

Owner's Manual

For all 2003 Tadpole Hot Tubs
(Multiple Patents with Other Patents Pending)



TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS

U.L./CSA Safety Instructions P. 02
Additional Safety Instructions P. 04

UPGRADES & ACCESSORIES P. 06

INSTALLATION & SET-UP

Selecting a Site for your Spa P. 07
Electrical Requirements & Hook-Up P. 08
Checklist Before Filling Your Spa P. 11
Initial Start-Up P. 12

OPERATION

Control System P. 12
JetPaks P. 15
Jetting P. 16

MAINTENANCE

Water Chemistry P. 17
Changing Your Spa Water P. 19
Cleaning Your Filter P. 20
Light Bulb Replacement P. 21
Ozone Sterilizer Replacement P. 21
Spa Shell Care P. 22
Spa Cabinet Care P. 22
Spa Cover Care P. 23
Miscellaneous Care P. 23

LOW-USE OR NO-USE PERIODS P. 24

SERVICE P. 25

TROUBLESHOOTING GUIDE P. 27

MISCELLANEOUS

Parts Identification Diagram P. 29
Notes P. 30

IMPORTANT SAFETY INSTRUCTIONS

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

U.L./CSA SAFETY INSTRUCTIONS:


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. CAUTION: Test the ground-fault interrupter before each use of the hot tub.

4. CAUTION: Adequate drainage must be provided if the equipment is to be installed in a pit.

5. a) A wire connector is provided on this unit to connect a minimum No. 8 AWG (8.4 mm²) 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.

b) A green-colored wire terminal or a terminal marked G, GR, Ground, Grounding, or the  Symbol is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.

c) At least two lugs marked "BONDED LUGS" are provided on the external surface or on the inside of the supply terminal box or compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub or spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.

d) All field-installed metal components such as rails, ladders, drains, or other similar hardware located within 3 m of the spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG.

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 hot tub unless they are supervised at all times.

7. DANGER - Risk of Injury. The suction fittings in this hot tub are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible.

Never operate the spa if the suction fittings are broken or missing. Never replace a suction 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 hot tub may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4 mm²) 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 hot tub. (These units DO NOT have an integral ground fault circuit interrupter. The installation of a integral ground fault circuit interrupter MUST be done by a qualified Electrician and must meet all local and national codes.)

10. WARNING - To reduce the risk of injury:

a) Water temperature in excess of 38°C (100°F) may be injurious to your health. The water in a spa or hot tub should never exceed 40°C (104°F). Water temperatures between 38°C (100°F) and 40°C are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes. (Before entering the spa or hot tub measure the temperature with an accurate thermometer.)

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 hot tub water temperatures to 38°C (100°F).

c) Before entering a hot tub, 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.

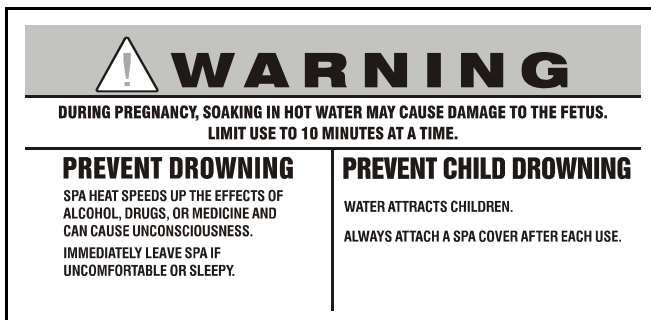
e) Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a hot tub.

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.

SAVE THESE INSTRUCTIONS.

WARNING SIGN

Included with this spa is a warning sign (Fig. A) to inform occasional users and guests of the risk of using the spa. This warning sign is suitable for indoor or outdoor use. Place this warning sign in a conspicuous place adjacent to the spa. For free extra copies call Bullfrog International, L.C. at (801) 565-8111.



(Figure A) Warning Sign

ADDITIONAL SAFETY INSTRUCTIONS:

1. WARNING - Risk of Fatal Hyperthermia.

a) The use of alcohol, drugs, or medication can greatly increase the risk of fatal Hyperthermia in spas and hot tubs.

b) 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:

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit the spa or hot tub;
- Physical inability to exit the spa or hot tub;
- Fetal damage in pregnant women; and

- Unconsciousness and danger of drowning.

2. WARNING - Risk to Infants, the Elderly, and Women Planning or Experiencing Pregnancy. Please consult your physician if the above applies to you or anyone using your spa.

3. WARNING - Risk of Children Drowning.

Although your spa cover is not rated as a safety cover, it is wise to always keep the spa cover securely fastened when not in use. This will help discourage children from attempting to enter the spa while not supervised by an adult.

4. WARNING - Risk of Drowning. Use caution when bathing alone. Overexposure to hot water may cause nausea, dizziness, and fainting.

5. WARNING - Risk of Injury. To avoid injury, exercise care when entering or exiting the spa or hot tub. Surfaces can be very slippery when wet. Do not step or sit on HeadRests. Also, keep all breakable objects out of the spa area.

6. WARNING - Risk of Injury. Do not use a spa or hot tub immediately following strenuous exercise.

7. WARNING - Risk of Injury. Prolonged immersion in a spa or hot tub may be injurious to your health.

8. WARNING - Risk of Injury. People with infectious

9. WARNING - Risk of Injury. Short term inhalation of high concentrations of ozone and long term inhalations of low concentrations of ozone can cause serious physiological effects. Do not inhale ozone gas produced by your spa's Ozone Sterilizer.

10. CAUTION - Risk of Injury. Maintain water chemistry in accordance with chemical manufacturer's instructions.

11. WARNING - Risk of Shock. Spa shall not be operated in severe weather conditions, i.e. electrical storms, tornadoes, etc.

12. CAUTION - Unauthorized Access. Secure the spa area against unauthorized access. Make sure all barriers meet both state and local codes. Keep spa cover on spa when spa is not being used.

13. CAUTION - Risk of Damage to Spa or Equipment. By performing maintenance as described later in this Owner's Manual, the chance of damage to your hot tub and its equipment will be greatly reduced. Never block the air vents that lead to the hot tub equipment compartment. Doing so may cause the hot tub equipment to overheat.

14. CAUTION - Non-Approved Accessories. Using accessories not approved by Bullfrog International, L. C. could void your warranty or cause other problems. Please consult with your authorized Tadpole Hot Tub Dealer.

15. CAUTION - Location of Your Spa. Locate your hot tub on a surface that can withstand the weight bearing requirements of the hot tub (see "Selecting a Site for your Hot Tub"). Also, locate your hot tub in an environment that can withstand repeated exposure to water and the possibility of a major spill.

UPGRADING YOUR TAD POLE

The following are possible upgrades for your Tad Pole Hot Tub:

New JetPak™ designs: As new jet types and styles become available so will new innovative JetPak modules (Fig. B). Check with your authorized Bullfrog Spa Dealer on a yearly basis to see what's available.

Pump upgrade: When you're ready for more horsepower and more jets, just call your authorized Tadpole Hot Tub Dealer and ask for PowerPlus.

WellSpring™ Ozone Sterilizer: For cleaner spa water, we use the most simple, reliable, user-friendly, affordable ozone system on the market. If your hot tub did not come with one, it's well worth the investment (**IMPORTANT:** Your hot tub was designed, tested, and UL Listed with a Bullfrog CDS-16 Ozone Sterilizer. No other Ozone Sterilizer is recommended for your Tadpole Hot Tub.)

LED Lighting System: This unique lighting system offers 12 different lighting "shows" with thousands of different colors and color schemes.

CoverMate-I Cover Lifter: Take the work out of uncovering and covering your hot tub — let Tadpole's cover lifter do the job for you with very little effort. And, while you are using your spa, the Cover Lifter neatly stores your cover behind the spa, offering a privacy wall.

PowerDrain™: This optional accessory allows Tadpole owners the ability to drain their hot tub's water in five to nine minutes (see pg. 26).

SpinClean™ Filter Cartridge Cleaning System: Allows users to more effectively clean their filter cartridges of debris.

Miscellaneous Upgrades: For upgrades as they become available, please visit your authorized Tadpole Hot Tub Dealer frequently.



(Figure B) Several JetPak™ Variations

INSTALLATION & SET-UP

Before attempting to install or use your hot tub, please read the U.L./CSA Safety Instructions, the Additional Safety Instructions, as well as all of the Installation Instructions that follow.

SELECTING A SITE FOR YOUR HOT TUB:

Your Tadpole Hot Tub was designed for either indoor or outdoor use. Whether indoors or outdoors, please adhere to the following guidelines:

1. Select a site that is stable and capable of supporting the weight of your hot tub, its water, and the people using it (refer to the "Model Brochure" or contact an authorized Tadpole Hot Tub Dealer for the Filled Weight of your hot tub). If installed on a suspended floor/deck, the floor/deck should be capable of supporting your hot tub. If you have concerns on this matter, please contact a qualified Licensed Contractor.
2. Select a surface that is flat and reasonably level. This surface must provide continuous support for the entire bottom of the hot tub. Do not shim or block up the spa creating voids below the hot tub.
3. Avoid installing the hot tub in a pit or low area where water may accumulate and damage the spa or its equipment. Choose a site where water will drain away from the hot tub and not towards it.
4. Important: With all installations, the hot tub must be located at least 5 feet from all electrical outlets, switches, and other permanently installed electrical devices.

Indoor Considerations: There are several considerations when installing your hot tub indoors: First, the environment both around and below the hot tub should be water resistant. It must be capable of handling water splashed out from the spa as well as the possibility of a leak from the hot tub (Your Tadpole portable hot tub is the most leak-free hot tub in the industry, but there is still the possibility of a leak from the hot tub. A catch basin equivalent to the volume of your hot tub is recommended); Second, it is recommended that the room you install the hot tub in has proper ventilation. Proper ventilation can usually be achieved by an exhaust fan or an open window.

Note: *Typical indoor surfaces include, but are not limited to: concrete, wood, non-slip tile, or linoleum.*

Outdoor Considerations: When selecting an outdoor site, several things should be considered: First, Avoid selecting a site where excessive water may contact the hot tub, such as from sprinklers or a roof edge without rain gutters; Second, and if possible, avoid areas of direct, prolonged sunlight. The ultraviolet rays of sunlight will tend to fade and damage your hot tub cover and cabinet; Third, Check your local codes on possible restrictions that require fencing or childproof gates around your hot tub; Last, avoid locating your hot tub in an area where debris will be tracked into the hot tub.

Note: *Typical outdoor surfaces include, but are not limited to: concrete, brick, non-slip tile, wood-decking, peagravel or sand.*

ELECTRICAL REQUIREMENTS & HOOK-UP

All Tadpole Portable Hot Tub's must be wired in accordance with all local & national electric codes. Have a licensed electrician perform the electrical installation.

Important: All metal enclosures, pipe or conduit located within 5 feet (1.5m) of the spa must be bonded to the Control Center Box located inside the equipment compartment of the spa. The wire used to complete this bonding must be a minimum No. 8 (8.4mm²) solid copper wire. It is to be connected to the ground lug connector on the exterior surface of the Control Center Box and all metal items described above.

WIRING DIAGRAMS

Please reference the wiring diagram that is specific to your spa's Control System:

- Economy Control System/STD-05 (Fig. C)

120V/240V CONVERTIBLE EQUIPMENT

Unless you special ordered 120 Volt equipment, your Tadpole Portable Hot Tub comes standard as a 240 Volt hot tub.

If your hot tub is equipped with an Economy Control System (STD-05), it can be wired as either a dedicated 120V or 240V system.

With the 120 Volt Economy Control System, you can take advantage of the Tadpole upgrade feature by upgrading your 120V system to a more powerful 240V system. The 240V system allows you to increase horsepower as well as heating capacity.

For specific conversion instructions, please refer to the system wiring diagram locating inside of the control system box.

STD-SUV SYSTEM 240-120 VOLT CONVERSION

All hot tubs come standard from the factory pre set for 240 volt operation.

Steps for 120 conversion:

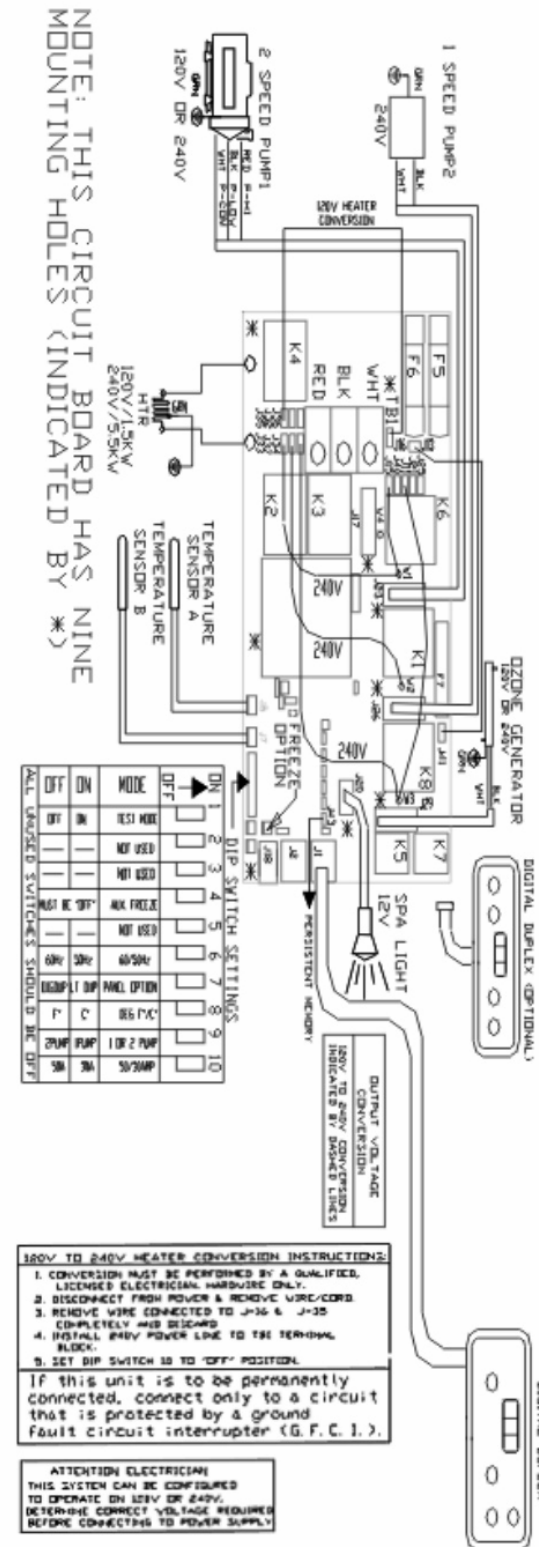
- #12 gauge wire about 6" in length and two spade crimp connectors to connect J-16 to J-35.
- Move the white wire connected to J-33 to J-35.
- Move the white wire connected to J-34 to J-11
- Set dip switch #10 to the "on" position.

The power input lines to the terminal block will use the WHT and BLK connections, the red terminal will not be used with the 120 volt system.

120 volt or 240 volt systems must be protected by a ground fault circuit interrupter (GFCI). **Extension cords are not allowed to be used with 120 volt conversion.** All wiring must be hard wired and performed by qualified electrician. Note: The motors used in Tadpole Hot tubs are 240 volt or 120 volt only. They are not convertible. If a 120 volt conversion is made in the field the motor must be changed to the proper voltage.

BULLFROG STD-05 SYSTEM WIRING DIAGRAM

240V, 5.5Kw HEATER, MAX.



(Fig. C) Standard 120V/240V Wiring Diagram

120 VOLT INSTALLATION

Use only a qualified Licensed Electrician to make 120 Volt electrical installations.

Your 120 Volt spa requires a dedicated GFCI 20 AMP electrical circuit and a minimum supply wire size of 12 gauge. It is important that this circuit is dedicated (not being used by any other electrical appliance) or your spa may not function properly.

Position your Tadpole Portable Hot Tub at least 5 feet (1.5m) from all electrical outlets or devices.

240 VOLT INSTALLATION

Use only a qualified Licensed Electrician to make 240 Volt electrical installations.

Your 240 Volt Tadpole Portable Hot Tub requires a dedicated 50 AMP electrical circuit and a minimum supply wire size of 6 gauge. It is important that this circuit is dedicated (not being used by any other electrical appliance) or your hot tub may not function properly.

Position your Tadpole Portable Hot Tub at least 5 feet (1.5m) from all electrical outlets or devices.

30 AMP Conversion Option: If you do not have 50 AMPS of electrical service available, your authorized Tadpole Hot Tub Dealer or electrician can easily convert your hot tub to operate on 30 AMPS with a minimum supply wire size of 10 gauge. Please be aware, that hot tub's converted to 30 AMPS are only capable of heating the water when the circulation pump is in low-speed, not high-speed. This heating limitation is acceptable in most climates as well as in indoor installations.

ELECTRICIAN'S INSTRUCTIONS:

NOTICE: As of January 1, 1994, the National Electric Code (Article 680-42) requires that all spas, hot tubs, and associated electrical components shall be protected by Ground Fault Circuit Interrupters.

Providing 120 Volt Service to the Tadpole Portable Hot Tub: As per code, supply a GFCI protected, 3-wire (Line 1, Neutral & Ground), 20-AMP, 60HZ, Single-Phase service to the front, left corner (when you are facing the control pad) of the Tadpole Portable Hot Tub. This service must include a disconnect that is visible from the hot tub and located not less than five feet from the hot tub and not more than 50 feet from the hot tub (a GFCI Sub-Panel may be used to substitute the disconnect if located within the same parameters).

Providing 240 Volt Service to the Tadpole Portable Hot Tub: As per code, supply a GFCI protected, 4-wire (Line 1, Line 2, Neutral & Ground), 50-AMP, 60HZ, Single-Phase service to the front, left corner (when you are facing the control pad) of the Tadpole Portable Hot Tub. This service must include a disconnect that is visible from the hot tub and located not less than five feet from the hot tub and not more than 50 feet from the hot tub (a GFCI Sub-Panel may be used to substitute the disconnect if located within the same parameters). Cont.

Installation of the GFCI: All conductors except the green ground must be routed through the GFCI, including the neutral. Never bypass the neutral line. If the neutral line is bypassed, then the current will be imbalanced and cause the GFCI to trip.

Note: For a GFCI wiring diagram, please contact Bullfrog International, L.C. or an authorized Bullfrog Portable Spa Dealer.

Connecting the Spa:

1. Remove the equipment compartment door.
2. Remove the face-plate to the Control Center by removing the four screws located in the front.
3. Connect a 1" non-metallic coupling and conduit to the 1" male CPVC pipe found at the base of the hot tub cabinet (see "Parts Identification Diagram" in this manual).
4. Run the required wires through the conduit and to the Control Center.
5. Connect the 3 wires (120V systems)/4 wires (240V systems) to the terminal block located in the Control Center (see appropriate "Wiring Diagram").
6. Replace the Control Center face-plate and the equipment compartment door.
7. The electrical hook-up is complete.

Important: Do not fill or start-up the spa until you have completed the following section.



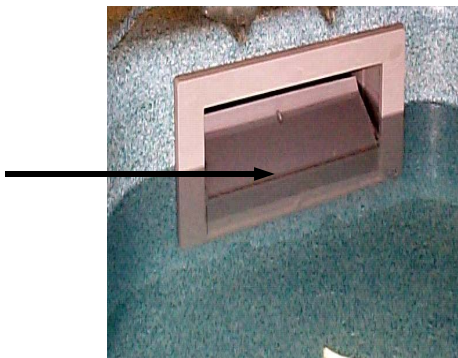
(Figure E) Drain Cap



(Figure F-1) Spa Fittings



(Figure F-2) Spa Fittings



(Figure G) Fill Level Indication Mark

CHECKLIST BEFORE FILLING YOUR HOT TUB

Important: The equipment should never be operated without water in the hot tub. Serious damage to the pump and/or heater may occur.

□ **1. Installing Your Cover:** Your hot tub cover comes with tie-down straps and locking hardware to attach the cover to the hot tub or decking. If your Dealer did not install your cover, then refer to Cover Installation Instructions that come in the cover cardboard packaging.

□ **2. Check Drain-Cap:** At the end of the drain hose (located in the Equipment Compartment) is the Drain-Cap (Fig. E) Make sure it is securely fastened to the end of the drain hose.

□ **3. Tighten Equipment Fittings:** In the equipment compartment, hand-tighten all PVC Pipe Unions and Pump Drain Plugs (Figs. F1-2) to prevent the possibility of leakage (sometimes these fittings loosen during shipment).

□ **4. Fill the hot tub:** Fill the hot tub to approximately the Water Level mark (Fig. G) on the face plate of the filter assembly. (See Note 2).

Note 1: To avoid air pockets in the pumps and in the main plumbing intake, it is recommended that the hot tub be filled through the filter assembly.

Note 2: The higher the water level, the less hot tub occupants it will take to cause the water to overflow the top of the hot tub.

Note 3: Do not fill the hot tub with soft water unless the mineral content is raised immediately (see your Dealer).

□ **5. Check for Leaks:** After the hot tub is full, but before turning the power on, check all the fittings and equipment in the equipment compartment for signs of leakage. If a leak is detected, except from fittings that can be hand-tightened, call your authorized Tadpole Hot Tub Dealer.

INITIAL START-UP

Important: Tadpole Hot Tub's come with an *Economy* Control System. Refer only to the Control System that applies to your hot tub.

ECONOMY CONTROL SYSTEM:

When your hot tub is first activated, it will go into Priming mode, indicated by "*Pr*" on the display. The Priming mode will last for less than 5 minutes and then the hot tub will begin normal operation in Standard Mode. By default, the hot tub will begin to heat until it reaches the start-up temperature of 100°F.

CONTROL SYSTEM OPERATION

WARNING: This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instruction, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a class B computing device in accordance with the specifications in subpart J of part 15 of the FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient the receiving antenna. Relocate the receiver with respect to the spa. Move the receiver away from the spa. Plug the receiver into a different outlet so that the receiver and spa are on different branch circuits. If necessary, the users should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to identify and resolve radio-TV interference problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.



(Figure I-1) Economy Control Pad

ECONOMY CONTROL SYSTEM

MASTER CONTROL PAD (Figures I-1 & 2)

Temp Set (80°F - 104°F)

The start-up temperature is set at 100°F. The last measured temperature is constantly displayed on the LED. **Note that the last measured hot tub temperature displayed is current only when pump 1 ("Jets ") has been running for at least 2 minutes.**

Press the "Temp" button to display and adjust the set temperature. After three seconds, the LED will automatically display the last measured temperature.

Jets

Touch the "Jets" button once to activate the low speed of pump 1 and again for the high speed. Press the "Jets" button again to turn off pump 1. If left running, the pump's low speed will automatically turn off after 2 hours, and the pump's high speed will automatically turn off after 30 minutes. The pump's low speed runs when the hot tub is heating, when a filter cycle is activated, or when a freezing condition is detected. If the pump's low speed is on under Automatic Spa Control, it can only be deactivated by entering the Standby Mode.

Light

Press the "Light" button to turn the light on and off. If left on, the light automatically turns off after 4 hours.

Modes

Press "Temp", then "Auxiliary" (to switch between Standard, Economy, and Sleep Modes.

Standard Mode is programmed to maintain the desired temperature. Note: the last measured hot tub temperature displayed is current only when pump 1 has been running for at least 2 minutes. "St" will be displayed momentarily when you switch into standard mode.

Economy Mode heats the hot tub to the set temperature only during filter cycles. "Ec" will display solid when temperature is not current, and will alternate with temperature when temperature is current.

Push "Jets" to shift to Standard-in-Economy Mode, indicated by "SE" alternating with the temperature. The spa operates the same as it does in Standard Mode, but reverts to Economy Mode automatically after 2 hours. During this time, a press of the "Temp" then "Auxiliary" buttons will revert to Economy Mode immediately.

Note: Heating will occur more quickly in Standard-in-Economy Mode if a low-speed (versus a high speed) pump is operating.

Sleep Mode heats the hot tub to within 20°F of the set temperature only during filter cycles. “**SL**” will display solid when temperature is not current, and will alternate with temperature when temperature is current.

Preset Filter Cycles

The first filter cycle begins 6 minutes after the hot tub is energized. The second filter cycle begins 12 hours later. Filter duration is programmable at the Master Control Pad for 2, 4, or 6 hours. The default filter time is 4 hours. To program, press “Temp”, then “Jets.” Press “Temp” to adjust. Press “Jets” to exit programming.

The low speed of pump 1 runs during filtration and the ozone sterilizer (if installed) will be enabled. If any button is pressed during filtering, the ozone sterilizer (if installed) will be disabled for 60 minutes.

Temperature Display Inversion

Press the “Temp” button, then the “Jets” button to invert display. Use the same sequence to revert back to normal display.

Standby Mode

The hot tub can be disabled when the filter needs to be serviced or when changing/servicing a JetPak™. Press the “Temp” button, then the “Light” button, and the display will show “**SY**.” All hot tub functions will be disabled except for auxiliary freeze control. Press any panel button to resume hot tub operation.

Freeze Protection

If the temperature sensors detect a drop to 40°F within the heater, then pump 1 (and the heater if necessary) will automatically activate to provide freeze protection. The equipment stays on until the sensors detect that the hot tub temperature has risen to within 15°F of the set temperature.



(Figure M-1) Remove Pillow



(Figure M-2) Remove SnapCap



(Figure M-3) Disconnect Air Line Union



(Figure M-4) Loosen JetPak Unions



(Figure N) Remove JetPak

JetPaks™

To identify a type of JetPak, locate the JetPak Identification Number found on the back side of the JetPak (example: J03-63-12). This number provides the following information:

- The Style of JetPak (J03=Style Number 03)
- The Water Flow-Rate of the JetPak (63=63 Gallons Per Minute)
- The Number of Jets (12=12 Jets)

INTERCHANGING JETPAKS:

1. Put the spa in "Standby Mode". This will prevent the pump from activating while interchanging JetPaks. (See "Standby Mode" under "OPERATION" in this Manual.)
2. Remove the headrest pillow (Fig. M-1).
3. Using your hands, remove the SnapCap (top mounting plate) by lifting it upward (Fig. M-2).
4. Push the JetPak forward until you have enough room to reach the two PVC water unions and air line union.
5. Disconnect the air line union (Fig. M-3).
6. After loosening the 2 PVC unions (Fig. M-4), pull the manifold out from between the two water unions and then remove the JetPak from the JetPod (Fig. N).
7. Exchange the JetPak with another JetPak.
8. Reattach the JetPaks in the same manner as above.

JETTING:

JET TYPES (Fig. O)

Depending on the model, your Tadpole Portable Hot Tub comes with a unique combination of the following jets:

Name	Flow
• Ozone Jet (for ozone system only)	
• Cluster Jets (small)	
• Duo-Blaster Jets (small)	
• Micro Magna Jets (small-medium)	
• VSR Jets (medium-large)	
• Storm Jets (medium-large)	
• Verta' ssage Jets (medium large)	
• Jumbo Storm Jets (large)	
• Handheld Jets (medium large)	

INTERCHANGEABLE JETS

The Micro and Storm Jets allow for after-market interchangeable jet nozzles (*Always contact your authorized Tadpole Portable Hot Tub Dealer before attempting to add jets or pump horsepower to your spa*).

ADJUSTABLE JETS (Fig. P)

To adjust the water pressure on any jet, simply turn the outer ring of the jet itself.

To Increase Jet Water Pressure: Turn the outer ring of the jet clockwise.

To Decrease Jet Water Pressure: Turn the outer ring of the jet counter-clockwise.

Note 1: *The Ozone, Verta' ssage, Shower and Duo-Blaster Jets are non-adjustable.*

Note 2: *Never shut all the jets off at the same time.*

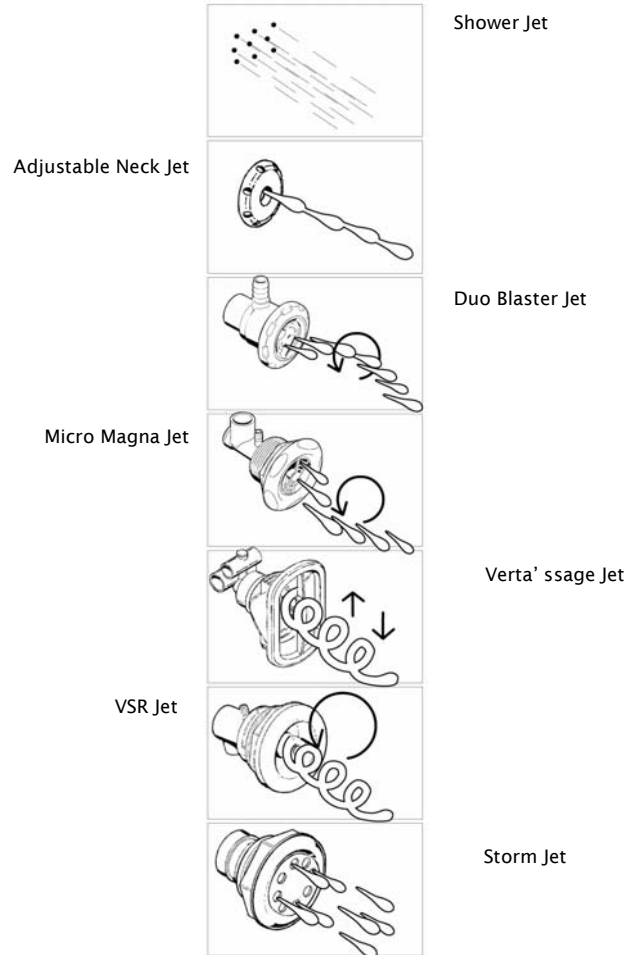


Figure O

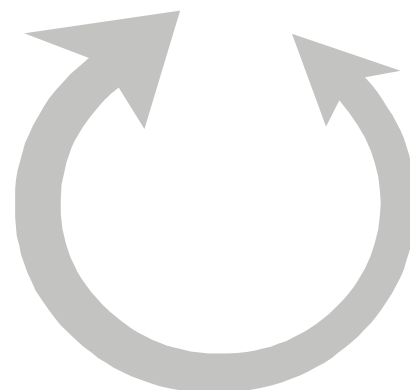


Figure P

MAINTENANCE

WATER CHEMISTRY

Tap water that is safe to drink is not always right for your hot tub. Normal tap water is usually filled with minerals and micro-contaminants that are not visible to the naked eye.

Properly testing and treating your hot tub water is essential for the health of your hot tub as well as the people that use it.

Proper chemical maintenance can control and help prevent the following: 1. Bacteria, algae and fungi, which can spread disease and infection to humans; and, 2. Staining and scale build-up on your hot tub shell, equipment, and piping; and, 3. Clogged filters.

Note 1: *When using chemicals, always follow the instructions provided on the manufacturer's labels.*

Note 2: *Use an accurate test kit to perform all chemistry tests.*

Note 3: *Never mix chemicals.*

Note 4: *With the exception of Chlorine or Bromine Tablets, always add chemicals directly to the hot tub, evenly spreading the chemicals over the surface of the water. Run the Filter Pump at high-speed for 15 or more minutes after applying any chemical.*

OVERVIEW OF WATER CHEMISTRY:

1. Sanitation: Sanitizers kill bacteria and keep the water clean. Effective and safe sanitizers include any of the following: GRANULAR CHLORINE (Dichlor), GRANULAR BROMINE, CHLORINE TABLETS (TriChlor) OR BROMINE TABLETS.

Note: *Non-trichlor chlorine tablets and/or non-dichlor granular chlorines must not be used in your spa, they may damage the hot tub, voiding your warranty.*

2. Super-Sanitation: As your hot tub is used, non-filterable wastes, including perspiration, oils, hair sprays, etc, will build up in the hot tub water. These substances make the water unattractive in appearance and odor, and can also interfere with sanitizer effectiveness. Normal sanitation does not eliminate these waste substances, but Super-Sanitation does. Super-Sanitation is achieved by "shocking" the hot tub water with a NON-CHLORINE SHOCK (Potassium Peroxymonosulfate), GRANULAR CHLORINE (Dichlor) or GRANULAR BROMINE.

Note: *Non-Chlorine Shock is the preferred shocking chemical because it will shock the water without raising the sanitizer level.*

3. pH Control: Proper pH balance is extremely important in controlling bacteria, providing water that's comfortable for the user, and in preventing damage to the hot tub and its equipment. Using the scale of 0-14, pH is the measure of acidity and basicity in the water. pH levels under 7.0 are acidic while pH levels over 7.0 are basic. The proper pH range for a hot tub is 7.4 to 7.6.

High pH levels (over 7.6) can cause the following: Scale build-up on the hot tub and its equipment, cloudy water, a prematurely dirty filter, and less effective chlorine sanitation. To correct high pH levels, add a pH DECREASER.

Low pH levels (under 7.4) can cause the following: Discomfort to the hot tub user and corrosion to the hot tub and its equipment. To correct low pH levels, add a pH INCREASER.

Note: *Never use muriatic or hydrochloric acid to adjust pH as it can damage your hot tub shell and surroundings.*

4. Total Alkalinity (TA): Total Alkalinity (TA) is the measure of carbonates and bicarbonates in the water. Low TA can cause pH to be unstable, bouncing from one level to another, causing the water to be corrosive or scale forming to the hot tub and its equipment. To correct low TA, add a TOTAL ALKALINITY INCREASER. High TA can cause scale build-up, cloudy water, as well as other pH problems. To correct high TA, contact your authorized Tadpole Portable Hot Tub Dealer.

5. Calcium Hardness (CH): Calcium Hardness (CH) is the measure of dissolved calcium in the water. Low CH (soft water) can result in staining to the hot tub's surface as well as corrosion to the hot tub and its equipment. To correct low CH, add a CALCIUM HARDNESS INCREASER. High CH (hard water) can cause cloudy water as well as rough scale build-up on the hot tub's surface and equipment. To correct or manage high CH, contact your authorized Tadpole Portable Hot Tub Dealer.

6. Stain & Scale Control: Stain and scale problems are common in hot water environments. To help prevent and control staining and scaling, add a STAIN & SCALE INHIBITOR.

7. Foam Control: Hot tub water that's polluted with body oils and lotions, combined with high water temperatures, can cause excessive surface foaming. To prevent and control foam on the surface of the hot tub water, add a FOAM REMOVER.

8. Clearing Cloudy Water: There are two basic reasons that hot tub water becomes cloudy. First, non-filterable liquid wastes (perspiration, etc.) have contaminated the water. To remove these waste substances, Super-Sanitize the water (as described above). Continued next page

Second, non-filterable micro-particulate wastes (dust, etc.) have contaminated the water. To remove these wastes substances, use a WATER CLARIFIER.

Note: Names of hot tub chemicals will vary from one manufacturer to another. Please consult your authorized Tadpole Portable Hot Tub Dealer if you have questions.

STARTING YOUR HOT TUB WITH NEW WATER:

1. As your hot tub fills with tap water , add the prescribed dose of a STAIN & SCALE INHIBITOR. This will provide the initial protection against staining and scaling.

Note: Do not use soft water unless the mineral content is raised immediately.

2. When your hot tub is completely filled with water, add the prescribed dose of a WATER CLARIFIER. This will clear the water of any micro-particulates that came with the new water.

3. If possible, have your authorized Tadpole Hot Tub Dealer test the Calcium Hardness (CH) of your hot tub water and adjust as per your dealer's recommendation (the correct level of CH depends on your overall water conditions).

4. Test and adjust the Total Alkalinity (TA) to the range of 125-150 PPM (parts per million).

5. Test and adjust the pH to the range of 7.4-7.6.

6. After the hot tub water has circulated for approximately one hour, add 1/2 teaspoon of GRANULAR CHLORINE or 1 teaspoon of GRANULAR BROMINE per each 200 gallons of hot tub water. After several hours, check sanitizer level and, if necessary, adjust to the following:

	Without Ozone	With
Ozone		
Chlorine Level:	2.0 PPM	1.0 PPM
Bromine Level:	3.0 PPM	2.0 PPM

Important: Unless you have ozone, do not use the hot tub if the sanitizer level is below 1.0.

Start-up water chemistry is now complete. However, it may take several days for the filter to completely clear the water.

MAINTAINING HOT TUB WATER

Sanitizer and pH Levels:

It is important to test and adjust the sanitizer and pH levels of your hot tub on a frequent basis. If your hot tub is used 0-3 times weekly, then we recommend that you test your hot tub water a minimum of 2-3 times that week. For each additional use you should test your hot tub water one additional time.

Always test the pH level before you test the sanitizer level. If the pH level is not in the range of 7.4-7.6, then make the necessary adjustment. Use the dosage prescribed on the label.

With each sanitizer test, use either GRANULAR BROMINE or GRANULAR CHLORINE to maintain the following levels:

	Without Ozone	With
Ozone		
Chlorine Level:	2.0 PPM	1.0 PPM
Bromine Level:	3.0 PPM	2.0 PPM

To maintain the above sanitizer level with CHLORINE or BROMINE TABLETS, please refer to your authorized Tadpole Portable Hot Tub Dealer for assistance.

Super-Sanitation:

Once per week, and when the hot tub is not in use, Super-Sanitize the spa water by adding one of the following:

- Two teaspoons of GRANULAR CHLORINE per 200 gallons of hot tub water.
- Four teaspoons of GRANULAR BROMINE per 200 gallons of hot tub water.
- Five teaspoons of a NON-CHLORINE SHOCK per 200 gallons of hot tub water.

Note 1: With above-average use, Super-Sanitation may be required more than once per week.

Note 2: With ozone, it may not be necessary to shock on a weekly basis (see your dealer).

Stain & Scale Control: Use a STAIN & SCALE INHIBITOR as per the instructions on the manufacturer's label. Do not add this chemical until 3-4 days after Super-Sanitation.

Foam Control: As needed, use a FOAM REMOVER as per the instructions on the manufacturer's label.

Cloudy Water Prevention & Control: Use a WATER CLARIFIER as per the instructions on the manufacturer's label. Do not add this chemical until 3-4 days after Super-Sanitation.

WATER CHEMISTRY TROUBLESHOOTING

Prior to each spa use, check the hot tub water. If the water appears cloudy or off-color, has significant surface foam or smells of chlorine/bromine, then there is a problem with the water and it needs to be treated or drained.

Using the hot tub in these conditions could result in a skin rash or other irritation.

For assistance in handling hot tub water chemistry problems, consult your authorized Tadpole Portable Hot Tub Dealer or another service center capable of performing a Computerized Water Analysis.

CHANGING YOUR HOT TUB WATER

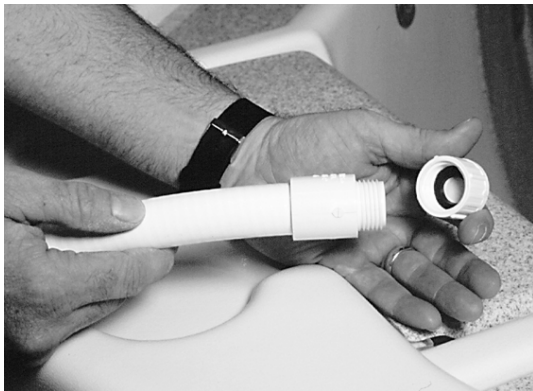
Depending on usage, your hot tub water will need to be changed approximately every 2 - 4 months or whenever your hot tub water becomes difficult to manage.

Note 1: Drain water to an area that can handle the gallonage of your hot tub.

Note 2: If draining water onto vegetation, make sure that the sanitizer level (bromine or chlorine level) of your hot tub water is less than .5 PPM.

Steps to Drain Your HOT TUB (Conventional Method):

1. Disconnect electrical power supply.
2. Remove door to Equipment Compartment.
3. Drain water from hot tub by completing the following:
 - a. Locate Drain Hose in Equipment Compartment.
 - b. Lift Drain Hose higher than water level in hot tub.
 - c. Remove cap on Drain Hose (Fig. S).
 - d. Connect garden hose to Drain Hose.
 - e. Lower Drain Hose to ground level.
4. Clean the hot tub shell (refer to "Hot Tub Shell Care" in this Owner's Manual).



(Figure S) Drain Cap

Steps to Drain Your hot tub (Using the Optional PowerDrain™ w/ 50' of Drain Hose):

***Items Needed:** 1 or 2 JetZone dividers

1. Place the hot tub into standby mode through the control panel.
2. Remove the 1st JetPak on the left side of the hot tub, nearest the filter assembly.
3. Remove the filter(s) from the filter housing unit.
4. Install the power drain unit on the water output side of the 2" plumbing entering the 1st JetPak recess (this will be the fitting closest to the control panel).
5. Unroll the drain hose and direct where the output of the water will go.
6. Start "Jets" button on low speed (water output volume can be controlled by using the gate valve supplied).
7. Place the JetZone divider(s) into the filter housing blocking off the flow at the bottom of the filter. This will allow the hot tub to drain down to the level of the intake suction.
8. The hot tub water will now drain out of the tub in about 5 to 9 minutes at full volume on low speed.
9. After water is drained, place in standby mode and reverse the above procedure.

Steps To Refill Your hot tub:

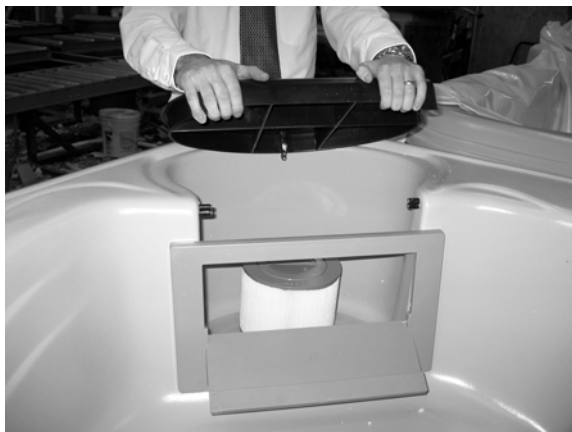
1. Remove garden hose from Drain Hose and replace Drain Hose Cap.
2. Reattach door to Equipment Compartment.
3. Refill hot tub with tap water. Fill the hot tub to any point between the two Water Level Indentation marks located on the face plate of the filter assembly. The depth range of these marks is 6-7½" down from top of the hot tub.

Note 1: To avoid air pockets in the pumps and in the main plumbing intake, it is recommended that the hot tub be refilled through the filter assembly.

Note 2: The higher the water level, the fewer hot tub occupants it will take to cause the water to overflow the top of the spa.

Note 3: Do not fill your hot tub with soft water unless the mineral content is raised immediately.

4. Restore electrical power supply.
5. See "Starting Your Hot Tub with New Water" under "Water Chemistry" in this Owner's Manual.



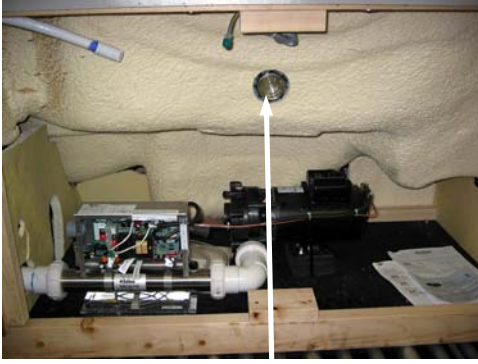
(Figure T) Filter Location and removal

CLEANING YOUR FILTER

Cleaning the Filter Cartridge:

It is recommended that your Filter Cartridge be cleaned every 3 to 6 weeks or as needed. Replace the Filter Cartridge(s) approximately every two years or when necessary. To maintain warranty protection, use only Tadpole Filter Cartridge replacements.

1. Put the hot tub in "Standby Mode". This will prevent the pump from activating while cleaning the cartridge. (See "Standby Mode" under "OPERATION" in this Owner's Manual.)
2. Remove Filter compartment snap-cap.
3. Grasp cartridge and spin out. With a garden hose and nozzle or other high pressure device, hose cartridge(s) clean with jet stream of water. Work top to bottom on each pleat. To remove collected suntan lotions and body oils that hosing will not remove; soak cartridge(s) in warm water with a FILTER CLEANER or detergent added. To remove calcium deposits (a white chalky material) soak cartridge in a one part muriatic acid to ten parts water solution. USE A PLASTIC CONTAINER ONLY. Calcium deposits indicate a high spa pH, which should be corrected.
5. CAUTION: Using a brush to clean a cartridge could damage it. Tadpole's SpinClean™ filter cartridge cleaners may be used and can be obtained from your authorized Tadpole Portable Hot Tub Dealer.
6. Reinstall cartridge, and snap-cap.
7. Press any button on the control pad to reset the control system.



(Figure U) Light Bulb Location

LIGHT BULB REPLACEMENT

To replace a burned out or defective light bulb, complete the following steps:

1. Disconnect electrical power supply.
2. Remove the door to the Equipment Compartment.
3. Locate the back of the hot tub Light Fixture (Fig. U).
4. Grasp the light bulb holder located on the back of the hot tub Light Fixture. Twist counter-clockwise to release it from hot tub Light Fixture. Pull light bulb holder out of hot tub Light Fixture.
5. Replace light bulb and reinstall light bulb holder into hot tub Light Fixture.
6. Replace door to Equipment Compartment and restore the electrical power supply.

Note: For alternate lighting systems contact your authorized Tadpole Hot Tub Dealer for service.

OZONE STERILIZER REPLACEMENT

On the front of your Tadpole Ozone Sterilizer (optional) is an ozone indicator light (the Ozone Sterilizer is located in the equipment compartment). This indicator light will glow whenever ozone is being produced.

To verify that your Ozone Sterilizer is working properly, check the indicator light when the filter pump is running and only during a preprogrammed filter cycle, making sure that the indicator light glows (do not check the indicator light if you have activated the jets within the previous 30 minutes - as a safety device, your Ozone Sterilizer shuts down for 30 minutes after the "Jets" button has been pressed).

If the indicator light does not glow when the filter pump is running then your Sterilizer is not working properly. When this occurs, take the following steps:

1. Disconnect electrical power supply.
 2. Locate the Ozone Sterilizer (Fig. V).
 3. Unplug the Ozone Sterilizer's power supply cord from your hot tub's Control Center.
 4. Disconnect the output tubing from the Ozone Sterilizer.
 5. Remove the mounting screws that hold the Ozone Sterilizer in place.
 6. Take the entire Ozone Sterilizer to your authorized Tadpole Portable Hot Tub Dealer. Your Ozone Sterilizer will be checked to verify that it is defective. If defective, then replace the entire Ozone Sterilizer with a new one.
- Note:** If your Ozone Sterilizer is found to be working properly, then you may have a problem with your hot tub's Control Center or Control Pad. Consult your dealer and request a service call.
7. Reinstall the Ozone Sterilizer by reversing the above procedure.



(Figure V) Ozone Sterilizer Location

HOT TUB SHELL CARE

Your Tadpole Hot Tub surface is durable and easy to clean:

Centrex® Hot Tub Surfaces:

For normal cleaning, use Ivory® Liquid dishwashing detergent or its equivalent. For stubborn stains, use Spic & Span® in powder form or its equivalent. To apply these cleaners, use a soft, damp cloth or sponge. Rinse well and dry with a clean cloth.

General Cleaning:

With normal use of your hot tub, oils, lotions and hairsprays will build up on the surface of the water, sometimes leaving a scum line around the perimeter of your hot tub shell. This scum line can easily be removed with a hot tub SURFACE CLEANER or its equivalent.

To remove grease, oil, paint and ink stains, use 25% isopropyl (rubbing) alcohol in water.

For hard water stains consult your authorized Tadpole Portable Hot Tub Dealer for acceptable cleaning agents.

To remove light scratches and/or to protect your hot tub's shell, see your Tadpole Hot Tub Dealer for an acceptable spa wax.

***Note 1:** Never allow your hot tub surface to come in contact with acetone (nail polish remover), nail polish, dry cleaning solution, lacquer thinners, gasoline, pine oil, abrasive cleaners, or any other harsh chemical. These chemicals can damage your hot tub shell and void your warranty.*

***Note 2:** Avoid using cleaning agents that will leave suds in your hot tub water.*

***Note 3:** Be sure to clean the JetPaks and the JetPods (the area behind the JetPaks) approximately twice each year.*

HOT TUB CABINET CARE

EternaWood Cabinets: Your EternaWood and cabinet components are made to provide many years of maintenance free service. For normal cleaning (EternaWood Cabinets only), use Ivory® Liquid dishwashing detergent or its equivalent. For stubborn stains, contact your authorized Tadpole Portable Hot Tub Dealer.

HOT TUB COVER CARE

Your hot tub cover is warranted by its manufacturer, Sunstar Enterprises, 127 N. Las Posas, San Marcos, CA 92069 (Phone 760 -744-2172). Although basic instructions are provided below, it is important that you refer to the Sunstar information that came with your cover. Sunstar provides detailed information on caring for your hot tub cover and what to do to protect its warranty.

Cleaning & Conditioning Your hot tub Cover:

On a monthly basis, complete the following:

1. Remove the hot tub cover and lay it down on a flat, clean surface near a garden hose.
2. Rinse the cover to remove any loose debris.
3. Using a soft bristle brush, clean the top (vinyl portion) of the cover with a mild solution of dishwashing liquid soap-about one teaspoon of soap to two gallons of water. Scrub the cover, using a gentle circular motion, being careful not to let any areas of the cover dry before rinsing with water.
4. Rinse the cover thoroughly and then dry with a clean cloth.
5. Use saddle soap (never use Armorall) to condition the cover. Follow directions on the container.
6. Wipe and/or rinse any dirt from the bottom side of the cover.
7. Replace the cover and secure with cover locks.

Note: To remove tree sap, use lighter fluid (not charcoal lighter, but the type used in cigarette lighters). Use sparingly. Immediately apply saddle soap to that area.

MISCELLANEOUS CARE

Cleaning & Protecting the Headrests: Clean on a regular basis with soap, water and a clean cloth. Use Armorall® Protectant or its equivalent once per month. This will maintain water resistance and luster of the product.

Vacuumping the hot tub: Debris from wind, trees, and hot tub users will occasionally accumulate on the bottom of your spa. Your hot tub's filtration system will remove the smaller debris. Debris that is too large or too heavy for the filtration system will have to be removed by the use of a vacuum. If you do not have a hot tub vacuum, please contact your authorized Tadpole Portable Hot Tub Dealer.

Cleaning the Scum Line: With normal use of your hot tub, oils, lotions and hairsprays will build up on the surface of the water, sometimes leaving a scum line around the perimeter of your hot tub shell. This scum line can easily be removed with a hot tub SURFACE CLEANER or its equivalent. See your authorized Tadpole Portable Hot Tub Dealer for this product.

Note: Avoid using cleaning agents that will leave suds in your spa water.

LOW-USE OR NO-USE PERIODS

At certain times of the year you may not use your hot tub as often as expected. For these low-use or no-use periods, we recommend the following:

Low-Use:

If your hot tub is being used less than once per month, then you may wish to lower the temperature setting by approximately 5-10°F or put the hot tub in the "Economy Mode". Lowering the temperature on your hot tub will cut your cost of operation if you are not using the hot tub for extended periods, however, you will need to adjust the temperature setting approximately 15 minutes before each use to heat the hot tub to the desired level.

No Use for 1-2 Weeks:

If you plan to not use your hot tub for one-two weeks, then we suggest that you not make any changes in operating your hot tub. Substantially reducing the water temperature (in well insulated hot tub's) for short periods of time has proven to increase heating costs.

No Use for 2-6 Weeks:

If you plan to not use your hot tub for two-six weeks, then you may wish to lower the temperature setting to approximately 80°F during the No-Use period.

No Use for Over 6 Weeks:

If you plan to not use your hot tub for over six weeks, then it is suggested that you winterize your hot tub by taking the following steps:

HOT TUB WINTERIZATION:

1. Drain the water from the Hot tub (see "Steps to Drain Your Hot Tub" under "Changing Your Hot Tub Water" in this Owner's Manual).
2. Drain the hot tub equipment. This is done by removing the drain plug from the pump(s) and loosening all PVC pipe unions and pump air bleed valves in the equipment compartment.
3. Clean the hot tub shell (see "Hot Tub Shell Care" in this Owner's Manual).
4. Remove filter cartridge(clean filter (see "Cleaning Your Filter" in this Owner's Manual), allow to dry, and then store inside your garage or home.
5. Remove and properly winterize your pH Sensor (Option on Limited Control Systems). For winterization instructions contact your authorized Tadpole Hot Tub Dealer.
6. Reattach and secure cover to the hot tub.

HOT TUB DE-WINTERIZATION:

De-Winterization is completed by reversing the above procedure and then refilling the hot tub (see "Steps to Refill Your Hot Tub" under "Changing Your Hot Tub Water" in this Owner's Manual).

Note: During periods of No-Use, you should test and chemically treat the water approximately once per week. Not doing so may lead to corrosion, staining and/or scaling to your hot tub and its equipment. If there is no one available to take care of the hot tub on a weekly basis, then it is recommended that you winterize your hot tub as described previously.

SERVICE

Before requesting service from your dealer, refer to the Trouble Shooting Guide in this Owner's Manual to determine the necessary course of action. If you are not able to solve the problem using the Trouble Shooting Guide, please contact your authorized Tadpole Portable Hot Tub Dealer.

WARRANTY SERVICE

If your Tadpole Portable Hot Tub fails within the warranty period and within the scope of its warranty, contact your authorized dealer and schedule a service call. You will be required to show proof of purchase by providing your dealer with a copy of your original sales receipt.

Note : Damage caused by repairs made by someone other than an authorized Tadpole Portable Hot Tub technician will not be covered by your warranty.

NON-WARRANTY SERVICE

We recommend having an authorized Tadpole Portable Hot Tub technician perform all repairs on hot tub's that fail outside of warranty coverage or beyond the warranty period. If you are not able to use an authorized Tadpole Hot Tub technician, we encourage you to request and use genuine Tadpole replacement parts.

If you are not able to obtain service in your area, call Bullfrog International, L.C. at:

Phone: 801-565-8111

E-Mail: info@bullfrogspas.com

Purchase Information

_YOUR HOT TUB'S SERIAL NUMBER

_DATE YOU PURCHASED YOUR HOT TUB

Dealer Information

_ Dealer Name

_ Street Address

_ City, State, & Zip Code

_ Phone Number

TROUBLESHOOTING GUIDE

The following guide was prepared to assist you in solving simple problems with your hot tub. If the problem with your hot tub cannot be solved after following these procedures, please contact your authorized Tadpole Portable Hot Tub Dealer.

PROBLEM: Control Panel displays an error message such as one of the following: "OHH", "OHS", "ICE", "SnA", "Snb", "Sn5", "HFL", "LF", "drY" or "dr".

Cause: For causes and solutions, see "Diagnostic Messages" under "OPERATION" in this Owner's Manual for the Control System installed on your hot tub.

PROBLEM: Control Pad and hot tub equipment do not operate.

Cause: 1. No electrical power to hot tub.

Solution:

- A. Reset or turn on the GFCI circuit breaker.
- B. Have a qualified electrician check your electrical service.

Cause: 2. The 30-Amp (20-Amp on Standard Control System/BULF20) fuse in the Control System has blown.

Solution: Contact your authorized Tadpole Hot Tub Dealer.

PROBLEM: GFCI Breaker Repeatedly Trips.

Cause: 1. Improper wiring to hot tub or GFCI breaker is defective.

Solution: Consult with electrician.

Cause: 2. Defective component on hot tub.

Solution: Contact your authorized Tadpole Hot tub Dealer.

PROBLEM: Hot Tub pump turns off during operation.

Cause: 1. Automatic timer has completed its 30 or 120 minute cycle.

Solution: Turn on the pump at the Control Pad.

Cause: 2. Pump has overheated due to vents in equipment door being blocked.

Solution: Clear items away from vents in equipment door.

Cause: 3. The pump motor is defective.

Solution: Contact your authorized Tadpole Hot Tub-Dealer.

PROBLEM: Hot tub will not heat.

Cause: 1. Thermostat on Control Pad has been turned down.

Solution: Adjust thermostat to desired temperature setting.

Cause: 2. High Limit sensor has tripped.

Solution: Touch any button on the Control Pad to reset High Limit.

Cause: 3. Heating System is defective.

Solution: Contact your authorized Tadpole Portable Hot Tub Dealer.

PROBLEM: Hot Tub Light does not work.

Cause: 1. Light bulb has burned out.

Solution: See "Light Bulb Replacement" in this Owner's Manual.

Cause: 2. Lighting System is defective.

Solution: Contact your authorized Tadpole Portable Hot Tub Dealer.

PROBLEM: Hot tub pump will not turn on, creates burning smell when running, or makes excessive noise when running.

Cause: Pump motor is defective.

Solution: Contact your authorized Tadpole Portable Hot Tub Dealer.

PROBLEM: Jets surge on and off.

Cause: Water level in Hot Tub is too low.

Solution: Adjust water level to any point between the two water level indentation marks on the back wall of the filter/skimmer cavity.

PROBLEM: Jets are weaker than normal or do not work at all, but in both cases the pump is running.

Cause: 1. Jet handle(s) is partially or fully closed.

Solution: Open jet handle(s).

Cause: 2. Hot tub filter cartridge is dirty.

Solution: See "Cleaning Your Filter" in this Owner's Manual.

Cause: 3. There is air trapped in the hot tub equipment or its face piping.

Solution: Open the air-bleed valve on each pump housing and allow air to bleed out of system. Be sure to tighten each air-bleed valve as soon as water starts to flow out.

Cause: 4. The Suction Fitting(s) are blocked.

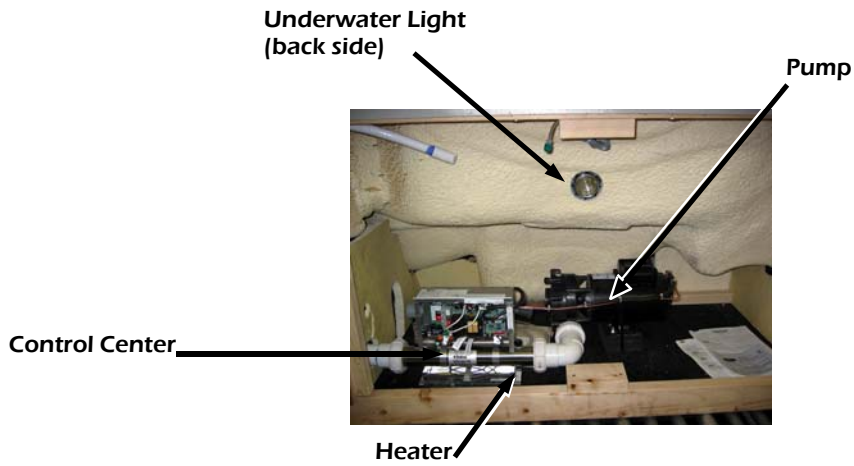
Solution: Remove any item or debris that is blocking each Suction Fitting.

Cause: 5. The JetZone Divider is not installed (This only applies to spas that have two pumps).

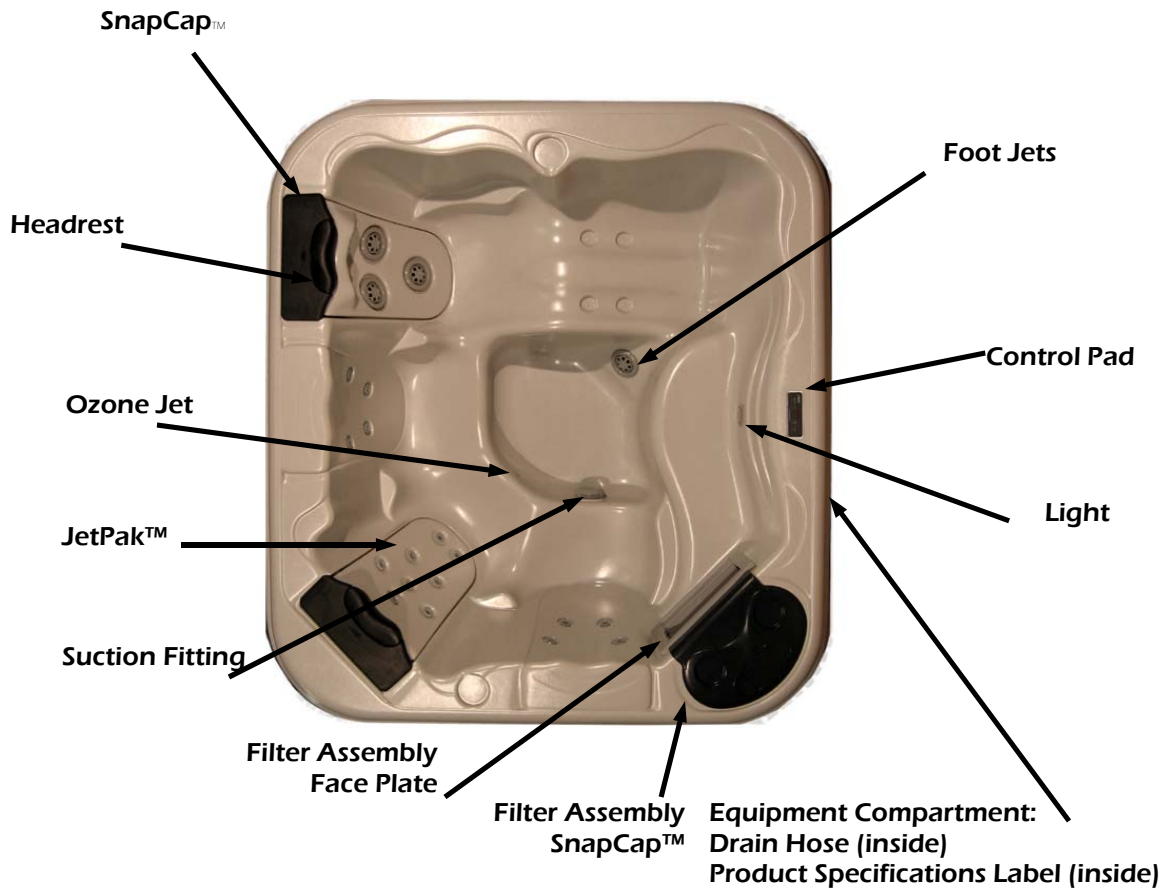
Solution: Re-install in the appropriate JetPak position. (Warning: Running your hot tub without a JetZone Divider can cause serious damage to your pump.)

PARTS IDENTIFICATION DIAGRAMS

Inside Equipment Compartment



Top View of Hot Tub (Model 251 Shown)



NOTES:



Powered By JetPaks™

Bullfrog International, L.C.

686 West 14600 South · Bluffdale, Utah 84065

801 565-8111 · FAX 801 565-8333

www.bullfrogspas.com

E-mail: info@bullfrogspas.com