

REGULAR SPA MAINTENANCE

CLEANING THE FILTER:

Your Baja Spa comes complete with a 50 Sq. Ft. filter cartridge that is designed to work under pressure. With normal use, this filter should be removed a minimum of once every 30 days, or anytime you notice an appreciable decrease of the flow from the spa jets. You should take time to clean the filter.

TO CLEAN THE FILTER:

- 1. TURN OFF THE POWER TO THE EQUIPMENT MODULE.
- 2. REMOVE THE COVER FROM THE FILTER UNIT.
- 3. OPEN AIR RELIEF PLUG.
- 4. PULL GRAY TAB AND TURN LOCK RING COUNTERCLOCKWISE (LEFT).
- 5. REMOVE CARTRIDGE FROM THE FILTER HOUSING AND CLEAN THOROUGHLY WITH PRESSURE SPRAY FROM A NOZZLE ON A GARDEN HOSE.
- 6. REPLACE THE CLEANED FILTER AND TIGHTEN THE LOCKING RING.
- 7. TURN ON POWER TO THE EQUIPMENT MODULE.
- 8. WHEN THE WATER COMES OUT OF THE AIR RELIEF PLUG, CLOSE IT.
- 9. WHEN WATER IS FULLY FLOWING, SET THERMOSTAT TO DESIRED WATER TEMPERATURE.

It is recommended to completely drain the spa at least four times a year. More frequent draining may be required depending on usage. The spa should also be drained if it is not going to be used for a long period. An empty spa MUST BE COVERED. Direct sunlight on the acrylic surface can cause severe damage or blemishing of the surface, and can result in voiding the spa warranty. A cover is supplied with each new spa.

SPA MAINTENANCE SCHEDULE

DAILY	- CHECK WATER LEVEL, REFILL IF NECESSARY TO LINE ON SKIMMER PLATE CHECK CHEMICAL READING AND ADJUST AS NEEDED.	
WEEKLY	- WIPE DOWN THE WATER LINE. - CHECK WATER FLOW AND CLEAN FILTER IF NECESSARY.	
MONTHLY	- CLEAN FILTER CARTRIDGE CLEAN THE INSULATED SPA COVER TEST THE GFCI.	
3 MONTHS	- DRAIN THE SPA COMPLETELY, REFILL WITH WATER AND REPLENISH CHEMICALS WHILE THE SPA IS EMPTY, CLEAN WITH A NONABRASIVE ACRYLIC CLEANER AND RINSE. NOTE: NEVER WAX THE SURFACE AS THE WATER WILL DISSOLVE THE WAX AND CLOG	
6 MONTHS	- CLEAN SYNTHETIC CABINET WITH WET TOWEL.	

CLEANING THE ACRYLIC SURFACE

When the acrylic surface becomes soiled, it can be cleaned with a soft cloth or sponge. DO NOT USE ANY ABRASIVE CLEANERS, as they can scratch or dull the brilliant acrylic surface.

Your insulated cover can be cleaned with a non-abrasive household cleaner. A non-silicone based vinyl restorer will help protect the surface from sun damage.

SPA CABINET INSTRUCTIONS



Position spa in final desired location before assembling free-standing cabinet. Install panel containing drain valve (see below for instructions on how to install drain valve). Position a cabinet corner under a corner of the spa.



Position a side panel under spa lip with black kickboard on the bottom overlapping cabinet corner. Long panels will match up with long sides of spa. Make sure bolt holes line up, you may have to rotate the cabinet corner 180° (top to bottom).



Attach side panels to corners using supplied panel bolts and bolt driver. Repeat process until all side panels and cabinet corners are attached to one another to form the cabinet.

* For some models a corner may come pre-attached to a side panel.

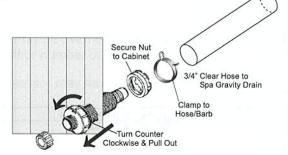
CABINET DRAIN VALVE INSTALLATION (PLEASE FOLLOW THESE INSTALLATION INSTRUCTIONS, PRIOR TO CABINET ASSEMBLY COMPLETION AND BEFORE FILLING THE SPA WITH WATER):

- Position the cabinet panel, which has a removable 1½" black plug, to the left of the topside control when facing spa.
- Locate black drain valve located to the left of the equipment pack, attached to clear hose with a 3/4" hose clamp.
- Remove or slide clamp with pliers and take out drain valve from clear hose.
- Remove nut from drain valve.
- Install drain valve through the hole and secure back nut.
- Place panel in place, making sure there are no crimps in line.
- Re-attach clear hose completely over barbs and re-secure with clamp.
- Complete cabinet installation (see below).

TO DRAIN SPA:

- Turn off the spa equipment.
- Remove the drain cap.
- Attach a garden hose to threads.
- Turn front face counter-clockwise and pull outwards.

There should be a slow but steady flow of water which originates from the gravity drain located in bottom of the Baja spa.



SPA CABINET MAINTENANCE

CLEANING: Abrasive or harsh chemicals, aromatic solvents (e.g. toluene, xylene) or cleaners containing aromatic solvents (e.g. Citri-Solv) should NEVER be used. Hot soapy water is the best choice for cleaning your cabinet. The cabinet is made from hard material with a non-porous surface, therefore it does not readily stain and most spills do not stick. Any water-based household cleaner can be used to clean the surface, including Windex, 409, Pledge, Murphy's Oil Soap, Simple Green and citrus cleaners. If unsure of the cleaner, test on a small area before cleaning. Can be pressure-washed.

SCRATCHES: For minor scuffs, gently buff with 'oooo' steel wool. Once the scratch is removed, polish area with Carnauba wax or a high-quality automotive polishing compound (e.g., 3M, Meguire's, Mother's) to bring up the luster to match the virgin cabinet surface. To remove deeper scratches, use a single-edged razor blade to skive the high spots from the surface of the cabinet. Holding the razor blade perpendicular (the tip of the blade directly against the cabinet surface) to the profile, scrape the surface along the length of the scratch (2 to 3 passes) to shave off the raised edges of the scratch. Once the raised edges are removed, use the steel wool and wax technique (noted above) for blending out the area.

GENERAL TROUBLESHOOTING

The following describes situations and possible solutions to common problems you may encounter as a spa owner.

NOTHING OPERATES	Main Breaker is OFF - Set to On. Sub-Panel Breaker OFF - Set to On. Component(s) not plugged in - Plug in components. Over-Temperature Protection On - Refer to page 9
NO, LOW OR SURGING WATER FLOW	Air Lock in Plumbing System - Refer to "regular spa maintenance," page 12. Restricted Flow - Insure that the water shut-off valves are open and that suction fittings are not blocked by debris. Dirty Filter - Clean or replace filter. Low Water Level - Increase water level to recommended level.
NO JETS OPERATION	Water Shut-Off Valves are Closed - Open Shut-Off valves. Thermal Overload Tripping - Check for restricted flow of water. Low Level Programming Incorrect - Contact your local dealer. Over-Temperature Protection On - Refer to page 9 Pump Not Plugged-In - Plug in the Pump.
NO OZONATOR OPERATION	Ozonator Not Plugged-In - Plug in the Ozonator. Low Water Flow - Clean or Replace filter. Ozone Bulb Defective - Replace bulb or contact your local dealer.
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 couplings or contact your local dealer. Pump Seal Leaking - Contact your local dealer. Plumbing Connections Leaking - Contact your local dealer. Water Leaking from Spaside Control - Contact your local dealer.
NO HEAT	Temperature Not Set Correctly - Adjust Set Point. Over-Temperature Protection On - Refer to page 9 No Power - Reset breaker at service panel. Low Water Flow - Clean or Replace filter. Pressure Switch Not Adjusted Properly - Contact a qualified technician.
HIGH 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 for assistance.
NO LIGHT OPERATION	Light Bulb Defective - Replace bulb or contact your local dealer. Light Not Plugged-In - Plug in the Light.

GENERAL TROUBLESHOOTING, CONT'D

CONTROLLER ERROR INDICATORS

To assist the user in identifying problems with the spa, the system will display an error message. These messages will be helpful when communicating with your local dealer or qualified technician if a problem should arise.



PRESSURE or FLOW SWITCH ACTIVATED - This error will be displayed only when the pump is not activated. Cycle the pump on low speed. If the error does not clear, this is an indication that the pressure or flow switch is activated with no water flow. Contact your local spa dealer



PRESSURE or FLOW SWITCH NOT ACTIVATED - This error will be displayed while the pump is running. Cycle the pump on low speed. If the error does not clear, this is an indication that the pressure or flow switch has not activated although there is water flow. Contact your local spa dealer



TEMPERATURE SENSOR MALFUNCTION - This error will occur when a problem with the temperature sensor exists. Contact your local spa dealer



OVERHEAT or HIGH-LIMIT PROTECTION - There are three(3) stages of over-temperature:

OR

1 - The spa water has exceeded 112°F at the temperature sensor. The heater, pump and accessory will be deactivated until the water cools to 109°F. Be sure to check the actual water temperature with an accurate thermometer.



2 - The spa water has exceeded 119°F at the high-limit sensor. The heater will deactivate while the pump and accessory will still operate. WATER MUST BE BELOW 119°F AND POWER MUST BE RESET TO CLEAR THE "HL" ERROR.

A dirty spa filter can also cause a restricted flow of water, be sure the filter is cleaned regularly and ensure all water shutoff valves are open.

If the system has been operating normally until now, the pump may be overheating the spa. Refer to "High Temperature Protection" on page 9 and reduce the duration and/or number of cycles per day.

3 - If you've eliminated items 1 & 2 as problems, the high-limit sensor may have malfunctioned.

Contact your local spa dealer.



FREEZE PROTECTION

SMART WINTER MODE, this mode will activate any time the temperature falls below 59°F. This mode will be active for a period of 24-hours. In this mode, if a pump has not been activated in the last 2 hours, the system will automatically turn it on for 1-minute to prevent freezing. The "Filter Cycle" indicator will blink while this mode is active.

If the preceding trouble shooting procedure does not correct the problem, then contact your local spa dealer or service technician.



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Date____Model #____

Serial Number