

TUFF  SPAS

**OWNER'S
REFERENCE
GUIDE**

NORTH AMERICA

Tuff Spas
7612 N. 74th Ave.
Glendale, AZ 85303
866-939-0851

- ❖ **Many troubleshooting inquiries can be handled by your dealer by phone.**
- ❖ **Side panel removal allows easy access to all interior spa plumbing for easy inspection or repair, allowing for total jet accessibility in seconds rather than minutes.**
- ❖ **Most parts are readily available from the factory, if not already in stock at your local dealer.**

Quick Tip Guide

- 1. For 120v (volt) hook up, use a dedicated circuit (15 Amp minimum, 20 Amp recommended) within the cord distance.**
- 2. Spa cover must be closed for the spa to properly heat. Heating time depends on air temperature but generally the spa will average 24 to 48 hours to heat on 120v. The spa will automatically filter twice a day for 1 hour each time (to change this see page 3 of the ML260 User Guide attached). Jets must all be open when the spa is not used for proper heating and filtration. The pump will continue to run until reaching the set temperature. The spa cord has a GFCI protection device. If it repeatedly trips, disconnect the plug from the receptacle until the fault has been identified and corrected by a spa technician.**
- 3. If an extension cord is used, it must be as short as possible and at least 10 gauge (for outdoor use). Inferior cords may cause spa controls to malfunction and void your equipment warranty.**
- 4. The heating spa will cause condensation to form on the outside and bottom of the spa which may cause reason to believe the spa is leaking. For this reason, small “leaks” should be allowed a few days prior to further investigation.**
- 5. The spa pump has an automatic high temperature shut off. If the motor stops, it will auto start after it cools.**
- 6. All tubing, manifolds, valves, etc. can be easily accessed throughout the spa by removing the panels.**
- 7. To convert the spa to 240v please contact your dealer or a licensed electrician. A 4-wire, 50 amp breaker is needed for 240v applications.**

Tuff Spa Startup

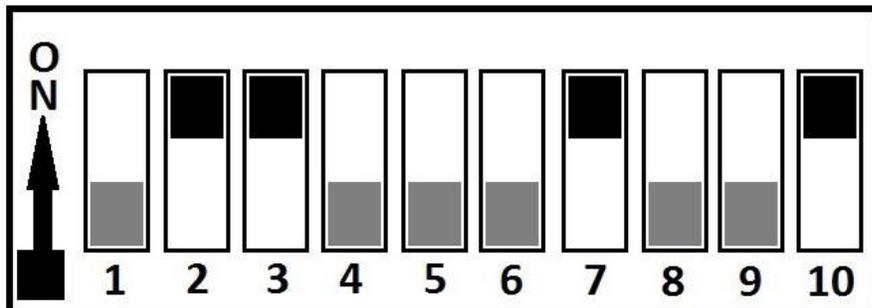
❖ Selecting Tuff Spa Site Location

It is important your new spa be installed on a solid, flat, and level surface that is engineered to carry a load of 75 pounds per square foot. Spas should not be placed near or below electrical or telephone cables. If there is not a dedicated 120v receptacle within 10' of your spa, contact a **Licensed Electrician** to supply power near the spa. A GFCI Power Cord is supplied with all 120v applications. For 240v you will need a licensed electrician to run the necessary wiring unless proper wiring is already at site location.

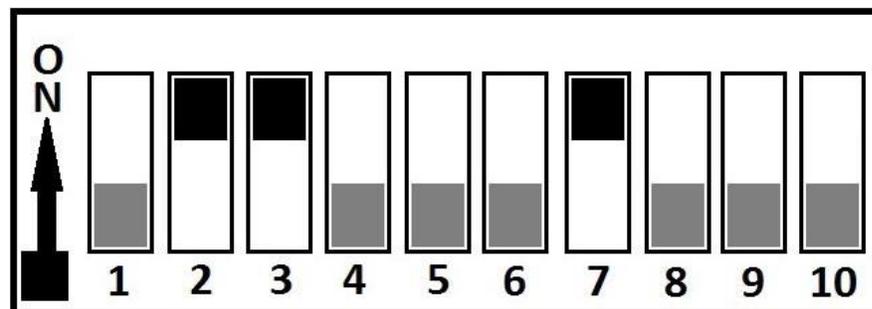
❖ 120v to 240v Conversion

1. Remove the necessary panel and locate the spa control pack
2. Remove the pack cover and locate the 120v electrical wiring. Remove the 3-wire, 120v cord and connect the 4-wire, 240v hookup (50 amp breaker required)
3. Locate the jumper wire that connects J11 to J32, remove it
4. Locate the DIP Switch bank and move #10 to the OFF position (down)
5. Turn power on

120v Tuff Spa DIP Switch Settings



240v Tuff Spa DIP Switch Settings



❖ **Filling Your Spa**

Ensure that the drain valve is closed. Unthread and remove the filter. Put garden hose in the void where the filter was. This will help to eliminate air locks. With the electrical breaker in the OFF position and/or the power cord un-plugged, fill to an approximate water level equal to the top of the highest jet. Once the spa is filled, power can then be supplied to your spa.

NOTE: Please ensure that the water level does not cover or submerge any equipment for an extended period of time when people enter the spa due to water displacement. If this happens, please lower the water level to prevent this as it could cause damage to the spa components that would not be covered under warranty.

❖ **Relieving Air Locks**

Occasionally, on a fresh fill or refill, an air lock may occur. This is caused by the build up of air in the plumbing lines which will not allow water or air to flow through the jets. If left un-attended, the pump can overheat from lack of water flow. This type of damage is not covered under the warranty. The easiest way to remedy this situation is to repeatedly cycle between low- and high-speed on the topside controls. If this does not fix the issue you will have to open the access panel that houses the pump. Once the panel is removed, locate the pump and you will see two large, white nuts attached to the pump. One is horizontal to the pump and the other is vertical. Take a large pair of channel locks and loosen the horizontal nut with the pump in high-speed. Continue to loosen the nut until the jets begin to work. Doing this will cause water to come out the nut you are loosening which is normal. Once the jets are functioning properly, tighten the nut back up and put the panel back on.

❖ **Adjusting Massage Jets**

To adjust for direction, rotate the "eyeball" of the jet in the desired direction. To adjust for flow, turn the outer jet face counter clockwise to increase flow and clockwise to decrease flow. At no time fully decrease flow to all of the jets. This may cause your pump to malfunction and suffer catastrophic failure which will not be covered under the warranty.

❖ **Air Adjustment**

To introduce air into the jets, turn the air controls (located on the spa's top edge) counter clockwise. To decrease air flow, turn the air controls clockwise.

❖ **Suction Fitting**

Keep the suction fitting (located in the foot well area) of the spa unobstructed and free from debris at all times. Only remove the suction-fitting screen for cleaning. Never remove it while the spa is connected to electrical power.

Care and Maintenance Instructions

❖ Cleaning the Filter Cartridge

1. Disconnect power
2. Remove the filter cover
3. Unthread the Filter Cartridge counter clockwise
4. Rinse dirt and debris away thoroughly with a garden hose
5. Replace filter cartridge and cover
6. Reconnect power

❖ Water Chemistry

Read and understand the spa chemistry guidelines supplied by your dealer or local chemical supplier. There are many solutions available to balance your water chemistry. If you are unfamiliar with water chemistry, your best option is to work with your dealer or your local chemical supplier. It is unhealthy 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 and possibly fade your spa surface. This will not be covered under the warranty.

❖ Minimum Weekly Maintenance

1. Test water for chlorine and pH
2. Adjust pH to 7.2-7.8
3. Adjust chlorine to 1-3ppm

❖ 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. For specific, regional winterization guides, please contact your local dealer. Below are general guidelines:

1. The spa must be completely free of water
2. The drain valve must remain in the open position
3. The drain valve cap must be removed and stored
4. The filter cartridge element must be removed, dried and stored
5. Remove the plug from the pump housing

❖ Hard Top Covers

1. Hot and cold weather natural causes the material to expand and contract which may allow for gaps and/or inconsistencies between the cover and spa. As long as the seal sits on the top edge of the spa any inconsistencies or small gaps around the edge of the cover will not affect the ability of the cover to retain heat and is purely aesthetic.
2. The high-grade resin from which the spas are constructed can be easily cleaned with a mild soap and water solution.
3. Any bolts/screws on the cover may need to be tightened on occasion, depending on use.

❖ **Soft Top Covers**

1. Soft top covers are composed of a vinyl skin and high density foam insert. They have straps and two part clips which are attached to the spa.
2. The vinyl surface can be cared for with any mild household cleanser or products made for the care and maintenance of vinyl products.

❖ **Cleaning Your Tuff Spa**

1. The filter should be cleaned every 3-6 months with your garden hose. You may also choose to use a filter cleaner. Follow the directions provided with the cleaner.
2. If the shell gets dirty, you can simply use pressurized water to clean the majority of the dirt. In some cases you may need to use a mild soap and water solution. In this instance, you will need to thoroughly rinse the spa. If not, you will have an issue with bubbles.
3. Refill spa with fresh water to the recommended level. The water line should cover all the upper jets in the spa. If you encounter an air lock, refer to the “Relieving Air Locks” section above.

Troubleshooting

❖ **“LF” Error Code Fixes**

1. The most common reason for this error code is a lack of water in the hot tub. The water line should be equal to the top of the highest jets (please refer to the “Filling Your Spa” section above). If it is not, add water to the spa to reach this level, then reset spa power. This will reset the memory and the error should be cleared.
2. The 2nd most common reason for this error is an air lock during a fresh fill of water into the spa. Air locks are common when filling up a spa for the first time. Please see “Relieving Air Locks” section for tips on relieving air locks. If after the air lock is remedied you may still have a “LF” error on the topside. To reset the memory, simply reset spa power. This should clear the error code.
3. The 3rd most common reason for this error code is a dirty filter or a clog in the line. Power off the spa, remove the filter, and reset power. If the issue persists, please contact your dealer for additional assistance.

❖ **“Why Is My Spa Constantly Running?”**

All Tuff Spas are fitted with state-of-the-art technology that automatically filter your spa as well as check to ensure the spa is always at the desired temperature. Part of this process is that the spa pump runs twice a day for at least 1 hour each time to filter. Additionally, the pump runs once every 30 minutes to verify that the spa is at the correct temperature. So while it may seem the spa is constantly running, this is simply part of the heating and filtration process. If you still feel the spa is running constantly, please contact your dealer.

❖ Draining Your Spa

DISCONNECT THE POWER TO YOUR HOT TUB

150, 250, 450, 650 Models:

On the outer side of the spa you, will see a black circular area that has a handle. Simply pull the handle out and twist off the cap. Attach a garden hose and carefully pull on the part where the hose and the drain assembly meet. The assembly will pop out approximately ¼” opening the valve. This is a gravity drain and as such, will be slow so you may not see water draining immediately. If you need to drain the spa more quickly, you may rent/buy a submersible pump.

350, 550 Models:

Remove the panel below the topside controller and locate the drain hose (3/4” flex pipe with drain attachment). Remove the drain assembly cap and attach a garden hose. Twist the valve allowing water to flow out. This is a gravity drain and as such will be slow so you may not see water draining immediately. If you need to drain the spa more quickly, you may rent/buy a submersible pump.

DO NOT LEAVE SPA EMPTY FOR EXTENDED PERIODS OF TIME. LEAVING THE SPA EMPTY MAY RESULT IN THE JET HOUSING GASKETS DRYING OUT, CAUSING LEAKS AND/OR WARPING. THIS TYPE OF DAMAGE IS NOT COVERED UNDER THE WARRANTY.

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

TO REDUCE THE RISK OF INJURY:

- ❖ Spa water 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.
- ❖ Excessive water temperature has a high potential for causing fetal damage, during the early months of pregnancy, pregnant or possibly pregnant women should limit spa temperatures to 30° C (100° F).
- ❖ Before entering a spa, 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 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.
- ❖ Persons using medication should consult a physician before using a spa. Some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.
- ❖ Do not sit or stand on the edge of the spa or cover.

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.

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.

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 ATTEINES 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 E SORANT

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'EVANOUISSMENT ET LA NOYADE EVENTUELLE, NE PRENDE 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 DENGEREUSE 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 (LUMINARE, TELPHONE, 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 entire Spa Shell and Hard Cover surface against water loss and structural integrity due to defects in the spa for Lifetime. For original purchaser only, warranty is non-transferable.

3- YEAR EQUIPMENT WARRANTY

The Original Manufacturers provide limited warranties on the “Topside” Controls, Heater, Master Control center, and Pump for 3 years from date of manufacturing. See terms and conditions in separate manufacture documents.

1- YEAR PARTS WARRANTY

The Original Manufacturers provide limited warranties on all Plumbing and Fittings, Wiring, Cords, GFCI, Jets, Hard Cover Arm Bars, Vinyl Spa Covers, Pillows, Hard Cover Gaskets & Straps, and other non-electrical mechanical parts for 1 year. The ozone is also covered for 1 year. See terms and conditions in separate manufacture documents.

90-DAY LABOR WARRANTY

Tuff Spas™ warrants all the labor involved with manufacturing defects for 90 days from date of purchase. This does not include electrical issues, ozone systems, issues with air locks or other issues that do not arise from defects in manufacturing. In some cases, the servicing dealer may charge you a reasonable repairperson travel/service charge that is not covered by this warranty. Please contact the dealer for information regarding any such charges.

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 or repair 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. Cartridge filter elements, light bulbs, stereos and all stereo components, foam, insulation, and cover straps.

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/discoloration to the spa surface caused by harsh chemicals or chemical misuse, and damage/discoloration to the spa surface caused by improper pH balance or other improper water chemistry maintenance. Damage to the spa surface caused by leaving the spa uncovered or without water, for long periods of time.**

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™ 7612 N. 74th Ave., Glendale, AZ 85303

TO ALL ORIGINAL PURCHASERS OF ITS PRODUCT

**Tuff Spas™
7612 N. 74th Ave.
Glendale, AZ 85303**

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

Name: _____ Dealer Name: _____

Address: _____ City: _____

State: _____ Zip: _____ Phone: _____

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