



**INSTALLATION
&
INSTRUCTION
MANUAL**



By: Quality Leisure Products

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- ❖ Most service calls can be handled on the phone.
- ❖ Front and bottom panel removal allows easy access to all interior spa plumbing for easy checking or repair. Total jet accessibility in minutes.
- ❖ Top of the line Balboa controls, Waterway/Pentair pumps and top quality jets are standard on all models in the Tuff Spa line.
- ❖ All spare parts are instantly available from the factory, if not already in stock at your dealer.

Service Guide

1. Refer to Balboa controls guide (in the back of this manual) and be familiar with the keypad operations.
2. To connect the heater to 220 volts refer to the directions on the inside cover of the Balboa Spa control pack in the Spa side compartment.
3. Spa cover must be closed for the Spa to heat up. Heating time depends on air temperature but generally a Tuff Spa will take 24 to 48 hours to heat up on 110v. The Spa will automatically cycle on for 2 hours each day for filtration. Jets must all be open when the Spa is not used for proper heating and filtration. The Spa pump will continue to run until reaching the set temperature. The spa is equipped for 220 volts conversion for faster heating if desired.
4. Use a dedicated circuit (20 Amp recommended for all spas) within the 15' cord distance.
5. The Spa cord has a G.F.I. protection device, if it repeatedly trips, disconnect the plug from the receptacle until the fault has been identified and corrected.
6. If an extension cord is used, it must be as short as possible and at least 10 gage. Inferior cords will cause Spa controls to mal-function and Void your equipment warranty.
7. The heating Spa will cause condensation to form on the outside and bottom of the Spa and can be reason to believe the Spa is leaking. Small apparent leaks should be given a few days before further investigation is started. Condensation on the cover underside may drip down the Spa sides.
8. The Spa pump motor has an automatic high temperature shut off switch. If the motor stops it will auto start when it cools.
9. Leaks can occur if a Jet body is not properly tightened. If a leak is suspected, remove the panel with a screwdriver. The insulation covering the jets are foam blocks which are easily taken out for seat jet access. If a jet is leaking and does not stop with tightening than back off the nut and apply a silicone sealant.
10. Other tubing, manifolds, valves, etc. can be accessed throughout the Spa by removing other panels.
11. In the unlikely event that the shell develops a hole, it can be sealed only by melting the plastic into the hole. This is best done carefully using an electric soldering iron to soften the surrounding plastic and work it into the hole. Spa must be thoroughly dry before applying the heat, so that there will be no steam formed as it will limit the temperature to 212 F, not hot enough. Do not attempt to apply glues, fiberglass, caulking or other patches as the Spa shell is made of polyethylene which cannot be glued.

Quick Reference For Spa Set Up

Read and Understand all Instructions Before Using Your Spa

1. **Locate Spa on a level surface that will support 3,000 lbs.**
2. **Fill Spa to cover top jets.**
3. **Remove front panel, remove the cord. Place through the slot on the access panel. Replace panel.**
4. **Plug the G.F.I. cord into a 20 amp Dedicated 110 volt circuit receptacle.**
5. **Avoid using extension cords.**
6. **To heat Spa, set to desired temperature and close the covers, initial warm up time will 24 to 48 hours or more depending on conditions, on a 110v line. For a four hour approximate heat up time, have an electrician convert the Spa Pack to 220V.**
7. **Do not unplug the Spa as there is a daily automatic 2 hour filter cycle. The spa will automatically maintain set temperature as required.**
8. **Jets can be turned off individually. After Spa use, be sure most jets are open for good filtration and heating.**
9. **2 valves on the Spa top are to put air bubbles to the jets.**

SPA SET UP AND OPERATING GUIDE

TS-100, TS-300, TS500

Read and Understand All Instructions before operating your Spa.

Selecting the right site for your new Spa

It is important that your new Spa be installed on a Solid, Flat, and Level Surface that is engineered to carry a load of 75 pounds per square feet. The proper site of your New Spa is in an area that is **Not Accessible to Children**. Security or Pool Yard gates should be in place to separate Children from the Spa. Spas should not be placed near or below Electrical or telephone cables. If there is not a dedicated 120 Volt receptacle within the 10 feet of your Spa, contact a **Licensed Electrician** to supply power near the Spa. A GFCI Power Cord is supplied with all models. The GFCI power Cord must be tested each use to insure proper operation. To test, simply depress the button marked "TEST" on the GFCI Unit, the unit should stop operating and the reset button should appear. Push the reset button. The unit should now operate normally. If the interrupter does not perform in this manner, a ground current is following indicating the possibility of electric shock. Disconnect the power until the fault has been identified and corrected.

❖ Filling Your Spa

Check that your Spa's drain valve (located behind the Spas drain cover) is closed. With the electrical breaker in the OFF position and/or the power cord un-plugged, fill to an approximate water level of 2" above the top of the highest jet. Once the Spa is filled, power can then be supplied to your Spa. The Spa's heater will begin heating to the temperature selected on your control panel. (See Spa Controller Instructions Attached)

❖ Draining Your Spa

Unplug the Spa's electrical power supply. The Spa must remain unplugged until re-filled with water. Remove the cap from the Spa's Drain hose and connect standard garden hose. Place the opposite end of the garden hose in the drainage area and open the Spa's drain valve.

❖ Adjusting Massage Jets

To adjust for direction, rotate the "eyeball" of the jet in the desired direction. To adjust for flow, turn the outer knob clockwise to increase flow and counter clockwise to decrease flow. **Do Not** fully decrease flow to all of the jets at the same time. This may cause your pump to malfunction and ultimately fail.

❖ Air Adjustment

To introduce air into your Massage Jets, Turn the Air Adjustment Dials (located on the Spa's top edge). Adjust the same as with the Massage Jets, clockwise to increase flow and counter clockwise to decrease flow.

❖ Suction Fitting

Keep the suction fitting (located in the foot well area) of the Spa unobstructed and free from debris at all times. Do not remove the suction-fitting screen while the Spa is connected to electrical power.

DANGER: RISK OF ELECTRIC SHOCK

Do not permit any electric appliance such as a light, telephone, radio, or television within 5 feet of a spa or hot tub.

TO REDUCE THE RISK OF INJURY:

- ❖ The water in the spa or hot tub should never exceed 40° C (104° F). Water temperatures between 38° C (100° F) and 40° C (104° F) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 15-20 minutes) and for younger children.
- ❖ Since excessive water temperature have a high potential for causing fetal damage, during the early months of pregnancy, pregnant or possibly pregnant women should limit spa or hot tub temperatures to 30° C (100° F).
- ❖ Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of temperature regulating devices may vary as much as plus or minus 3° C (5° F).
- ❖ The use of alcohol, drugs or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.
- ❖ 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 or hot tub.
- ❖ Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temp plus or minus temperature of 98.8° F. The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy and an increase in the internal body temperature. The affects of hyperthermia include (1) unawareness of impending hazard, (2) Failure to perceive heat, (3) Failure for the need to exit the Spa, (4) Physical inability to exit Spa, (5) Fetal damage to pregnant women, and (6) Unconsciousness resulting in a danger of drowning .

WARNING The use of Alcohol , Drugs or medication can greatly increase the risk of fatal hyperthermia.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

Care and Maintenance Instructions

Cleaning the Filter Cartridge

1. Disconnect power
2. Remove the Filter Cover
3. Remove the Filter Cartridge by pulling straight up
4. Rinse Dirt and Debris away thoroughly with a garden hose
5. Replace Filter Cartridge and Cover.
6. Spa Power can then be turned back on

Water Chemistry

Read and Understand the Spa Chemistry Guidelines supplied by your dealer or chemical supplier. Some general guidelines and tips are listed on next page. It is Un-healthy to use your Spa when the water is not in proper Chemical Balance.

Warning

Do not use Calcium Hypochlorites or Trichlors. Doing so may cause corrosion to your pump that will not be covered by your Spa's Warranty

Winterizing

If the Spa is to be transported or stored in temperatures 32° F (0° C) or lower, it is critical that the Spa be fully winterized.

1. The Spa must be fully emptied
2. The drain valve must remain in the open position
3. The drain valve cap removed and stored
4. The Filter Cartridge Element must be removed, dried and stored
5. Remove the plug bottom of the pump housing.

Guide to Spa Water Chemistry

Cleaning your hot tub

1. Drain your spa water every 3 to 4 months, depending on use.
2. The filter should be cleaned every month or more frequently for high bather loads. Soak overnight in filter cartridge cleaner and rinse well before replacing in spa.
3. Refill spa with fresh water to the recommended level. The water line should cover all the upper jets in the spa.

Initial treatment to fresh water

- ❖ Once the temperature of your hot tub reaches about 80° Fahrenheit (30° Celsius), you can start adding chemicals. Warm water will allow any granular chemicals to dissolve properly.
- ❖ Test and adjust the pH of the water to 7.6 - 8.2 by adding either a capful of pH-up or pH-down (add pH up if the pH tests low and vice versa). Allow the water to filter for 30 minutes before retesting the pH.
- ❖ Add 1 capful of a stain and scale control and 1 capful of spa water clarifier. Adding 2 ounces of an enzyme based product will clarify the water and also reduce scum-lines and odors caused by body oils and cosmetic products.
- ❖ Test and adjust the alkalinity of the water to 100. Add alkalinity increaser to raise the alkalinity of the water or add de-creaser to lower the alkalinity.
- ❖ **Sanitizing the spa water** - Use an appropriate amount of Bromine/Chlorine (See instructions on the container or consult with your pool supply professional).
- ❖ ***If you are new to water maintenance, test your spa water with test strips daily to ensure you have a proper sanitizer level. If you are using an Ozone device, you can keep the bromine/chlorine level at the low end of 'ideal' on your test kit scale. You will find that your spa will use less of your sanitizer because the ozone is killing some of the bacteria.

Weekly maintenance

1. Test water for bromine/chlorine, pH and alkalinity.
2. Adjust pH to 7.6 - 8.2 and alkalinity to 100.
3. Add 1 capful of stain and scale control and 1 ounce of a spa clarifier
4. Repeat sanitation as in the "initial treatment" (add bromine/chlorine as needed).
5. Rinse off the filter cartridge with fresh water. Soak the filter in cartridge cleaner monthly or more frequently if you have a large bather load.

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

WARNING: CHILDREN SHOULD NOT USE SPA OR HOT TUBS WITHOUT ADULT SUPERVISION
AVERTISSEMENT: NE PAS LAISSER LES ENFANTS UTILISER UNE CUVE DE RELAXATION SANS SURVEILLANCE

WARNING: DO NOT USE SPAS OR HOT TUBS UNLESS ALL SUCTION GUARDS ARE INSTALLED TO PREVENT BODY AND HAIR ENTRAPMENT

AVERTISSEMENT: POUR EVITER QUE LES CHEVEUX OU UNE PARTE DU CORPS PUISSENT ETRE ASPIRES, NE PAS UTILISER UNE CUVE DE RELAXATION SI LES GRILLES DE PRISE D'ASPIRATION NE SONT PAS TOUTES EN PLACE

WARNING: PEOPLE USING MEDICATIONS AND/OR HAVING ADVERSE MEDICAL HISTORY SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB.

AVERTISSEMENT: LES PERSONNES QUI PRENNENT DES MEDICAMENTS OU ONT DES PROBLEMES DE SANTE DEVRAIENT CONSULTER UN MEDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION

WARNING: PEOPLE WITH INFECTIOUS DISEASES SHOULD NOT USE A SPA OR HOT TUB

AVERTISSEMENT: LES PERSONNES ATTEINTES DE MALADIES INFECTIEUSES NE DEVRAIENT PAS UTILISER UNE CUVE DE RELAXATION

WARNING: TO AVOID INJURY EXERCISE CARE WHEN ENTERING OR EXITING THE SPA OR HOT TUB

AVERTISSEMENT: POUR EVITER DES BLESSURES, USER DE PRUDENCE EN ENTRANT DANS ONE CUVE DE RELAXATION ET EN SORTANT

WARNING: DO NOT USE DRUGS OR ALCOHOL BEFORE OR DURING THE USE OF A SPA OR HOT TUB TO AVOID UNCONSCIOUSNESS AND POSSIBLE DROWNING

AVERTISSEMENT: POUR EVITER L'EVANOUISSEMENT ET LA NOYADE EVENTUELLE, NE PRENDRE NI DROGUE NI ALCOOL AVANT D'UTILISER UNE CUVE DE RELAXATION NI QUAND ON S'Y TROUVE

WARNING: PREGNANT OR POSSIBLY PREGNANT WOMEN SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB

AVERTISSEMENT: LES FEMMES ENCEINTES, QUE LEUR GROSSESSE SOIT CONFIRMEE OU NON, DEVRAIENT CONSULTER UN MEDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION

WARNING: WATER TEMPERATURE IN EXCESS OF 38° C MAY BE INJURIOUS TO YOUR HEALTH

AVERTISSEMENT: IL PEUT ETRE DANGEREUX POUR LA SANTE DE SE PLONGER DANS DE L'EAU A PLUS 38° C

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

WARNING: BEFORE ENTERING THE SPA OR HOT TUB MEASURE THE WATER TEMPERATURE WITH AN ACCURATE THERMOMETER

AVERTISSEMENT: AVANT D'UTILISER ONE CUVE DE RELAXATION MESURE LA TEMPERATURE DE L'EAU A L'AIDE D'UN THERMOMETRE PRECIS

WARNING: DO NOT USE A SPA OR HOT TUB IMMEDIATELY FOLLOWING STRENUOUS EXERCISE

AVERTISSEMENT: NE PAS UTILISER ONE CUVE DE RELAXATION IMMEDIATEMENT APRES UN EXERCISE FATIGANT

WARNING: PROLONGED IMMERSION IN A SPA OR HOT TUB MAY BE INJURIOUS TO YOUR HEALTH

AVERTISSEMENT: L'UTILISATION PROLONGEE D'UNE CUVE DE RELAXATION PEUT ETRE DANGEREUSE POUR LA SANTE

WARNING: DO NOT PERMIT ELECTRIC APPLIANCES (SUCH AS A LIGHT, TELEPHONE, RADIO OR TELEVISION WITHIN 1.5 M OF THIS SPA OR HOT TUB

AVERTISSEMENT: NE PAS PLACER D'APPAREIL ELECTRIQUE (LUMINAIRE, TELEPHONE, RADIO, TELEVISEUR ETC) A MOINS DE M DE CETTE COVE DE RELAXATION

CAUTION: MAINTAIN WATER CHEMISTRY IN ACCORDANCE WITH THE MANUFACTURE'S INSTRUCTIONS

ATTENTION: LA TENEUR DE LEAU EN MATIERS DISSOUTES DOIT ETRE CONFORME AUX DIRECTIVES DU FABRICANT

WARNING

**Connect to a grounded , Grounding Type Receptacle Only
To reduce the risk of electric shock, replace damaged cord immediately
DO NOT BURY THE CORD**

DANGER

To reduce the risk of injury to persons, DO NOT REMOVE Suction Fittings



TO ALL ORIGINAL PURCHASERS OF THIS PRODUCT

LIFETIME WARRANTY

Tuff Spas™ warrants the spa shell/skirting against water loss and structural integrity due to defects in the spa for Lifetime. For original purchaser only, warranty is non-transferable.

5- YEAR WARRANTY

Tuff Spas™ warrants the interior and exterior surface of the spa against cracking or delaminating for 5 years from date of purchase. For original purchaser only, warranty is non-transferable.

1- YEAR PARTS WARRANTY

The Original Manufacturers provide limited warranties on the pump, “topside” controls, heater, master control center, plumbing and fittings. **(2 year warranty on the pump)** See terms and conditions in separate documents.

PERFORMANCE OF WARRANTY

Tuff Spas™ shall repair or replace (at our option) warranted product if it fails or becomes defective during the warranty period. To obtain service in the event of a defect covered by this Warranty, contact your Tuff Spas™ dealer or Tuff Spas™ as soon as possible and take appropriate precautions to prevent further damage to your spa. Tuff Spas™ or a designated service technician will correct the defect subject to the terms in this warranty. In the event that a replacement is necessary, costs for the removal of the defective spa, shipping costs for the replacement or repaired spa, and delivery and installation of the replacement or repaired spa will be the responsibility of the spa owner.

EXCEPTIONS TO WARRANTY

1. Any damage caused by negligent misuse, improper installation, improper water chemistry, and/or failure to follow instructions in the Owners Manual.
2. Filter elements, underwater light bulbs, ozone bulbs, pillows, spa covers, stereos and all stereo components.

This warranty is void if the spa has been subject to any alteration, misuse, or abuse. Alteration shall include any component or plumbing change, electrical conversion, or the addition of any sanitation or water purification device or heating system, which contributes to a component or unit failure or unsafe operating system. Misuse and abuse shall include use of the spa in an application for which it is not designed. Specifically: damage caused by clogged or dirty cartridges, damage to the spa surface caused by harsh chemicals or chemical misuse, and damage to the spa surface caused by improper pH balance or other improper water chemistry maintenance, and damage to the spa surface caused by leaving the spa uncovered by spa cover, without water, and in direct sunlight.

Tuff Spas™ shall not be liable for injury to any person or any claim for damage however it shall arise. All consequential expenses including loss of use, transportation charges arising out of alleged deficiency of spa are specifically excluded. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Some states do not allow the exclusion of consequential damages, so the above limitation may not apply to you.

Tuff Spas™ 7112 West Frier Drive Glendale, AZ 85303

TO ALL ORIGINAL PURCHASERS OF ITS PRODUCT

**Tuff Spas™
7112 W. Frier
Glendale, AZ 85303**

Warranty Registration: Mail this in with a copy of your invoice.

Name: _____ Dealer Name: _____

Address: _____ City: _____

State: _____ Zip: _____ Phone: _____

Spa Model & Serial #: _____ Date of Purchase ___/___/___