

 **HotSpring**<sup>®</sup>  
*Portable Spas*  
Built for a lifetime of relaxation.<sup>®</sup>

# *Owner's Manual*

**Watkins® Manufacturing Corporation congratulates you on your decision to enjoy the finest spa available... Welcome to the growing family of Hot Spring® spa owners.**



**HotSpring®**  
*Portable Spas*

## **Owner's Manual**

This Owner's Manual will acquaint you with the operation and general maintenance of your new spa. We suggest that you take some time to carefully review all seven sections. Please keep this manual available for reference.

If you have any questions about any aspect of your spa's set-up, operation or maintenance, contact your authorized Hot Spring dealership. They are trained professionals who are familiar with the product as well as new spa ownership concerns. Their expertise will facilitate the enjoyment of your new Hot Spring spa.

The serial number label is located within the equipment compartment of your Hot Spring spa.

**IMPORTANT:** Watkins Manufacturing Corporation reserves the right to change specifications, or design, without notification and without incurring any obligation.

DATE PURCHASED: \_\_\_\_\_

DATE INSTALLED: \_\_\_\_\_

DEALER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

SPA MODEL/SERIAL NUMBER: \_\_\_\_\_

COVER SERIAL NUMBER: \_\_\_\_\_

ACCESSORY SERIAL NUMBERS: \_\_\_\_\_

### **Important!**



In most cities and counties, permits will be required for the installation of electrical circuits or the construction of exterior surfaces (decks and gazebos). In addition, some communities have adopted residential barrier codes which may require fencing and/or self-closing gates on the property to prevent unsupervised access to a pool (or spa) by children under 5 years of age. Your Hot Spring spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers and as a result, is usually exempt from most barrier requirements. As a general practice, your local Building Department will inform you of any applicable barrier requirements at the time a permit is obtained for the installation of an electrical circuit. Your Hot Spring dealer can provide information on which permits may be required.

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# IMPORTANT SAFETY INSTRUCTIONS

## READ AND FOLLOW ALL INSTRUCTIONS

### AVOIDING THE RISK TO CHILDREN

#### **DANGER:**

- **RISK OF CHILD DROWNING.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a spa unless they are supervised at all times.

#### **WARNING:**

- To reduce the risk of injury, do not permit children to use this spa unless they are closely supervised at all times.
- To reduce the risk of injury, lower water temperatures are recommended for young children. Children are especially sensitive to hot water.

#### **DO:**

- Make sure you always lock the child resistant locks after using the spa for your children's safety. Every Hot Spring® spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers.
- Test the water temperature with your hand before allowing children to enter the spa to be sure that it's comfortable. Children are especially sensitive to hot water.
- Remind children that wet surfaces can be very slippery. Make sure that children are careful when entering, or exiting the spa.

#### **DON'T:**

- Allow children to climb onto the spa cover.
- Allow children to have unsupervised access to the spa.

### AVOIDING THE RISK OF ELECTROCUTION

#### **Risk of electrocution**

- Connect only to a grounded source.
- Do not bury the power cord. A buried power cord may result in death, or serious personal injury due to electrocution if direct burial-type cable is not used, or if improper digging occurs.
- A ground terminal (pressure wire connector) is provided on the control box inside the unit to permit connection of a minimum No. 10 AWG (6 mm<sup>2</sup>) solid copper bonding conductor between this point and any metal equipment, metal water pipe, metal enclosures of electrical equipment, or conduit within five feet (1.5 m) of the unit as needed to comply with local requirements.

#### **WARNING:**

- To reduce the risk of electrical shock, replace a damaged cord immediately. Failure to do so may result in death or serious personal injury due to electrocution.
- Your spa is provided with a Ground Fault Circuit Interrupter for user and equipment protection. To ensure proper operation of this important safety device, test according to the following instructions per electrical configuration.

**Cord-Connected 115 volt, 20 amp models:** The GFCI is located at the end of the power cord. Before each use, with the unit operating, push the TEST button. The unit should stop operating and the GFCI power indicator will go out. Wait 30 seconds and then reset the GFCI by pushing the RESET button. The GFCI power indicator will turn on, restoring power to the spa. If the interrupter does not perform in this manner, there may be an electrical malfunction and with it, the possibility of an electric shock. Disconnect the power until the problem has been corrected.

**230 volt, permanently installed or converted models:**

- A ground terminal is provided on the terminal block (TB-1, system ground terminal) 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. 10 AWG (6 mm<sup>2</sup>) solid copper wire to any metal ladders, water pipes, or other metal within 5 feet (1.5 m) of the spa to comply with local requirements. The means of disconnection must be readily accessible, but must be installed at least 5 feet (1.5 m) from the spa.
- Your spa is provided with a suitably rated circuit breaker to open all ungrounded supply conductors.

- Your spa uses ground fault circuit interrupters in the electrical subpanel. Before each use of the spa and with the unit operating, push the TEST button on each breaker. The switch should click over to the “Trip” position. Wait 30 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.

**NOTE:** Failure to wait 30 seconds before resetting the GFCI may cause the spa’s Power Indicator (on the control panel) to blink. If this occurs, repeat the GFCI test procedure.

 **DANGER: RISK OF ELECTRICAL SHOCK**

- Install at least 5 feet (1.5 m) from all metal surfaces. A spa may be installed within 5 feet of a metal surface if each metal surface is permanently connected by a minimum No. 10 AWG (6 mm<sup>2</sup>) solid copper conductor attached to the wire ground connector on the terminal box that is provided for this purpose if in accordance with National Electrical Code ANSI/NMFA70-1993.
- Do not permit any electrical appliances, such as a light, telephone, radio, or television within 5 feet (1.5 m) of a spa. Failure to maintain a safe distance may result in death, or serious personal injury due to electrocution, if the appliance should fall into the spa.
- Install your spa in such a way that drainage is away from the electrical compartment and from all electrical components.

**DO:**

- Be sure your spa is connected to the power supply correctly - use a licensed electrical contractor.
- Disconnect the spa from the power supply before draining the spa or servicing the electrical components.
- Test the Ground Fault Circuit Interrupter(s) before each use.

**DON'T:**

- Use the spa with the equipment compartment door removed.
- Place electrical appliances within 5 feet (1.5m) of the spa.
- Use an extension cord to connect the spa to its power source. The cord may not be properly grounded and the connection is a shock hazard. An extension cord may cause a voltage drop, which will cause overheating of the jet pump motor and motor damage.
- Attempt to open the electrical control box. There are no user serviceable parts inside.

**RISKS TO AVOID**

 **DANGER: RISK OF INJURY**

- To reduce the risk of injury to persons, DO NOT remove suction fittings (filter standpipes) located in the filter compartment.
- The suction fittings in the spa are sized to match the specific water flow created by the pump. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
- There is a danger of slipping and falling. Remember that wet surfaces can be very slippery. Take care when entering or exiting the spa.
- Never operate spa if the suction fittings are broken or missing.
- People with infectious diseases should not use the spa.
- Keep any loose articles of clothing or hanging jewelry away from rotating jets or other moving components.

**Increased side effects of medication**

- The use of drugs, alcohol, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
- Persons using medications should consult a physician before using a spa; some medication may cause a user to become drowsy, while other medication may affect heart rate, blood pressure, and circulation.
- Persons taking medications which induce drowsiness, such as tranquilizers, antihistamines or anticoagulants should not use the spa.

**Health problems affected by spa use**

- Pregnant women should consult a physician before using spa.
- 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 spa.

**Unclean water**

- Keep the water clean and sanitized with correct chemical care. The recommended levels for your Hot Spring<sup>®</sup> spa are:
 

- Free Available Chlorine (FAC):	3.0-5.0 ppm	- Total Alkalinity:	125-150 ppm
- Water pH:	7.4-7.6	- Calcium Hardness:	150-200 ppm

(Refer to Water Quality and Maintenance section for complete instructions.)

**IMPORTANT:** Turn on the jet pump for a least ten minutes after adding ANY spa water chemicals into the filter compartment.

- Clean the filter cartridges monthly to remove debris and mineral buildup which may affect the performance of the hydromassage jets, limit the flow, or trip the high limit thermostat, which will turn off the entire spa.

## **AVOIDING THE RISK OF HYPERTHERMIA**

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 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.

### **TO REDUCE THE RISK OF INJURY:**

- The water in the spa should never exceed 104°F (40°C). Water temperatures between 100°F and 104°F (36°C and 40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding ten minutes) and for young children. Extended use can cause hyperthermia.
- Pregnant or possibly pregnant women should limit spa water temperatures to 100°F (36°C). Failure to do so may result in permanent injury to your baby.
- Do not use spa immediately following strenuous exercise.

### **AVOIDING THE RISK OF SKIN BURNS:**

- To reduce the risk of injury, before entering a spa the user should measure the water temperature with an accurate thermometer, since the tolerance of temperature-regulating devices may vary by as much as ±5°F (±2°C).
- Test the water with your hand before entering the spa to be sure it's comfortable.

### **SAFETY SIGN**

Each Hot Spring® spa is shipped with a SAFETY SIGN in the owner's package. The sign, which is required as a condition of Product Listing, should be permanently installed where it is visible to the users of the spa. To obtain additional SAFETY SIGNS, contact your Hot Spring dealer and request Part #70798.

## **IMPORTANT SPA INSTRUCTIONS**

The following contains important spa information, and we strongly encourage you to read and apply them.

### **DO:**

- Use and lock the vinyl cover when the spa is not in use, whether it is empty or full.
- Follow the Spa Care and Maintenance recommendations stated in this manual.
- Use only approved accessories and recommended spa chemicals and cleaners.

### **DON'T:**

- Leave the Hot Spring spa exposed to the sun without water or the cover in place. Exposure to direct sunlight can cause solar distress of the shell material.
- Roll or slide the spa on its side. This will damage the siding.
- Lift or drag the vinyl cover by using the cover lock straps; always lift or carry the cover by using the handles.
- Attempt to open the electrical control box. There are no user serviceable parts inside. Opening of the control box by the spa owner will void the warranty. If you have an operational problem, carefully go through the steps outlined in the Troubleshooting section. If you are not able to resolve the problem, contact your authorized Hot Spring dealer. Many problems can easily be diagnosed over the telephone by an Authorized Service Technician.

## **SAVE THESE INSTRUCTIONS**

# SPA SPECIFICATIONS

	Footprint Dimensions	Height	Effective Filter area	Heater (Watts)	Water Capacity	Dry Weight	Filled Weight*	Dead Weight*	Electrical Requirements
Vista® (Model SS)	7'7" x 8'4" 2.31m x 2.54m	38" .97 m	325 square feet	4,000	500 gallons 1,893 litres	1008 lbs. 457 kg.	6,059 lbs. 2,748 kg.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Grandee® (Model G) & (Model GG)	7'7" x 8'4" 2.31m x 2.54m	38" .97 m	150 (G) 325 (GG) square feet	Model G 6,000 Model GG 4,000	500 gallons 1,893 litres	1,008 lbs. 457 kg.	6,233 lbs. 2,827 kg.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Envoy® (Model KK)	7'9" x 7'5" 2.36m x 2.26m	36" .91 m	325 square feet	4,000	450 gallons 1,703 litres	875 lbs. 397 kg.	5,350 lbs. 2,427 kg.	110 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Vanguard® (Model V) & (Model VV)	7'3" x 7'3" 2.21m x 2.21m	36" .91 m	120 (V) 150 (VV) square feet	6,000	400 gallons 1,514 litres	789 lbs. 358 kg.	5,039 lbs. 2,286 kg.	110 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Sovereign® (Model II)	6'8" x 7'9" 2.03m x 2.36m	33" .84 m	120 square feet	6,000	355 gallons 1,344 litres	713 lbs. 322 kg.	4,603 lbs. 2,088 kg.	105 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Sovereign (Model I)	6'8" x 7'9" 2.03m x 2.36m	33" .84 m	90 square feet	1,500 or 6,000	355 gallons 1,344 litres	713 lbs. 322 kg.	4,603 lbs. 2,088 kg.	105 lbs. per square foot	115 volt, 20 amp Dedicated GFCI protected circuit <hr/> 230 volt, 50 amp Single phase GFCI protected circuit
Accolade™ (Model AC)	6'6" x 7'3" 1.98m x 2.21m	36" .91 m	195 square feet	6,000	350 gallons 1,325 litres	705 lbs. 320 kg.	4,205 lbs. 1,907 kg.	105 lbs. per square foot	230 volt, 50 amp Single phase GFCI protected circuit
Prodigy® (Model H)	6'2" x 7'3" 1.88m x 2.21m	33" .84 m	90 square feet	1,500 or 6,000	325 gallons 1,230 litres	613 lbs. 278 kg.	4,088 lbs. 1,854 kg.	105 lbs. per square foot	115 volt, 20 amp Dedicated GFCI protected circuit <hr/> 230 volt, 50 amp Single phase GFCI protected circuit
Jetsetter® (Model JJ)	5'5" x 7' 1.65m x 2.13m	29" .74 m	90 square feet	1,500 or 6,000	225 gallons 851 litres	450 lbs. 204 kg.	2,828 lbs. 1,283 kg.	90 lbs. per square foot	115 volt, 20 amp Dedicated GFCI protected circuit <hr/> 230 volt, 50 amp Single phase GFCI protected circuit
Jetsetter® (Model J)	5'2" x 6'10" 1.57m x 2.08m	29" .74 m	90 square feet	1,500 or 6,000	215 gallons 814 litres	420 lbs. 190 kg.	2,665 lbs. 1,209 kg.	90 lbs. per square foot	115 volt, 20 amp Dedicated GFCI protected circuit <hr/> 230 volt, 50 amp Single phase GFCI protected circuit

△ **CAUTION:** Watkins® Manufacturing Corporation suggests a structural engineer or contractor be consulted before the spa is placed on an elevated deck.

\* **NOTE:** The "Filled weight" and "Dead weight" of the spa includes the weight of the occupants (assuming an average occupant weight of 175 lbs).

# INSTALLATION INSTRUCTIONS

## SITE PREPARATION

You probably have a spot picked out for your new spa, whether it's indoors or outdoors, on a patio or on a deck. Just make sure you check the following:

- Always put your spa on a structurally sound, level surface. A filled spa can weigh a great deal. Make certain that the location you choose can support the weight of your filled spa.
- Don't forget to level your spa before filling it. (See Spa Leveling Instructions)
- Locate your equipment compartment, which houses all of the electrical components, in a place where water drainage will be away from it. Do not allow water into the equipment compartment. Water can cause damage to the electronics, or may trip the circuit breaker on your house's electrical panel.
- Leave yourself easy access to the circuit breakers in the subpanel (230 volt models), or to the interrupter switch on the end of the power cord (115 volt models).
- Never let water get into the subpanel (230 volt models), into the interrupter switch (115 volt models), or into the electrical outlet that your spa is plugged into. Your 115 volt Hot Spring® spa comes with a protective box designed to keep out rain and water from sprinkler systems. Your 230 volt spa's subpanel is rain-tight when installed correctly with the door closed. Periodically check these conditions and correct any flaws if detected.
- Leave access to the equipment compartment for periodic spa care and maintenance.
- If your spa is going to be installed in a location known to be frequented by mice, rats or other nocturnal creatures, Watkins Manufacturing Corporation recommends covering the access opening to the spa's equipment compartment with a heavy gauge screen material available at your local hardware store.

⚠ **WARNING: Damage to the spa's equipment compartment components or internal plumbing as a result of rodent infestation is NOT covered under your warranty!**

## OUTDOOR AND PATIO INSTALLATION

No matter where you install your new spa, it's important that you have a solid foundation to support it. Structural damage to the spa, resulting from incorrect installation, or placement on an inadequate foundation, is not covered under the spa's limited warranty.

If you install the spa outdoors, we recommend a reinforced concrete pad at least four inches thick. The reinforcing rod or mesh in the pad should be attached to a #10 AWG bonding wire per national electrical codes (contact your local electrical code compliance inspector for more information; inspection for proper grounding may be required before pouring concrete to form the slab).

If you place the spa on the ground, even temporarily, place stepping stones under the leveling areas (see Spa Leveling Instructions). The stones should be at least two inches thick and twelve inches square. Even with stones in place, the spa will inevitably settle and become unlevel. Plus, a spa surrounded by dirt or grass will soon be filled with dirt or grass from users' feet; therefore, it is important to get it onto a solid foundation as soon as possible.

## DECK INSTALLATION

To be certain your deck can support your spa, you must know the deck's maximum load capacity. Consult a qualified building contractor or structural engineer. To find the weight of your spa, its contents and occupants, refer to the Spa Specification chart. This weight per square foot must not exceed the structure's rated capacity, or serious structural damage could result.

## INDOOR/BASEMENT INSTALLATION

Be aware of some special requirements if you place your spa indoors. Water will accumulate around the spa, so flooring materials must provide a good grip when wet. Proper drainage is essential to prevent a build-up of water around the spa. When building a new room for the spa it is recommended that a floor drain be installed. The humidity will naturally increase with the spa installed. Water may get into woodwork and produce dry rot, mildew, or other problems. Check for airborne moisture's effects on exposed wood, paper, etc. in the room. To minimize these effects, it is best to provide plenty of ventilation to the spa area. An architect can help to determine if more ventilation must be installed.

**IMPORTANT:** Your Hot Spring spa is equipped with a vent to remove excessive heat from the equipment compartment. Find this vent (it's under the bottom right corner) and be sure the vent is not blocked by anything, including carpeting.

Your Hot Spring dealership can help you with local information such as zoning regulations and building codes. They can also give you a copy of our planning guide – just ask for a Hot Spring spa Pre-Delivery Instruction.

⚠ **WARNING: Please keep the area around your spa well ventilated when it is installed indoors or in a confined area.** Inadequate ventilation around the spa could cause a build-up of a higher-than-normal concentration of spa chemicals and/or bacterial fragments. These dispersed spa chemicals and/or bacterial fragments can be inhaled, and may result in breathing difficulties or lung damage in certain people suffering from a

### ⚠ WARNING



Watkins Manufacturing Corporation recommends that the Hot Spring® spa be installed above ground. Lowering the top of the spa to ground level, or employing decking which raises standing level toward the top of the spa substantially increases the hazard of accidental entry. Consult a licensed building contractor to design or evaluate your custom decking requirements.



compromised immune system or respiratory infection. If you or other bathers are affected by this condition, please seek medical attention as soon as possible.

In addition to the above, properly clean and maintain your spa as follows:

- Follow all procedures in this owner's manual and printed instructions on all water care (chemical) products packaging.
- Test the water regularly to ensure proper levels of sanitizers, pH, and other water care requirements.
- Drain, clean, and refill your spa with fresh water on a regular schedule, and in accordance with this owner's manual.
- Clean the filter(s) at least once per month.
- Check to make sure you have proper circulation throughout your spa water system.
- Have spa users bathe before entering the spa water.

## SPA LEVELING INSTRUCTIONS

In order for your Hot Spring® spa to operate properly, and the internal plumbing to drain completely, the spa must be level. If the spa is to be installed on an uneven, or unlevel foundation, shimming of the spa is required.

**NOTE: Due to the large size of the Vista® and Grandee® spas, Watkins Manufacturing Corporation requires that these spas be installed on a level 4"- (10.1 cm) thick concrete pad or structurally engineered deck and NOT shimmed in any manner.**

△ **WARNING:** Watkins Manufacturing Corporation recommends that a structural engineer or contractor be consulted prior to placing the spa on an elevated deck, or platform. Use the Dead Weight in the Spa Specification chart to determine the structure's requirements.

**IMPORTANT:** Watkins Manufacturing Corporation reserves the right to change any specifications or design without incurring any obligation.

### Approved Shim Material

- Cedar shingles
- Redwood
- Exterior rated plywood
- Exterior rated lumber

The shims used should vary in thickness from 1/4 - to 1/2-inch (0.6 cm to 1.2 cm) and should be cut into 2" x 4" (5 cm x 10 cm) rectangles.

### Leveling Instructions (Envoy™, Vanguard®, Sovereign®, Accolade™, Prodigy® and Jetsetter® models)

1. Using a 6' (2 meter) carpenter's level (or a shorter level and a straight 2" x 4", 8' board, or a board 5 cm by 10 cm, 2.4 meters long), check the spa to identify the highest, and lowest corners.
2. With one end of the level resting on the highest corner of the spa (and the opposite end resting on the lowest corner), gently raise the lower end of the level by placing shims between the spa shell and the level, until the level itself is level. This will tell you how many shims are needed at that lowest corner.
3. Now carefully pivot the level, keeping the shimmed end where it is, until the other end of the level rests on one of the other corners. Check the level. Adjust the end of the level using the procedure above. Carefully pivot the level again to the last corner, leaving the pivot end at its original location, and repeat the procedure. Whatever shims are on the three corners are the ones you will place under those corners in the next steps.
4. Remove the level and set it aside. Carefully remove the shims and keep them together, remembering the corner from which each set of shims came.
5. With more than one person lifting, lift the lowest side of the spa (the one with the most shims), and place a 4" x 4" (10 cm x 10 cm) block under the spa pedestal, at the center of the side lifted.
6. Refer to the spa pedestal support diagram for your spa to locate the leveling points for the elevated corners. Place the set of shims corresponding to each corner directly under its designated leveling point.
7. Lift the spa, remove the support block, and set the spa on the shims. Repeat steps 5 through 7, if necessary, for the opposite side of the spa.
8. Use the level to check the level of the spa. Make any necessary adjustments.
9. Refer to the spa pedestal support diagram for your spa to locate the remaining leveling points, each of which must now also be shimmed, and carefully slide "helper" shims under the spa at their designated locations. These helper shims should create a snug fit between the foundation and the spa pedestal structure. If it is necessary to lift the spa in order to place the helper shims, use care not to kick out the original corner shims.

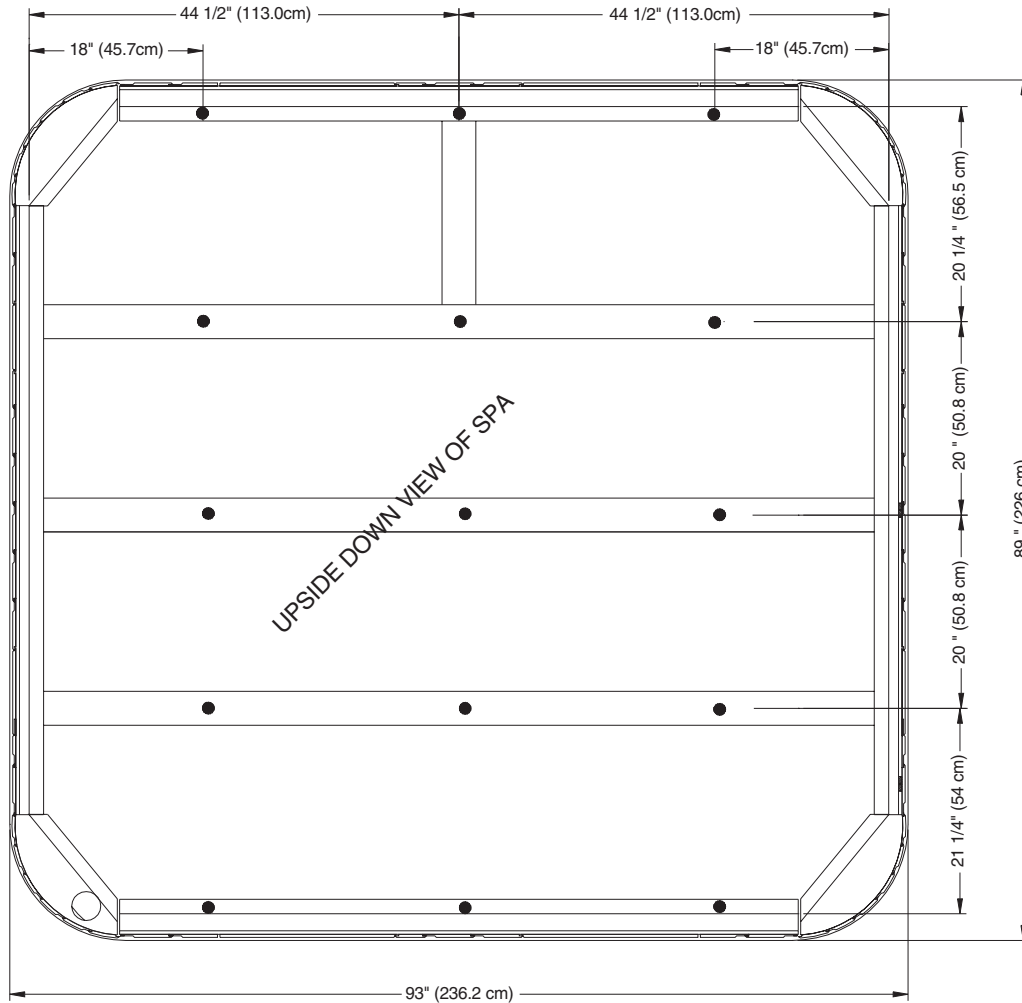
The following base support diagrams for the Envoy, Vanguard, Sovereign, Accolade, Prodigy, and Jetsetter spas indicate the recommended shimming points.

**Notice:** Though designed for outdoor installation, your Hot Spring spa is not impervious to damage that may be caused by insects, rodents, or other living creatures. A screen has been installed at the bottom of the door to minimize their ability to access the spa's equipment compartment and cause damage to the spa components. Please note, the electronics within the compartment need adequate airflow to cool the equipment and maintain the optimal temperature range. Sealing the opening completely, or allowing debris to build-up on the screen mesh, will adversely affect the spas' performance. Damage to the spa or it's components caused by an "act of nature", rodent or insect damage is not covered under the terms of your spa's Limited Warranty.

# ENVOY™ (MODEL KK)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**



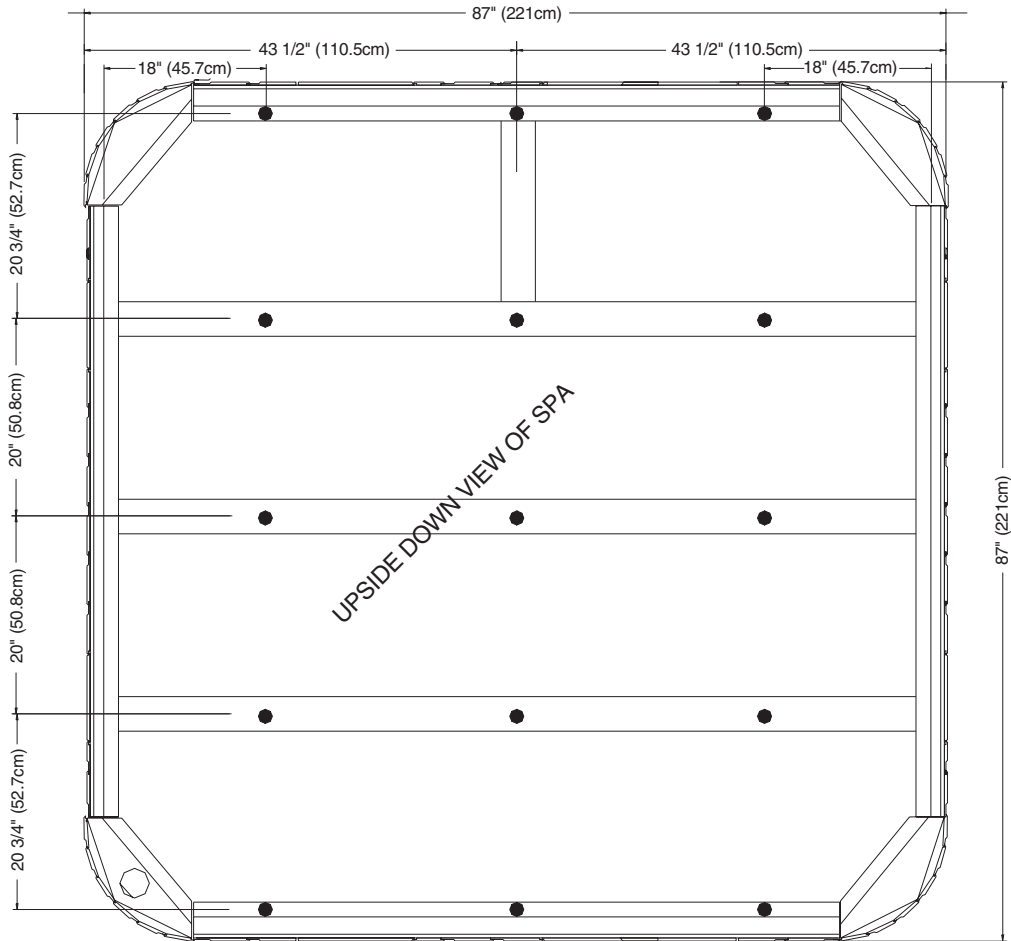
DOOR SIDE

- 15 leveling points (place shims approx. 18" in from edge, then center middle shims).

# VANGUARD® (MODEL V & VV)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**



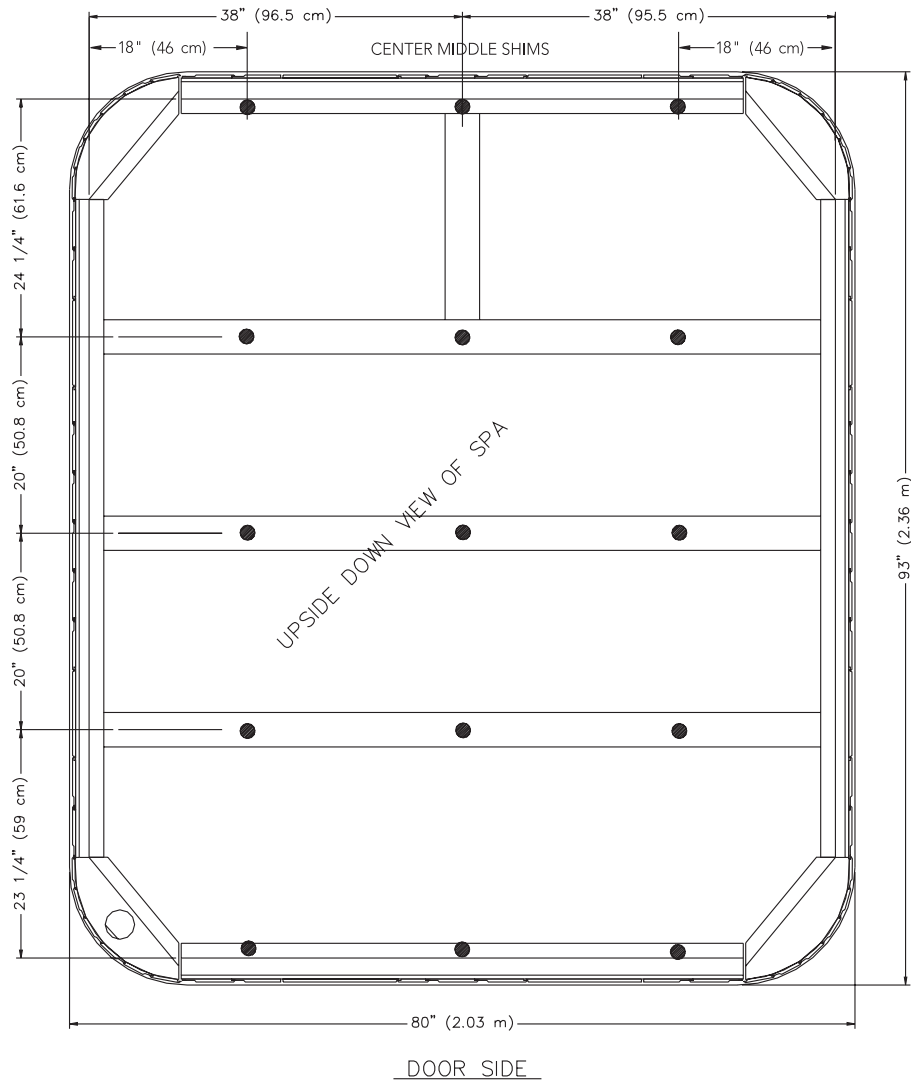
DOOR SIDE

- 15 leveling points (place shims approx. 18" in from edge, then center middle shims).

# SOVEREIGN® (MODEL I & II)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**

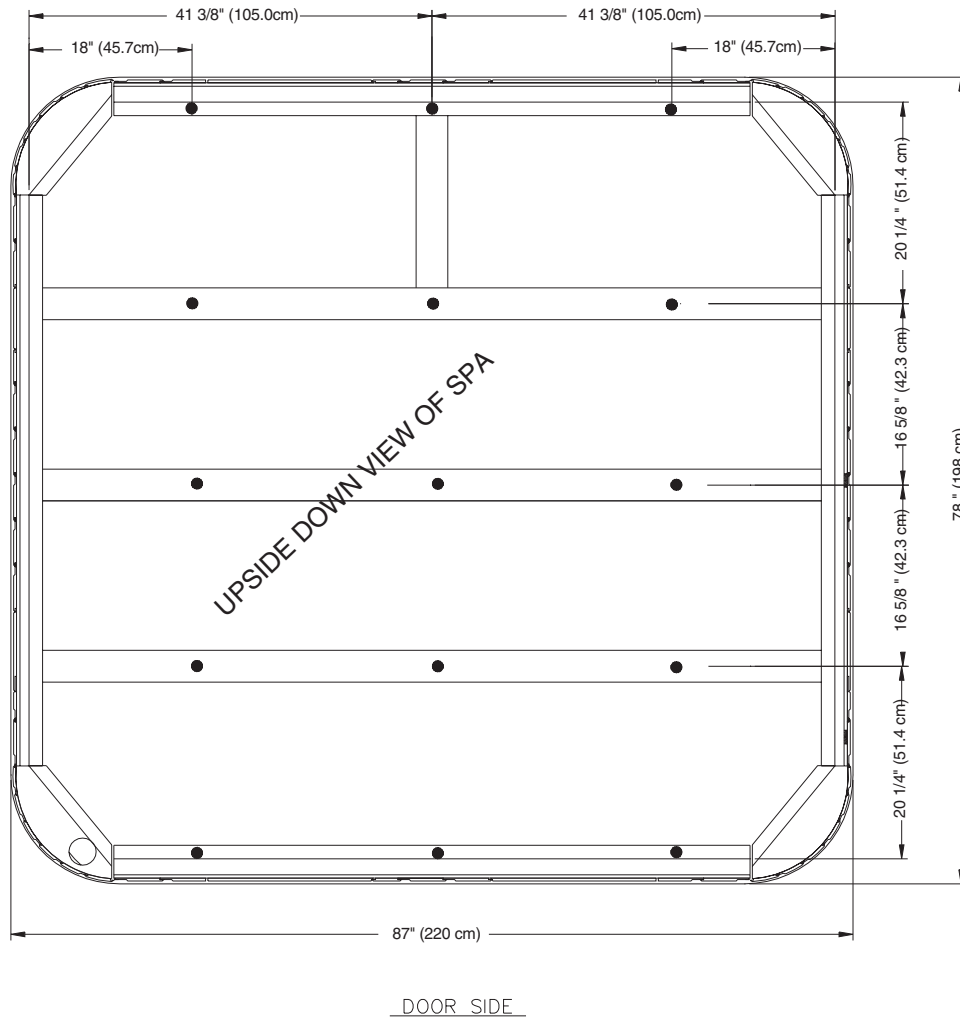


- 15 leveling points (place shims approx. 18" in from edge, then center middle shims).

# ACCOLADE™ (MODEL AC)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**

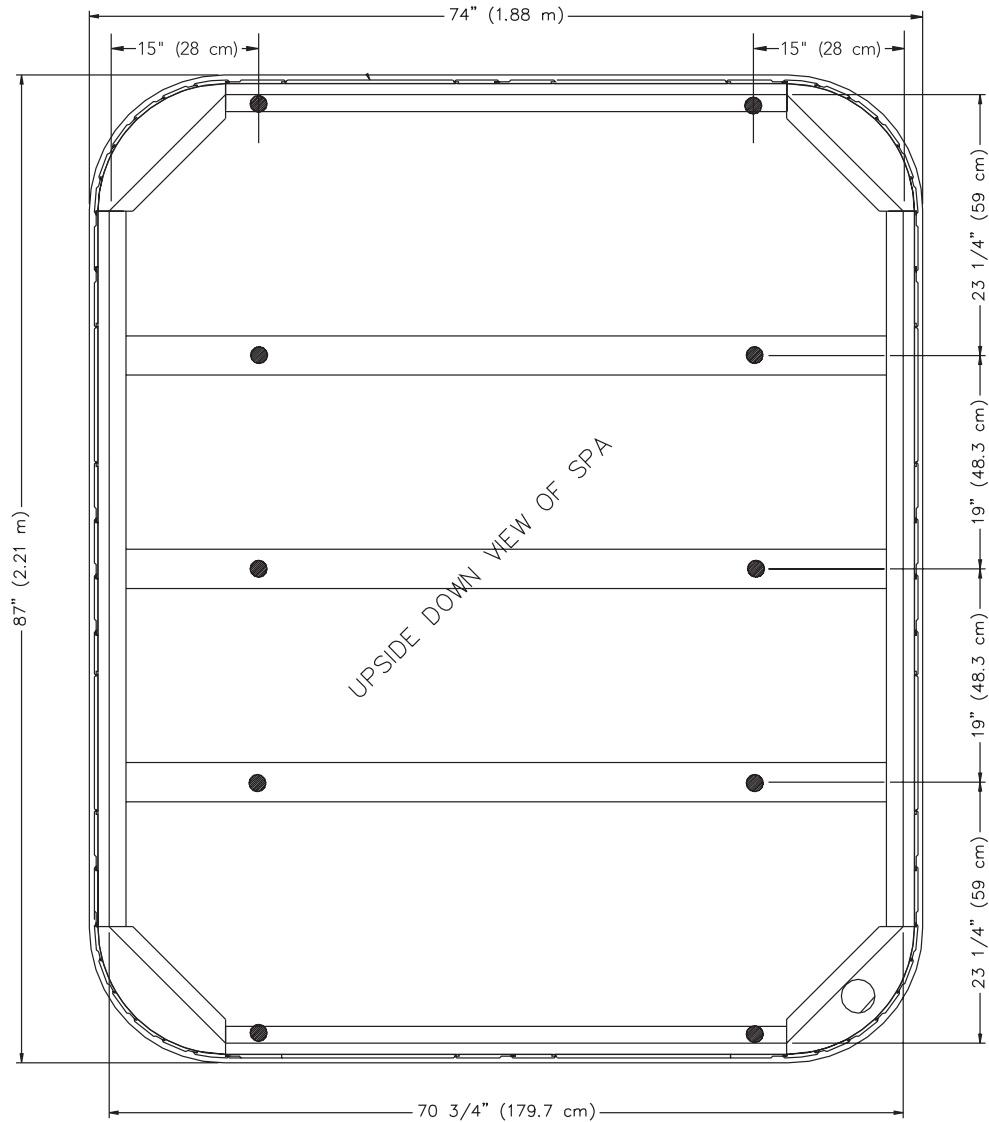


- 15 leveling points (place shims approx. 18" in from edge, then center middle shims).

# PRODIGY® (MODEL H)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**

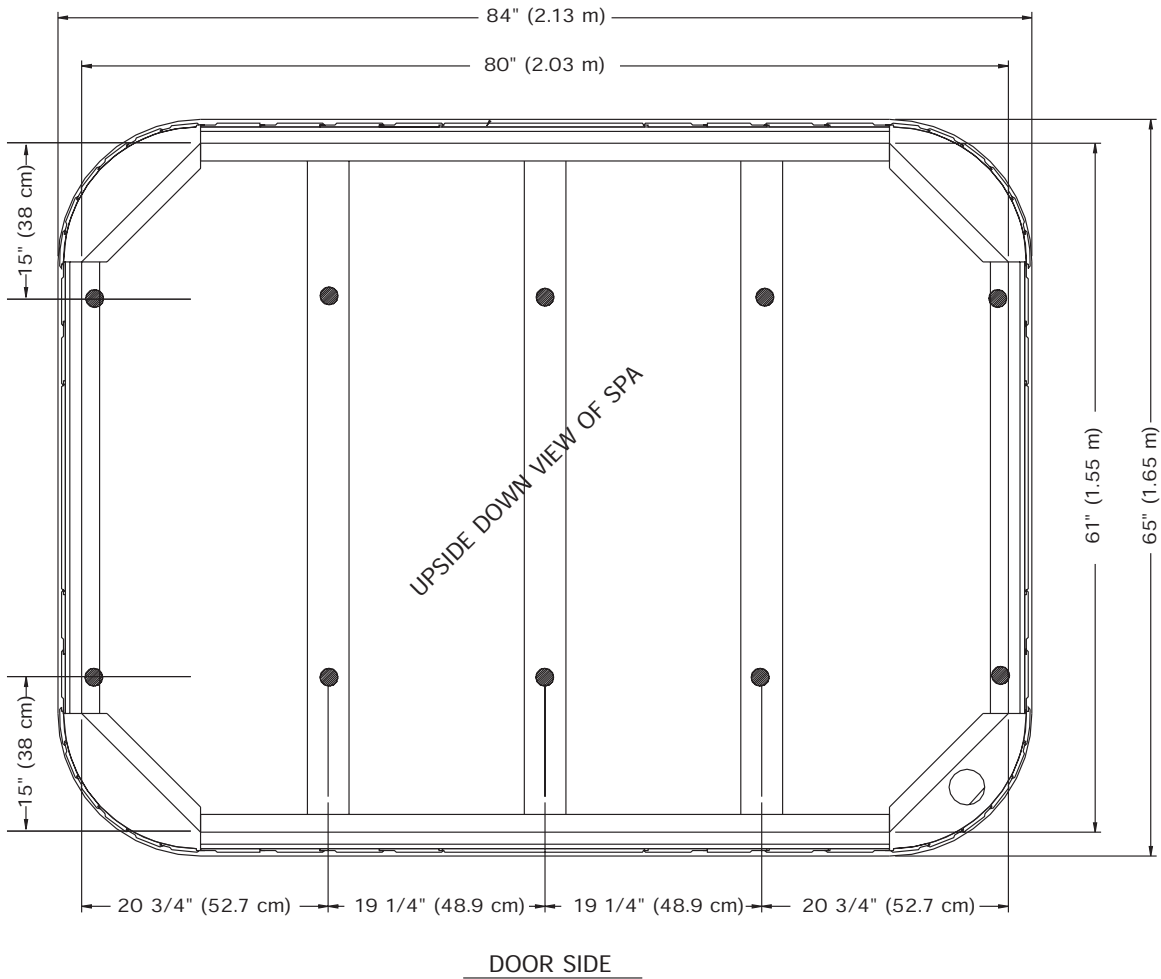


- 10 leveling points (place shims approx. 15" in from edge, then center middle shims).

# JETSETTER® (MODEL JJ)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**

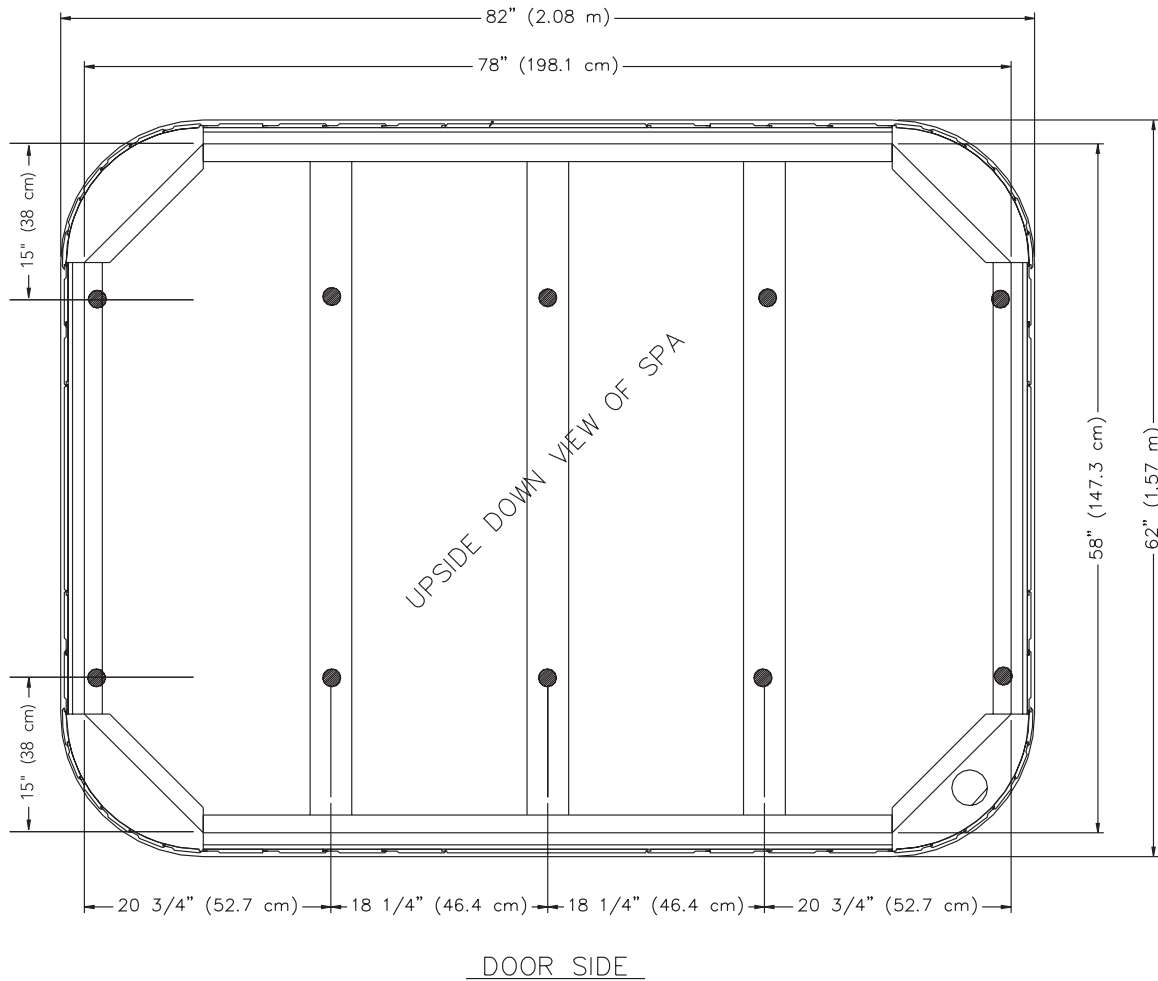


- 10 leveling points (place shims approx. 15" in from edge, then center middle shims).

# JETSETTER® (MODEL J)

## Leveling Points

**NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.**

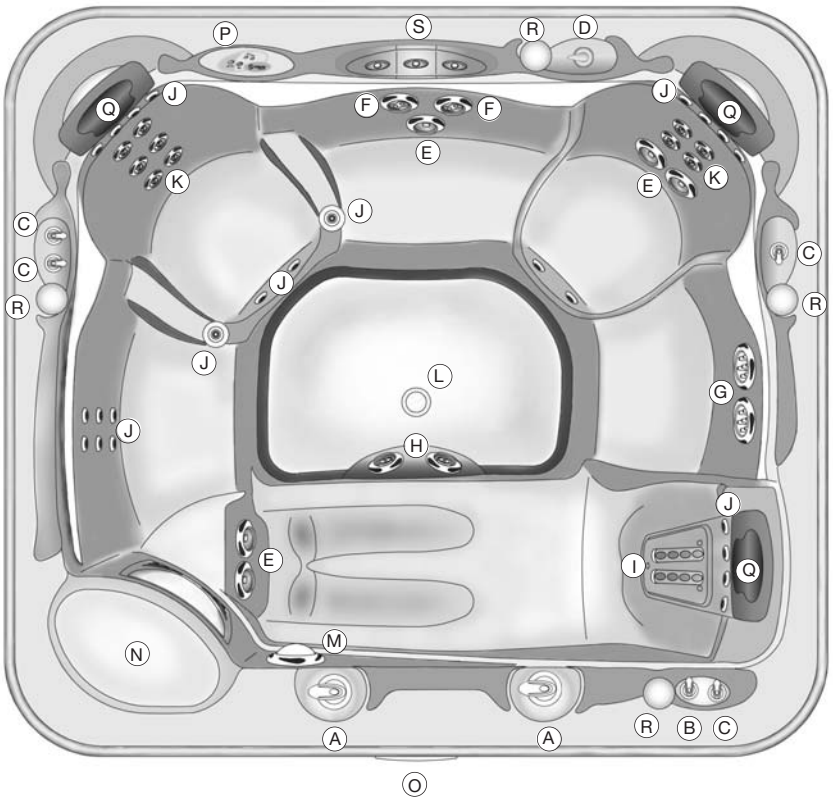


- 10 leveling points (place shims approx. 15" in from edge, then center middle shims).

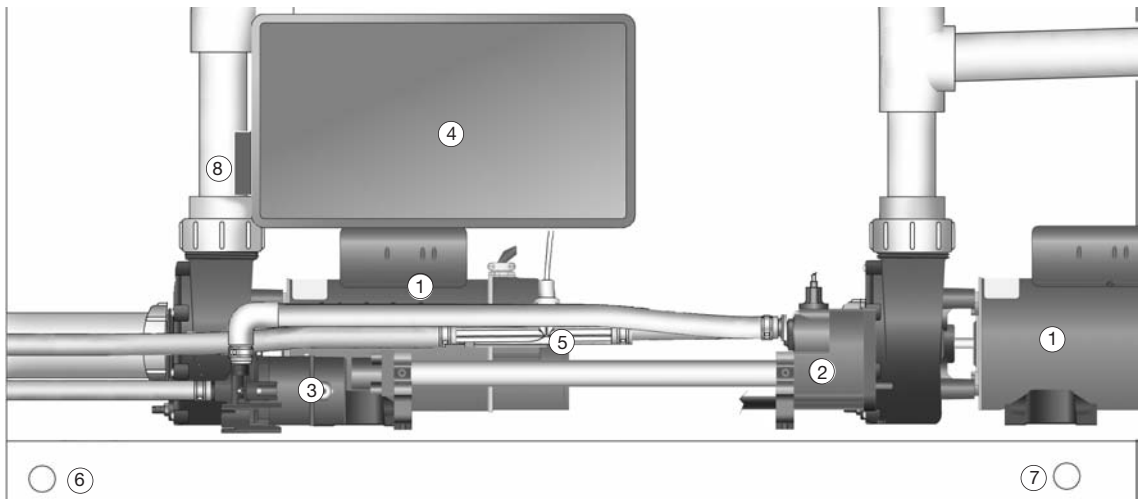


**VISTA®  
(MODEL SS)**

**OVERHEAD VIEW**



- A. SmartJet® system lever
- B. Moto-Massage® jet Comfort Control® system lever
- C. Precision® jets Comfort Control system lever
- D. Water feature lever
- E. Hydromassage jet with directional nozzle
- F. Hydromassage jet with rotary nozzle
- G. Soothing Seven® jets
- H. JetStream® jet
- I. Moto-Massage® DX jet
- J. Precision jets
- K. HydroStream™ jet
- L. Heater return and spa drain
- M. Light lens
- N. Filter compartment
- O. Main control panel
- P. Auxiliary control panel
- Q. Pillow
- R. Cup holder
- S. Water Feature



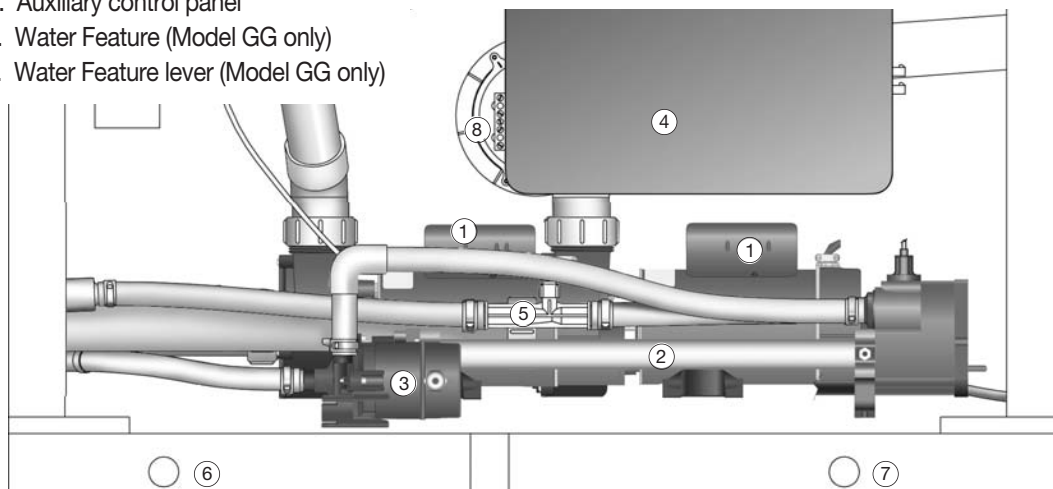
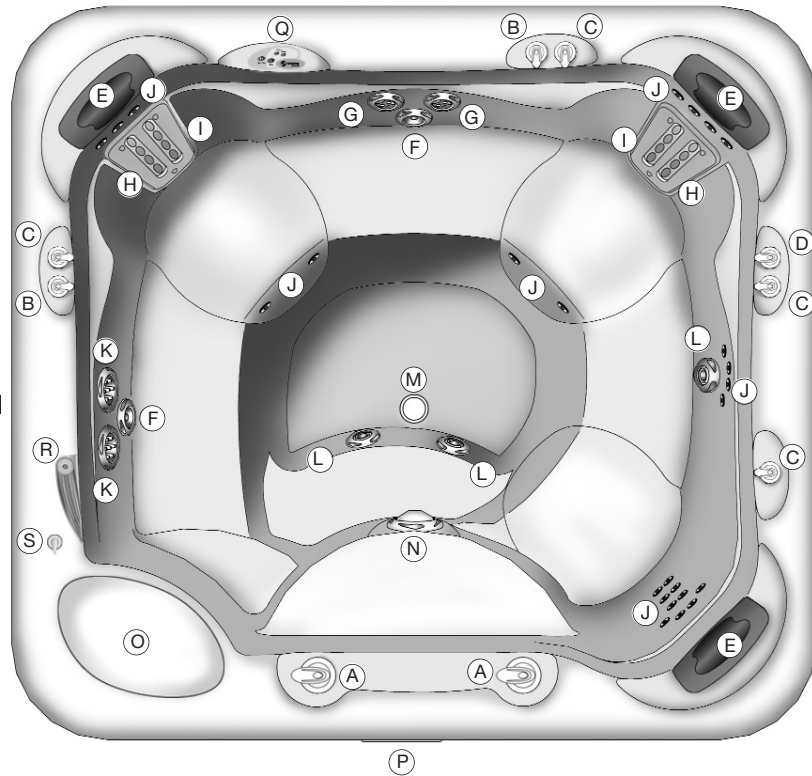
**EQUIPMENT COMPARTMENT**

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# GRANDEE® (MODEL G & GG)

## OVERHEAD VIEW

- A. SmartJet® system lever
- B. Moto-Massage® jet Comfort Control® system lever
- C. Precision® jets Comfort Control system lever
- D. JetStream® jet Comfort Control system lever
- E. Pillow
- F. Hydromassage jet with directional nozzle
- G. Hydromassage jet with rotary nozzle
- H. Moto-Massage jet (Model G only)
- I. Moto-Massage® DX Jet (Model GG only)
- J. Precision jets
- K. Soothing Seven® jets
- L. JetStream jet
- M. Heater return and spa drain
- N. Light lens
- O. Filter compartment
- P. Main control panel
- Q. Auxiliary control panel
- R. Water Feature (Model GG only)
- S. Water Feature lever (Model GG only)

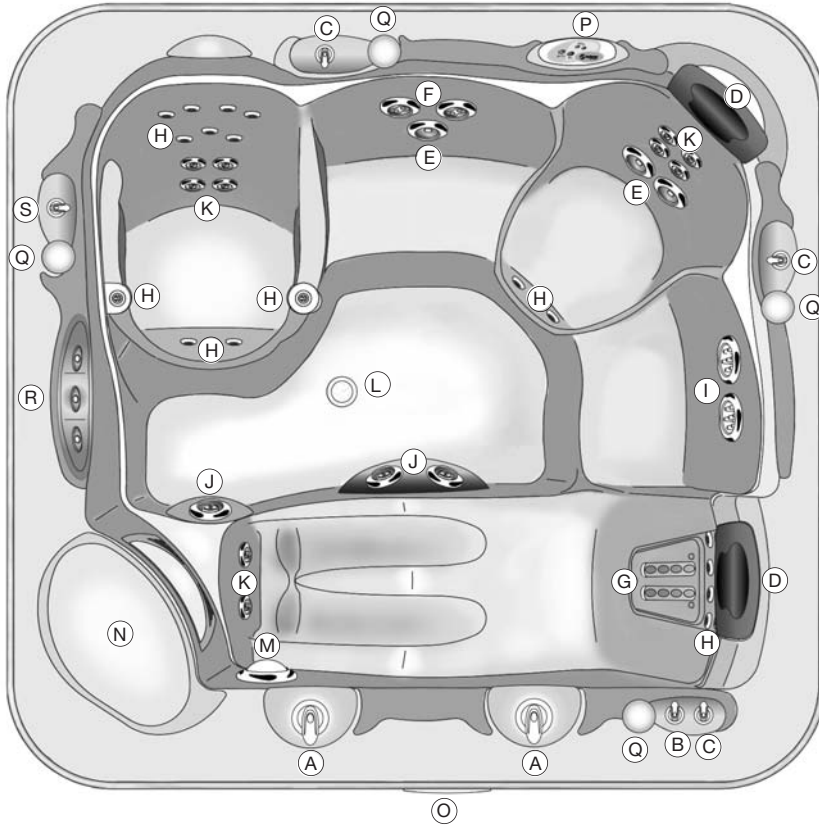


## EQUIPMENT COMPARTMENT

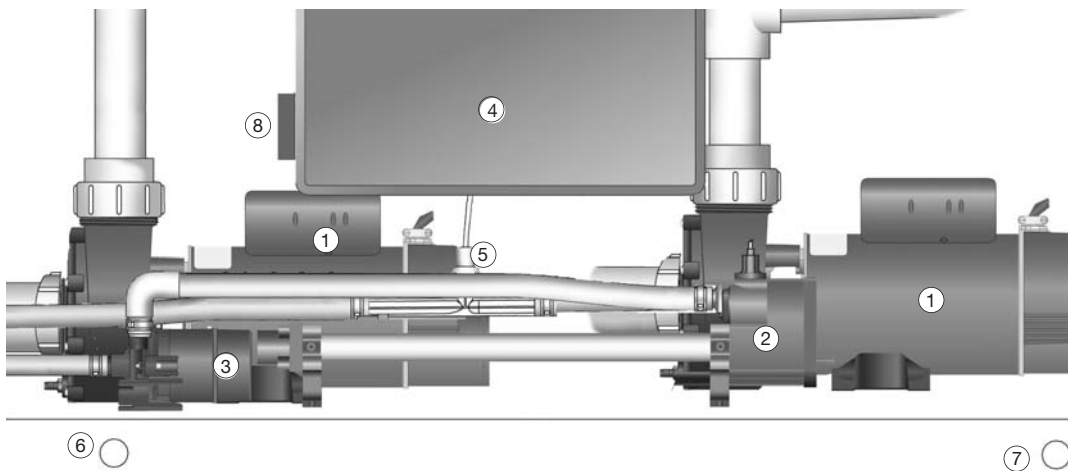
- |                                      |                     |
|--------------------------------------|---------------------|
| 1. Wavemaster® jet pump              | 5. Ozone injector   |
| 2. No-Fault® heater                  | 6. Main drain valve |
| 3. Silent Flo 5000® circulation pump | 7. Secondary drain  |
| 4. IQ 2020™ control box              | 8. Bonding terminal |

## ENVOY® (MODEL KK)

### OVERHEAD VIEW



- A. SmartJet® system lever
- B. Moto-Massage® jet Comfort Control® system lever
- C. Precision® jets Comfort Control system lever
- D. Pillow
- E. Hydromassage jet with directional nozzle
- F. Hydromassage jet with rotary nozzle
- G. Moto-Massage DX jet
- H. Precision jets
- I. Soothing Seven® jets
- J. JetStream® jet
- K. HydroStream™ jet
- L. Heater return and spa drain
- M. Light lens
- N. Filter compartment
- O. Main control panel
- P. Auxiliary control panel
- Q. Cup holder
- R. Water feature
- S. Water feature lever



### EQUIPMENT COMPARTMENT

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# VANGUARD® (MODEL V & VV)

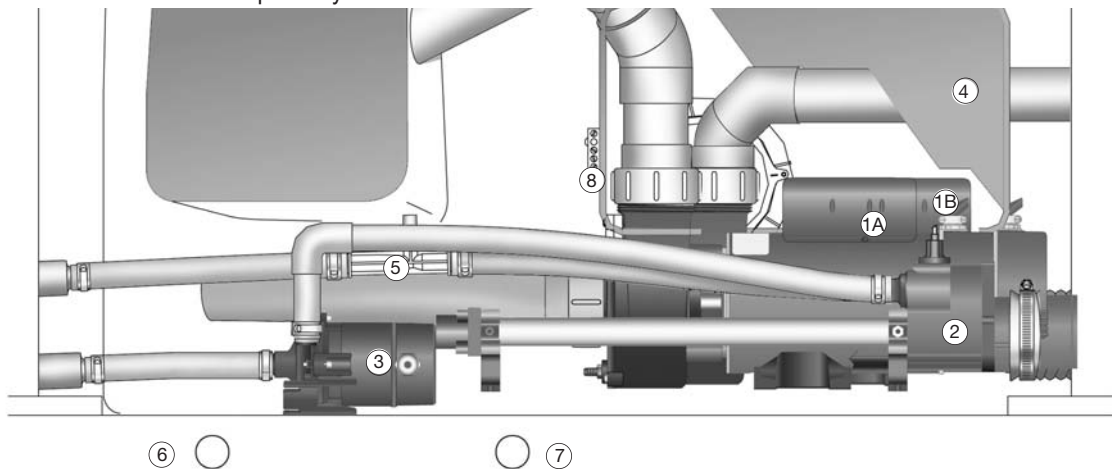
## OVERHEAD VIEW

- A. SmartJet® system lever
- B. Moto-Massage® jet Comfort Control® system lever
- C. Precision® jets Comfort Control system lever
- D. Pillow
- E. Hydromassage jet with directional nozzle
- F. Hydromassage jet with rotary nozzle
- G. Moto-Massage jet
- H. Moto-Massage® DX Jet\*
- I. Precision jets
- J. Soothing Seven® jets
- K. JetStream® jet
- L. Heater return and spa drain
- M. Light lens
- N. Filter compartment
- O. Main control panel
- P. Auxiliary control panel
- Q. Water Feature\*\*
- R. Water Feature lever\*\*



\* Available on model VV spas only, single Moto Massage jet on V model.

\*\* Available on model VV spas only.

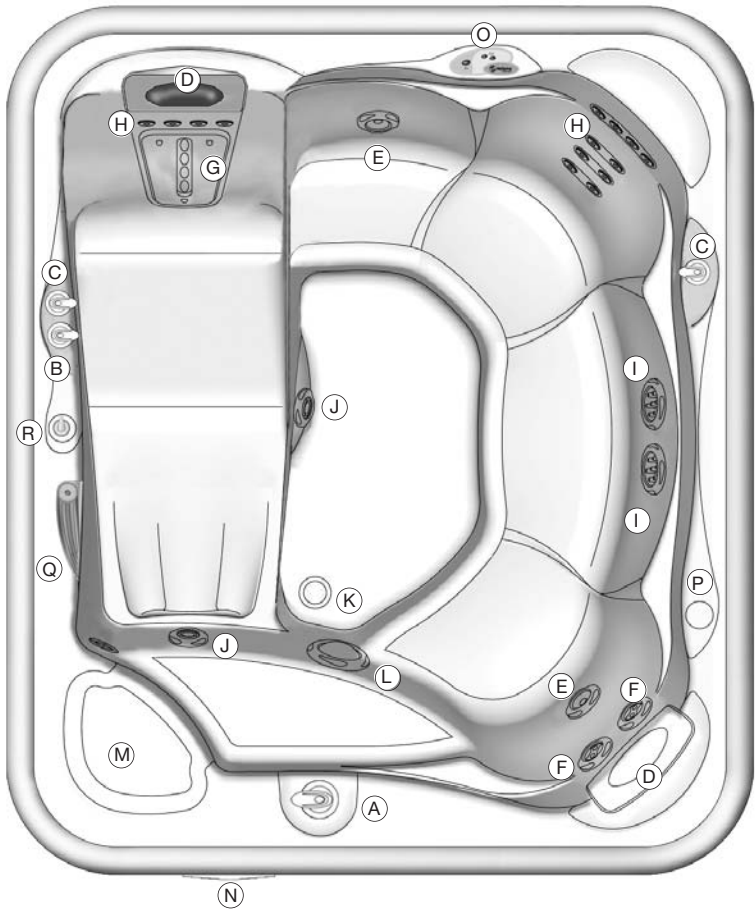


## EQUIPMENT COMPARTMENT

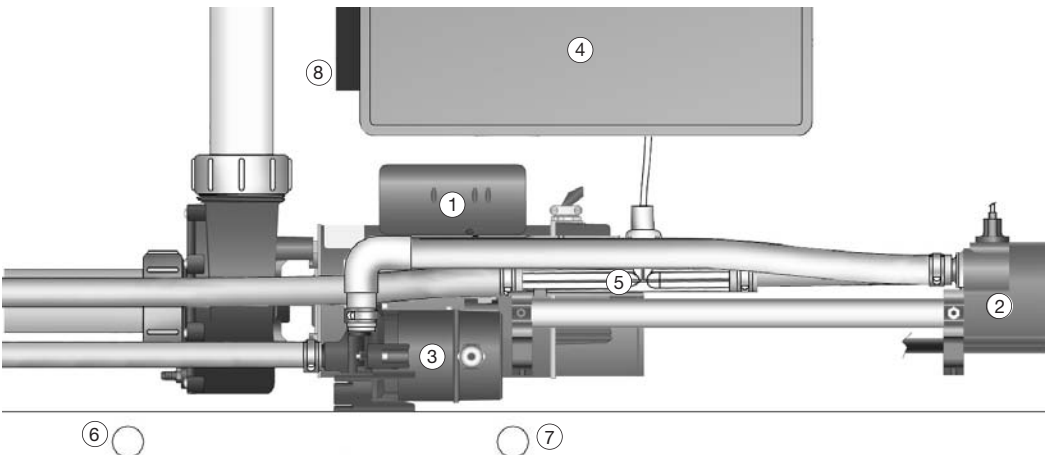
- 1A. Wavemaster® jet pump
- 1B. Wavemaster jet pump  
(Available on model VV spas only)
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# SOVEREIGN® (MODEL I & II)

## OVERHEAD VIEW



- A. SmartJet® system lever
- B. Moto-Massage® jet Comfort Control system lever
- C. Precision® jets Comfort Control® system lever
- D. Pillow
- E. Hydromassage jet with directional nozzle
- F. Hydromassage jet with rotary nozzle
- G. Moto-Massage jet
- H. Precision jets
- I. Soothing Seven® jets
- J. JetStream® jet
- K. Heater return and spa drain
- L. Light lens
- M. Filter compartment
- N. Main control panel
- O. Auxiliary control panel
- P. Cup holder
- Q. Water Feature (model II only)
- R. Water Feature lever



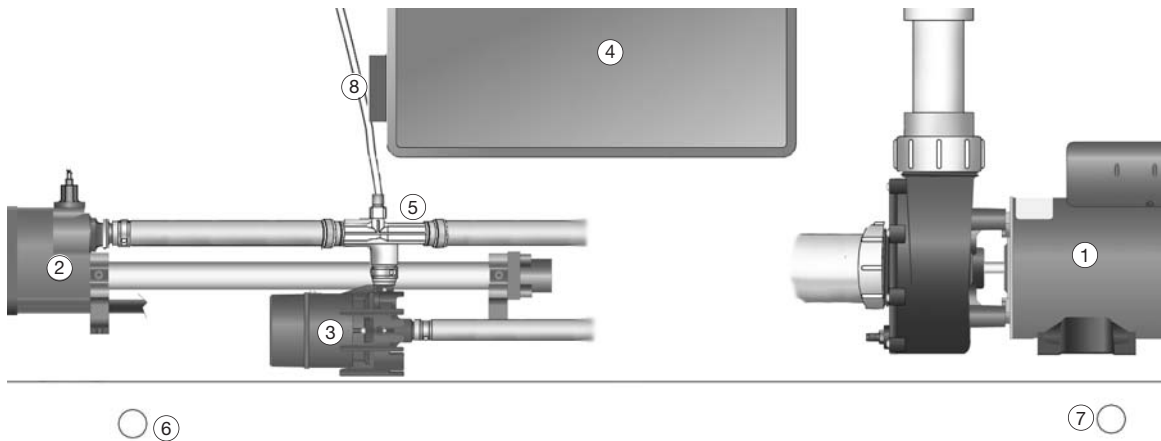
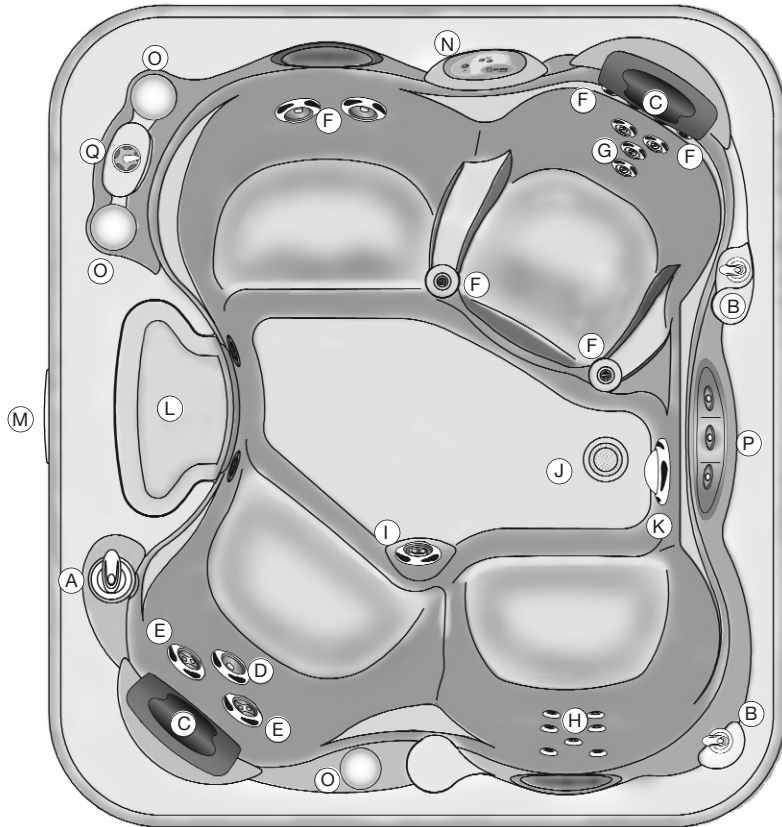
## EQUIPMENT COMPARTMENT

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# ACCOLADE™ (MODEL AC)

## OVERHEAD VIEW

- A. SmartJet® system lever
- B. Precision® jets Comfort Control® system lever
- C. Pillow
- D. Hydromassage jet with directional nozzle
- E. Hydromassage jet with rotary nozzle
- F. Precision jets
- G. HydroStream™ jet
- H. Soothing Seven® jets
- I. JetStream® jet
- J. Heater return and spa drain
- K. Light lens
- L. Filter compartment
- M. Main control panel
- N. Auxiliary control panel
- O. Cup holder
- P. Water feature
- Q. Water feature lever



## EQUIPMENT COMPARTMENT

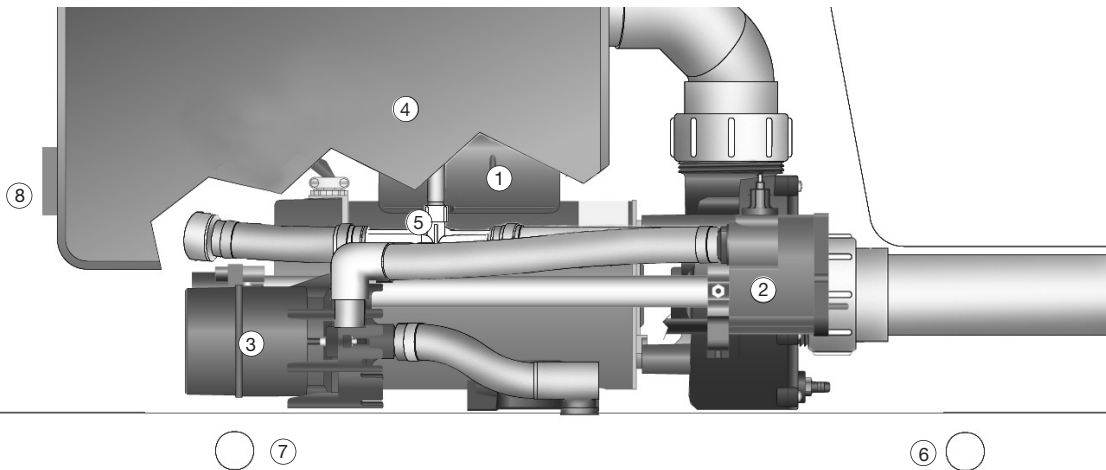
- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

## PRODIGY® (MODEL H)

### OVERHEAD VIEW



- A. SmartJet® system lever
- B. JetStream® jet Comfort Control® system lever
- C. Precision® jets Comfort Control system lever
- D. Hydromassage jet with directional nozzle
- E. Hydromassage jet with rotary nozzle
- F. Precision jets
- G. Soothing Seven® jets
- H. JetStream jet
- I. Heater return and spa drain
- J. Light lens
- K. Filter compartment
- L. Main control panel
- M. Auxiliary control panel
- N. Cup holder



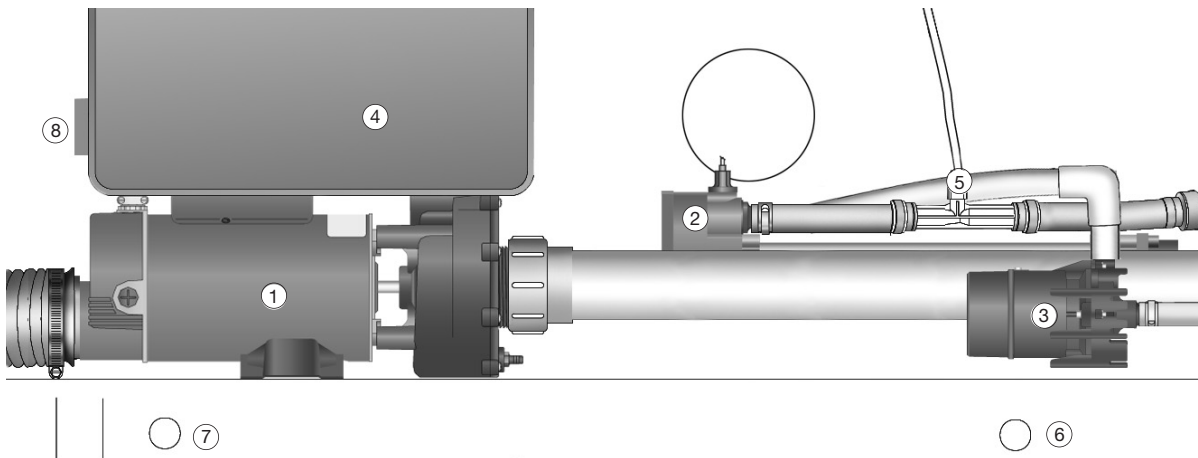
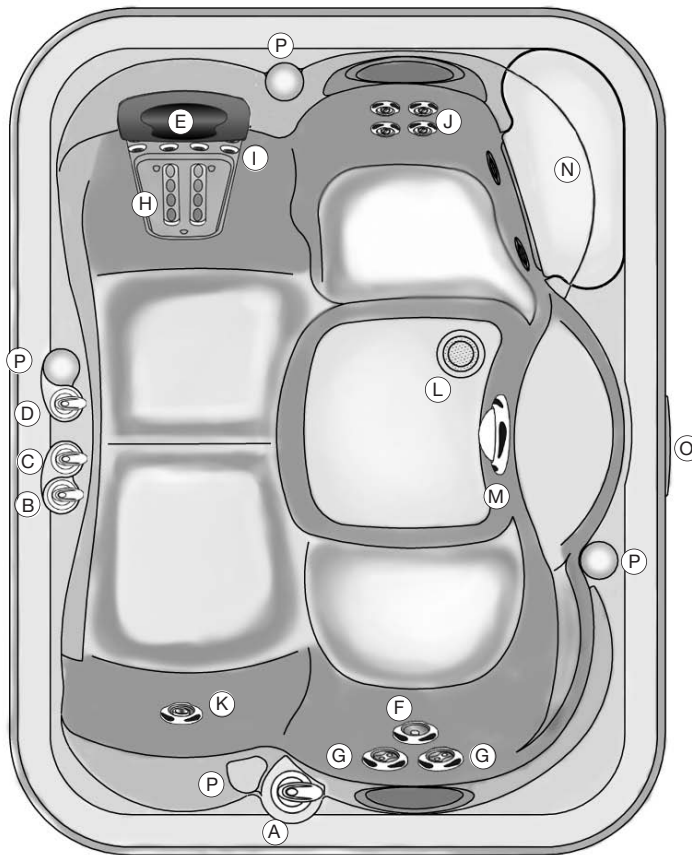
### EQUIPMENT COMPARTMENT

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# JETSETTER® (MODEL JJ)

## OVERHEAD VIEW

- A. SmartJet® system lever
- B. JetStream® jet Comfort Control® system lever
- C. Moto-Massage® DX jet Comfort Control system lever
- D. Precision® jets Comfort Control system lever
- E. Pillow
- F. Hydromassage jet with directional nozzle
- G. Hydromassage jet with rotary nozzle
- H. Moto-Massage DX jet
- I. Precision jets
- J. HydroStream™ jet
- K. JetStream jet
- L. Heater return and spa drain
- M. Light lens
- N. Filter compartment
- O. Main control panel
- P. Cup holder



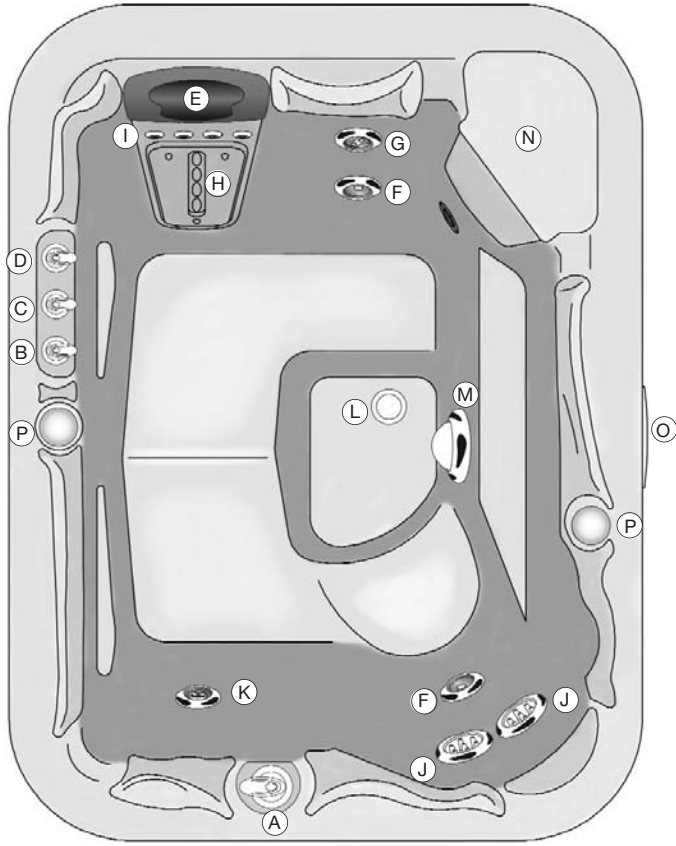
## EQUIPMENT COMPARTMENT

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

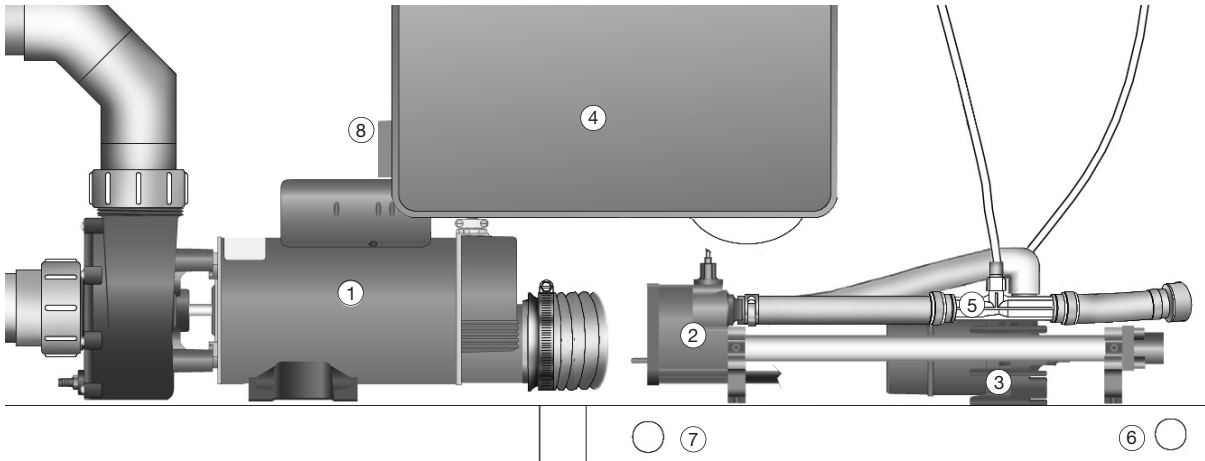


# JETSETTER® (MODEL J)

## OVERHEAD VIEW



- A. SmartJet® system lever
- B. JetStream® jet Comfort Control® system lever
- C. Moto-Massage® jet Comfort Control system lever
- D. Precision® jets Comfort Control system lever
- E. Pillow
- F. Hydromassage jet with directional nozzle
- G. Hydromassage jet with rotary nozzle
- H. Moto-Massage jet
- I. Precision jets
- J. Soothing Seven® jets
- K. JetStream jet
- L. Heater return and spa drain
- M. Light lens
- N. Filter compartment
- O. Main control panel
- P. Cup holder



## EQUIPMENT COMPARTMENT

- 1. Wavemaster® jet pump
- 2. No-Fault® heater
- 3. Silent Flo 5000® circulation pump
- 4. IQ 2020™ control box
- 5. Ozone injector
- 6. Main drain valve
- 7. Secondary drain
- 8. Bonding terminal

# ELECTRICAL REQUIREMENTS AND PRECAUTIONS

Your Hot Spring® spa has been carefully designed to give you maximum safety against electrical shock. Connecting the spa to an improperly wired circuit will negate many of the spa's safety features. Improper wiring may also cause electrocution, risk of fire, and other risks of injuries. Please read and follow the electrical installation requirements and instructions for your specific spa model completely!

**SERVICE NOTE:** All Hot Spring spa models are equipped with a power indicator which, in addition to showing the spa has power to it, has a diagnostic function as well. It will begin blinking if the heater high-limit thermostat has tripped. If the power indicator light is blinking, follow the instructions in the Troubleshooting section to identify and correct the cause. The power indicator will stop blinking once the problem has been corrected.

## 230 VOLT PERMANENTLY CONNECTED MODELS

- **Vista® (Model SS)**
- **Grandee® (Model G/GG)**
- **Envoy® (Model KK)**
- **Vanguard® (Model V/ VV)**
- **Sovereign® (Model II)**
- **Accolade™ (Model AC)**

HOT SPRING SPAS MUST BE WIRED IN ACCORDANCE WITH ALL APPLICABLE LOCAL ELECTRICAL CODES. ALL ELECTRICAL WORK SHOULD BE DONE BY AN EXPERIENCED, LICENSED ELECTRICIAN. WE RECOMMEND THE USE OF APPROPRIATE ELECTRICAL CONDUIT, FITTINGS, AND WIRE FOR ALL CIRCUITS.

An electrical subpanel containing two GFCI breakers is included with each 230 volt spa. We recommend that this subpanel be used to supply power and protect the spa.

This subpanel requires a 50 amp, single phase, 230 volt, four wire service (two line, one neutral, one ground). The grounding conductor must be at least the same gauge as the line conductors, but not less than #10 AWG. A minimum #10 AWG solid copper bond wire is also required.

Mount the subpanel in the vicinity of the spa, but not closer than five feet away, in accordance with all local codes. (N.E.C. 680-38 to 41-A-3)

## INSTALLATION INSTRUCTIONS

1. To connect the electrical service, first remove the screws from the equipment compartment door. Carefully pull the door panel away and down in order to remove it completely from the spa.
2. Locate the IQ 2020™ spa control box. Loosen the screws on the front of the control box. Remove the screws and the control box cover.
3. Route the electrical service from the subpanel into the spa equipment compartment. Position the conduit in the recess provided between the frame and door. Install the supply conduit so as not to block the drain valve.

**NOTE:** The subpanel must be placed in sight of the spa, at a minimum distance of five feet away.

4. Connect the supply conduit to the bottom of the IQ 2020 spa control box, using a 3/4" liquid-tight, flex conduit fittings.

## GRANDEE (G), VANGUARD (V/VV), SOVEREIGN (II) & ACCOLADE WIRING CONNECTIONS

1. Identify the TB-1 terminal block, located inside the IQ 2020 control box at the lower left-hand corner.
2. Connect the #12 AWG, BLUE wire, from the subpanel 20 amp breaker, terminal L1 to TB-1, terminal 2.
3. Connect the #12 AWG, RED wire, from the subpanel 20 amp breaker, terminal L2 to TB-1, terminal 4.
4. Connect the #12 AWG, WHITE wire, from the subpanel 20 amp breaker, terminal N (load neutral) to TB-1, terminal 5.

**NOTE:** The WHITE neutral wire must be attached to the LOAD neutral on the 230 volt, 20 amp breaker (not to the neutral bus bar in the subpanel). The WHITE neutral wire coming from the breaker itself is already connected to the neutral bus bar.

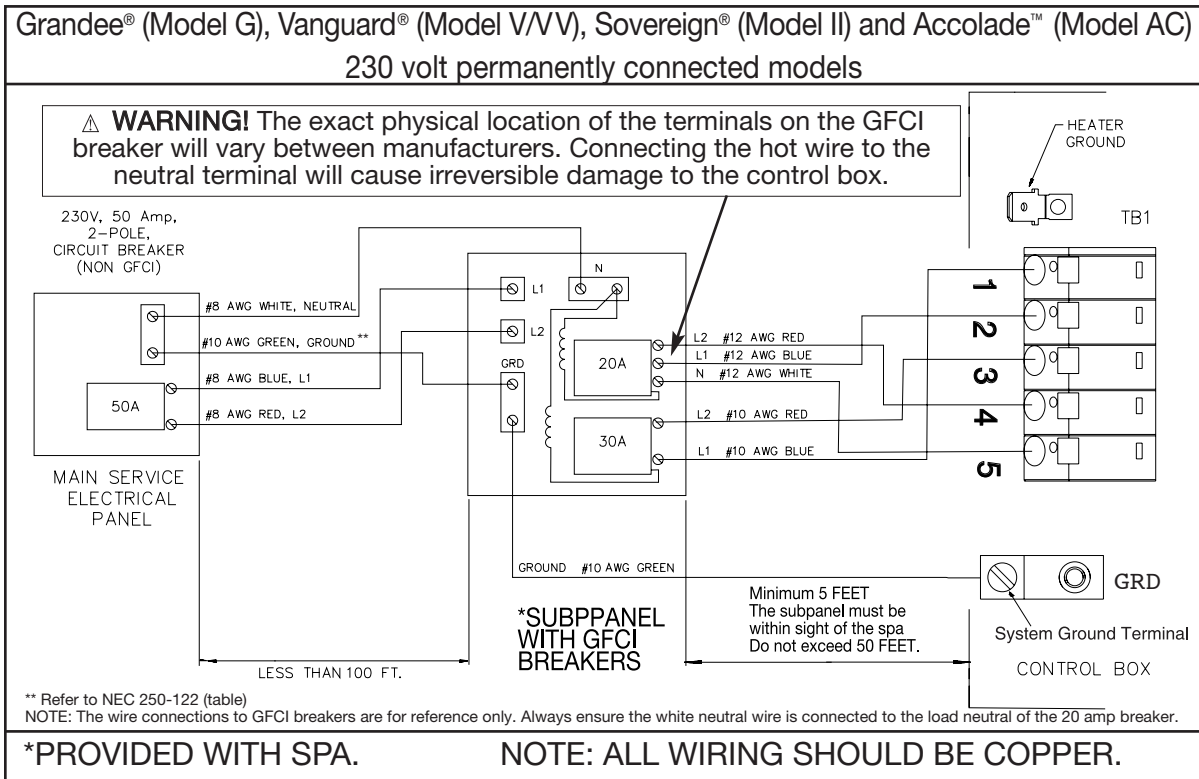
5. Connect the #10 AWG, BLUE wire, from the subpanel 30 amp breaker, terminal L1 to TB-1, terminal 1.
6. Connect the #10 AWG, RED wire, from the subpanel 30 amp breaker, terminal L2 to TB-1, terminal 3.
7. Connect the #10 AWG, GREEN wire, from the subpanel GROUND bar to TB-1, system ground terminal.
8. Using the pressure wire connector provided on the outside of the control box, bond the spa to all exposed metal equipment or fixtures, handrails, and the concrete pad (if applicable) per N.E.C. Article 680 and local codes.
9. Replace the control box cover and securely tighten the fastening screws. Close and secure the equipment compartment door.

⚠ **WARNING: FILL THE SPA WITH WATER BEFORE TURNING ON THE POWER.**

Once your spa has been filled with water, turn it on and test all of the circuit breakers.

**NOTE:** If both breakers immediately trip, verify that the #12 AWG WHITE neutral wire is connected from TB-1 terminal 5 to the N (load neutral) terminal of the 20 amp subpanel breaker. Each breaker should be tested prior to each use. Here's how:

1. Push the "TEST" button on each GFCI breaker, and observe it click OFF.
2. Wait 30 seconds, then push the breaker switch to the OFF (down) position (to ensure that it has completely disengaged), then push the breaker switch to the ON (up) position. If you don't wait 30 seconds, the spa's power indicator may continue to blink – try again.



If any of the GFCI breakers fails to operate in this manner, your spa may have an electrical malfunction, and you may be at risk of electrical shock. Turn off all circuits and do not use the spa until the problem has been corrected by an authorized service agent.

**⚠ WARNING:** Removing, or bypassing any GFCI breaker will result in an unsafe spa and will void the spa's warranty.

**IMPORTANT:** Should you ever find the need to move or relocate your Hot Spring® spa, it is essential that you understand and apply these installation requirements. Your Hot Spring spa has been carefully engineered to provide maximum safety against electric shock. Remember, connecting the spa to an improperly wired circuit will negate many of its safety features.

**NOTE:** Long wiring runs may require larger-gauge wire than stated. We recommend using a maximum 3% voltage drop when calculating wire gauge requirements.

### **VISTA® (SS), GRANDEE® (GG) & ENVOY® (KK) WIRING CONNECTIONS**

1. Identify the TB-1 terminal block, located inside the control box at the lower left-hand corner.
2. Connect the #12 AWG, BLUE wire, from the subpanel 20 amp breaker, terminal L1 to TB-1, terminal 1
3. Connect the #12 AWG, RED wire, from the subpanel 20 amp breaker, terminal L2 to TB-1, terminal 3

**NOTE:** The WHITE neutral wire must be attached to the LOAD neutral on the 230 volt, 30 amp breaker (not to the neutral bus bar in the subpanel). The WHITE neutral wire coming from the breaker itself is already connected to the neutral bus bar.

4. Connect the #10 AWG, BLUE wire, from the subpanel 30 amp breaker, terminal L1 to TB-1, terminal 2
5. Connect the #10 AWG, RED wire, from the subpanel 30 amp breaker, terminal L2 to TB-1, terminal 4
6. Connect the #10 AWG, WHITE wire, from the subpanel 30 amp breaker, terminal N (load neutral) to TB-1, terminal 5
7. Connect the #10 AWG, GREEN wire, from the subpanel GROUND bar to TB-1, system ground terminal.
8. Using the pressure wire connector provided on the outside of the control box, bond the spa to all exposed metal equipment or fixtures, handrails, and the concrete pad (if applicable) per N.E.C. and local codes.

9. Replace the control box cover and securely tighten the fastening screws. Close and secure the equipment compartment door as follows:
  - Place top of door or panel directly below bartoop against the frame of the spa.
  - Push bottom of door or panel against the spa frame.
    - Slide door or panel upward (pushing in on center of door) until screw holes line up.
    - Slightly pull on door or panel, if door remains against the spa then replace the screws.
    - If the door does not lock into position, repeat the previous steps.

⚠ **WARNING: FILL THE SPA WITH WATER BEFORE TURNING ON THE POWER! (See STARTUP AND REFILL PROCEDURES).**

Once your spa has been filled with water, turn it on and test all of the circuit breakers.

**NOTE:** If both breakers immediately trip, verify that the #10 AWG WHITE neutral wire is connected from TB-1 terminal 5 to the N (load neutral) terminal of the 30 amp subpanel breaker. Each breaker should be tested prior to each use. Here's how:

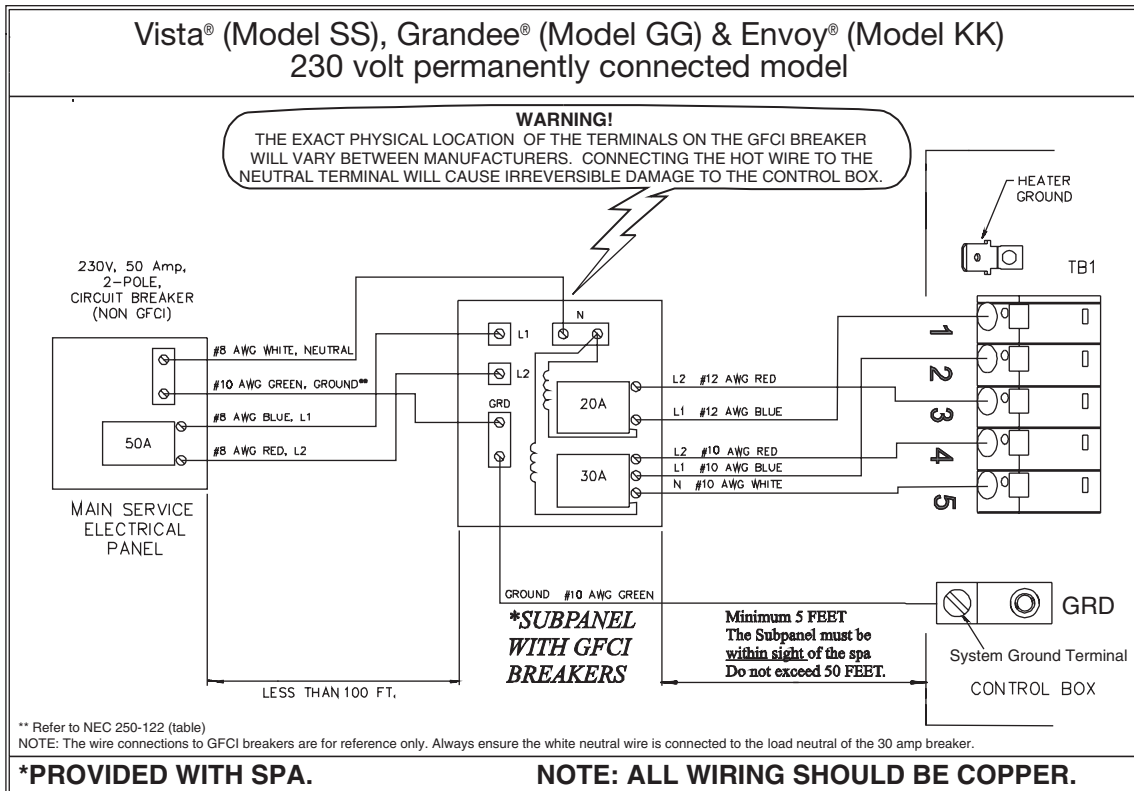
1. Push the "TEST" button on each GFCI breaker, and observe it click OFF.
2. Wait 30 seconds, then push the breaker switch to the OFF (down) position (to ensure that it has completely disengaged), then push the breaker switch to the ON (up) position. If you don't wait 30 seconds, the spa's control panel may flash four lines on and off – try again.

If any of the GFCI breakers fails to operate in this manner, your spa may have an electrical malfunction, and you may be at risk of electrical shock. Turn off all circuits and do not use the spa until the problem has been corrected by an authorized service agent.

⚠ **WARNING:** Removing or bypassing any GFCI breaker will result in an unsafe spa and will void the spa's warranty.

**IMPORTANT:** Should you ever find the need to move or relocate your Hot Spring® spa, it is essential that you understand and apply these installation requirements. Your Hot Spring spa has been carefully engineered to provide maximum safety against electric shock. Remember, connecting the spa to an improperly wired circuit will negate many of its safety features.

**NOTE:** Long wiring runs may require larger-gauge wire than stated.



## 115-230 VOLT CONVERTIBLE MODELS

- Sovereign® (Model I)
- Prodigy® (Model H)
- Jetsetter® (Model J & JJ)

### 230 VOLT CONVERSION INSTRUCTIONS

Refer to the following instructions to convert a 115 volt spa to a 230 volt spa.

**NOTE:** Converting the spa to 230 volt operation should only be done by an authorized service agent or a qualified electrician.

Required Parts: (3) P.N. 36021 program jumpers (staged on JP jumpers in IQ 2020™ control box) and (1) P.N. 20679 or 37087 subpanel (230 volt)

1. Disconnect the power cord from the house receptacle.
2. Remove the screws and open the equipment compartment door.
3. Remove the screws on the front of the IQ 2020 spa control box.
4. Open the control box cover.
5. Identify TB-1, located in the lower left-hand corner inside the control box.
6. Refer to Figure 1, item A. Remove both the 3 pin jumper attached to terminals 3, 4, and 5, and the 2 pin jumper attached to terminals 1 and 2.
7. Refer to Figure 1, item B. Remove the power cord wires from terminals 2, 4 and the system ground terminal.
8. Refer to Figure 1, item C. Attach the 2 pin jumper to terminals 4 and 5.
9. Unscrew the power cord strain relief and remove the power cord from the access hole in the control box.
10. On the large circuit board, locate the program jumpers, JP-1 through JP-12 (positioned near the center of the circuit board, with JP-1 being the top jumper).

⚠ **WARNING:** Do not allow pliers to contact any electronic components inside the control box.

11. Use a pair of needlenose pliers to place the program jumpers as shown in Figure 2 (use Watkins P.N. 36021).

**NOTE:** The program jumpers JP-1, JP-2 and JP-3 must be set correctly for the spa to operate. Figure 2 illustrates the correct jumper settings.

Converting from 115 volts to 230 volts changes the voltage supplied to the heater from 115 volts to 230 volts. The jet pump will continue to operate at 115 volts.

### INSTALLATION INSTRUCTIONS

1. To connect the electrical service, first remove the screws from the equipment compartment door. Carefully pull the door panel away and remove it from the spa.
2. Locate the IQ 2020 spa control box. Loosen the screws on the front of the control box. Remove the screws and the control box cover.
3. Route the electrical service from the subpanel into the spa equipment compartment. Position the conduit in the recess provided between the frame and the door.

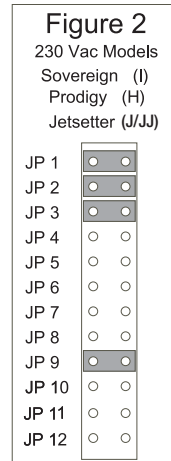
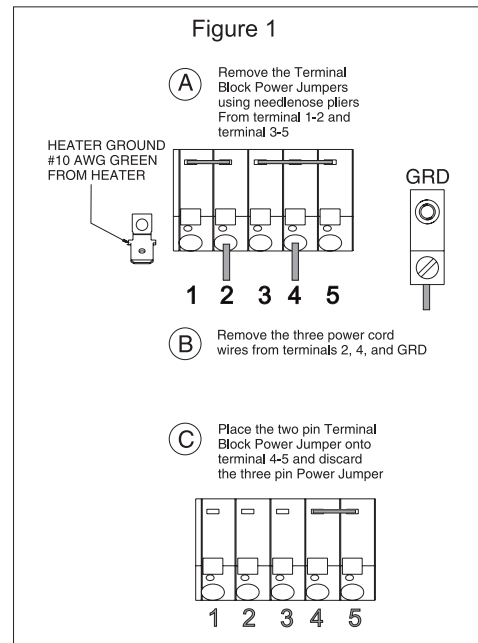
**NOTE:** The subpanel must be placed in sight of the spa, at a minimum distance of 5 feet away.

4. Connect the supply conduit to the bottom of the IQ 2020 spa control box, using a minimum of 3/4" liquid-tight, flex conduit fittings.

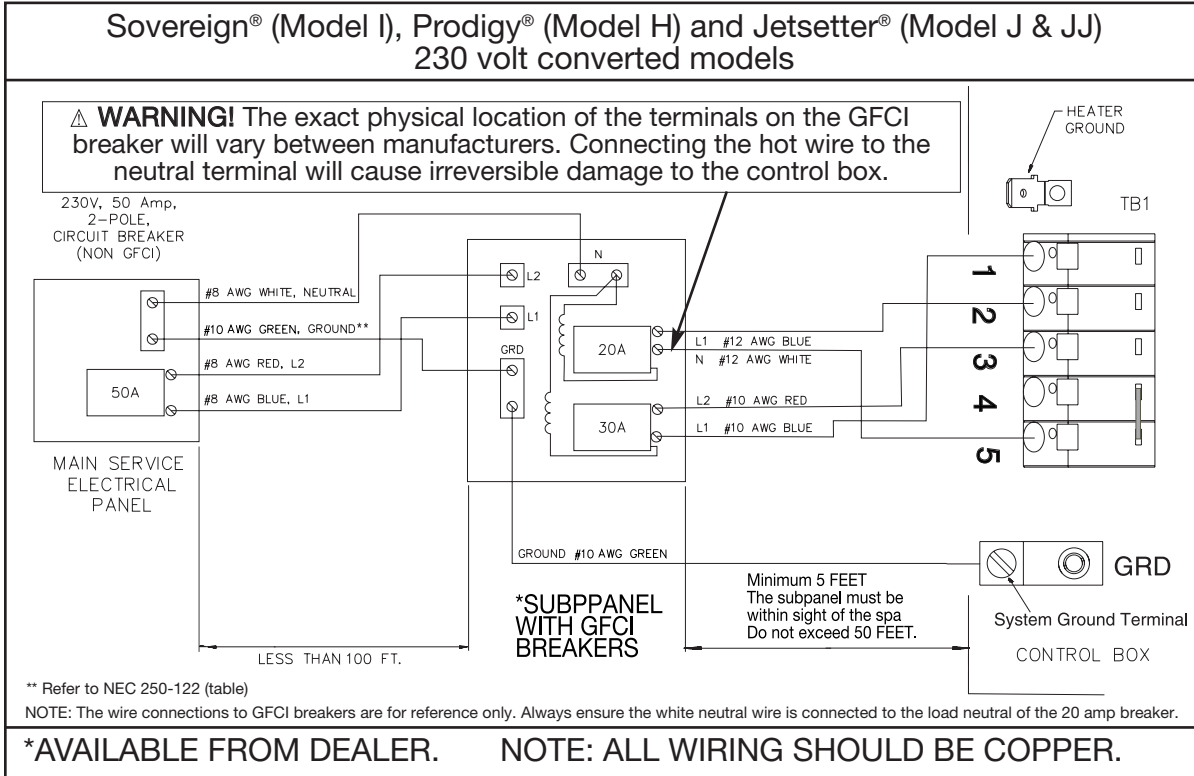
### WIRING CONNECTIONS

1. Identify the TB-1 terminal block, located at the lower left-hand corner of the control box.
2. Connect the #12 AWG, BLUE wire from the subpanel 20 amp breaker, terminal L1 to TB-1 terminal 2.
3. Connect the #12 AWG, WHITE wire from the subpanel 20 amp breaker, terminal N (load neutral) to TB-1, terminal 5.

**NOTE:** The WHITE neutral wire must be attached to the load neutral on the 115 volt, 20 amp breaker (not the neutral bus bar in the subpanel). The WHITE pigtail (neutral) wire from the 20 amp breaker is already connected to the neutral bus bar.



4. Connect the #10 AWG, BLUE wire from the subpanel 30 amp breaker, terminal L1 to TB-1, terminal 1.
5. Connect the #10 AWG, RED wire from the subpanel 30 amp breaker, terminal L2 to TB-1, terminal 3.
6. Connect the #10 AWG, GREEN wire from the subpanel ground bar to TB-1 system ground terminal.
7. Bond the spa to all exposed metal equipment or fixtures, handrails, and concrete pad per N.E.C. Article 680 and all local codes.



8. Replace the control box cover and securely tighten the fastening screws. Close and secure the equipment compartment door.

**⚠ WARNING: FILL THE SPA WITH WATER BEFORE TURNING ON THE POWER.**

Once your spa has been filled with water, turn it on and test all the circuit breakers.

**NOTE:** If both breakers immediately trip, verify that the #12 AWG WHITE neutral wire is connected from TB-1 terminal 5 to the L1 (load neutral) terminal of the 20 amp subpanel breaker. Each breaker should be tested prior to each use. Here's how:

1. Push the "TEST" button on each GFCI breaker, and observe it click off.
2. Wait 30 seconds, then push the breaker switch to the OFF (down) position (to ensure that it has completely disengaged), then push the breaker switch to the ON (up) position. If you don't wait 30 seconds, the spa's power indicator may continue to blink – try again.

If any of the GFCI breakers fails to operate in this manner, your spa may have an electrical malfunction, and you may be risking electrical shock. Turn off all circuits and do not use the spa until the problem has been corrected by an authorized service agent.

## 115 VOLT OPERATION (USA ONLY)

The spa must be connected to a dedicated 115 volt, 20 amp, GFCI protected, grounded circuit. The term “dedicated” means the electrical circuit is not being used or shared for any other electrical items (patio lights, appliances, garage circuits, etc.). If the spa is connected to a non-dedicated circuit, overloading will result in “nuisance tripping” at the main panel. This requires frequent resetting of the breaker switch at the house electrical breaker panel and introduces the possibility of damage or failure of spa equipment. The dedicated circuit must be properly wired; that is, it must have a 20 amp GFCI circuit breaker in the house breaker panel, #12 AWG or larger wire (including the ground wire) and the correct polarity throughout the circuit.

### NEVER CONNECT THE SPA TO AN EXTENSION CORD!

A pressure wire connector is provided on the exterior surface of the control box, inside the spa. This is to permit the connection of a ground bonding wire between this point and any metal equipment, enclosures, reinforced concrete pad, pipe, or conduit within 5 feet of the spa (if needed to comply with local building code requirements). The bonding wire must be at least a #10 AWG solid copper wire.

Bond the spa to all exposed metal equipment or fixtures, handrails, and concrete pad per N.E.C. Article 680 and all local codes.

## INSTALLATION INSTRUCTIONS

All 115 volt Hot Spring® spa models come equipped with approximately 15 feet of useable power cord (this is the maximum length allowed by Underwriters Laboratory and the National Electric Code). When the spa is installed, the power cord will come out of the bottom of the equipment compartment door. For your safety, when the electrician is installing the 20 amp single electrical outlet and waterproof cover, the outlet should be no closer than 5 feet (1.5 meters) and no farther than 10 feet from the spa [reference National Electrical Code 680-6a(1) and 680-41a].

The Ground Fault Circuit Interrupter (GFCI) is located at the end of the power cord. This device is for your protection. It is very important to protect it from rain and other moisture. Once a month, with the plug connected to the power supply,

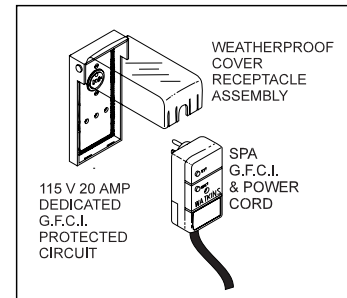
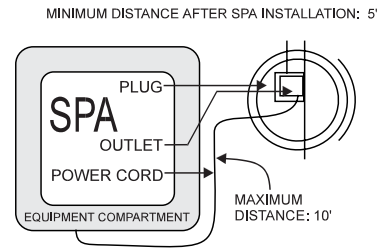
1. Push the “TEST” button on the GFCI breaker. The spa should stop operating and the GFCI power indicator will go out.
2. Wait 30 seconds, then push the “RESET” button. Power will be restored to the spa and the GFCI power indicator will turn on.

If the GFCI fails to operate in this manner, your spa may have an electrical malfunction, and you may be risking electrical shock. Turn off all circuits and do not use the spa until the problem has been corrected by an authorized service agent.

△ **WARNING:** Removal of the GFCI from the spa’s power cord will result in an unsafe spa and will void the spa’s warranty.

**IMPORTANT:** Should you ever find the need to move or relocate your Hot Spring spa, it is essential that you understand and apply these installation requirements. Your Hot Spring spa has been carefully engineered to provide maximum safety against electric shock. Remember, connecting the spa to an improperly wired circuit will negate many of its safety features.

**NOTE:** Long wiring runs may require larger-gauge wire than stated. We recommend using a maximum 3% voltage drop when calculating wire gauge requirements.



# OPERATING INSTRUCTIONS

Hot Spring® spas are manufactured in two different electrical versions, 230 volt permanently connected, and 115 / 230 volt convertible models. The largest spa models, the Vista®, Grandee®, Envoy®, Vanguard®, Sovereign® (II) and Accolade™ are available only as 230 volt permanently connected models (these spas can not be converted to 115 volt systems), and utilize a continuous heating system. This means that the heater may turn on while the jet pump is operating, unlike 115 volt models where the heater will automatically be turned off when the jet pump is turned on.

The remaining spa models, the Sovereign (I), Prodigy®, and Jetsetter®, are available as 115v / 230v convertible systems, meaning that a 115 volt model can be converted to a 230 volt model. The benefit of operating in 230 volt mode is an increase in the wattage (heater capacity) of the heater, allowing the heater to run when the jet pump is operating, which keeps your water hotter longer when the jets are in use. **Contact your authorized Hot Spring dealer for the requirements to convert between electrical systems at your home.**

**IMPORTANT:** Improper conversion from one system to another may damage the spa's electrical components. Always consult your authorized Hot Spring dealer prior to converting from one electrical system to another.

## 230 VOLT PERMANENTLY CONNECTED MODELS

- **Vista (Model SS)**
- **Grandee (Model G/GG)**
- **Envoy (Model KK)**
- **Vanguard (Model V/VV)**
- **Sovereign (Model II)**
- **Accolade (Model AC)**

The 230 volt permanently connected models come with a subpanel which contains two GFCI circuit breakers - a 20 amp / 230 volt GFCI circuit breaker and a 30 amp / 230 volt GFCI circuit breaker. The Grandee (G), Vanguard, Sovereign (II) and Accolade use the 20 amp breaker for the jet pump and control circuit while the 30 amp breaker is used for the heating system. The Vista, Grandee (GG) and Envoy use the 20 amp breaker for the heating system while using the 30 amp breaker for the jet pumps and control circuit. The subpanel and spa must be "hardwired" by a licensed electrician using appropriate wire, conduit, and fittings.

The Vista, Grandee, Envoy and Vanguard (VV) spas are equipped with two jet pumps that allow you to operate each half of the jet system separately, or both halves simultaneously. Each half of the jet system has two different jet menus which are selected with the individual SmartJet® levers. This feature allows you to select any one of four menus or a combination of menus when using the spa.

The Vista uses one 2.5 HP (Wavemaster® 9000) single speed jet pump and one 2.5 HP (Wavemaster 9200) two speed pump, Grandee (G) and Vanguard (Model VV) use two 1.65 HP (Wavemaster 7000) jet pumps. The Grandee (GG) uses one 2.0 HP (Wavemaster 8000) and one 2.5HP (Wavemaster 9000) single speed jet pump and the Envoy uses one 2.0 HP (Wavemaster 8000) single speed and one 2.0 HP (Wavemaster 8200) jet pump having two speeds. The Sovereign (II) uses a 2.5 HP (Wavemaster 9000) single speed jet pump. The Accolade uses a 2.5 HP (Wavemaster 9200) two speed jet pump and offers a two jet menu system.

**NOTE:** Vanguard (Model V) Enduro® spa uses a 2.5 HP (Wavemaster 9000) single speed jet pump.

The Vista, Grandee (G), Envoy, Vanguard (VVV), Sovereign (II) and Accolade are equipped with a No-Fault® titanium, high watt density heater. The heating system consists of a 6,000 watt (6 kW) heater on the Grandee (G), Vanguard (VVV), Sovereign (II) and Accolade while a 4,000 watt (4 kW) heater is used on the Vista, Grandee (GG) and Envoy spas. The spas are also equipped with an energy efficient low-flow circulation pump, and a high-limit thermostat for protection of user and equipment.

In each of these spas, the heater will turn on while the jet pump is operating (after a 1-1/2 degree temperature drop) to help maintain the water temperature during spa use. Factors such as the number of people using the spa, the air temperature, and the length of time the pump is operated will affect the heating system's ability to maintain the water temperature.

## 115/230 VOLT CONVERTIBLE MODELS

- **Sovereign (Model I)**
- **Prodigy (Model H)**
- **Jetsetter (Model J & JJ)**

The 115 / 230 volt convertible Hot Spring spa models come configured with a familiar 115 volt electrical system, with a GFCI plug at the end of a cord. The GFCI plug contains a GFCI breaker for user and equipment protection. The 115 volt configuration requires a dedicated outlet to supply power to the spa.

These models can be converted to 230 volt operation with the addition of a subpanel and a control box wiring change. Consult your dealer before attempting to convert from 115 volt operation to 230 volt operation. Any damage to the spa from improper conversion is not covered under the warranty.

In the 115 volt configuration, either the heater, or the jet pump can operate, but they can't work at the same time. In a 115 volt system, as long as the jet pump is activated, the heater will not turn on. On the other hand, when the spa is converted to operate in the 230 volt configuration, the heater and jet pump can operate simultaneously.

Each convertible spa model is equipped with a No-Fault titanium, high watt density heater. The heater will operate at 1500 watts when the spa is configured as a 115 volt cord-and-plug connected model, and at 6000 watts when the spa is configured as a 230 volt converted model. The heating system consists of the No-Fault heater, an energy efficient low-flow circulation pump, and a high-limit thermostat and integrated pressure switch for user and equipment protection.

All three of these models feature a Wavemaster 7000 jet pump to operate their jet systems. The Sovereign (I), Prodigy, and Jetsetter models use a 1.65 HP jet pump. The SmartJet lever is used to operate the jet menus available in these models.



## START-UP AND REFILL PROCEDURES

Your Hot Spring® spa has been thoroughly tested during the manufacturing process to ensure reliability and long-term customer satisfaction. A small amount of water may have remained in the plumbing after testing and, as a result, may have spotted the spa shell or the spa siding prior to delivery. Before filling the spa, wipe the spa shell clean with a soft rag.

The following instructions must be read and followed exactly to ensure a successful start-up or refill.

### CAUTIONS

- Do not fill the spa with hot water, as tripping of the high-limit thermostat may result.
- DO NOT CONNECT POWER TO AN EMPTY SPA. Power to the spa automatically activates critical components within the spa, such as controls, heater, circulation pump, and other systems. If power is supplied to these components prior to the spa being filled, the components will be damaged, and this may result in a non-warranty component failure.
- Do not use your spa after filling until all of the steps listed below are completed.
- Do not add chlorine if treating your spa with polyhexamethylene biguanide (Biguanide, PHMB, eg. BaquaSpa™) sanitizer.

1. Close all drains and fill the spa with water through the filter compartment. Your Hot Spring spa water level should be maintained approximately 1-1/2" above the top of the highest jet.

**RECOMMENDED:** Use the FreshStart®<sub>10,000</sub> pre-filter to remove unwanted contaminants from the tap water.

**IMPORTANT:** Watkins Manufacturing Corporation does not recommend that the spa be filled with "softened" water, as this may damage the spa's equipment.

2. **AFTER** the spa has been filled with water and the equipment compartment door is secured, power must be applied to the spa.

- **115 volt models:** Connect the GFCI to the waterproof receptacle and push the RESET button on the GFCI.
- **230 volt models:** Open the door of the electrical subpanel, if your spa is a Grandee®, Vanguard®, Sovereign® (II), Accolade™ or a 230 volt converted model reset the 20 amp GFCI breaker first and verify the system is primed (see step 3), then reset the 30 amp breaker. If your spa is a Vista® or Envoy® model reset the 30 amp GFCI breaker first, verify the system is primed, then reset the 20 amp breaker. Close and secure the subpanel door.

3. The jet pump, heating system, and all internal plumbing will achieve a partial prime as the spa is filled. To check the operation of the jet system and to purge any remaining air from the heating system, push the JETS button (for the Vista, Grandee, and Envoy push the JETS 1 and JETS 2 buttons, push the JETS 2 button a second time on the Vista and Envoy) to make the jet pump run on high speed for one minute. Once the jet system is fully operational (as indicated by strong, non-surfing jets), priming of the spa is complete. Weak or surfing jets are an indication of a low water level condition or clogged filter cartridges.

**IMPORTANT:** Be sure the air control valves (see illustration in Comfort Control® system section) are open by turning each one clockwise and checking to see that the SmartJet® lever is pointing to the 3 o'clock position (see illustration in SmartJet system section).

4. Adjust Total Alkalinity (TA) to 125 ppm, Calcium Hardness (CH) to 150 ppm, then spa water pH to between 7.4 and 7.6. These procedures are listed in the "Water Quality and Maintenance" section.

**IMPORTANT:** Add spa water chemicals directly into the filter compartment with the jet pump on high speed for at least ten minutes.

**OPERATION NOTE:** Adjusting the Total Alkalinity as the first step is important, as out-of-balance TA will affect your ability to adjust the pH correctly and will prevent the sanitizer from operating effectively.

5. Superchlorinate the spa water by adding 1-1/2 teaspoons of chlorine (sodium dichlor) per 250 gallons (950 liters) of spa water. Use the jet button marked "CLEAN" to circulate the spa water for a ten-minute period.
6. During the super-chlorination period, rotate the SmartJet lever(s) through each of their operating positions, letting the spa water circulate (with jets on) for equal periods of time. For example, if your spa has four operating positions, leave the SmartJet lever in each position for approximately two to three minutes.

**OPERATION NOTE:** The Vista, Grandee, Envoy, Vanguard (V/VV), Sovereign (II), Accolade, Prodigy®, and Jetsetter® (J/JJ) SmartJet levers are designed to operate in the 3 o'clock and 9 o'clock positions. The Sovereign (I) SmartJet lever has been designed to operate in the 3 o'clock, 6 o'clock, 9 o'clock, and 12 o'clock positions.

7. Set the temperature control to the desired temperature between 100°F and 104°F (36°C and 40°C), then place the vinyl cover on the spa and allow the water temperature to stabilize (approximately 24 hours). Make sure you secure the cover in place using the cover locks. Periodically check the spa water temperature. When the water temperature climbs above 90°F (32°C), proceed to the next step.
8. Rotate the SmartJet lever(s) to the primary position (3 o'clock) and turn on the CLEAN cycle for ten minutes to circulate the spa water. After the clean cycle is complete, test the spa water for Free Available Chlorine (FAC) residual. If the residual is between 3 and 5 ppm on the test strips (found in the test kit) go on to the next step. If the residual is less than 3 ppm, superchlorinate the spa water by adding 1-1/2 teaspoons of chlorine (sodium dichlor) per 250 gallons (950 liters) of spa water. Use the jet button marked "CLEAN" to circulate the spa water for a ten-minute period.
9. Rotate the SmartJet lever(s) to next position and let the spa water circulate (using the jet) for ten minutes. Test the spa water for Free Available Chlorine (FAC) residual. If the residual is between 3 and 5 ppm on the test strips (found in the test kit) go on to the next step. If the residual is less than 3 ppm, superchlorinate the spa water by adding 1-1/2 teaspoons of chlorine (sodium dichlor) per 250 gallons (950 liters) of spa

water. Then use the jet button marked “CLEAN” to circulate the spa water for a ten-minute period. Repeat this procedure until all SmartJet® lever operating positions have been tested.

10. Recheck the Total Alkalinity (TA) at 125 ppm, Calcium Hardness (CH) at 150 ppm, then spa water pH at between 7.4 and 7.6.

**Operational Note:** Make sure you adjust your Total Alkalinity first, as an out-of-balance condition will affect your ability to adjust the pH correctly, and will prevent the sanitizer from operating effectively. **The spa is ready for use when the spa water has circulated through each SmartJet lever operating position and the chlorine level remains between 3 ppm and 5 ppm.**

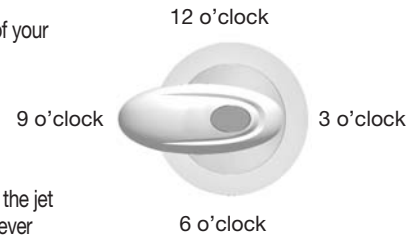
11. The spa temperature is pre-programmed to reach 102°F (39°C), and will normally do so within 18 to 24 hours. You may raise the water temperature by pressing the TEMP (+) button on the control panel, or lower it by pressing TEMP (-) button. After a few hours, the water temperature will remain within 1-1/2 degrees of your selected temperature. To prevent tampering, you can lock your desired temperature setting. Refer to the Control Panel section for details.

**NOTE:** Allowing the jet pump to operate for long uninterrupted periods of time with the cover in place will cause a rise in the spa water temperature. All spas are equipped with a safety device to reduce the risk of component damage or personal injury, should the jet pump be left running continuously for a long period of time. After two hours of continuous operation, the jet pump controller will automatically turn off the jet pump.

## SMARTJET SYSTEM

With your Hot Spring® spa's exclusive SmartJet system, you can control the massaging action of your spa. Using the SmartJet lever, the jets are activated in sets, known as jet systems.

On the Vista®, Grandee®, Envoy®, Vanguard®, Sovereign® (II), Accolade™, Prodigy® and Jetsetter® (J/JJ), each SmartJet lever controls two jet systems. To access a jet system, simply turn the SmartJet lever to the 3 o'clock or 9 o'clock position. On the Sovereign (I), the single SmartJet lever has four positions to access the four jet systems. The jet systems are selected by turning the SmartJet lever to the 3, 6, 9 or 12 o'clock position (facing the spa). Please consult the jet system menus on the following pages to determine which jets are activated with each SmartJet lever position. Or just jump in and play – turn the lever(s) and see what happens.



## COMFORT CONTROL® SYSTEM

The Comfort Control system allows you to control the intensity of the massage at each jet by adjusting the mixture of air and water. Jets with an adjustable faceplate are controlled by turning the faceplate clockwise for a softer flow, counterclockwise for a stronger flow. Jets without an adjustable faceplate are controlled by a Comfort Control lever. The Precision®, Moto-Massage® and JetStream® jets are controlled by Comfort Control levers.



**NOTE:** The intensity of the JetStream jets in the footwell can not be altered.

Turn the Comfort Control lever clockwise to increase the intensity of the jet and counterclockwise to decrease the intensity.

## MOTO-MASSAGE® JET (Available on Vanguard, Sovereign, and Jetsetter [J])

The Moto-Massage jet automatically travels up and down in a sweeping motion, simulating the natural stroking effects of a manual massage. The intensity and speed of the Moto-Massage jet may be adjusted by turning the Comfort Control lever.

The Moto-Massage jet has been factory adjusted to provide maximum hydromassage, and to achieve full vertical travel with its Comfort Control lever in the full air volume position. Should the Moto-Massage jet not achieve full vertical travel and the problem is not a closed air control valve or clogged filter cartridge, then your Hot Spring Service Center should be contacted.

**SERVICE NOTE:** A slow or non-moving Moto-Massage jet may indicate that the filter cartridge pores are obstructed with dirt, body oils, or calcification. Follow the filter cartridge cleaning procedures in the Spa Care and Maintenance section of this manual.

**ACCESSORY NOTE:** For a different-feeling massage, ask your dealer about the HydroPulse® option; an alternative faceplate for your Moto-Massage jet.

## MOTO-MASSAGE® DX JET

**NOTE:** The Moto-Massage DX jet is available on the Vista, Grandee (GG), Envoy, Vanguard (Model VV) and Jetsetter (JJ) spas only.

The Moto-Massage DX automatically travels two streams up and down in a sweeping motion, simulating the natural stroking effects of a manual massage. The intensity and speed of the Moto-Massage DX jet may be adjusted by turning the Comfort Control lever.

The Moto-Massage DX jet has been factory adjusted to provide maximum hydromassage, and to achieve full vertical travel with its Comfort Control lever in the full air volume position. Should the Moto-Massage DX jet not achieve full vertical travel and the problem is not a closed air control valve or clogged filter cartridge, then your Hot Spring Service Center should be contacted.

**SERVICE NOTE:** A slow or non-moving Moto-Massage DX jet may indicate that the filter cartridge pores are obstructed with dirt, body oils, or calcification. Follow the filter cartridge cleaning procedures in the Spa Care and Maintenance section of this manual.

## HYDROMASSAGE JETS

The Hydromassage jets have two different nozzle options: directional and dual port rotary. The directional nozzle allows you to aim the water in the direction that feels best. The dual port rotary nozzle divides the water flow into two streams, and then spins.

**ACCESSORY NOTE:** Your Hot Spring® dealer stocks hydromassage jet kits which can easily be installed in your spa to modify your jets from directional to dual port rotary.

### SOOTHING SEVEN® JET

The Soothing Seven jet is another unique feature of Hot Spring spas. Its seven outlets are designed to massage the muscles in the upper back and shoulders, gently and thoroughly. Turn the faceplate clockwise to increase the jet pressure and counterclockwise to decrease the jet pressure.

### PRECISION® JETS

Precision jets are located above Moto-Massage® jets (except Accolade™ and Prodigy® spas) and in groups of various sizes in the Vista®, Grandee®, Envoy®, Vanguard®, Sovereign®, Accolade and Prodigy models. They are designed to perform a soft, soothing massage on your back and shoulders. Adjust the pressure of the Precision jets using the Comfort Control® lever (located closest to the Precision jets).

Refer to the drawings on the following pages to familiarize yourself with the SmartJet® system menus for your spa. Please note that the SmartJet lever side of the spa is always considered the front when referring to the locations of the different types of jets and jet systems. **The clock positions are correct when facing the spa, standing at the SmartJet lever.**

### JETSTREAM® JET

The JetStream jet is a large orifice hydromassage jet designed to put maximum massaging action on a specific area of the body. It is located in the lower part of the spa to afford optimal access for the massaging of feet, legs, hips, and lower back. The intensity of the JetStream jets can be altered (except the ones found in the FootWell® system) using the Comfort Control lever. JetStream jets located in the FootWell are not adjustable.

### HYDROSTREAM® JET (VISTA, ENVOY, ACCOLADE & JETSETTER [JJ] SPAS ONLY)

The Hydrostream jet is a mid-size hydromassage jet that delivers a great massage to the feet, back and shoulder areas. This jet can be adjusted at the face plate for greater or lesser intensity.

**ACCESSORY NOTE:** Your Hot Spring Dealer stocks rotary nozzle HydroStream jet kits that can easily be installed in your Vista or Envoy spa to modify the jet from directional to dual port rotary.

## WATER FEATURE

Vista, Envoy and Accolade spas are equipped with a BellaFontana™ water feature. This water feature can be turned on or off when the two-speed pump is on low speed (tranquil mode) or high speed. To function correctly, the water feature on/off lever must be placed in the *full on* position only.

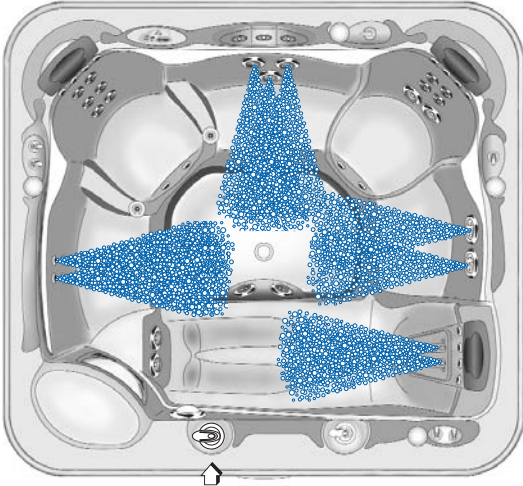
If the lever is not in the *full on* position when the pump is on high speed, it is likely that the water feature will project water substantially farther out into the spa as the on/off lever is opened. This is not proper operation. If this occurs, the pump should be turned off, the water feature lever rotated to the full on position and the pump turned on again.

**CAUTION:** Partial blockage of water flow at entrance of water feature will cause the water to flow farther into or over the spa.

Grandee (GG), Vanguard (VV) and Sovereign (II) models (Sand, Spa Blue, and Pearl spas only) also have a water feature system. The water feature will either be located on the left or right side of the spa towards the front depending on the model. A lever located next to the waterfall is used to adjust the water from full flow to completely off. The circulation pump of the spa powers the water feature allowing the water to run all of the time if desired. Turning the water feature lever to it's full clockwise position will shut the water feature off.

**IMPORTANT:** It is recommended that the water feature found on the Grandee, Vanguard and Sovereign be turned off before placing the cover onto the spa.

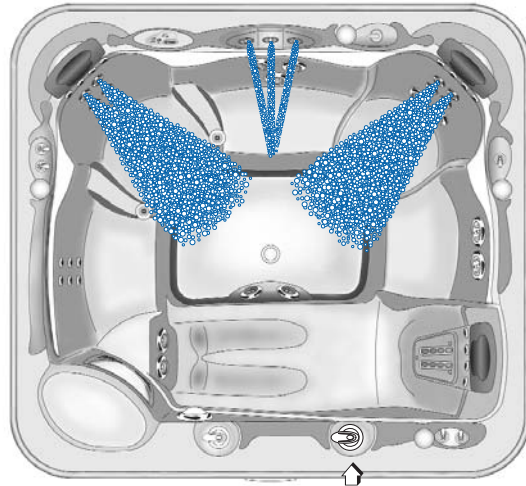
# Vista® (Model SS) Jet System Menu



## Jet Pump 1-Jet System 1

**Left SmartJet® lever in the 3 o'clock position**

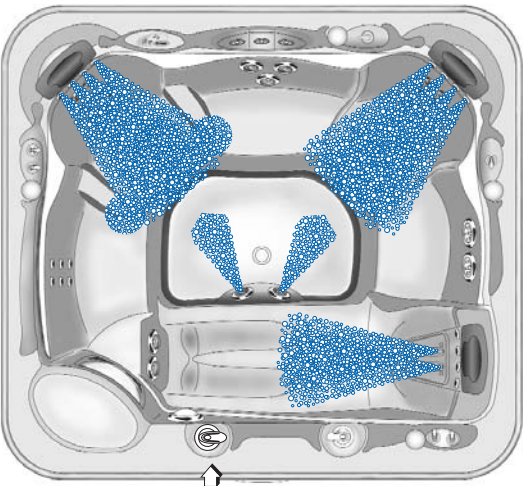
- 3 Jet-Cluster™ system on rear wall (2 dual port rotary, 1 directional hydromassage)
- 2 Soothing Seven® jets on right wall
- 1 Moto-Massage® DX jet on right front
- 6 directional Precision® jets on left wall



## Jet Pump 2-Jet System 1

**Right SmartJet lever in the 3 o'clock position**

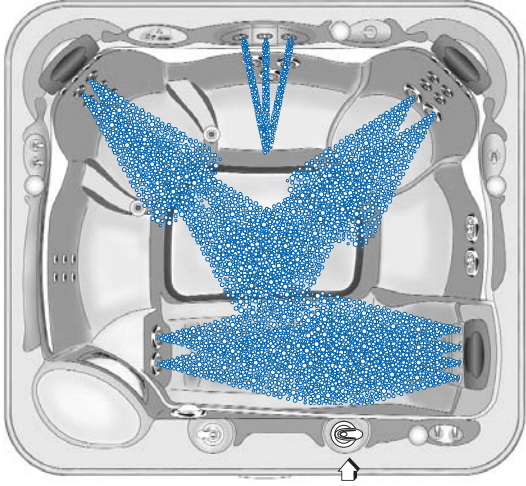
- 6 HydroStream® jets left back wall
- 1 Water Feature
- 4 HydroStream jets with 2 directional hydromassage jets right back wall



## Jet Pump 1-Jet System 2

**Left SmartJet lever in the 9 o'clock position**

- 4 directional Precision® jets on left back wall
- 2 rotary Precision jets in armrest (wrist jets)
- 4 directional Precision jets on right back wall
- 1 Moto-Massage DX jet on right front
- 2 JetStream jets in FootWell® system

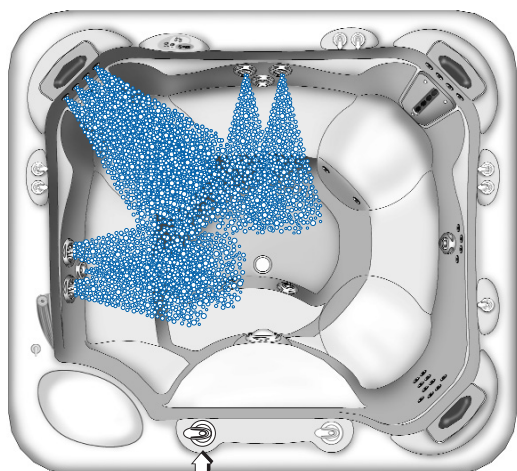


## Jet Pump 2-Jet System 2

**Right SmartJet lever in the 9 o'clock position**

- 2 HydroStream jets left back wall
- 2 directional Precision jets in left back seat (calf area)
- 2 directional hydromassage jets right back wall
- 2 directional Precision jets in right back seat (calf area)
- 4 directional Precision jets above right front Moto-Massage jet
- 2 directional hydromassage jets in lounge FootWell

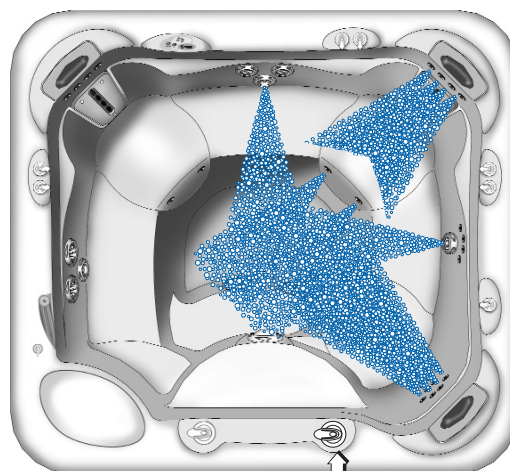
# Grandee® (Model G) Jet System Menu



## Jet Pump 1–Jet System 1

*Left SmartJet® lever in the 3 o'clock position*

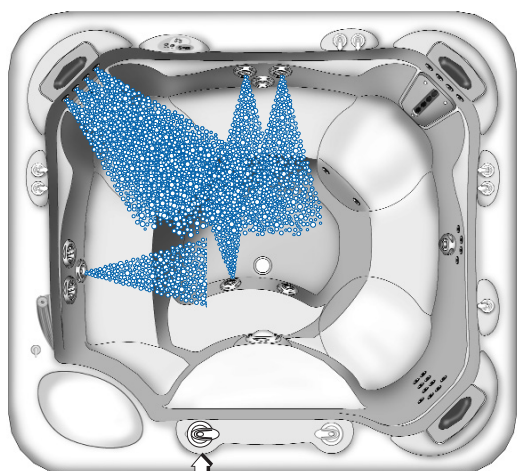
- 1 Moto-Massage® jet on left rear
- 4 directional Precision® jets above left Moto-Massage jet
- 3 Jet-Cluster™ system on left wall (1 directional hydromassage, 2 Soothing Seven®)
- 2 dual port rotary jets on back wall



## Jet Pump 2–Jet System 1

*Right SmartJet lever in the 3 o'clock position*

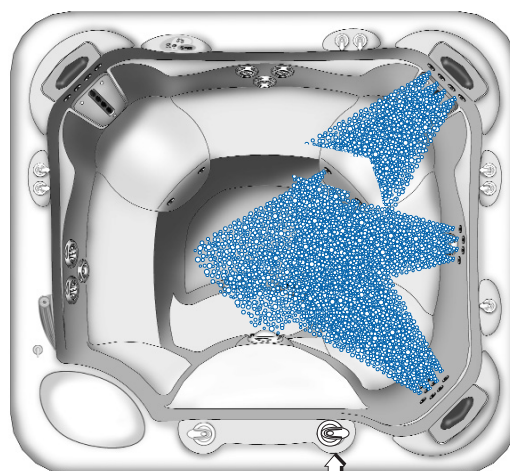
- 1 Moto-Massage jet on right rear
- 4 directional Precision jets above right Moto-Massage jet
- 10 directional Precision jets on right front
- 1 directional hydromassage jet on back wall
- 2 directional Precision jets on right rear seat (calf area)
- 1 JetStream® jet on right wall



## Jet Pump 1 –Jet System 2

*Left SmartJet lever in the 9 o'clock position*

- 1 Moto-Massage jet on left rear
- 4 directional Precision jets above left Moto-Massage jet
- 1 directional hydromassage on left wall
- 2 dual port rotary jets on back wall
- 1 JetStream jet in FootWell® System
- 2 directional Precision jets on left seat (calf area)

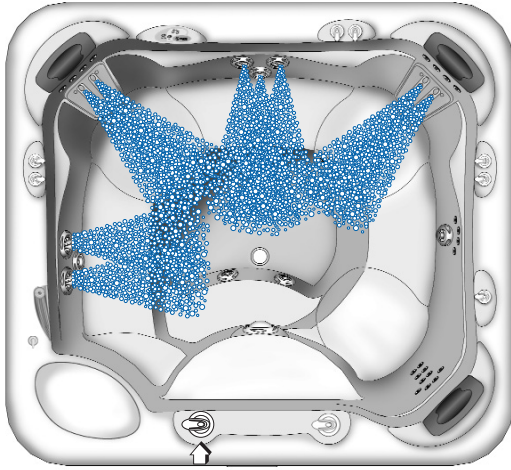


## Jet Pump 2–Jet System 2

*Right SmartJet lever in the 9 o'clock position*

- 1 Moto-Massage jet on right rear
- 4 directional Precision jets above right Moto-Massage jet
- 4 directional Precision jets on right wall
- 10 directional Precision jets on right front
- 1 JetStream jet in FootWell System
- 2 directional Precision jets on right seat (calf area)

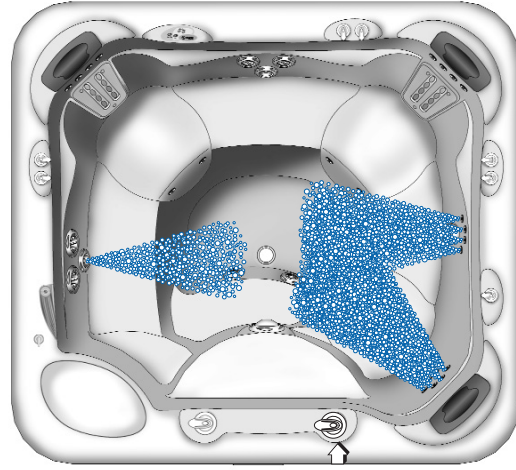
# Grandee® (Model GG) Jet System Menu



## Jet Pump 1-Jet System 1

*Left SmartJet® lever in the 3 o'clock position*

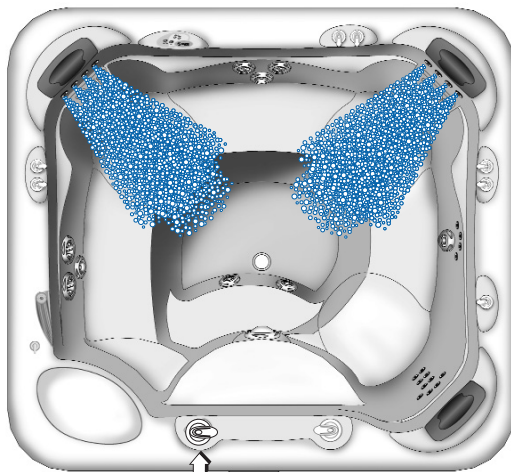
- 1 Moto-Massage® DX jet on left rear
- 3 Jet-Cluster™ system on back wall (1 directional hydromassage, 2 dual port rotary)
- 1 Moto-Massage DX jet on right rear
- 2 Soothing Seven® on left wall



## Jet Pump 2-Jet System 1

*Right SmartJet lever in the 3 o'clock position*

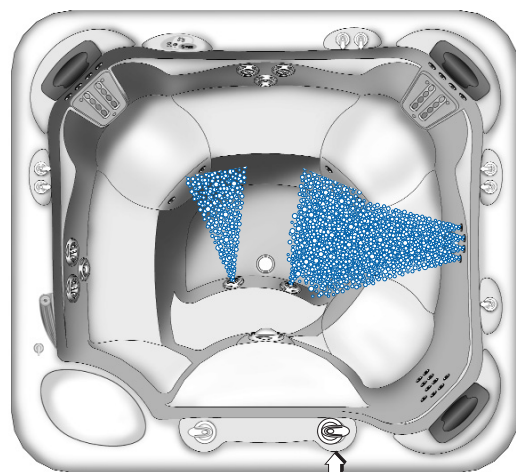
- 4 directional Precision jets on right wall
- 10 directional Precision jets on right front
- 1 directional hydromassage jet on left wall



## Jet Pump 1-Jet System 2

*Left SmartJet lever in the 9 o'clock position*

- 1 Moto-Massage DX jet on left rear
- 4 directional Precision jets above left Moto-Massage jet
- 2 directional Precision jets on left seat (calf area)
- 1 Moto-Massage DX jet on right rear
- 4 directional Precision jets above right Moto-Massage jet
- 2 directional Precision jets on right seat (calf area)

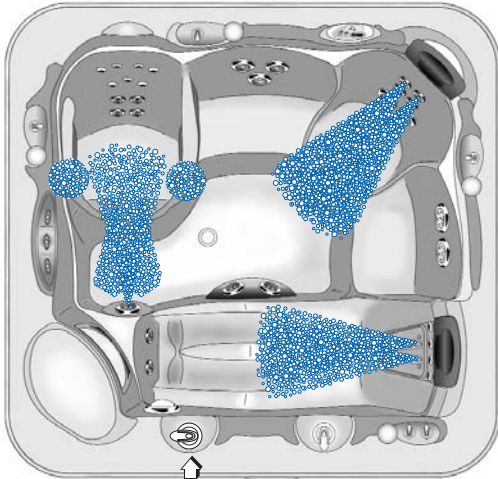


## Jet Pump 2-Jet System 2

*Right SmartJet lever in the 9 o'clock position*

- 4 directional Precision jets on right wall
- 1 JetStream® jet on right wall
- 2 JetStream jets in FootWell System

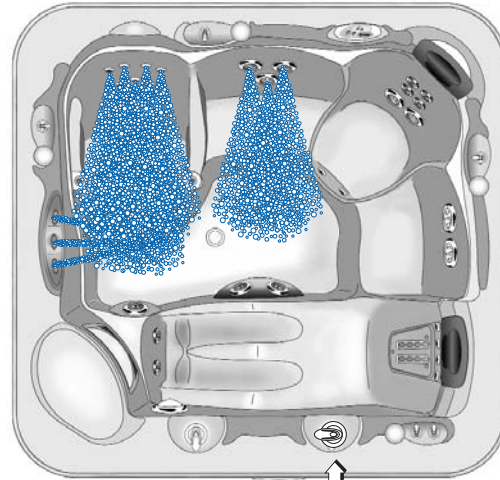
# Envoy® (Model KK) Jet System Menu



## Jet Pump 1-Jet System 1

*Left SmartJet lever in the 3 o'clock position*

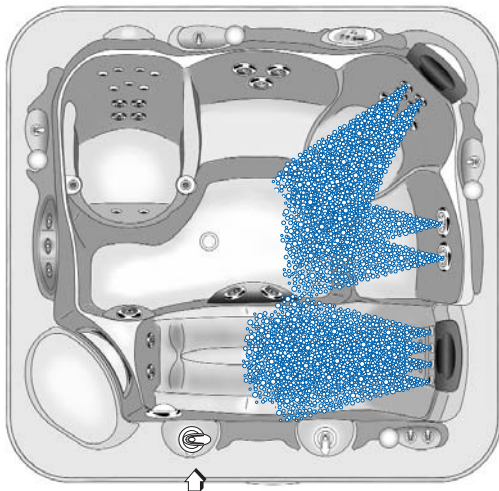
- 2 rotary Precision® jets on left seat armrest (wrist jets)
- 2 directional Precision jets on left seat (calf area)
- 4 HydroStream jets on right back wall
- 1 Moto-Massage® DX jet on right front wall
- 1 JetStream® jet in FootWell® System



## Jet Pump 2-Jet System 1

*Right SmartJet lever in the 3 o'clock position*

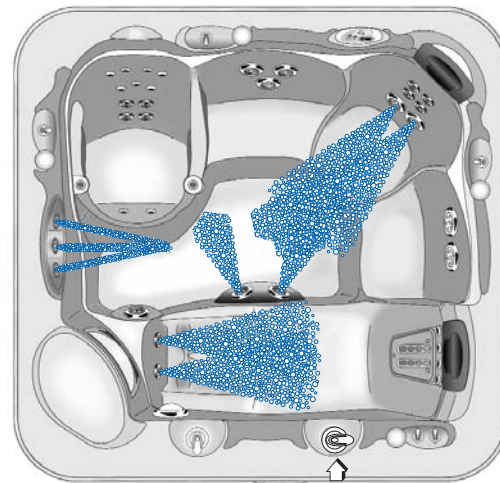
- 7 directional Precision jets on left back wall
- 4 HydroStream® jets on left back wall
- 3 Jet-Cluster™ system on back wall (2 dual port rotary, 1 directional hydromassage)
- 1 Water Feature



## Jet Pump 1-Jet System 2

*Left SmartJet® lever in the 9 o'clock position*

- 4 HydroStream jets on right back wall
- 2 Soothing Seven® jets on right wall
- 1 Moto-Massage DX jet on right front wall
- 4 directional Precision jets above right front Moto-Massage jet



## Jet Pump 2-Jet System 2

*Right SmartJet lever in the 9 o'clock position*

- 2 directional hydromassage jets right back wall
- 2 directional Precision jets on right back wall (calf area)
- 2 HydroStream jets in lounge FootWell
- 2 JetStream jets in FootWell system
- 1 Water Feature