



# FOR

America's Get Away Spa!

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.







REV01/06

## **HOTTUBS.COM**

## 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 therapeutic 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<sup>™</sup> 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.

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Date Model #

## SAFETY INSTRUCTIONS

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

## 1. **READ AND FOLLOW ALL INSTRUCTIONS.**

- 2. **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 (8.4 mm<sup>2</sup>) slide copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 mm) 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.
- d) NEVER use an Extension Cord of any type.
- 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 ft. (1.5 m) from spa water. (See GFCI Warning pg. 4)
- 6. **DANGER Risk of Accidental Drowning.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children do not 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 (8.4 mm<sup>2</sup>) 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. Always enter and exit the spa slowly and cautiously. Wet surfaces can be slippery.

## SAFETY INSTRUCTIONS

- 11. Do not use the spa alone.
- 12. People with infections, skin sores or open wounds should not use the spa.
- 13. It is recommended that people shower before and after using the spa in order to keep spa operating cleaner, and to rinse off spa water chemicals.
- 14. Disconnect all electrical power before attempting any kind of service to the electrical module.
- 15. Always use unbreakable containers around the spa. Never use glass.
- 16. 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.
- 17. 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.
- 18. Install to provide drainage of compartment with electrical components.

#### 19. WARNING - To reduce the risk of injury:

a) The water in a spa should never exceed  $40^{\circ}C(104^{\circ}F)$ . Water temperature between  $38^{\circ}C(100^{\circ}F)$  and  $40^{\circ}C(104^{\circ}F)$  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).

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 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.

f) 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.

## SAFETY INSTRUCTIONS

- 20. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 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) physical inability to exit spa, (4) fetal damage in pregnant women, (5) unawareness of impending hazard, (6) unconsciousness resulting in the danger of drowning. WARNING: The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.
- 21. Inform all occasional users of these precautions.
- 22. For units with an Integral GFCI (ST 1050-54-56): Warning This product is provided with a ground fault circuit-interrupter 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 and 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 electrical shock. Disconnect the power until the fault has been identified and corrected.
- 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 (1.52 m) away, adjacent to, and within sight of the unit.

# 24. SAVE THESE INSTRUCTIONS!

## **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 4-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 **Iow speed mode** (Filtration) or High Speed.

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

## INSTALLATION GUIDELINES

- 1. Locate your spa on a solid, level surface that is structurally strong enough to Support its filled weight.
- 2. 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. (see No. 2)
- 4. The spa must be installed in such a manner as to provide drainage away from the spa.
- 5. Spas which will be installed into a floor or wood deck must be installed to permit access to the equipment for servicing.
- 6. Do not install the spa under any electrical wires.
- 7. In selecting the ideal outdoor, or indoor location for your spa, we suggest you take into consideration the following:
  - a) The view you will have from the spa.
  - b) The proximity to your home for changing 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 an unguttered roof overhang.
  - f) Indoor installations require provisions for proper ventilation.
  - g) Check local codes for building and fence requirements.
  - 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.)
  - i) Indoor spas should be installed in rooms constructed of materials that will not be damaged by high humidity.

# **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 1100 watts (1.1 kw) of heat when the pump is operating in low speed and thermostat is calling for heat.

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.

# The following instructions are for 240 Volt - 40 Amperes Applications 240 VOLT INSTALLATION

The heater will provide 4500 watts (4.5 kw) of heat when the pump is on and the thermostat is calling for heat.

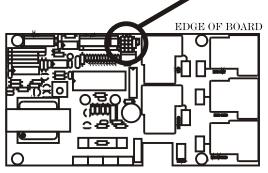
The following instructions must be followed for a permanently connected Equipment Module designed to operate at 240 Volts.

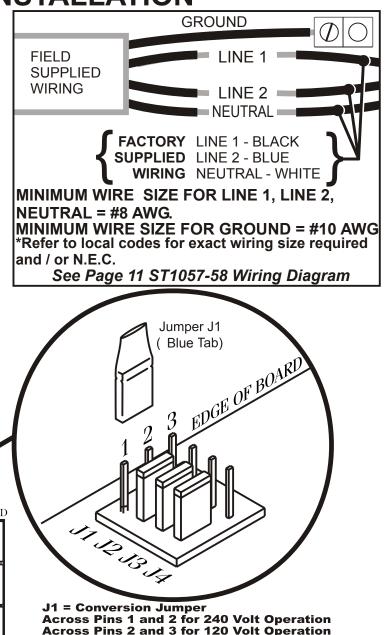
1. Disconnect and remove the GFCI power cord.

2. Connect input power wiring as shown above. When connected to 240 Volts, the Equipment Module requires a three wire electrical service, **plus ground (line 1, line 2, Neutral and Ground),** and requires a minimum supply conductor ampacity of 40 amperes and a GFCI circuit breaker size of 40 Amperes.

3. Move Jumper 1 (Blue Tab) from pins 2 and 3 to pins 1 and 2 as shown in detail to the right. *Use copper conductors ONLY!* 

4. Close the wiring access panel.



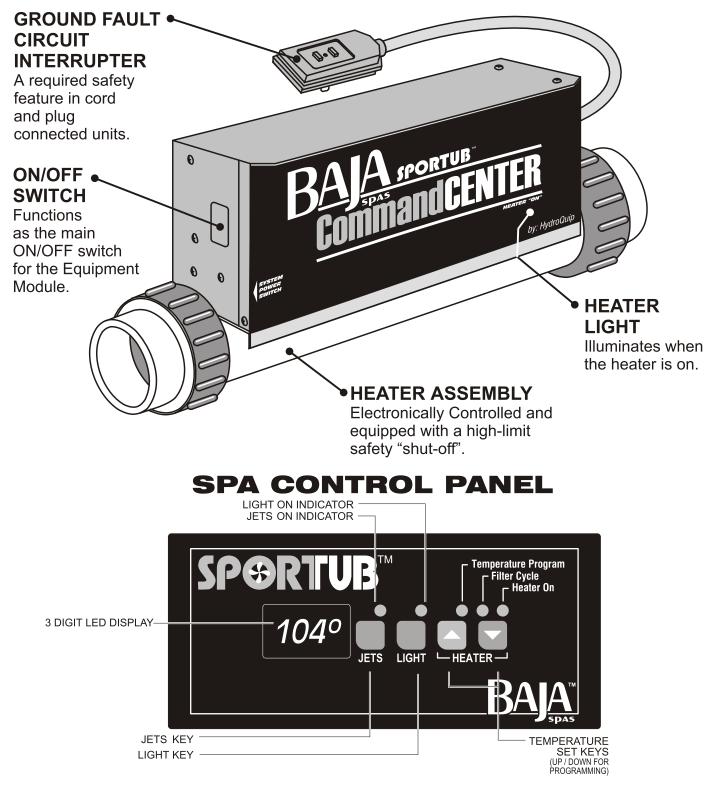


**NOTE:** 240 Volt mode allows pump high speed and heater to operate at the same time.

## EQUIPMENT FEATURES

NOTE: Before filling spa, please familiarize yourself with the features of the Equipment Module & Control

# **EQUIPMENT MODULE**



## INITIAL STARTUP WARNING

#### IN ORDER TO CHECK FOR POSSIBLE LEAKS, THE FOLLOWING STEPS ARE PERFORMED WITHOUT THE WOOD SKIRTING IN PLACE. TO PREVENT RISK OF ELECTRICAL SHOCK, DO NOT USE SPA AT THIS TIME.

1. 120 Volt Units: Make sure the power supply cord is "unplugged" 240 Volt Units: Make sure the power supply is "OFF".

2. Check to see that the Drain Valve (located to the left side of Equipment Module) is closed.

3. 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).

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

4. Fill the spa water to 1" above the center line of the skimmer located inside spa. Bleed air from the filter and equipment module by opening the air relief plug (located on the top of the filter). Tighten plug when finished. (See pg. 15 Cleaning the Filter)

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

- 5. Check all plumbing connections for water leaks.
- 6. Familiarize yourself with controller operations (Pages 9-10).

7. Apply power to the Equipment Module. 120 Volt Units: Plug cord into dedicated 15 amp outlet.

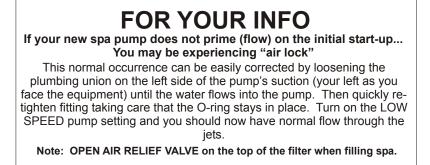
240 Volt Units: Turn the main disconnect switch to the "ON" position.

8. Push the JET button located on the topside SPORTUB<sup>™</sup> control panel. The pump will ow operate at high speed.

9. Set desired temperature.

IMPORTANT NOTE: It is very important the pump be operated on high speed for several minutes to assure that all air has been removed from system. The thermostat may only be "turned up" after full water flow has been established.

- 10. Check for any leaks.
- 11. Open valves for operation. Close valves for maintenance.



#### **Controller Operations** 1050-54-56 PORTUE

JETS KEY: The Jets key is used to turn the pump on or off at selected speeds. The first press will turn on the pump HIGH speed, the JETS second press will change the pump to LOW speed, the third press will turn the pump off or return to a heat or filtration mode (see note). A built-in timer will shut the pump off 20 minutes after it has been started unless the user does so manually. When the pump is on, the Jets On Indicator will appear above the Jets key. 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 KEY: The Light key is used to turn the light on or off. The first press of the Light key will turn the light on. A second press will turn the light off. The light will automatically turn itself off after 2 hours. When the light is on, the Light On

Indicator will appear above the Light key.

PROGRAMMING FILTER CYCLES: You may choose to filter your spa 1, 2, or 3 times daily as required to maintain clean, sanitary water. At the same time, press and release both the Jets key and the Up Arrow key. The current setting for filtration cycle frequency will be displayed. Do nothing and the control will revert to the Default System Operation Mode, OR, to change the frequency, press the Up or Down Arrow key. Pressing the Jets key and Up Arrow key at the same time again will start a Filtration Cycle, otherwise, the first cycle will start 24 hours from the programming time. NOTE: The cycles will repeat every 24, 12, or 8 hours within a 24 hour period, starting from the time programmed. It is recommended that the system be powered up at a time when the programmed cycles do not interfere with sleeping hours.

PROGRAMMING CYCLE DURATION: You may choose to filter your spa 60, 120, or 180 minutes per cycle as required to maintain clean, sanitary water. At the same time, press and release both the Light key and the Up Arrow key. The current setting for filtration cycle duration will be displayed (60,120,180). Do nothing and the control will revert to the Default System Operation Mode, OR, to change the frequency, press the Up or Down Arrow key.

**IMPORTANT PROGRAMMING NOTES**: (1) If a program change is not made within 5 seconds, the system will default back to the monitoring mode. (2) While programming, the Pump and Light features may have been activated. Either can be turned off in the normal way after programming is complete. The display will return to indicate water temperature 5 seconds after the keys are released.



TEMPERATURE PROGRAM KEYS: The Up/Down Temperature Program keys are used to set the desired water temperature. Press the Up or Down keys to Increase (or

decrease) the desired temperature setting. The temperature can be adjusted in 1°F increments from 59°F to 104°F (or 15°C to 40° C). The desired temperature setting will remain in the display for 5 seconds as confirmation of the new value, after 5 seconds the display will return to display the present water temperature. NOTE: The Temperature Program Indicator will appear to indicate that the temperature in the display is the desired-programmed temperature and not the actual water temperature.

**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 programming and will not be affected by the Freeze Protection Mode.

HIGH TEMPERATURE PROTECTION: If the water temperature exceeds 122°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 17. 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 default programming. The filter cycle starts 24 hours after the system has been powered up, filters for one hour, and then repeats every 24 hours. The maintained temperature will default to 100° F. The freeze protection feature will stay in effect. 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 and that the Temperature Program point has returned to the default value.

ADDITIONAL PROGRAMMING: To set temperature unit (°F or °C) press and hold the light key for 5 seconds. This will switch the system to the temperature that you prefer. Once the selection has been made simply wait until the spaside control reverts back to the temperature made.

## **SPORTUB II 1057-58 Controller Operations**

## **Programming Cycle Duration**

You may choose to filter spa 60, 120, 180 or 480 minutes per cycle as needed to maintain filtered water. To view the current length of each filter cycle, **press & hold** the Light button for 5 seconds. The current length of each filtration cycle will then be shown.

This setting can be modified by holding the Up/Down button until the length of each cycle is shown. A simultaneous **press & hold** of the Pump1 & Light button for 5 seconds more will start a new filter cycle.

## **Programming Number of Filter Cycles:**

You may choose to filter the spa 1, 2 or 3 times daily as required to maintain clean water. To view the current number of filter cycles, *press & hold* the Pump1 button for 5 seconds. The current number of filtration cycles will be displayed. This setting can be modified by holding down the Up/Down button until the desired number of cycles is shown. A simultaneous *press & hold* of the Pump1 & Up/Down button for an extra 5 seconds will start a new filter cycle.

**JET1** - The JET1 button is used to turn the pump on or off at selected speeds. The first press will turn the pump to LOW speed. The second press will change the pump to HIGH speed. The third press will turn the pump off or return to a heat or filtration mode (see note). A built in timer will shut the pump off 20 minutes after it has been started unless the user does so manually. When the pump is on, the "Jets On" indicator will appear above the JET1 button.

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 light or the "Filter Cycle" indicator light.

**JET2** - The JET2 button is used to turn the JET2 booster pump on or off. The first press of the JET2 button will start the booster pump. A second press will turn the booster pump off. The JET2 booster pump will automatically turn itself off after 20 minutes. When the JET2 booster pump is on, the JET2 indicator light will appear above the JET2 button.

**LIGHT** - The LIGHT button is used to turn the light on or off. The first press of the LIGHT button will turn the light on. The second press of the button will turn the light off. The light will automatically turn itself off after 2 hours. When the light is on, the indicator light will appear above the LIGHT button.

**TEMPERATURE PROGRAM** - The temperature program button is used to set the desired water temperature. Press and hold this button to increase or decrease the desired temperature setting. Release and press again to increase/decrease to the desired temperature setting. The temperature can be adjusted in 1°F increments from 59°F to 104°F (or 15°C to 40°C). The desired temperature setting will remain in the display box for 5 seconds as confirmation of the new setting. After 5 seconds, the display will show the current water temperature.

Note: The temperature program indicator will appear to indicate that the temperature in the display is the desired programmed temperature and not the actual water temperature.

Note: A power outage to the system will erase any programmed settings. If a power outage should occur, it will then be necessary to re-program the system. Filtering default is 120 minutes, twice a day. Temperature default is 100 degrees.

## QUICK PROGRAMMING NOTES

#### IF YOU APPLY POWER TO SYSTEM AND DO NOTHING ELSE:

- 1. The primary filter cycle will occur in 24 hours and run for 120 min. This will repeat every 24 hours.
- The spa will heat up to and maintain 100° F. (The freeze protection mode is available if required.)

#### TO SET OR CHANGE THE FILTER CYCLE START TIMES:

Refer to **PROGRAMMING FILTER CYCLES** in operating manual.

#### IF THE FILTER CYCLES ARE NOT RUNNING AT THE BEST TIMES FOR YOUR SLEEPING SCHEDULE, YOU MUST PROGRAM THE SYSTEM AT A PARTICULAR TIME OF DAY TO ADJUST THE INTERNAL SYSTEM TIME PATTERN.

## Desired Filter Cycles Programming Time Filtering Time

| 1 Cycle per 24 Hour Period  | 8:00 PM |
|-----------------------------|---------|
| 2 Cycles per 24 Hour Period | 8:00 PM |
| 3 Cycles per 24 hour Period | 2:00 PM |

8:00 PM 8:00 PM & 8:00 AM 10:00 PM, 6:00 AM & 2:00 PM

Note: The easiest way to change the internal system time pattern is to simply TURN OFF ALL POWER to the spa for (10) ten seconds and then promptly start your programming procedure.

# **FACTORY PRE-SET FILTRATION MODES**

Baja Spas Self Cleaning Spa Filtration Program has been designed to efficiently circulate 24 hours per day. The circulation pump system will only turn off when the spa temperature exceeds 4 (four) degrees above the actual temperature set point.

Baja Spas also added other factory filtration modes and conveniences:

**Purge Mode:** Everyday at approximately 12:00 Noon, the booster pump will operate for a few minutes to stir up the spa water through the entire system.

**Smart Summer Mode:** In high heat climate areas, Baja Spas circulation filtration system will automatically perform 2 special filter cycles that run at 10:00AM and 5:00PM respectively for 2 hours each to provide filtration and ozonation.

#### Economy (EC) - Filtration (FL) Cycles: DO NOT CHANGE THESE FACTORY PRESET MODES!

Should you accidentally go into the programming mode after setting the clock and the spa topside controller reads F1, 2, 3 (Filtration) or E1,2,3 (Economy) **Do Not Change These Factory Preset Modes.** 

Simply step away from the spa for 2 minutes and the controls will automatically reset themselves. Changing these modes will alter the factory preset settings.

# **SPORTUB 1057-58 WIRING DIAGRAM**



# INSTALLING YOUR PURIFICATION DISPENSER

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



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



Nature 2: Insert Cartridge Replace every 4 months

## **JET OPERATION:**



Open air control fittings when in HIGH speed Jets mode.

## FILTER REMOVAL:

Note: See Page 13 for cleaning instructions before removing filter.



Turn outer ring to direct flow from TurboStream® to Magna Jets. Each TurboStream® jet controls bucket seat iets.



To install (optional) Euro'ssage<sup>™</sup>, turn Magna Jet counterclockwise and pull straight out then turn Euro'ssage<sup>™</sup> slightly clockwise until you feel it click into place.







Pull tab and turn lock ring counterclockwise. Remove filter lid and cartridge. After cleaning filter, bleed air out of the filter cavity by opening the air relief valve & turn on Circulation Pump.

# EXTREME SOUND PRECAUTIONS

These instructions are for spas equipped with the optional Baja Extreme Sound System feature. "Caution-Risk of electrical shock. Do not leave compartment door open". Replace components only with identical components.

**1.** Baia Extreme Sound System controls should not be operated while inside the spa.

2. "WARNING- Prevent Electrocution. Do not connect any auxiliary components (for example speakers, headphones, additional audio/video components etc.)to the system

3. These units are not provided with an outdoor antennae. If provided, it should be installed in accordance with Article 810 of the National Electrical Code.

4. Do not service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to gualified service personnel.

5. If the power supply connections or power supply cord(s) are damaged, water is entering the audio/video compartment, or any electrical equipment compartment area, the protective shields or barriers are showing signs of deterioration, or there are signs of other potentially hazardous damage to the unit, turn off the unit and refer serving to a qualified service personnel. 6. The unit should be subjected to periodic routine maintenance once every quarter to make sure the at the unit is operating properly.

## CABINET INSTALLATION





Attach coupling blocks to one end of side panel with toggle bolts and tool supplied with cabinet. (PS 1042, WW 1067/68)



2 Align with another side panel. Insert bolts and tighten securely.



Bosition side panels under spa lip with black kickboard on the bottom.



Install corner posts (pay attention to "up" arrows) to side panels, then small panels to each corner post around spa using panel bolts and bolt driver.



## CABINET DRAIN INSTALLATION

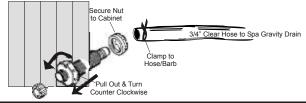
# INSTALLATION INSTRUCTIONS FOR CABINET DRAIN VALVE BAJA SPA'S EQUIPPED WITH THE THRU CABINET DRAIN VALVE WILL INCLUDE:

- Cabinet panel with removable 1  $\frac{1}{2}$  black plug .
- Place this panel in the <u>LEFT CORNER</u> position on models # 1043/44/54/57/58/67/68and in <u>LEFT SIDE</u> panel position on Models # 1040/42/46/50/56.
- Black drain valve located to the left of the equipment pack, attached to clear hose with a <sup>3</sup>/<sub>4</sub> hose clamp.

# PLEASE FOLLOW THESE INSTALLATION INSTRUCTIONS, PRIOR TO SKIRT ASSEMBLY AND FILLING THE SPA WITH WATER:

- Remove / slide clamp with pliers and take out drain valve from clear hose.
- Discard black cabinet plug and install drain thru hole and secure back nut.
- Place panel in place, making sure there are no crimps in line.
- Secure valve to cabinet.
- Re-attach clear hose completely over barbs and re-secure with clamp.
- Complete cabinet installation.
- TO DRAIN SPA- MAKE SURE EQUIPMENT IS IN OFF POSITION
- Simply 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 MAINTENANCE SCHEDULE**

| DAILY        | <ul> <li>CHECK WATER LEVEL, REFILL IF NECESSARY TO<br/>LINE ON SKIMMER PLATE.</li> <li>CHECK CHEMICAL READING AND ADJUST AS NEEDED.</li> <li>FOR PROPER FILTRATION, THE WATER SHOULD BE<br/>CIRCULATING FOR AT LEAST FOUR HOURS A DAY.</li> </ul>  |
|--------------|--|
| WEEKLY       | - WIPE DOWN THE WATER LINE.<br>- CHECK WATER FLOW AND CLEAN FILTER IF NECESSARY.   |
| MONTHLY      | - CLEAN FILTER CARTRIDGE.<br>- CLEAN THE INSULATED SPA COVER.<br>- TEST THE GFCI.  |
| THREE MONTHS | <ul> <li>B - DRAIN THE SPA COMPLETELY, REFILL WITH WATER<br/>AND REPLENISH CHEMICALS.</li> <li>WHILE THE SPA IS EMPTY, CLEAN WITH A NONABRASIVE<br/>ACRYLIC CLEANER AND RINSE.</li> <li>NOTE: NEVER WAX THE SURFACE AS THE WATER WILL<br/>DISSOLVE THE WAX AND CLOG THE FILTER.</li> </ul> |

SIX MONTHS: - CLEAN, RESTAIN AND TREAT REDWOOD SKIRT.

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

## **REGULAR SPA MAINTENANCE**

## EON SYNTHETIC CABINET:

Your modular cabinet has been treated with a stain at the factory. It is suggested that the cabinet be treated annually with an additional coat of stain for maximum weather protection. Contact your Baja Spa Retailer for advice on which stain and oil work best in your area.

## DRAINING THE SPA (SEE PAGE 13):

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 acrylic spa surface, and can result in the voiding of the spa surface warranty.

## TO DRAIN THE SPA, COMPLETE THE FOLLOWING STEPS:

- 1. Turn off the main circuit breaker or disconnect panel.
- 2. Attach a garden hose to the drain hose bib, and then open hose bib allowing the water to drain from the spa by gravity. For complete draining, place outlet end of hose below bottom of spa.

## **CLEANING**:

When the acrylic surface becomes soiled, it can be cleaned with a soft cloth or sponge. **DO NOT US 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.

# WINTERIZING/ SUMMARIZING YOUR SPA

If the spa is to be left unused for an extended period of time in areas where freezing temperatures DO NOT OCCUR, it may be desirable to turn the heater OFF. To keep the spa water clean and sparkling, set the timer to filter the water several times each day. When preparing the spa for use, check the water chemistry to assure correct chlorine and pH levels.

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.

However, CAUTION MUST BE USED WITH THIS APPROACH. 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.

**Smart Winter Mode:** In cold climate areas, Baja Spas are equipped with sensors to detect cold climate situations. These safety sensors will not operate in a power outage. If long outages are expected, it is best to drain and winterize the spa. See Page 13 for winterizing instructions.

## TROUBLESHOOTING

### NONE OF THE EQUIPMENT OPERATES

Main breaker is set at OFF. <u>Set main breaker to ON.</u> Sub-panel breaker is set at OFF. <u>Set sub-panel breaker to ON.</u> Equipment GFCI set at OFF. <u>Set GFCI to ON.</u> Power switch set at OFF (if available). <u>Set power switch to ON.</u>

Components not plugged in. Plug in components. Power cord not plugged in. Plug in power cord. Overheat protection switch tripped.

Allow unit to cool down and restart by pushing any key.

#### NO, LOW, OR SURGING WATER FLOW

#### Air lock plumbing system.

"Bleed" the system, see start-up procedure page 8.

#### 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.

### LOW SPEED PUMP DOES NOT OPERATE

#### Overheat protection switch tripped.

Allow unit to cool down and restart by pushing any key. **Pump not plugged in.** Plug in the pump.

### THERAPY JETS INOPERATIVE

#### Overheat protection switch tripped.

Allow unit to cool down and restart by pushing any key. Shut off valves are closed. Open shut off valves. Pump not plugged in. Plug in the pump. Dirty filter. Clean or replace filter. Jets not properly adjusted. Adjust jets properly - or contact your local dealer. Diverter valve not properly adjusted.

Adjust diverter valve properly - or contact your local dealer.

### LIGHTS INOPERATIVE

Light bulb defective. Replace bulb - or contact your local dealer. Reflector fallen off. Replace reflector - or contact your local dealer. Light not plugged in. <u>Plug in the light.</u>

#### IF THE ABOVE TROUBLESHOOTING PROCEDURE DOES NOT CORRECT THE PROBLEM, THEN CONTACT YOUR LOCAL SPA DEALER OR SERVICE TECHNICIAN

#### **OZONATOR INOPERATIVE**

Power switch is OFF. <u>Set power switch to ON.</u> Power cord not plugged in. <u>Plug in power cord.</u> Low water flow. <u>Clean or replace filter - or contact your dealer.</u> Ozone bulb defective. <u>Contact your local dealer.</u>

#### WATER LEAKS

Spa overfilled. Adjust spa water level. Too many people in spa. Adjust spa water level. Drain valve left open. Shut off drain valve. Couplings or unions loose. Tighten or contact your local dealer. Incorrect water chemistry. Contact your local dealer. Pump seal leaking. Contact your local dealer. Plumbing / connections leaking. Contact your local dealer. Water leaking from spa side control. Contact your local dealer.

#### **NO HEAT**

Temperature not set correctly. <u>Adjust setting.</u> Overheat protection switch tripped. Allow unit to cool down and restart by pushing any key. No power to heater. <u>Reset breaker at service panel.</u> Low water flow. <u>Clean or replace filter.</u>

Improper water flow.

Refer to NO, LOW, OR SURGING WATER FLOW (above). Spa cover not installed. Replace spa cover.

### LOW HEAT

Insufficient heat time. Increase heating periods on timer operation. Temperature not set correctly. Adjust temperature setting. Spa cover not installed. Replace spa cover. Overheat protection circuit tripped. Allow unit to cool down and restart by pushing any key. Temperature sensor not in drywell. Place sensor in drywell - or contact your local dealer. Improper water flow. Refer to NO, LOW, OR SURGING WATER FLOW (above).

### **HIGH HEAT**

Temperature sensor not in drywell.

Place sensor in drywell - or contact your local dealer.

Temperature set too high/maximum.

Adjust temperature setting.

High air temperature. <u>Remove spa cover.</u>

#### GFCI TRIPS OCCASIONALLY

Lightning or Electrical storm, Power surge, Extremely humid conditions, or Radio frequency interference. <u>Reset GFCI.</u> <u>NOTE: Assure that the GFCI is properly grounded and bonded.</u>

### **GFCI TRIPS REPEATEDLY**

Defective component. Contact your local dealer.

## **3 DOT CONTROL PANEL ALARMS**

SMART WINTER MODE/FREEZE PROTECTION: On board temperature sensors continuously monitor water and air temperature. If the temperature inside the control box falls below 59°F. the system will start a special program (Smart Winter Mode) to circulate the water in the plumbing. For the next 24 hours, the components will be automatically operated for a period of 1 minute every 2 hours to thoroughly circulate the water throughout the spa. The time between the 1-minute operations will steadily decrease as the air temperature inside the control box drops. If the water temperature sensor falls below 49°F, the heater will be activated to maintain a temperature above freezing (Freeze Protection). The Filtration Icon in the upper display will be flashing when the system has entered either safety mode. Only while in freeze mode are other functions of the unit (except the alarms) are disabled. Note: If your area experiences electrical power outages and the climatic conditions could result in freezing of the water, we suggest that you contact your local dealer for assistance in proper drainage and winterizing of your spa to avoid any damage that may occur from freezing temperatures.

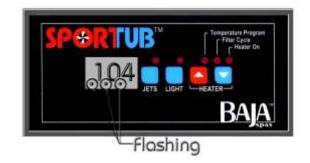
**PRESSURE SWITCH:** To assure proper heater operation, a water pressure switch has been installed to monitor the system. If 3 flashing dots appear below the temperature in the LED window, this indicates the need for system service. Refer to the advanced troubleshooting guide available from your spa retailer or contact a service technician to correct the problem.

**HIGH TEMPERATURE PROTECTION:** If the water temperature exceeds 119°F, the heater will be turned off and the High-Limit temperature protection circuit will display 3 flashing dots below the temperature in the LED window. Once the water has cooled below 110°F power to the system must be turned off, then back on to allow the system to reset. If this condition persists, refer to the advanced troubleshooting guide available from your spa retailer or contact a service technician to correct the problem

**TEMPERATURE SENSOR:** To assure proper temperature maintenance, a temperature probe has been incorporated into the system. If you notice the displayed temperature greatly differs from the actual water temperature, or if 32°F is displayed and the correct water temperature is much higher, this indicates the need for system service. Refer to the advanced troubleshooting guide available from your spa retailer, or contact a service technician to correct the problem



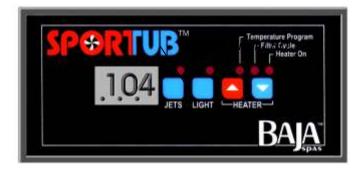
Filter Indicator







## **3 DOT ERROR IDENTIFICATION**





# *3 flashing dots below the temperature display is an indication that an error has occurred. To identify the error, follow these procedures:*

- 1) Open the front cover of the systems control box.
- 2) Verify if the system error LED is illuminated on the printed circuit board.

### System Error LED not Illuminated:

#### With Pump Running

- a) Press the Temp. Down Key to lower the temperature below the current water temperature.
- b) If the 3 flashing dots go away after the pump has shut off, this is an indication that the pressure or flow switch was not activated while water was flowing through the heater. Readjust pressure or flow switch.

#### With Pump Off

a) If 3 flashing dots appear while the pump is off, the pressure or flow switch is activated although no water is flowing through the heater. Readjust pressure or flow switch.

#### System Error LED Illuminated:

a) This is an indication of an Over Temperature condition. Ensure that the High-Limit temperature sensor is properly connected to the printed circuit board.

#### Temperature display reads 30-39°F Range (No flashing or LED error indication):

a) If the temperature reading is 32°F and this is not the actual water temperature, this indicates a problem with the temperature sensor. Ensure that the temperature sensor is properly connected to the printed circuit board.



# Spa Delivery Checklist

| urchaser Information  |
|---|
|   |
| oa Information  |
| Serial#   |
| Equipment serial#   |
| Type: w/skirt w/o skirt (circle one)                          |
| Color: Redwood Grey (circle one) y Voltage drop               |
| Operational Instruction / Demo Owners Manuals/ Warranties     |
| Filter Start Time and Duration Spa Owners Manual              |
| Time of Day Programming Spa Owners Operational Video          |
| Economy Programming & Effects Owners Manual Reviewed w/ Owner |
| Consumer Lifestyle Programming                                |
| Equipment Function (Light) Other                              |
| Filter Maintenance & Air Relief                               |
| Chemical Kit & Water Testing                                  |
| Spa Drain and Function  |
| Warranty Information  |
|   |

### Optional equipment delivered:

\_\_\_\_ Function use and care of above optional equipment reviewed

The above spa was received in good order and the above checklist items were completed and understood this date by the undersigned.