

**DISCLAIMERS**

There are no additional warranties, express or implied, which extend beyond the terms of this limited warranty. Marquis Corp. makes no warranty of merchantability of the goods or the fitness of the goods for a particular purpose.

No other person or entity has been authorized to make any warranty, representation or promise of performance not included in this express written warranty, and Marquis Corp. shall not be bound by any such additional warranty, representation or promise.

This warranty gives you specific legal rights. You may also have other rights that may vary from state to state.

Please enjoy your new spa, but think safety first. Read your Owner's Manual in its entirety before installing your spa and encourage all spa users to do the same. More than just common sense, this Owner's Manual provides vital safety and operational information.

We sincerely hope your spa life is a pleasant experience. If problems should arise, contact your authorized dealer. Or contact Marquis Corp. at any of the following:

Email: [service@marquiscorp.com](mailto:service@marquiscorp.com)  
Web: [www.marquisspas.com](http://www.marquisspas.com)

Marquis Corp.  
596 Hoffman Road  
Independence, OR 97351

**SERIAL NUMBER LOCATION**

You will find the serial number on the silver tag in the equipment area.

**PLEASE FILL OUT AND KEEP FOR FUTURE REFERENCE**

Name of Purchaser \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Signature \_\_\_\_\_

Telephone \_\_\_\_\_

Spa Model/Color \_\_\_\_\_

Spa Serial # \_\_\_\_\_

Pack Serial # \_\_\_\_\_

Dealer's Name \_\_\_\_\_

Dealer's Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_

Every effort has been made to ensure the accuracy of this manual. However, Marquis Corp. reserves the right to improve its product without notice. This could create a minor variation between this manual and the actual product you receive. We apologize for any inconvenience this may cause.

**IMPORTANT SAFETY INSTRUCTIONS**

120V, Cord Connected Models .....	2
240V, Permanently Installed or Converted Models .....	2-3
Safety .....	3-7

**INSTALLATION INSTRUCTIONS**

Location .....	8-9
Filter Cartridge .....	9
Electrical Requirements .....	10-11

**STARTING YOUR SPA .....** 12**SPA SPECIFICATIONS**

660 .....	13-14
545.....	15-16
530.....	17-18
435.....	19-20
425.....	21-22
322 .....	23-24

**SPA CONTROL OPERATION**

All Models.....	25-28
Audio Systems.....	28-29

**EQUIPMENT DIAGRAM**

660 and 545.....	30
530, 435 and 425.....	31
322.....	32

**TROUBLESHOOTING .....** 33

LCD Diagnostic Messages .....	34
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**MAINTENANCE .....** 35-40**WARRANTY .....** 41-42**STEREO WARRANTY.....** 43-44**STEREO SYSTEM ONE YEAR LIMITED WARRANTY**

Marquis Corp. warrants to the original retail purchaser, the components of the stereo system will be free from defects in material and workmanship for a period of one year from date of purchase. One year coverage includes parts. Labor is covered for 90 days and is based on a predetermined schedule. Optional remote and IR/RF sending unit not included in this warranty: other warranties may apply from the original manufacturer of the optional remote. The stereo system Limited Warranty is made only to the original purchaser of the spa and is not transferable.

In no event shall any obligation of Marquis Corp. extend beyond the original period of any applicable warranty determined according to the effective warranty date of the original purchaser.

**PERFORMANCE OF WARRANTY**

Marquis Corp. agrees to repair or furnish a replacement for any defects in stereo system material or workmanship which upon test and examination by Marquis Corp. proves defective. Stereo components including CD player/radio, speakers, subwoofer, mechanical speaker lift device, stereo access door, power supply are warranted against defects in material and workmanship for one year. Labor to replace stereo components is covered for 90 days. Water intrusion of any kind is not covered. All materials for examination must be returned to Marquis Corp. freight prepaid.

Your authorized Marquis Dealer reserves the right to assess travel charges for service calls.

**INVALIDATION OF WARRANTY**

This warranty is void if the stereo system has been subjected to alteration, misuse or abuse or if any repairs on the stereo system are performed or attempted by anyone other than an authorized Marquis Corp. service center. Alteration is defined as any component change, electrical conversion or the addition of any alternative sound system components which contribute to component failure.

Misuse and abuse shall include without limitation any external power source attached to the stereo system other than approved source, or use in a particular manner that the stereo system was not designed, or operation of the stereo system other than in accordance with Marquis Corp. printed instruction (located in the Owner's Manual) that leads to any component failure. Under no circumstances shall Marquis Corp. or any of its representatives be held liable for injury to any person or damage to any property, however arising.

Other costs not associated to the direct repair of the spa, such as phone charges, missed work, and damage caused to the stereo system beyond Marquis control, are not included in this warranty. Items beyond Marquis control include but are not limited to damage resulting from: improper connections, accidents, failure to follow procedures defined in the Owner's Manual, damaged from excessive wattage to the system, lightning, extreme temperatures or any other natural occurrences.

**IMPORTANT:** Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, therefore the limitation or exclusions may not apply to you.

spa, a replacement part will be provided to you at no charge when you return the defective part. All replacement parts assume the original warranty status of the spa into which they are installed, including time remaining on warranty, and have no separate or independent warranty of any kind.

To facilitate repairs, Marquis Corp. or its agent may require access to spa equipment. It is your responsibility to provide unencumbered access.

#### WHAT THE MARQUIS CORP. LIMITED WARRANTY DOES NOT COVER

No warranty will apply to any spa that has been (i) modified, altered or adapted without Marquis Corp.'s written consent; (ii) maltreated or used in a manner other than in accordance with the spa owner's manual; (iii) repaired by any third party not authorized by Marquis Corp.; (iv) improperly installed by any party; (v) used with equipment not covered by this warranty, to the extent that problems are attributable to such use; (vi) relocated to the extent that problems are attributable to the relocation; (vii) located on any support surface other than specified in the spa printed instructions; and (viii) damage caused by pH level outside the range of 7.4 to 7.6 and other chemical abuse. Refer to instructions in the owner's manual for proper use, maintenance and installation of your spa.

Other items not included in this warranty are freight expenses; labor and material cost associated with removal and or replacement of the spa; damage to or fading of the spa surface and staining of the spa surface or equipment caused by impact, scratching, abrasive or corrosive cleaners; damage due to extreme water temperatures outside the range of 32°F to 120°F (0°C to 49°C) even if the damage was the result of a covered failure; or damage to the spa surface or equipment caused by acts of nature, including wind and power surges. Damage to the spa surface and fittings caused by leaving the spa uncovered and empty of water with direct exposure to sunlight may cause solar heat distress and also invalidates this warranty.

Other costs not associated with the direct repair of the spa, such as phone charges and missed work are not included in this warranty. In the event that the Marquis Corp. serial number tag on the spa has been removed or tampered with, the warranty will be void. Customer may not dismantle spas, and any attempt to dismantle systems, other than described herein, constitutes a modification or alteration of the spa which voids the applicable warranty.

#### LIMITATIONS

Your sole and exclusive remedy and Marquis Corp.'s entire liability in connection with manufacture and sales of its spa products is repair or replacement (at Marquis' option) of a defective part, as expressed in the limited warranty. Any other express or implied representation or warranty, including the implied warranties of merchantability and of fitness for a particular purpose as well as non-infringement, is excluded to the maximum extent permitted by law.

Except as may be required by applicable law, Marquis Corp. shall not be liable for injury, loss, or damage to person or property, however arising, in connection with manufacture or sale of its spa products. This includes indirect, punitive, special, incidental, or consequential damages (including but not limited to loss of use) whether the claim for such injury, loss, or damage is based on breach of contract, breach of warranty, or tort, even if Marquis Corp. has previously been advised of the possibility of such damages.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

The following instructions contain important safety information. We strongly encourage you to read and apply them.

## IMPORTANT SAFETY INSTRUCTIONS

WHEN INSTALLING AND USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

- 1. READ AND FOLLOW ALL INSTRUCTIONS**
- 2. WARNING:** To reduce the risk of injury, do not permit children to use this product unless closely supervised at all times.
- 3. DANGER: RISK OF CHILD DROWNING.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use the spa or hot tub unless they are supervised at all times.

#### 120 VOLT, CORD CONNECTED MODELS

- 4. DANGER: RISK OF INJURY.** Connect only to a grounded source.
- 5. Do not bury the power cord.**
- 6. WARNING:** To reduce the risk of electric shock, replace a damaged cord immediately.
- 7. A ground terminal (pressure wire connector) is provided on the surface of the control box inside the equipment compartment.** This connector should be bonded with a minimum No. 8 AWG (8.4mm<sup>2</sup>) (No. 6 AWG in Canada) solid copper wire between this unit and any metal ladders, metal water pipes, metal enclosures of electrical equipment, conduit, or metal equipment within five feet (1.5m) of the spa. If the spa is located on a reinforced concrete pad, the reinforced steel should also be bonded to the ground terminal.
- 8. WARNING:** Your spa may be equipped with a ground fault circuit interrupter (GFCI) on the end of the power supply cord. Before each use of the spa, with the plug connected to the power supply and the unit operating, press the "test" button. The unit should stop operating and the GFCI power indicator will go out. Wait thirty seconds and then reset the GFCI by pressing the "Reset" button. The GFCI power indicator will turn on, restoring power to the spa. If the interrupter does not perform in this manner, it is an indication of an electrical malfunction and the possibility of an electric shock. Disconnect the plug from the receptacle until the fault has been identified and corrected.

#### 240 VOLT, PERMANENTLY INSTALLED OR CONVERTED MODELS

- 9. A ground terminal is provided on the terminal block (TB-1, terminal 7) located inside the control box.** To reduce the risk of electric shock, connect this terminal to the grounding terminal of your electrical service or supply panel with a continuous green, insulated copper wire. The wire must be equivalent in size to the circuit conductors supplying the

equipment. In addition, a bonding terminal (pressure wire connector) is provided on the outside of the control box for bonding to local ground points. To reduce the risk of electric shock, this connector should be bonded with a No. 8 AWG (8.42mm<sup>2</sup>) (No. 6 AWG in Canada) solid copper wire to any metal ladders, water pipes, or other metal within five feet (1.5m) of the spa to comply with local requirements.

10. Your spa uses ground fault circuit interrupters in the electrical subpanel. Before each use of the spa and with the unit operating press the Test button on each breaker. The switch should click over to the "Trip" position. Wait thirty seconds and reset each GFCI breaker by switching it completely off and then completely on. The switch should then stay on. If either of the interrupters does not perform in this manner, it is an indication of an electrical malfunction and the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.

#### ALL SPA MODELS

11. Install the spa so proper drainage is provided.
12. **DANGER: RISK OF ELECTRIC SHOCK.** Install the spa at least five feet (1.5m) away from metal surfaces, in accordance with the National Electric Code ANS/NMFP70-1993. Each metal surface must be permanently connected to a minimum No. 8 (8.42mm<sup>2</sup>) (No. 6 AWG in Canada) solid copper conductor attached to the wire bonding connector on the terminal box provided for this purpose.
13. **DANGER: RISK OF ELECTRIC SHOCK.** Do not permit any appliance, such as a light, telephone, radio, or television, etc. within five feet (1.5m) of the spa or hot tub.
14. **WARNING:** To reduce the risk of injury:
- Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10 minutes) and for young children.
  - Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100°F (38°C).
  - Before entering a spa, the user should measure the water temperature with an accurate, waterproof, fever thermometer since the tolerance of temperature-regulating devices may vary as much as +/- 5°F (3°C).
  - The use of drugs, alcohol, 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 the spa.
  - Persons using medications 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.
15. **DANGER: TO REDUCE THE RISK OF INJURY TO PERSONS.** Do not remove the suction fittings.
16. **DANGER: RISK OF INJURY:** Never operate a spa if the suction guard(s) is broken or missing. Never replace a suction guard with one rated less than the flow rate marked on the original suction guard. The suction guard(s) in the spa are sized to match the specific water flow

#### WHAT THE MARQUIS CORP. LIMITED WARRANTY COVERS

Marquis Corp. warrants that our products will be free from defects in materials and workmanship for the term set forth exclusively in this warranty. Accessories purchased from Marquis Corp. or a Marquis Corp. authorized dealer and added to the spa after manufacture of the spa are not covered under this warranty but may have other warranties. Refer to owner's manual for proper use, maintenance and installation of your spa. The Limited Warranty is made only to the original purchaser of the spa and is not transferable.

- [5] STRUCTURE: The fiber glass structure is warranted for five years not to leak. Fittings and attachments are not included.
- [2] SURFACE: The acrylic surface is warranted for two years against blisters, cracks and delamination.
- [2] PLUMBING: Plumbing and fittings are warranted against water loss for two years. Warranty coverage does not include gaskets or seals.
- [2] EQUIPMENT: Electronic equipment is warranted against defects in materials and workmanship for two years. Equipment includes equipment packs, PC boards, pumps, control panels, heater and heat sensors.
- [1] EXTERIOR: The synthetic skirt exterior is warranted against cracking and peeling for one year.
- [1] COMPONENTS: The ozonator and GFCI are warranted against defects in material and workmanship for one year.
- [1] PARTS: LED lights, remote controls, valves, spa cover, stereo components, jet inserts and overlays are warranted for one year. These parts do not qualify for labor coverage under this warranty. Fuses, non-LED lights, filter, filter lid, cushioned headrests and other items not specifically mentioned in this warranty are warranted to be free from defects in materials and workmanship at time of delivery. These parts do not qualify for labor coverage under this warranty.

#### TERM OF THE MARQUIS CORP. LIMITED WARRANTY

The term of your warranty begins on the date the product is sold to you and continues for the term described in this warranty for each component.

#### WHAT YOU SHOULD DO IF YOU EXPERIENCE A PROBLEM

Unless otherwise designated in writing by Marquis Corp., Marquis Corp. or its agent are the only parties authorized to perform warranty service on Marquis Corp. spas. Upon experiencing a problem, please contact your authorized dealer. You will be asked to provide the following information when requesting warranty service: your name, address and contact information; serial number; a description of your spa and a description of the problem. You will be required to provide proof of purchase of your spa prior to receiving warranty service.

#### WHAT MARQUIS CORP. WILL DO IN THE EVENT OF A PROBLEM

Marquis Corp. agrees to repair any plumbing or surface defects and to repair or furnish a replacement for any factory-installed component covered under this warranty which, upon test and examination by Marquis Corp., proves to have manufacturing defects. All materials for examination must be returned to Marquis Corp. freight prepaid.

Marquis Corp. will provide parts and labor where applicable (according to predetermined schedule) at no charge to repair or replace components that fail due to manufacturing defects. Responding authorized dealer may charge additional service and travel fees.

In the event that Marquis Corp. or its agent determines that your problem can be addressed by providing a replacement part to you for installation in your

the test strip and give a false reading. Remove spa cover and activate jets and air control. Allow jets to run for 30 minutes. Test water to see if desired level has been reached.

**High Sanitizer Reading**

**P:** Too much chlorine or bromine added or dispensed into the spa.  
**S:** Remove spa cover and activate jets and air control. Allow jets to run for 30 minutes. Test water to see if desired level has been reached. Reduce bromine level.

**Eye or Skin Irritation**

**P:** Contaminants or excessive amount of chloramines/bromamines in water.  
**S:** Treat water with *Spa Shock*. Adjust sanitizer level.

**P:** pH is low.  
**S:** Adjust as needed.

**Corrosion of Metal**

**P:** Low pH.  
**S:** Adjust pH with *pH and Alkalinity Up*.

**Green Water/Algae**

**P:** Low sanitizer level or high pH.  
**S:** Adjust pH and shock as necessary.

**Erratic pH**

**P:** Alkalinity and/or calcium hardness are too low causing pH “bounce”.  
**S:** Test and adjust alkalinity and/or calcium hardness to bring them into the ideal range.

created by the pump. Should the need arise to replace the suction guard(s) or the pump, be sure that the flow rates are compatible.

17. **DANGER:** Children are especially sensitive to hot water. At no time should children have unsupervised access to the spa. Children must not be allowed to climb onto the spa cover. All Everyday Hot Tubs are equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers. Always lock the child resistant locks after using the spa for your children's safety.

18. **SAVE THESE INSTRUCTIONS.**

- WARNING:** Do not permit electric appliance (such as a light, telephone, radio, or television) within five feet (1.5m) of this spa or hot tub.
- WARNING:** Children should not use spas or hot tubs without adult supervision.
- WARNING:** Do not use spas or hot tubs unless all suction guard(s) are installed to prevent body and hair entrapment.
- WARNING:** Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.
- WARNING:** People using medications and/or having an adverse medical history should consult a physician before using a spa.
- WARNING:** The use of alcohol, drugs, and medication can greatly increase the risk of fatal hyperthermia.
- WARNING:** Before entering the spa or hot tub measure the water temperature with an accurate thermometer.
- WARNING:** Water temperature in excess of 104°F (40°C) may be injurious to your health.
- WARNING:** Prolonged immersion in a spa or hot tub may be injurious to your health.
- WARNING:** People with infectious diseases should not use a spa.
- WARNING:** Pregnant or possibly pregnant women should consult a physician before using a spa or hot tub.
- WARNING:** To avoid injury, exercise care when entering and exiting the spa or hot tub.
- WARNING:** Do not use a spa or hot tub immediately following strenuous exercise.
- WARNING:** Maintain water chemistry in accordance with manufacturer's instructions.

## SAFETY INSTRUCTIONS FOR FRENCH SPEAKING SPA OWNERS

- AVERTISSEMENT:** Ne pas placer d'appareil électrique (luminaire, téléphone, radio, téléviseur, etc.) moins de 1.52 m de cette cuve de relaxation.
- AVERTISSEMENT:** Ne pas laisser les enfants utiliser une cuve de relaxation sans surveillance.
- AVERTISSEMENT:** Pour éviter que les cheveux ou une partie du corps puissent être aspirés, ne pas utiliser une cuve de relaxation si les grilles de prise d'aspiration ne sont pas toutes en place.
- AVERTISSEMENT:** Pour éviter l'évanouissement et la noyade éventuelle, ne prendre ni drogue ni alcool avant d'utiliser une cuve de relaxation ni quand on s'y trouve.
- AVERTISSEMENT:** Les personnes qui prennent des médicaments ou ont des problèmes de santé devraient consulter un médecin avant d'utiliser une cuve de relaxation.
- AVERTISSEMENT:** La consommation d'alcool ou de drogue augmente considérablement les risques d'hyperthermie mortelle dans une cuve de relaxation.
- AVERTISSEMENT:** Avant d'utiliser une cuve de relaxation mesurer la température de l'eau l'aide d'un thermomètre précis.
- AVERTISSEMENT:** Il peut être dangereux pour la santé de se plonger dans de l'eau plus de 40°C.
- AVERTISSEMENT:** L'utilisation prolongée d'une cuve de relaxation peut être dangereuse pour la santé.
- AVERTISSEMENT:** Les personnes atteintes de maladies infectieuses ne devraient pas utiliser une cuve de relaxation.
- AVERTISSEMENT:** Les femmes enceintes, que leur grossesse soit confirmée ou non, devraient consulter un médecin avant d'utiliser une cuve de relaxation.
- AVERTISSEMENT:** Pour éviter des blessures, user de prudence en entrant dans une cuve de relaxation et en sortant.
- AVERTISSEMENT:** Ne pas utiliser une cuve de relaxation immédiatement après un exercice fatigant.
- ATTENTION:** La teneur de l'eau en matières dissoutes doit être conforme aux directives du fabricant.

## WATER CARE TROUBLESHOOTING

- P: Problem  
S: Solution

**Cloudy Water**

- P: Inadequate filtration or dirty filter.  
S: Ensure that the filter is securely installed. Clean or replace filter. Increase the length of clean up and/or filter cycles.
- P: Water is not balanced.  
S: Test water and adjust pH, alkalinity, and sanitizer as needed. Shock to oxidize and destroy organics in the water.
- P: Unfiltered particles or chemically saturated.  
S: Use *Water Clarifier* to combine particles.
- P: High total dissolved solids  
S: Drain, clean, and refill the spa.

**Chemical Odor**

- P: Too many chloramines/bromamines in the water.  
S: Treat water with *Spa Shock* then adjust sanitizer level as necessary.
- P: Dull looking water, difficult to manage. High total dissolved solids (TDS) may be the cause.  
S: Drain and refill with fresh water.

**Musty Odor**

- P: Not enough sanitizer in water – bacteria or algae in water.  
S: Add sanitizer as necessary and shock. Readjust sanitizer level if necessary.

**Yellow Water**

- P: Low pH and/or low alkalinity.  
S: Test and adjust pH with *pH and Alkalinity Up*. Adjust alkalinity if necessary.

**Foaming**

- P: High concentration of body oils, lotions or soaps, as well as excessive organics.  
S: Use *Spa Defoamer* and adjust pH and sanitizer as needed.

**Scum Line in Spa**

- P: Body oils and dirt.  
S: Use *Glove Sponge* to clean the spa. Test and adjust the sanitizer and pH if necessary. Increase the clean up cycle.

**No Sanitizer Reading**

- P: Sanitizer level is too low.  
S: Shock until the sanitizer registers in the recommended range.
- P: Test strip remains "white" even after sanitizer has been added.  
S: Sanitizer level could be extremely high. It can bleach the reagents on

**IMPORTANT CHEMICAL SAFETY PROCEDURES**

1. Always keep chemicals out of reach of children.
2. Read product labels carefully prior to use.
3. When dissolving, always add chemicals to water, do not add water to chemicals. Some dry chemicals should be dissolved prior to adding them to the spa. Using a clean container, dip some water from the spa. Mix until dissolved, then add to circulating water.
4. **CAUTION:** Do not mix chemicals together. Add them separately to the spa water.
5. All chemical products should be stored in a cool, dry, well-ventilated area where the average temperature does not exceed 90°F (32°C). Keep storage area clean of debris such as rags, newspaper, and combustible materials.
6. Keep chemicals away from open flame or other heat source. Do not smoke near chemicals. If a dry chlorine chemical fire should occur, use water only. Do not use a dry chemical fire extinguisher to attempt to put out the fire.
7. When adding chemicals, always keep the water circulating in the spa with jets in a downward circular pattern for better chemical distribution. Add chemicals to the spa water one at a time. Allow several minutes between any new chemical additions using the jet action to evenly distribute throughout the spa.
8. After adding chemicals, wait the amount of time recommended on the chemical container before retesting your water for an accurate reading. Retest your spa water before using.
9. If you have any questions or concerns about the correct procedures for handling chemicals, please contact your authorized dealer.

**WATER CARE**

There are three things necessary for clean safe water:

1. **CIRCULATE:** Water has to be circulated regularly; it can not be stagnant.
2. **FILTER:** Water has to be filtered to remove particulate and debris.
3. **SANITIZE:** Water has to be sanitized to kill organisms like algae, bacteria and virus.

The control system in your spa will automatically circulate and filter. (See SPA CONTROL OPERATION.) The sanitation requires minimal effort if done consistently and properly.

To sanitize spa water, three things are required:

1. **BALANCE:** The water must be balanced so the sanitizer can work and spa equipment is protected.
2. **SHOCK:** Shock to oxidize organics and maximize sanitizer efficiency.
3. **SANITIZE:** Maintain a proper level of sanitizer at all times.

**PERSONAL SAFETY**

Prolonged immersion in hot water can result in **HYPERTHERMIA**, a dangerous condition which occurs when the internal temperature of the body reaches a level above normal (98.6°F, 37°C). The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy, and a body temperature above 98.6°F (37°C). The physical effects of hyperthermia include unawareness of impending hazard, failure to perceive heat, failure to recognize the need to exit the spa, physical inability to exit the spa, fetal damage in pregnant women, and unconsciousness resulting in a danger of drowning.

**WARNING:** The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.

Persons taking medications which induce drowsiness such as tranquilizers, antihistamines, or anticoagulants should not use the spa. Pregnant women and persons with a medical history of heart disease, diabetes, or high blood pressure should consult a physician before using the spa.

**PERSONAL SAFETY DOs:**

- Be sure your spa is connected to the power supply correctly – only use a licensed electrical contractor.
- Shut off power supply (unplug 120V models) before draining the spa or servicing the electrical components.
- Test the Ground Fault Circuit Interrupter (GFCI) monthly.
- Always test the water temperature with an accurate thermometer before entering the spa to be sure that it's a safe temperature.
- Remember that wet surfaces can be very slippery. Take care when entering and exiting the spa.
- Lock the spa cover when the spa is not in use, whether it is empty or full of water.
- Keep the water clean and sanitized with correct chemical care.
- Turn on the jets when adding ANY chemicals to the spa water.
- Clean the filter cartridge monthly to remove debris and mineral buildup which affects the performance of the hydrotherapy jets, limits the flow, or trips the high limit thermostat which will turn off the entire spa.

**PERSONAL SAFETY DO NOTs:**

- Don't use the spa with the equipment compartment door removed.
- Don't use the spa for more than 10 minutes of time at water temperatures in excess of 100°F (38°C).
- Don't allow the jet pump to operate for an extended period of time with the cover in place. Extended pump operation causes a slow heat buildup due to water friction. The spa equipment controls are equipped with a built-in safety timer that automatically shuts off the jet pump after 15 minutes of continuous operation should it have been left on inadvertently.
- Don't operate the spa at any time with the filter cartridges removed.
- Don't lift or drag the cover by using the tie-down straps; always lift and carry by using the external handles.
- Don't store chemicals in the spa's equipment compartment.
- Don't hesitate to call your authorized dealer with any questions or maintenance concerns.

## LOCATION

For your portable spa to function properly and safely, it must be located on a hard, flat, level surface. Inground spas require special installation techniques and should be planned in conjunction with your spa dealer. Improper installation can result in structural damage to the spa and the voiding of your spa warranty. Items to discuss with your dealer include: local construction codes; electrical service requirements; serviceability of equipment; present underground obstructions such as gas, water, and telephone lines; safety measures such as fences and locks; and visibility of the spa installation from the home, street, and neighbors.

- Allow for sufficient water drainage around the spa to help preserve the equipment and support structure. This includes indoor installations.
- A filled spa can weigh in excess of 4,000 pounds and the location should support the weight of the filled spa.
- Locate the equipment compartment where it will be accessible. Your spa **MUST** be installed to permit access for servicing the equipment above and/or below any decks or floors. Access is essential and must allow adequate room for service.
- Leave access to the circuit breakers in the subpanel (240V models) or to the interrupter switch (GFCI, 120V models) on the end of the power cord.
- Be sure the spa is level and in the final position **BEFORE** filling with water. Check for power cords, tools, and hoses that may be caught underneath the spa.
- **IMPORTANT: DO NOT LET AN EMPTY SPA REMAIN EXPOSED TO DIRECT SUNLIGHT.**  
Spa surface temperatures can reach in excess of 150°F (65°C) if left exposed to the sun. Significant damage can occur if this is allowed to happen, including warping and blistering of the surface. Damage, that occurs as a result of this exposure is not covered under the warranty.
- **CAUTION:** Never try to move a spa that has not been fully drained. To do so could result in damage to the spa and physical injury to the mover.

## OUTDOOR AND PATIO INSTALLATION

To install the spa outdoors, we recommend a reinforced concrete pad at least four inches thick. The reinforcing material should be attached to a #8 AWG bonding wire per national and local electrical code.

If you place the spa on the ground, even temporarily, place concrete pavers under the entire bottom of the spa. The concrete pavers should be a least two inches thick and level across the entire surface. The spa will inevitably settle and not remain level on this surface, thus it's important to get it onto a solid foundation as soon as possible.

## DECK INSTALLATION

Be sure the deck can support the weight of your filled spa by checking the deck's maximum load capacity. Consult a qualified building contractor or structural engineer. Minimum requirement is 100 pounds per square foot.

**NOTE: Do not leave an empty spa uncovered. Direct sunlight on the spa surface can cause severe damage or blemishing and can result in the voiding of any surface warranties.**

### 5. Excess Debris

Grit and debris tracked into the spa should be removed with a spa vacuum.

### 6. Water Line

To avoid buildup of oils and lotions at the water line, clean the interior when needed. We suggest the *Glove Sponge* to clean without scratching. **NOTE:** Do not use the same brush or sponge to clean the exterior of the spa and the interior of the spa. Soap and other product residue used on the outside of the spa can cause foaming of the spa water and scratches to the spa surface.

### 6. Light Bulb Replacement

- A. Turn off the power to the spa.
- B. Remove the equipment area door to find the light access. (See EQUIPMENT DIAGRAM.)
- C. Remove the lamp socket from the back of the light assembly by turning counterclockwise and pulling at the same time.

## SUSPENDED USE OR WINTERIZING THE SPA

If you decide to discontinue the use of your spa for any extended period of time, we suggest you follow the steps below.

**NOTE:** During long periods of inactivity, damage can occur to equipment from condensation within the equipment compartment.

1. Turn off the power to the spa.
2. Drain the spa. (See DRAINING AND REFILLING THE SPA.)
3. Remove all residual water from the seating and footwell. If necessary, bail out the remaining water then dry the spa with towels. A wet/dry vacuum is recommended for best results.
4. Using the wet/dry vacuum, place vacuum nozzle over each jet nozzle to remove water from plumbing lines, starting with the highest jet and finishing with the lowest jet.
5. Unscrew the pump plug from the pump. (See STARTING YOUR SPA.)
6. Again, using the wet/dry vacuum, place nozzle over the exposed pump opening to remove excess water. The pump should be removed from the spa and stored in a climate-controlled room.
7. Clean the spa interior.
8. Clean the filter cartridge.
9. Reinstall the spa cover and lock in place.

**NOTE:** Direct sunlight on the spa surface can cause severe damage or blemishing and can result in the voiding of any surface warranties.



### 1. Leakage Detection

Open the equipment door and check for signs of water leakage around the pump. Pump seals wear out over time, especially with improper water chemistry. Early detection of pump seal failure can significantly reduce repair costs.

### 2. Ozonator Operation

The ozonator functions whenever the system is running on filter or clean up cycles. Check to see if the bulb is lighted. The end cap of the ozonator should glow if functioning properly. If not, the bulb has burned out. Contact your dealer for service.

### 3. Draining the Spa

- Turn off the power to the spa.
- Open the equipment compartment (see EQUIPMENT DIAGRAM). Remove the hose bib cap from the connection and attach a hose.
- Open the drain valve. Gravity causes the water to drain out of the hose.
- When the spa is empty, close the drain valve and remove the hose. Reinstall the hose bib plug.

**NOTE:** Keep the drain valve closed at all times except when draining the spa (do not rely on the cap to stop the flow of water). Not doing so could result in damage to the drain valve due to freezing water.

## AS NEEDED MAINTENANCE

### 1. Cover Care

Proper care of the cover increases the cover life. **NOTE:** Do not use regular household products or products that contain silicone, alcohol, steel wool, or bleach.

### 2. Synthetic Exterior

Clean the exterior of the spa with a mild soap and water solution. Cleaners containing alcohol, Acetone, Nitrobenzene, and Cyclohexanol can dissolve and discolor the synthetic exterior.

### 4. Clean the Acrylic Interior

Once the spa is drained, clean the acrylic interior thoroughly – especially at the water line. Bleach (diluted) is the recommended cleaning agent for acrylic – other products should be avoided except as stated below.

To maintain the high gloss, elegant look of LUCITE XL just follow these simple steps: Use common household, non-abrasive cleaners for most cleaning jobs. For normal care and cleaning use a soft cloth or sponge with soap and water. Rinse well and dry with a soft, clean cloth. If using a household cleaner, make sure it is recommended for use on acrylic by the manufacturer. Never use abrasive cleaners. Do not allow your acrylic surface to come into contact with products such as ketones or esters such as acetone or ethyl acetate (nail polish remover), Wintergreen oil (methyl salicylate), nail polish, dry cleaning solution or other chlorinated organic solvents, lacquer thinners, gasoline, aromatic solvents, pine oil, etc. Remove dust and dry dirt with a soft, damp cloth. Clean grease, oil, paint and ink stains with isopropyl (rubbing) alcohol. Dry with a clean, soft cloth. Avoid using razor blades or other sharp instruments that might scratch the surface.

**NOTE:** Due to the high-gloss acrylic finish, imperfections in the surface texture may occur but in no way compromise the integrity of the spa shell.

## INDOOR INSTALLATION

There are special requirements if you place your spa indoors. Flooring material must provide adequate traction when wet. Proper drainage is essential to prevent water puddling. Proper ventilation to the area is required. The addition of a ventilation system is recommended. Please see your contractor for details.

## SHUT-OFF VALVES

Your spa is equipped with shut-off valves (see EQUIPMENT DIAGRAM) that shut off the water flow to the equipment system for dealer service. At times, a new spa or one that has recently been serviced, may have the shut-off valves partially closed which can restrict the water flow and hinder jet performance. Be sure the valves are fully open.

## FREEZE PROTECTION

When a freeze condition is detected (which occurs when the temperature in the heater housing drops to 55°F (13°C) the jet pump is automatically activated. In areas with extremely cold winter conditions, your spa should be fine as long as it is left running at normal operating temperatures. For extra protection see your dealer for an optional freeze sensor. If you plan to turn the spa off, follow the instructions in this manual (see SUSPENDED USE OR WINTERIZING YOUR SPA).

## OVERHEATING

In the case of extended hot weather, the spa water temperature may reach and maintain 104°F to 106°F (40°C to 41°C) or higher. This is due to the ambient temperature and the full insulation in the spa cabinet. You may have the option of shortening the pump-run time. See SPA CONTROL OPERATION for available options.

## SUCTION GUARDS

The suction guard(s) in the footwell of your spa is an opening through which the jet pump draws water. Suction fittings are equipped with a safety guard. Suction through the fittings can be strong. The safety guard(s) must remain in place and undamaged. A fitting with a damaged guard(s) can be dangerous, especially to small children or people with long hair. Should any part of the body become drawn to a fitting, turn the jet pump off immediately. Long hair should be restrained in a bathing cap, never allow it to float freely in the spa. Replace any missing or damaged suction guard(s). **NOTE:** It is normal for the flow rates of the suction fittings to vary from strong to barely noticeable.

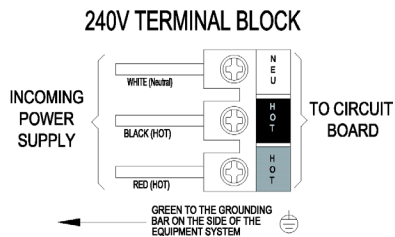
**ELECTRICAL REQUIREMENTS**

It is the responsibility of the spa owner to ensure that all electrical connections are made by a qualified electrician in accordance with all national, state, and local electrical codes in effect at the time of installation.

**240 Volt**

All connections must be made in accordance with the wiring diagram found on the inside of the control box cover. Connections must be made with copper conductors only – *do NOT use aluminum wire*. All conductors, circuit breakers, and fuses and the GFCI must be sized in accordance to the total amperage load as specified:

- Permanently connected (Hard wired).
- Rated 240V, 60Hz, 50A, three wires (#6 copper) plus ground (#8 copper), [4 wires total].
- Circuit breaker or fuse size: 50A.
- A disconnecting means must be installed within sight from the equipment and at least 5 feet (1.52m) from the inside walls of the spa.
- Connect only to a circuit protected by a Class A Ground Fault Circuit Interrupter (GFCI).
- For units used in other than single-family dwellings, a clearly labeled emergency switch shall be provided as part of the installation. The switch shall be readily accessible to the occupants and shall be installed at least five feet (1.52 m) away, adjacent to, and within sight of the unit.
- A pressure wire connector is provided on the exterior of the control box to allow connection of a bonding wire to any metal ladder, metal water pipe, common bonding grid (reinforced concrete slab, ground plate beneath the spa), or any other metal within 5 feet (1.52 m) of the spa. The bonding wire shall be copper and at least #8 AWG (8.42mm<sup>2</sup>), #6 in Canada.



**NOTE:** Ensure that a Ground Fault Circuit Interrupter (GFCI) is properly installed. Failure to do so may result in spa malfunction or damage which is not warranted. GFCIs are available from your authorized dealer.

**120 Volt**

120 Volt spas shall be plugged into a properly grounded, grounding type 15 amp receptacle on a dedicated circuit. A dedicated circuit is a circuit with no other components that consume power, such as lights, televisions, radios, computers, or other electronic devices. These could cause your spa to malfunction by any of the following: unusual text on the control panel, slow heating, poor jet action, tripping house breaker, or blown fuses. Failure to follow these instructions could lead to premature failure of spa components that would not be covered under the warranty. The dedicated circuit shall meet the following specifications:

**WEEKLY MAINTENANCE**

**1. Removing Debris**

Remove any debris from the Vortex skimmer and suction guard(s) on the inside of the spa. Blocked intakes can impede the flow of water through the jetting system.

**2. Water Level**

Replenish the water level if necessary so that it is approximately two-thirds up the Vortex skimmer opening. (See STARTING YOUR SPA.)

**MONTHLY MAINTENANCE**

**1. Filter Care**

We cannot stress enough the importance of a clean filter for proper water filtration. Dirty filters can restrict water flow, cause hazy water, and prevent your chemicals from working properly. Many water treatment products clear or clarify the water by clumping microscopic particles and minerals together so that these larger particles can be effectively trapped in the filter. A filter clogged with debris and calcium deposits does not trap particles properly.

The Maintenance Reminder on the control panel indicates a CL every 30 days to remind you to clean your filter.

**EVERY THREE TO FOUR MONTHS**

**Draining and Filling the Spa**

The average spa needs to be drained every three to four months. After months of continually adding chemicals to the water and introducing body oils and lotions, the water can be difficult to manage and chemicals are not as effective as usual. You may also notice excessive foaming. A maintenance reminder appears on the control panel as “CH” to remind you to change water. More frequent draining may be required depending on use.

**LCD DIAGNOSTIC MESSAGES**

The advanced technology built into the spa allows it to perform a number of self-diagnostic system checks and it can display a variety of messages in the LCD window on the control panel.

**HH:** Overheat. The spa has shut down. **DO NOT ENTER THE WATER.** Contact your dealer for service.

**OH:** Overheat protection. If a malfunction occurs and the spa water reaches 110°F (43°C), the system completely shuts down. In such a condition, **DO NOT ENTER THE WATER.** Turn off all power to the spa and contact your dealer for service. Several conditions could lead to overheating, for example, low water level, shut-off valves closed while heater is on, dirty filter, and restriction in the plumbing lines. After the power is turned back on, the spa will not restart itself until the water temperature within the spa drops to a lower, predetermined temperature. As a double safety feature, a secondary high-limit sensor shuts the system off if the water temperature in the heater housing reaches 118°F (48°C). In this case, the spa may be restarted by pressing any panel pad after the water has cooled to 110°F (42°C). If the switch trips repeatedly, do not use the spa and contact your authorized dealer for service.

**IC:** Ice. Potential freeze condition detected.

**SA:** Spa is shut down. Sensor plugged into sensor "A" jack is not working.

**Sb:** Spa is shut down. Sensor plugged into sensor "B" jack is not working.

**Sn:** A sensor has malfunctioned. If alternating with spa temperature, it may just be a temporary condition. If flashing by itself, spa is shut down. Contact your dealer for service.

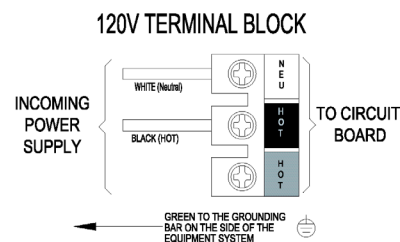
**HL:** A significant difference between temperature sensors has been detected. This could indicate a flow problem. Check water level in spa and refill if necessary. If water level is okay, make sure the pumps have been primed.

**LF:** Persistent low flow problems. Heater is shut down, but other spa functions continue to run normally. Check water level and refill if necessary. Contact your dealer for service.

**dr:** Possible inadequate water, poor flow, or air bubbles detected in the heater. Spa is shut down for 15 minutes. Check water level and refill if necessary. If okay, check that pumps have been primed. Press any button to reset.

**dY:** Inadequate water detected in heater. Spa is shut down. follow directions for "dr" message.

- Rated 120V, 60Hz, 15A (2 wires plus ground)
- Circuit breaker or fuse size: 15A
- The receptacle must be at least 5 feet (1.52 m) from the spa.
- The 15 foot GFCI power cord provided with the spa must be plugged directly into the receptacle. Do NOT use an extension cord or any other adaptor. Actual exposed length of cord will vary by model, but will never be less than 12 feet.

**Convert 120 Volt to 240 Volt**

120 Volt spas may be converted to operate on 240V, 50A. All connections must be made by a licensed electrician.

1. Disconnect the power by unplugging the power cord from the receptacle, removing the cord from the terminal block on the circuit board, and storing it with your owner's manual.
2. Locate the white wire connecting J11 to J32 on the circuit board. Remove the wire and discard.
3. Move white wire located on J25 to J35. Move white wire located on J64 to J34.
4. For 50A operation, move dip switch 10 to the OFF position.
5. Install 240V power as indicated in the **240 Volt** section.
6. Rated 240V, 60Hz, 50A, three wires (#6 copper) plus ground (#8 copper), [4 wires total].

**STARTUP PROCEDURE**

Your spa is equipped with solid-state controls specific to your spa model. Please see SPA CONTROL OPERATION.

To start your spa, you will need a water test strip. It is important to follow each of these steps when starting your spa. Once you have completed the following steps, refer to the WATER TREATMENT section for proper start-up water maintenance.

**NOTE:** Your spa has been filled and test-run at the factory. The first time your spa is filled with water, some discoloration from residual test water may appear. This will disappear when the spa is completely filled and the filtration system is functioning. Test the water for the proper chemical balance and adjust as necessary. **PROPER CHEMICAL BALANCE IS IMPORTANT** for your safety and the longevity of your spa.

**THERAPY PUMP**

Allow the spa to circulate on high-speed (see SPA CONTROL OPERATION) for four to five minutes to discharge air from the plumbing system. Do not expect hot water immediately from the jets; the heater will take several hours to heat the water.

**Startup procedure for all models**

1. Place spa on a hard, flat, level surface. Make sure the power supply is off.
2. Make sure the suction guard(s) in the footwell are in place and undamaged.
3. Open the equipment door. (SEE EQUIPMENT DIAGRAM). Tighten all disconnects and open all shut-off valves.

NOTE: Keep the drain valve closed at all times except when draining the spa (do not rely on the cap to stop the flow of water). Not doing so could result in damage to the drain valve due to freezing water.

4. Install filter cartridge.
5. Fill the spa with water to 3" above the skimmer openings.
6. Turn the power on.
7. Your spa is now in "pump priming" mode and a "Pr" message displays in the LCD window of the control panel. While in this mode the spa appears idle, which lasts approximately four to five minutes if not exited manually. To exit manually, press the TEMP+- pad.
8. At this time the spa should have water flowing from the jets. If the pump has not primed and the water is not flowing from the jets after two minutes TURN OFF POWER TO THE SPA and vent air from the pumps by slightly opening the pump unions. After turning the power on again, the spa initiates a new priming mode. Repeat steps above.
9. The system requires approximately two minutes of water flow to determine the water temperature. After two minutes of water flow, the temperature is displayed as actual water temperature. After you have manually exited the priming mode (or allowed the spa to automatically exit) the LCD window momentarily displays 100°F (38°C) and then the display switches to - - °F.
10. The factory default setting for water temperature is 100°F (38°C). Use the TEMP+- pad on the control panel to set the water temperature to the desired level. (See SPA CONTROL OPERATION, Temperature Display And Adjustment.) Your spa heats at the rate of approximately one degree per hour for 120V systems, and five degrees per hour for 240V systems.

**SPA COVER**

When the spa is not in use, the spa cover should be kept on the spa to retain the water's heat and to keep out dirt, leaves, etc. Your heater maintains a constant water temperature between uses. For your safety, the cover is equipped with adjustable straps, safety locks, and handles. To avoid stress on the cover and handles please follow these instructions:

1. Unlock the safety straps from the spa.
2. Grasp the exterior cover handles and carefully lift the edge of the cover. To facilitate removal first break the vacuum seal between the cover and the lip of the spa interior.
3. Raise the cover and fold back.
4. Remove the cover from the spa by using the exterior cover handles. It is suggested that you use the safety locks to help keep out unintended users and prevent covers from being blown off in windy conditions. Cover lifts are also available to assist you in cover removal.

PLEASE NOTE: The following corrective actions may be performed by the spa owner. If the trouble cannot be corrected in the steps below, please contact your authorized dealer for service. (Improper servicing by an unauthorized service provider or spa owner could result in damage not covered by the warranty and could cause serious injury.)

**EQUIPMENT WILL NOT OPERATE**

- Check the control panel LCD window for diagnostic code.
- 240V Spas: Check the circuit breaker on the main circuit panel.
- 120V Spas: Check the GFCI power cord and reset if necessary (see IMPORTANT SAFETY INSTRUCTIONS at beginning of manual).
- Check the condition of the power cord.

**INADEQUATE JET ACTION**

- Be sure the shut-off valves are completely open.
- Open the jets by turning the jet face to allow for maximum water flow.
- Check for obstruction or restrictions at suction guard(s) or filters, such as leaves, etc.
- Check to ensure water is at proper level and add water if needed.

**NO HEAT**

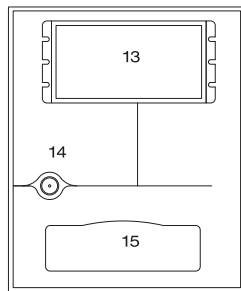
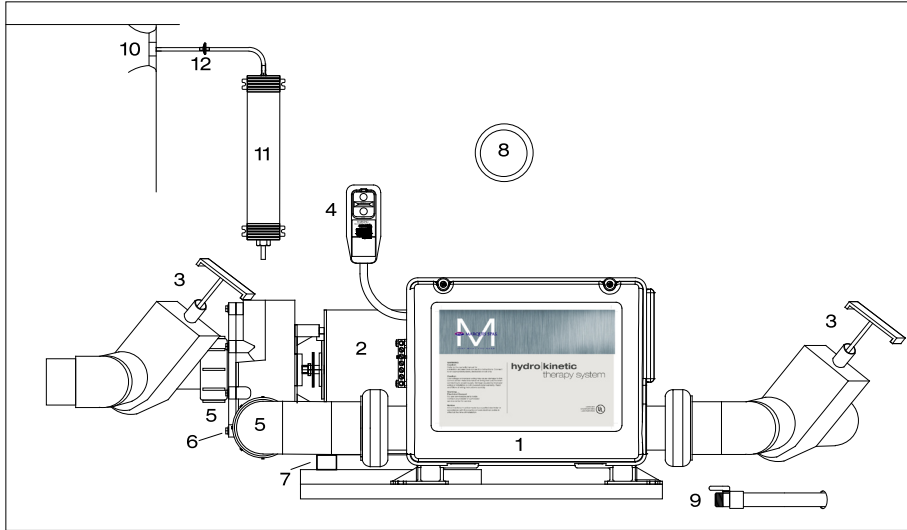
- Check temperature displayed in the LCD window for desired temperature setting.
- Inspect the filter cartridge for dirt and debris.
- Check that the water is at proper level, 3" above skimmer opening.
- Check HEAT MODE to be certain spa is not in SLEEP MODE.
- Lower ambient temperatures may result in heat loss.

NOTE: Do not expect instant hot water from the jets. It will take the heater 12-24 hours to heat the water to the temperature you desire.

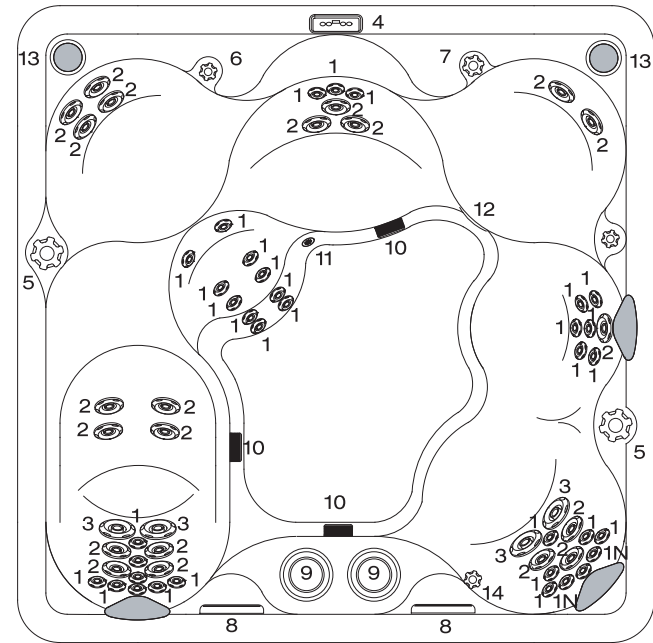
**LIGHT DOES NOT WORK**

- Press the LIGHT pad on the control panel.
- Reposition the light bulb in the socket. (See REPLACING LIGHT BULB.)

MODEL 322



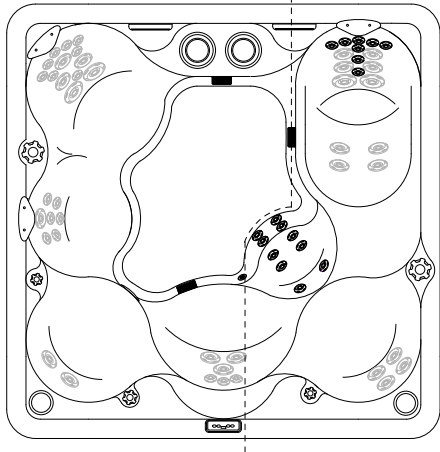
#	Component	Qty.
1	Control box and heater	1
2	Two-speed pump	1
3	Slice valves	2
4	GFCI	1
5	Pump unions	2
6	Pump plug	1
7	Motor mounts	4
8	Light bulb	1
9	Hose bib drain	1
10	Ozonator fitting	1
11	Ozonator	1
12	Check valve	1
13	Stereo power supply (optional)	1
14	Stereo MP3 plug (optional)	1
15	Stereo head unit (optional)	1



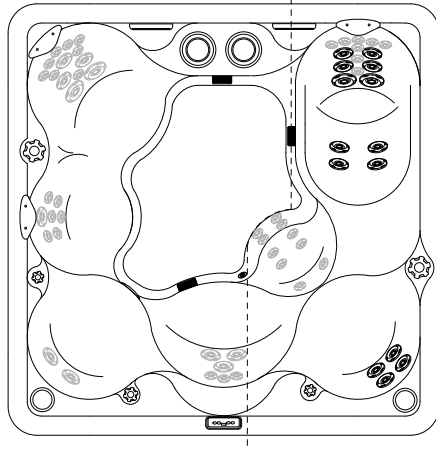
#	Component Identification	Qty.
1	200 Series Jets	33
1N	200 Series Neck Jets	2
2	300 Series Jets	21
3	400 Series Jets	4
4	Control Panel	1
5	Jet Selectors	2
6	Air Control	1
7	Waterfall Valve	2
8	Waterfall features	2
9	Filter Canisters	2
10	Suction Fittings	3
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2
14	Neck Jet Valve	1

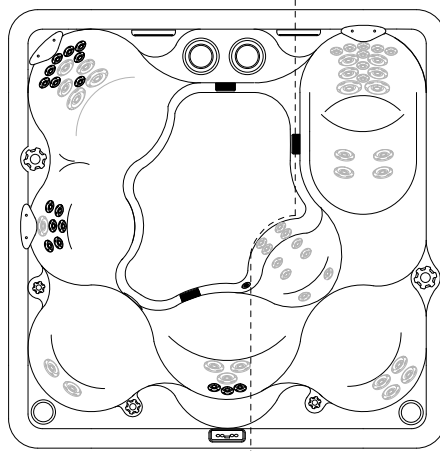
Physical Specifications	Size
Dimensions	90" x 90"
Height	34"
Seating Capacity/Positions	6
Weight Dry/Lbs.	780
Weight Full/Lbs.	4032
Water Capacity/Gallons	390
Total Therapy Jets	60



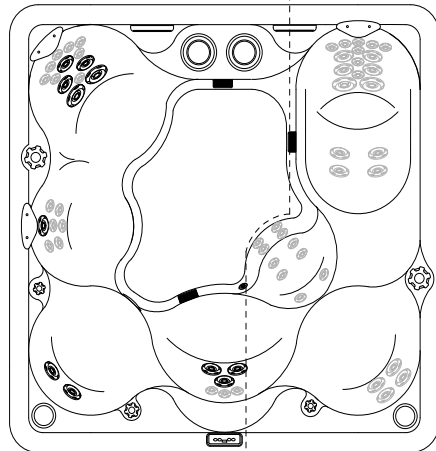
PUMP 2  
ZONE 2



PUMP 2  
ZONE 1

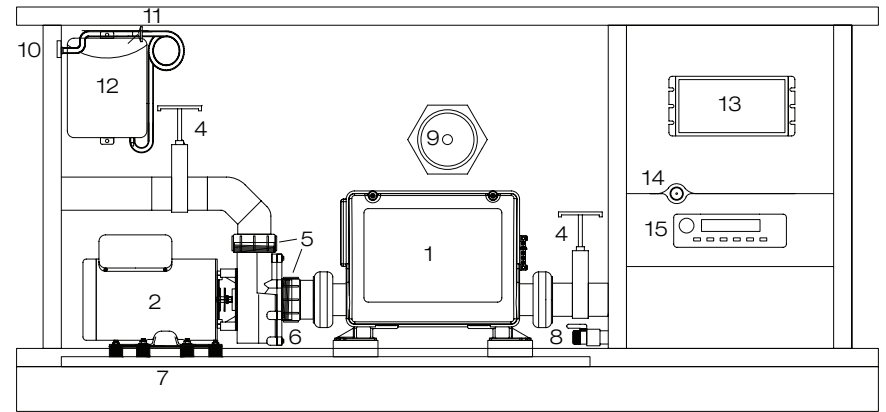


PUMP 1  
ZONE 2

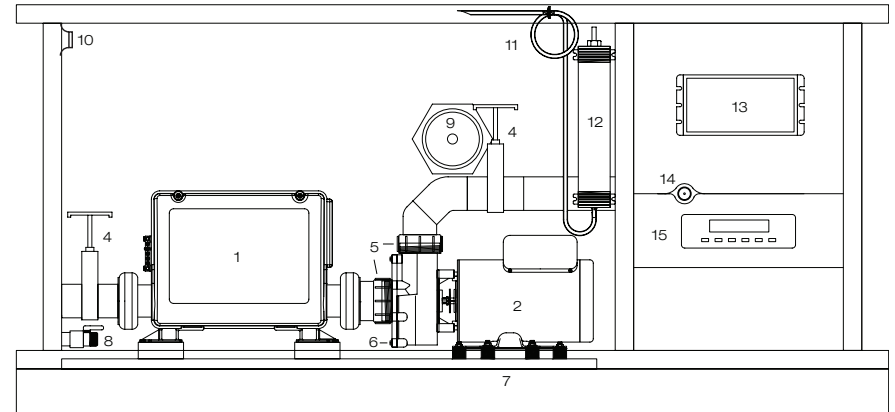


PUMP 1  
ZONE 1

MODEL 530

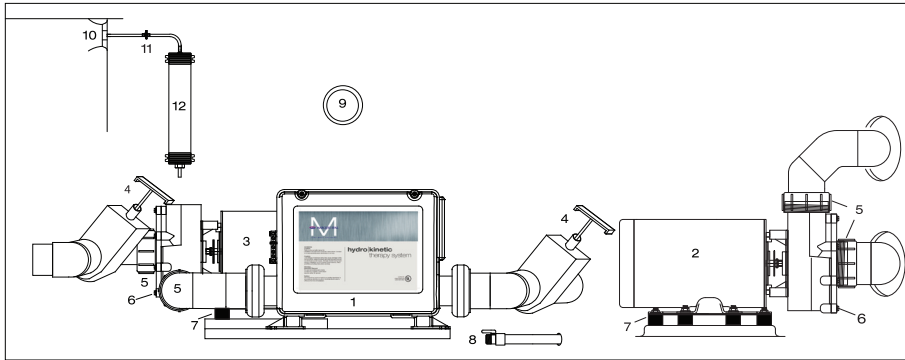


MODEL 435 & 425

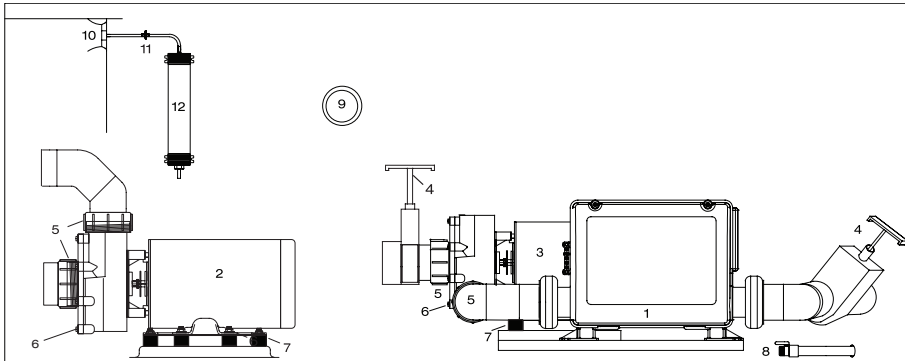


#	Component	Qty.
1	Control box and heater	1
2	Two-speed pump	1
4	Slice valves	2
5	Pump unions	2
6	Pump plug	1
7	Motor mounts	4
8	Hose bib drain	1
9	Light bulb	1
10	Ozonator fitting	1
11	Check valve	1
12	Ozonator	1
13	Stereo power supply (optional)	1
14	Stereo MP3 plug (optional)	1
15	Stereo head unit (optional)	1

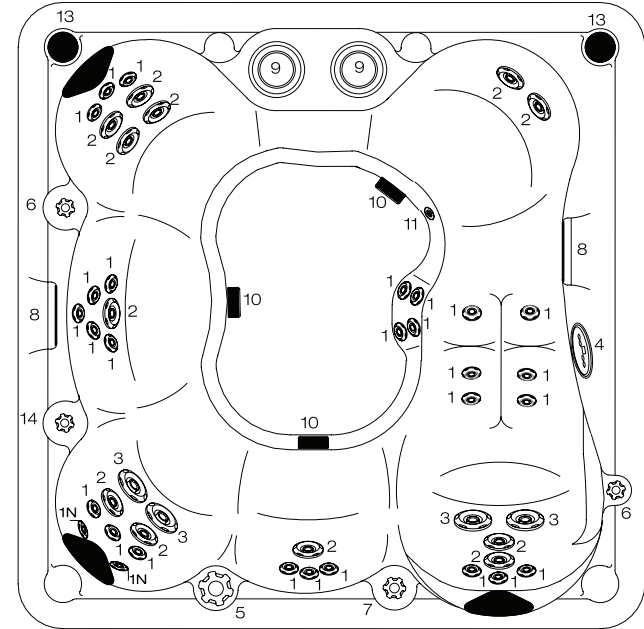
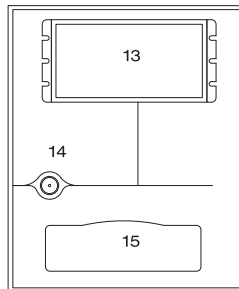
MODEL 660



MODEL 545



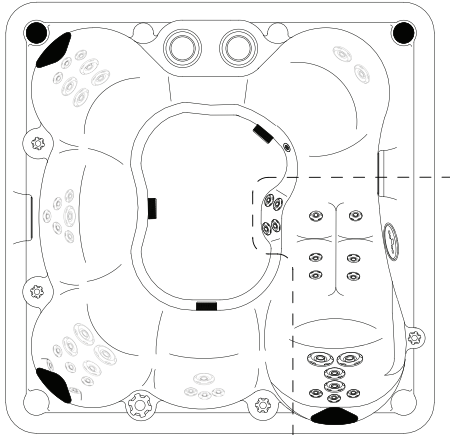
#	Component	Qty.
1	Control box and heater	1
2	two-speed pump	1
3	one-speed pump	1
4	Slice valves	2
5	Pump unions	4
6	Pump plugs	2
7	Motor mounts	8
8	Hose bib drain	1
9	Light bulb	1
10	Ozone fitting	1
11	Check valve	1
12	Ozonator	1
13	Stereo power supply (optional)	1
14	Stereo MP3 plug (optional)	1
15	Stereo head unit (optional)	1



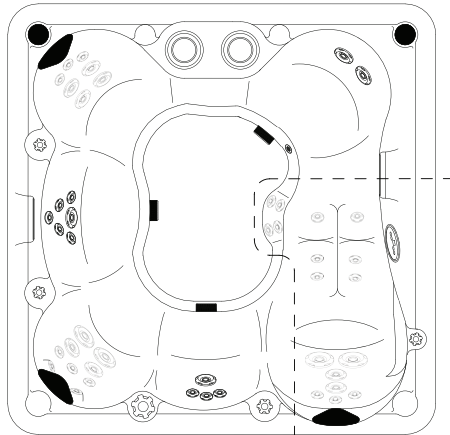
#	Component Identification	Qty.
1	200 Series Jets	27
1N	200 Series Neck Jets	2
2	300 Series Jets	12
3	400 Series Jets	4
4	Control Panel	1
5	Jet Selector	1
6	Air Controls	2
7	Waterfall Valve	1
8	Waterfall features	2
9	Filter Canisters	2
10	Suction Fittings	3
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2
14	Neck Jet Valve	1

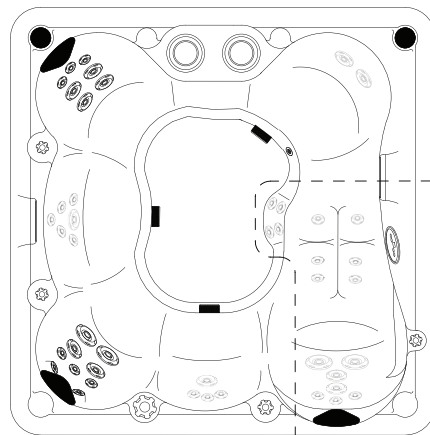
Physical Specifications	Size
Dimensions	84" x 84"
Height	34"
Seating Capacity/Positions	6/6
Weight Dry/Lbs.	740
Weight Full/Lbs.	3659
Water Capacity/Gallons	350
Total Therapy Jets	45



PUMP 2  
ZONE 2



PUMP 1  
ZONE 2



PUMP 1  
ZONE 1

- **WARNING** – Prevent Electrocutation. Do not connect any auxiliary components (for example, cable, additional speakers, headphones, additional audio/video components, etc.) to the system, except as provided by the following: The 3.5 mm auxiliary jack is designed for input only from devices such as an MP3 player operating at 4.5 V or less.
- These units are not provided with an outdoor antennae; it should be installed in accordance with Article 810 of the National Electrical Code, ANSI/NFPA 70.
- Do not service this product yourself as opening or removing covers may expose you to dangerous voltage or other risk of injury. Refer all servicing to qualified service personnel.
- If the power supply connections or power supply cord(s) are damaged; if water is entering the audio compartment or any electrical equipment compartment area; if the protective shields or barriers are showing signs of deterioration; or if there are signs of other potential damage to the unit, turn off the unit and refer servicing to a qualified service personnel.
- This unit should be subjected to periodic routine maintenance (i.e. once every three months) to make sure that the unit is operating properly.

#### Audio Expansion Port

The built-in audio expansion port allows you to connect optional accessories. Use the supplied 3.5 cm cord to attach MP3 player. **NOTE:** The 3.5 cm auxiliary jack is designed for input only from devices such as an MP3 player operating at 4.5V or less.

#### TEMPO AUDIO SYSTEM

This system will support a wide range of personal audio players with 3.5mm jacks operating at 4.5V or less. Typically this would be the headphone jack on the device. To use, pull on the recessed handle of the device drawer that is located on the door of the spa. Once fully extended, open the lid of the drawer exposing the supplied 3.5mm cable and plug in the personal audio player. Song selection, volume, and tone are controlled by the personal audio device. Once the unit is playing, stow the personal audio device in the drawer, close the lid and push the drawer back in place. This will ensure the personal audio device is protected during use.



### Sleep Mode

Your spa will maintain a water temperature that is 20°F (7°C) below the set temperature. Heater functions only during a filter cycle. The LCD window displays “SL” flashing alternately with the actual temperature when the spa is up to set temperature and displays “SL” steadily when below set temperature.

### To Adjust the Heat Mode:

First press the SETTINGS pad to display the heat mode settings (St, Ec, SL). Use the TEMP+/- pad to scroll through the options. When desired selection has been reached, press SETTING pad again to enter selection and advance to the filter cycle settings (F1, F2, F4, F6).

### HEAT LIGHT

The HEAT light illuminates when the heater is on. The pump circulates on low-speed whenever the thermostat calls for heat.

### SYSTEM LOCK

Once you find and establish the settings that work best for your individual needs, use system lock to keep from inadvertently changing the settings.

Press the TEMP+/- pad and then immediately press the SETTINGS pad. Unlock by repeating sequence. While the system is locked, you may still operate the jets and light. The LCD window displays LC to indicate the system is locked when you try to change the temperature or settings.

### AUDIO SYSTEM

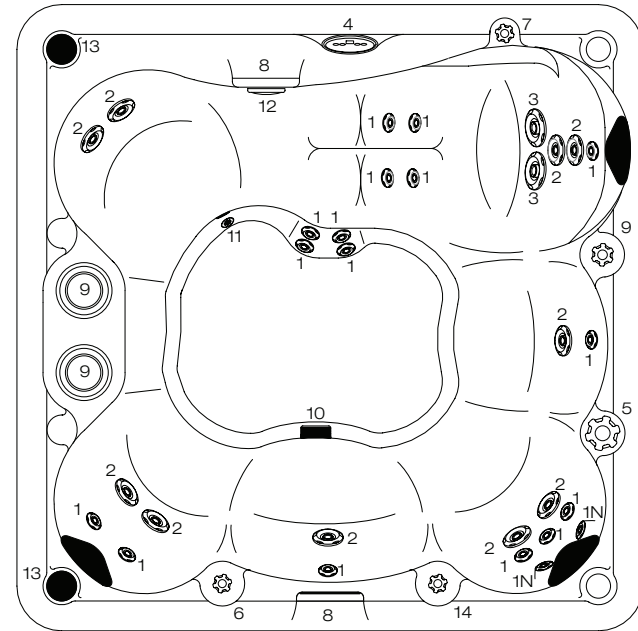
Please refer to the manufacturer’s owner’s manual for features, operation, and troubleshooting.

**NOTE:** Avoid water splashing on the stereo face. Never insert a disk or operate the stereo with wet hands. Moisture can damage internal components. Water intrusion into stereo is not covered under warranty. See manufacturer’s owner’s manual for coverage information. Consult your Limited Warranty for more information about coverage.

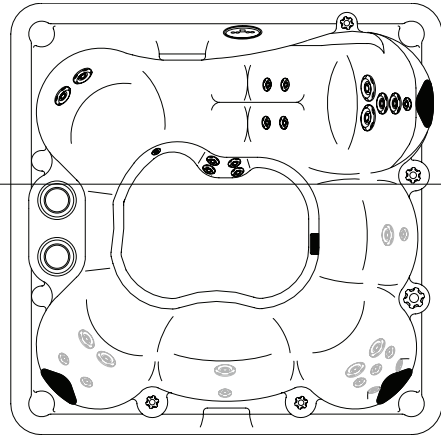
### Speakers

Gently push the top of the self-rising speakers to raise them. Hold the speaker top, avoiding the speaker screens, and gradually rotate the speakers as desired. To lower the speakers gently push the speaker top until it is completely closed. Make sure speakers are in the down position before closing the spa cover. Speaker lift mechanism is manufacturer-warranted against failure to lift due to manufacturing defects only. Closing the spa cover with speakers in the up position or forcing the speaker down too rapidly can result in damage.

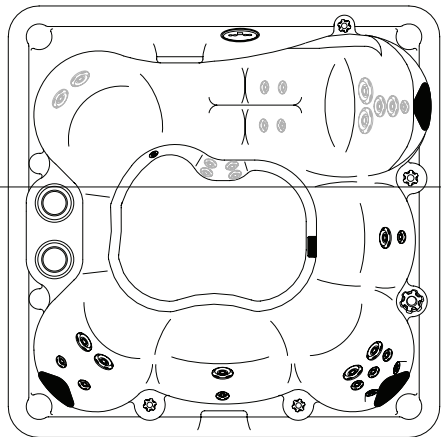
- **CAUTION** - Risk of Electric Shock. Do not leave compartment door open.
- **CAUTION** - Risk of Electric Shock. Replace components only with identical components.
- Do not operate the audio controls while inside the spa.



#	Component Identification	Qty.
1	200 Series Jets	16
1N	200 Series Neck Jets	2
2	300 Series Jets	10
3	400 Series Jets	2
4	Control Panel	1
5	Jet Selector	1
6	Air Controls	2
7	Waterfall Valve	1
8	Waterfall features	2
9	Filter Canisters	2
10	Suction Fitting(s)	1
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2
14	Neck Jet Valve	1
Physical Specifications		Size
Dimensions		84" x 84"
Height		34"
Seating Capacity/Positions		6/6
Weight Dry/Lbs.		740
Weight Full/Lbs.		3659
Water Capacity/Gallons		350
Total Therapy Jets		30



PUMP 2



PUMP 1

### Selectable Filtration Settings

- 1H: 1 hour
- 2H: 2 hours
- 3H: 3 hours
- 4H: 4 hours
- OH: Off

### To adjust the Filtration settings:

Use the TEMP+/- pad to scroll through options. When desired selection has been reached. Press SETTINGS pad to enter selection and exit settings mode.

### TEMPERATURE DISPLAY AND ADJUSTMENT

#### Factory Default Settings:

- Temperature: 100°F (38°C)

The LCD window displays the actual water temperature. Pressing the TEMP+/- pad makes the numbers flash, then pressing the pad again (repeatedly) increases the set temperature one degree at a time, up to 104°F (40°C). After a short pause, the actual temperature displays. Press TEMP+/- pad repeatedly to decrease the set temperature to 80°F (27°C).

**\*NOTE:** In event of a power outage, all settings revert to the preset, default settings.

### HEAT MODE

Your spa comes preset in the standard heat mode. For most applications, the standard mode should be used. If you are in a warm weather climate and the spa does not require as much heat, the economy mode may work best. For a vacation home or for very infrequent use, the sleep mode provides filtration and circulation with lower energy demand. In economy mode your spa heats only during the filter cycle. In sleep mode your spa will maintain a water temperature that is 20°F (7°C) below the set temperature. This ensures your spa will be ready to use more quickly (allow about one hour per one degree F for heating your spa's water) when increasing the temperature to the desired level.

The spa's heat mode can be adjusted to one of three different settings:

#### Standard Mode

The spa water heats to the temperature as set at the bather's panel. In this mode the filtration pump turns on for two minutes every half-hour to "poll" or check the water. If heat is needed the unit heats to the set temperature. The LCD window steadily displays the actual temperature in this mode.

#### Economy Mode

In this mode the spa only heats to the set temperature during a filter cycle. The LCD window displays "Ec" alternately flashing with the actual temperature when the spa is up to temperature and "Ec" steadily when the spa's water temperature is below the set temperature.

**FILTRATION SYSTEM**

Your spa is preset at the factory with a default setting to filter itself using the jet pump on low-speed for two hours twice in a 24-hour period. These settings represent the filter settings necessary for average use. The timing of the first filter cycle is determined by when the spa was initially energized. The first cycle begins six minutes after this initial power-up. The second filter cycle begins 12 hours after the first cycle.

Factory Default Settings:

- Filter Cycle Duration: F2 (2 hours)
- Filter Cycles: 2C (twice per day)
- SmartClean: 1H (1 hour)

These settings represent the most commonly used settings, but your use may be different, depending upon many variables – frequency, number of bathers, duration, water capacity, etc. These variables affect the quality of water and the way it should be managed to achieve the most effective cleansing. Selectable choices for the settings of the operation systems allow flexibility and ensure your spa remains easy to maintain for your particular set of circumstances.

**To adjust the filter settings**

First press of the SETTINGS pad displays the filter time settings (F1, F2, F4, F6). Use the TEMP+- pad to scroll through the options. When desired selection has been reached, press SETTINGS pad again to enter selection and advance to the filter cycle settings (2C, 1d, 1n). For example, if you select 2C and F2, your spa will filter two hours twice a day for a total of four hours of filtration daily.

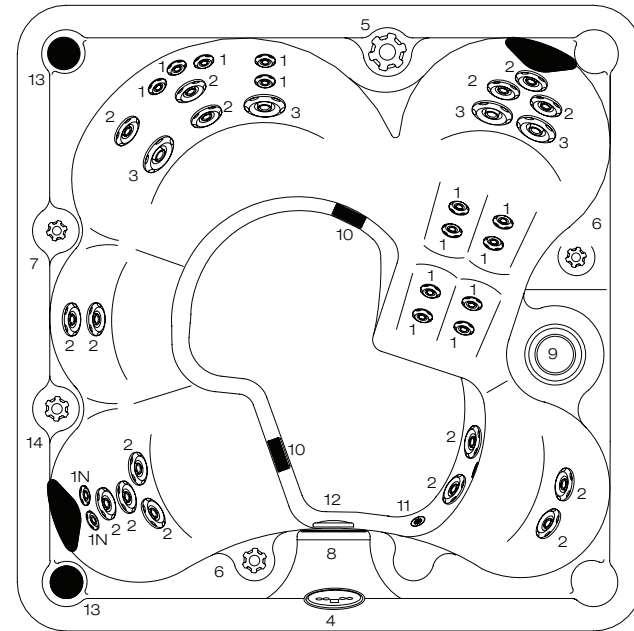
Use the TEMP+- pad to scroll through filter cycle options. When desired selection has been reached, press the SETTINGS pad to enter selection and advance to the filtration settings.

**Selectable filter cycles and cycle duration**

- 2C: twice per day (once every 12 hours)
- 1d: once during the day
- 1n: once during the night
- F1: 45 minutes
- F2: 2 hours
- F4: 4 hours
- F6: 6 hours

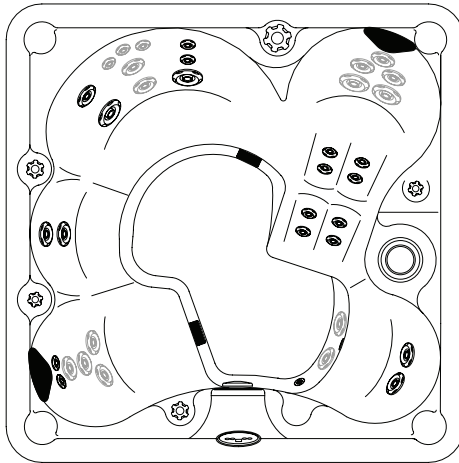
**FILTRATION SYSTEM**

Since a spa is always covered when not in use, it stays fairly free of debris or outside contamination. Contamination to a spa's water occurs during usage, so filtering immediately after usage is the most effective time to clean the spa water. Your spa is preset at the factory with a default setting to filter for one hour (1H) every time your spa is used. This filtration cycle begins 30 minutes after the spa light or jet pump has been deactivated. The pump runs on low-speed to filter the water for the cycle's duration.

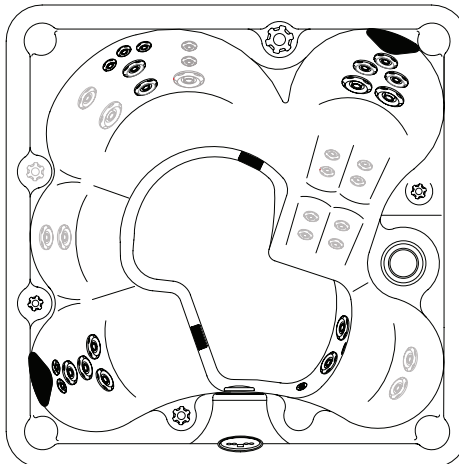


#	Component Identification	Qty.
1	200 Series Jets	13
1N	200 Series Neck Jets	2
2	300 Series Jets	16
3	400 Series Jets	4
4	Control Panel	1
5	Jet Selector (option)	1
6	Air Control	2
7	Waterfall Valve	1
8	Waterfall Feature	1
9	Filter Canister	1
10	Suction Fittings	2
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2
Physical Specifications		Size
Dimensions		77" x 77"
Height		34"
Seating Capacity/Positions		4/5
Weight Dry/Lbs.		500
Weight Full/Lbs.		3085
Water Capacity/Gallons		310
Total Therapy Jets		35

ZONE 2\*



ZONE 1\*



ALL MODELS



**PUMP PRIMING (Pr)**

Pump priming feature begins at start-up. When your spa is energized, the LCD window displays a “Pr” message. This mode lasts approximately four to five minutes, if not exited manually by pressing the TEMP pad.

**UNDERWATER LIGHTING**

Press the LIGHT pad to turn the underwater lighting on and off. After being on for 60 minutes, the lights automatically turn off.

**COLORED LIGHTS AND TWILIGHT LIGHT SYSTEM**

Use SPA LIGHT pad. Step one: turn on light. Step two: turn off and then on within 2-3 second period to change color.

**WATERFALL FEATURE**

The water flow is controlled by an independent valve.

**JETS**

Use the JETS pad on the bather panel. First press of the JETS pad activates pump on low-speed (and starts soak timer). Second press of the JETS pad activates pump on high-speed. Third press of the JETS pad turns jets off for all-quiet mode. Fourth press of the JETS pad turns pump back to low-speed. If the pump is already on low (heating, filter cycle) then the first press starts the soak timer. After running on low- or high-speed for 15 minutes, the pump automatically turns off (unless in heating or filtering cycle).

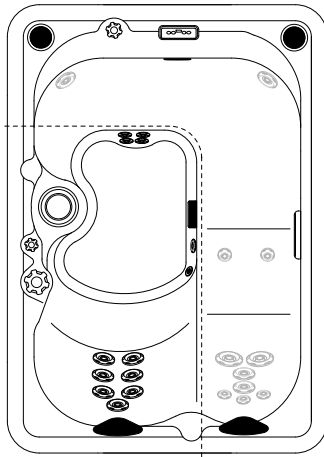
**SOAK TIMER**

The soak timer starts the first time you press a JETS pad. The LCD window displays the elapsed time (1-30) for 55 seconds then switches to the current water temperature for five seconds then back to the timer. It continues to alternate for the entire 30 minutes. The timer runs for 30 minutes regardless of other functions in use (jets, temperature, or light). You can manually cancel the timer by pressing the TEMP+- pad and then the LIGHT pad.

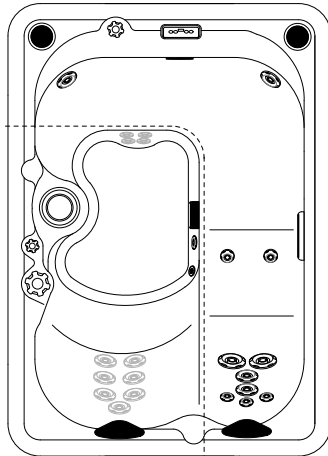
**SOLID-STATE OZONATOR (OPTION)**

The ozonator greatly reduces the amount of chemical sanitizer you need in the water to keep your water clean. The ozonator functions whenever the system is operating on filter or clean up cycles. You should occasionally inspect your ozonator to ensure it continues to light. A good time to do this is when you drain and fill your spa.

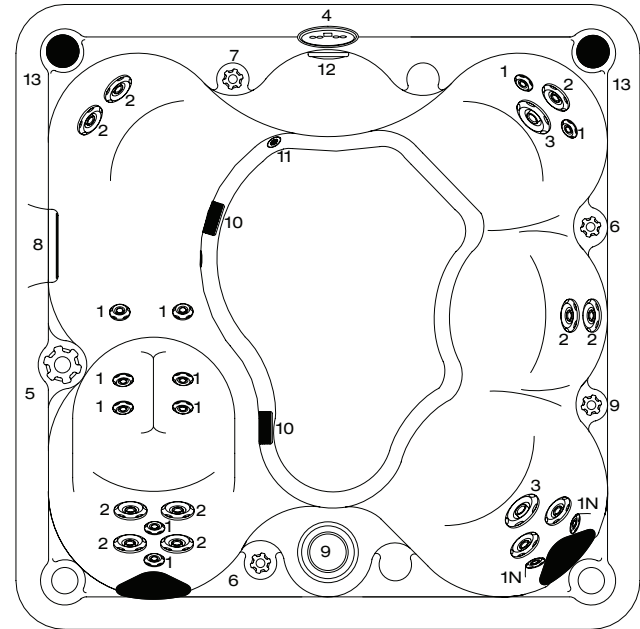
\*Jet selector is optional



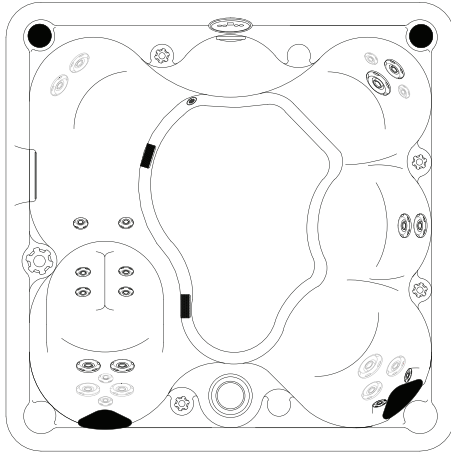
ZONE 2



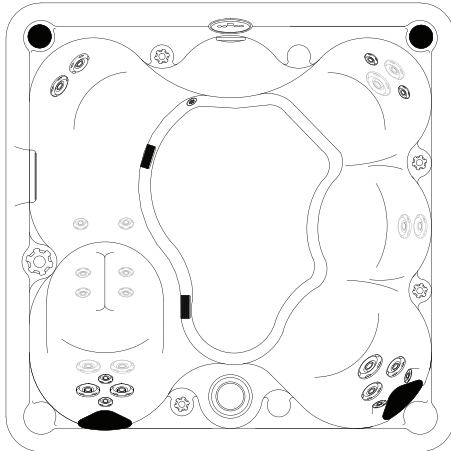
ZONE 1



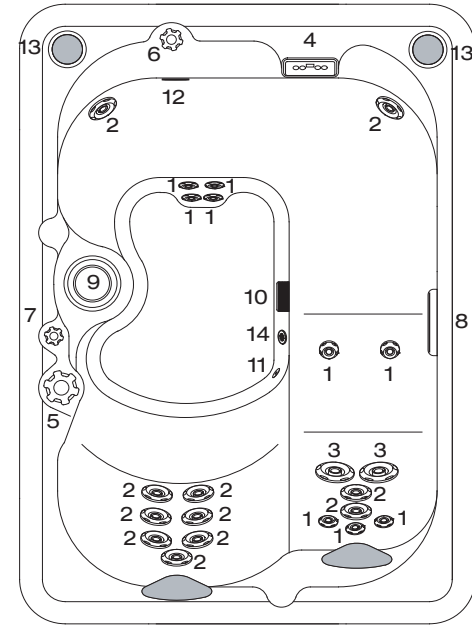
#	Component Identification	Qty.
1	200 Series Jets	10
1N	200 Series Neck Jets	2
2	300 Series Jets	11
3	400 Series Jets	2
4	Control Panel	1
5	Jet Selector (option)	1
6	Air Control	2
7	Waterfall Valve	1
8	Waterfall Feature	1
9	Filter Canister	1
10	Suction Fittings	2
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2
Physical Specifications		Size
Dimensions		77" x 77"
Height		29.5"
Seating Capacity/Positions		4/5
Weight Dry/Lbs.		475
Weight Full/Lbs.		2977
Water Capacity/Gallons		300
Total Therapy Jets		25



ZONE 1



ZONE 2



#	Component Identification	Qty.
1	200 Series Jets	9
2	300 Series Jets	11
3	400 Series Jets	2
4	Control Panel	1
5	Jet Selector	1
6	Air Control	1
7	Waterfall Valve	2
8	Waterfall Feature	1
9	Filter Canister	1
10	Suction Fitting	1
11	Floor Drain	1
12	Light	1
13	Stereo Speakers (option)	2

Physical Specifications	Size
Dimensions	60" x 84"
Height	29.5"
Seating Capacity/Positions	3/4
Weight Dry/Lbs.	400
Weight Full/Lbs.	2026
Water Capacity/Gallons	195
Total Therapy Jets	22