

Sterling Leisure®

HOT TUB OWNER'S MANUAL

MODELS: XP1, XP2, Passion, Essence,
Desire, Pure, Pristine



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Part Number 7876

Revised 03/11

Owner's Information

Dealer:

Date Purchased: _____
Company: _____
Address: _____
Telephone: _____

Installer:

Date Installed: _____
Company: _____
Address: _____
Telephone: _____

Hot Tub:

Date Delivered: _____
Model: _____
Color: _____
Serial Number: _____

Your unique hot tub serial number is located on a data plate outside the cabinet at ground level directly below the topside control panel. When calling for service, have your serial number in hand.



Serial Number Location

Sterling Leisure™ Hot Tub Owner's Manual

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Important: Premium Leisure is dedicated to offering you the best in customer satisfaction and service. Be sure to read, complete, sign, and **send in the limited warranty card within 30 days of purchase** to ensure you understand what you are entitled to in terms of service. If you have any questions, you can call our customer care center at 727.573.9611.

Printed in the U.S.A.

Version 1.5

Revised 03/11

Part # 7876

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Introduction

Sterling Leisure®

Your choice of a Sterling Leisure™ brand hot tub from Premium Leisure LLC indicates that you are devoted to excellence. The management and staff appreciate your patronage and takes pride in the tradition of quality hot tubs that our company represents.

To properly acquaint yourself with your hot tub, we suggest that you take time to read through this manual before hook up and operation. Doing so will familiarize you with important operating and safety procedures, thereby ensuring an enjoyable experience right from the start.

If you need any more information than this manual provides, feel free to visit our Web site at www.PremiumLeisure.com or call our customer care center, at 727.573.9611.

 **WARNING:** This manual was written to ensure the proper use and installation of your hot tub. Any modifications to the procedures outlined in this manual may result in voiding your warranty.

This manual and its contents are subject to change without notice. Although we have prepared this manual as accurate as possible, we are not liable for errors or omissions; loss, injury, or damages caused by improper installation; or use of hot tub (improper or otherwise).

Your new hot tub is made with quality synthetic cabinet materials. Synthetic materials won't fade and are nearly invulnerable to mold and mildew. Where wood splits, cracks, and stains, synthetic materials stand in timeless perfection.

Important Safety Information


IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS


Your physiological response to hot water depends on subjective factors such as age, health, pregnant women, temperature sensitivities, chemical sensitivities, and medical history. *Always* consult a physician before using a hot tub to understand your particular tolerance and limitations.

READ AND FOLLOW ALL INSTRUCTIONS





WARNING – To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

A wire connector is provided on this unit to connect a minimum 8 American Wire Gauge (AWG) (8.4mm²) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.

*** For cord connected / convertible units:**  **Danger – Risk of injury.**
Replace damaged cord, immediately. Do not bury cord. Connect to a grounded, grounding type receptacle only.














**** For units with GFCI:**  **Warning** – This product is provided with a ground-fault circuit interrupter located in the main panel. The GFCI must be tested before each spa use.

Dangers

-  **RISK OF ACCIDENTAL DROWNING:** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times. Always cover the hot tub and use safety locks when it is not in use.
-  **RISK OF INJURY:** The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
-  **RISK OF ELECTRIC SHOCK:** Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum 8 AWG (8.4 mm²) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.
-  **RISK OF ELECTRIC SHOCK:** Do not permit any electric appliance, such as a light, telephone, radio or television, within 5 feet (1.5 m) of a spa. Do not operate such an appliance from either inside the hot tub or when you are wet, unless such appliances are built-in by the manufacturer.

Warnings

TO REDUCE THE RISK OF INJURY:

- The water in a spa should never exceed 40°C (104°F). Water temperatures between 38°C (100°F) and 40°C (104°F) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.
 - Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possible pregnant women should limit spa water temperatures to 38°C (100°F).
 - Before entering a spa/hot tub, the user should measure the water temperature since the tolerance of water temperature regulating devices varies.
 - The use of alcohol, drugs or medication before or during spa/hot tub use may lead to unconsciousness with the possibility of drowning.
 - Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.
 - Persons using medication should consult a physician before using a spa/hot tub since some medication may include drowsiness while other medication may affect heart rate, blood pressure and circulation.
-  Do not connect auxiliary components (such as headphones, cables, and additional speakers) to the stereo (if equipped).
-  Do not use a hot tub immediately following strenuous exercise.
-  Do not use your hot tub alone.
-  Lock the cover on your hot tub when not in use.
-  Persons with infectious diseases should not use a hot tub.
-  Replace audio components only with identical components.
-  Do not leave the CD access door open on the stereo (if equipped).
-  Some types of hair dye can react with the sanitizers in your hot tub water causing your hair to change color. Use at your own risk.
-  Water normally splashes out of a hot tub during typical use. Install an adequate perimeter that provides sound footing.
-  Do not turn your hot tub on/off from a wall switch, ground fault circuit interrupter, circuit breaker, fuse, or by plugging/unplugging it.
-  Remove all jewelry, metal, and watches from your person before entering your hot tub.
-  Keep all breakables away from the hot tub area.
-  Maintain water balance in accordance with instructions.

Warning Sign



Warning Sign Must Be Posted – The red WARNING sign like the one shown is packed with your new hot tub. This sign must be posted in a prominent place in close proximity to the hot tub installation site immediately upon completion of hot tub installation.

Important: It is extremely important that this sign be permanently placed in clear view of persons using the hot tub. Occasional hot tub users may not be aware of some of the dangers hot water poses to pregnant women, small children, seniors, and people under the influence of alcohol. If you did not receive a warning sign or your sign has become damaged, please call your local dealer for a replacement.

Hyperthermia

To reduce the risk of injury, the water temperature in a hot tub should never exceed 104°F (40°C). 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 young children, senior citizens, persons with sensitivities, and when hot tub use exceeds 10 minutes.

WATER TEMPERATURE IN EXCESS OF 100°F (38°C) MAY BE INJURIOUS TO YOUR HEALTH.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia include:

- ⚠ Unawareness of impending hazard
- ⚠ Failure to perceive heat
- ⚠ Failure to recognize the need to exit hot tub
- ⚠ Physical inability to exit hot tub
- ⚠ Fetal damage in pregnant women
- ⚠ Unconsciousness and danger of drowning

If you sense any of the symptoms of hyperthermia, safely exit the hot tub immediately.

SAVE THESE INSTRUCTIONS

Basic Safety Guidelines

Your hot tub is meant to be enjoyable, healthful, and relaxing. Below are some basic safety guidelines to follow every time you use your hot tub.

- Always check the temperature of your hot tub before entering. High water temperatures can be hazardous to your health.
- Persons suffering from heart disease, diabetes, high or low blood pressure, and pregnant women should consult a doctor before using your hot tub.
- Persons under the influence of medication, drugs, or alcohol should not be allowed into your hot tub.
- Remove all jewelry, metal, and watches from your person before entering your hot tub.
- Do not allow children to use your hot tub without continuous supervision of an adult.
- Do not use your hot tub alone.
- Test the ground fault circuit interrupter (GFCI) breaker prior to using your hot tub each time to ensure it operates properly.
- Any electrical devices near your hot tub must be GFCI protected and out of reach from inside the hot tub.
- Keep all breakables away from the hot tub area.
- Lock the cover on your hot tub when not in use.
- Enter and exit the hot tub slowly. Wet surfaces can be slippery.
- Prolonged immersion can be hazardous to your health.
- Maintain water chemistry in accordance with manufacturer's instructions.

For Hot Tubs Equipped with Audio Components

Audio components are optional and not available on all models.

⚠ WARNING: Prevent Electrocutation: Do not connect any auxiliary components – for example, cable, additional speakers, headphones, etc., – to the system.

⚠ Caution: Risk of Electric Shock: Do not leave audio compartment door open. Replace audio components only with identical components.



Site Selection and Installation

Proper planning is an important consideration when installing your new hot tub. Site selection is a critical step and requires serious thought. Planning ahead makes the installation process easier. The following information is provided to assist you in site preparations.

- 1) Always comply with local building codes and obtain any necessary permits. You may also need to consult with an engineer to address your specific design needs.
- 2) Contact an electrician to assess your electrical needs, install wiring, and assure a safe operation. (NOTE: The XP1 and XP2 require a Siemens GFCI.)
- 3) Position your hot tub with proper access to water, drainage, and electricity.
- 4) Place your hot tub on a uniform solid, flat surface designed to properly support its weight. For external installations, a 4-inch (10 cm) thick cement pad suffices. See page 8 for conduit entry locations for your model hot tub.
- 5) For internal installations, check the load carrying capabilities of the floor on which the hot tub will reside. Most homes meet the requirement of 80 pounds per square foot.
- 6) Assure that your hot tub will fit into the space you have chosen and the delivery route will accommodate its large size.
- 7) Provide adequate ventilation for the humidity created by your hot tub. In most cases, a Hot Tub Hard Cover is sufficient.
- 8) Protect the pump and all equipment from the weather by ensuring the cabinet panels are secure at all times.
- 9) Allow 36 inches (1 meter) of unobstructed access to all sides of your hot tub for normal servicing. Your hot tub is not designed to be recessed in the ground or in a deck.



Figure 1 – Clearances and Support

The following dimensions can be used to determine the proper location of submerged conduits in concrete slab installations. All dimensions are made from the outside of the hot tub's frame with the access panels removed. The topside control panel is shown at bottom of diagram for reference.

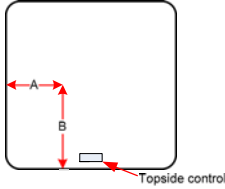


Figure 2 – Conduit Entry Location Reference Points

Model	Dimension A	Dimension B
XP1	25" (63.5 cm)	11.5" (29.2 cm)
XP2	27" (68.6 cm)	17" (43.2 cm)
Passion	Call	Call
Essence	Call	Call
Desire	Call	Call
Pure	Call	Call
Pristine	Call	Call

Table 1 – Conduit Entry Location Dimensions

- 10) Consider positioning your hot tub out of or adequately protecting it from the wind. Just as people can get cold on cool/windy days, so can your hot tub. Windy environments can significantly increase operating costs.
- 11) Consider using an insulating pad. In cold climates, the ground can rob heat from the hot tub and increase your operating costs.

Electrical Specifications

Important – Qualified and licensed electricians must perform all electrical hookups. The following specifications must be followed in order to ensure proper performance and safety.

⚠ WARNING: Starting an incorrectly wired hot tub could cause severe damage to the mechanical equipment or even bodily harm. Have your licensed electrician verify GFCI (or RCD) wiring with the diagrams on pages 10-16 prior to starting the hot tub or call the technical support line at 727.573.9611.

⚠ Caution: Failure to abide by specifications listed may result in damage to the equipment and will void the warranty.

All hot tubs must be wired with the appropriately sized wiring. Failure to do so will cause equipment damage and will not be covered under your warranty.

All hot tubs must be over current protected with a built-in GFCI (or RCD) in the service panel.

Model	Volts (V)	Freq. (Hz)	Rating (A)	GFCI (A)	Wire size from GFCI to Main Panel [†]	Equipment Pack
XP1, XP2	240	60	48	60	6-3 plus ground (up to 130') 4-3 plus ground (up to 230') 2-3 plus ground (up to 360')	IN.PL1
Passion, Essence, Desire, Pure, Pristine	240	60	48	60	6-3 plus ground (up to 130') 4-3 plus ground (up to 230') 2-3 plus ground (up to 360')	HS2000

Table 2 – Domestic Wire Size Chart

Model	Volts (V)	Rating (A)	RCD (A)	Wire size from RCD to Main Panel ^{‡§}	Equipment Pack
XP1, XP2	220-240	1x32 2x16 3x16	IEE Wire Regulation	3x4mm ² 5x1.5 mm ² 5x1.5 mm ²	IN.PL1-CE
Passion, Essence, Desire, Pure, Pristine	220-240	1x32 2x16	IEE Wire Regulation	3x4mm ² 5x1.5 mm ²	HSEX2000

Table3 – Export (Overseas) Wire Size Chart

* Wire size may need to be reduced at GFCI to fit into the breaker

† Solid copper

‡ Wire size may need to be reduced at RCD to fit into the breaker

§ Solid copper

⚠ WARNING: Disconnect electrical power before servicing. Before obtaining access to terminals, all supply circuits must be disconnected.

⚠ WARNING: Test the GFCI (or RCD) before each use.



Our hot tubs are certified by Intertek Testing, SNAa Ltd. Ontario, Canada to CSA-C22.2 No. 218.1-M89 and ANSI/UL 1563 standards.



Parts with extra low voltage not exceeding 12v must be inaccessible to a person in the hot tub. Earthed appliances must be permanently connected to fixed wiring. Parts incorporating electrical components, except remote control devices, must be located or fixed so that they cannot fall into the hot tub.

Means for disconnection must be used in fixed wiring in accordance with wiring rules.

Important – To allow the 240V GFCI to function properly, connect the white Neutral wire from the hot tub to the Neutral terminal on the GFCI breaker, not the Neutral bus in the GFCI breaker box. An improperly connected Neutral causes the GFCI breaker to trip.

Wiring Diagrams

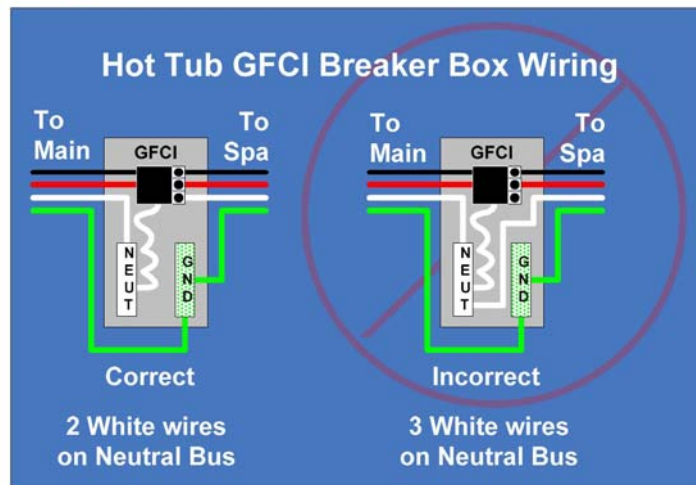
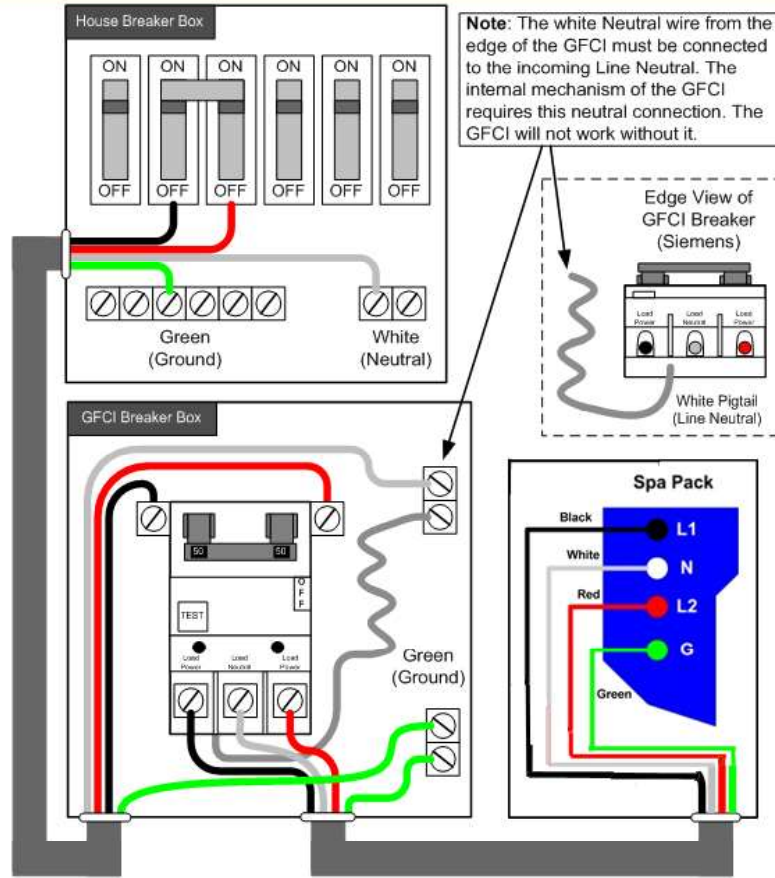


Figure 3 – 240V GFCI Wiring

Important: Use only a 60A Siemens GFCI Circuit Breaker (PL part number 5547). Installation, including selection of conductor size and type, must be performed by a qualified electrician in accordance with the National Electrical Code or the Canadian Electrical Code, and all federal, state, and local codes and regulations in effect at the time of installation.



**Figure 4 – Electrical Service for XP1 and XP2 models
 Single-phase 240V Domestic version**

Use ONLY a Siemens 60A 240V three-wire plus ground GFCI (PL part number 5547) with your XP1 or XP2 for proper operation.

See wire size chart on page 9.

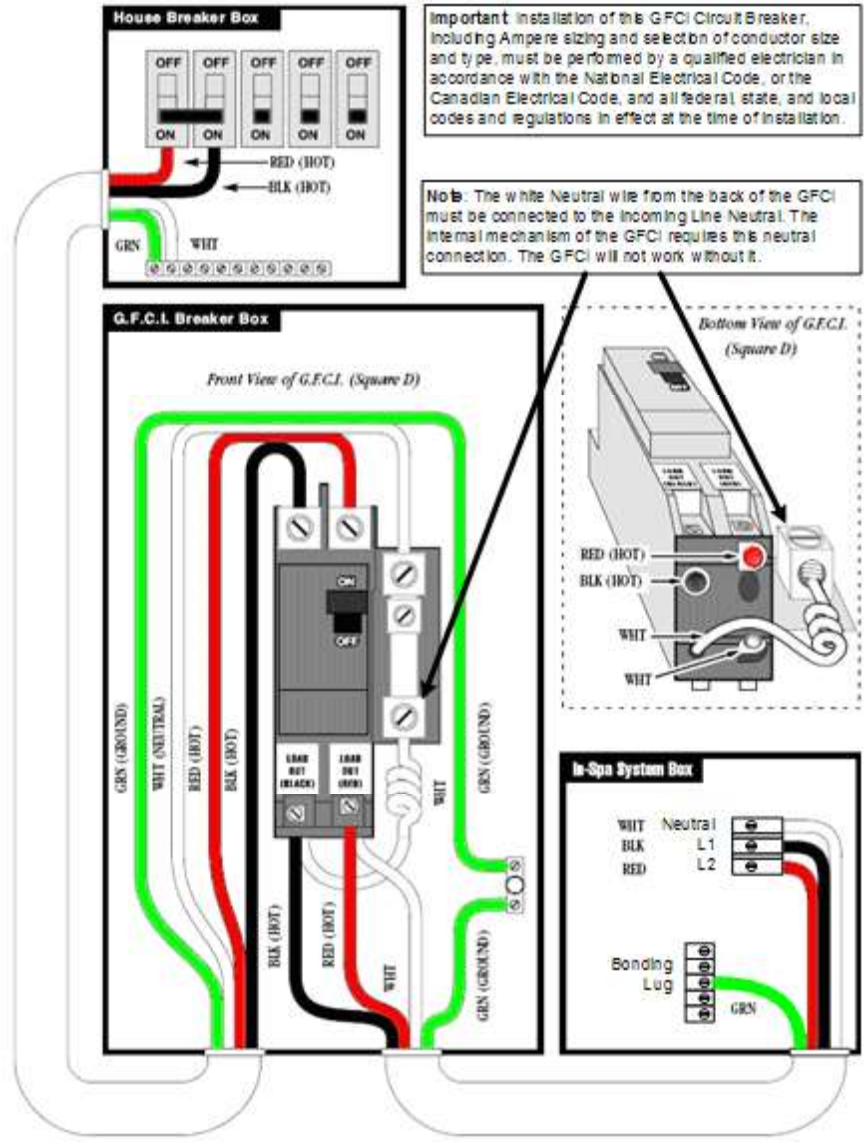
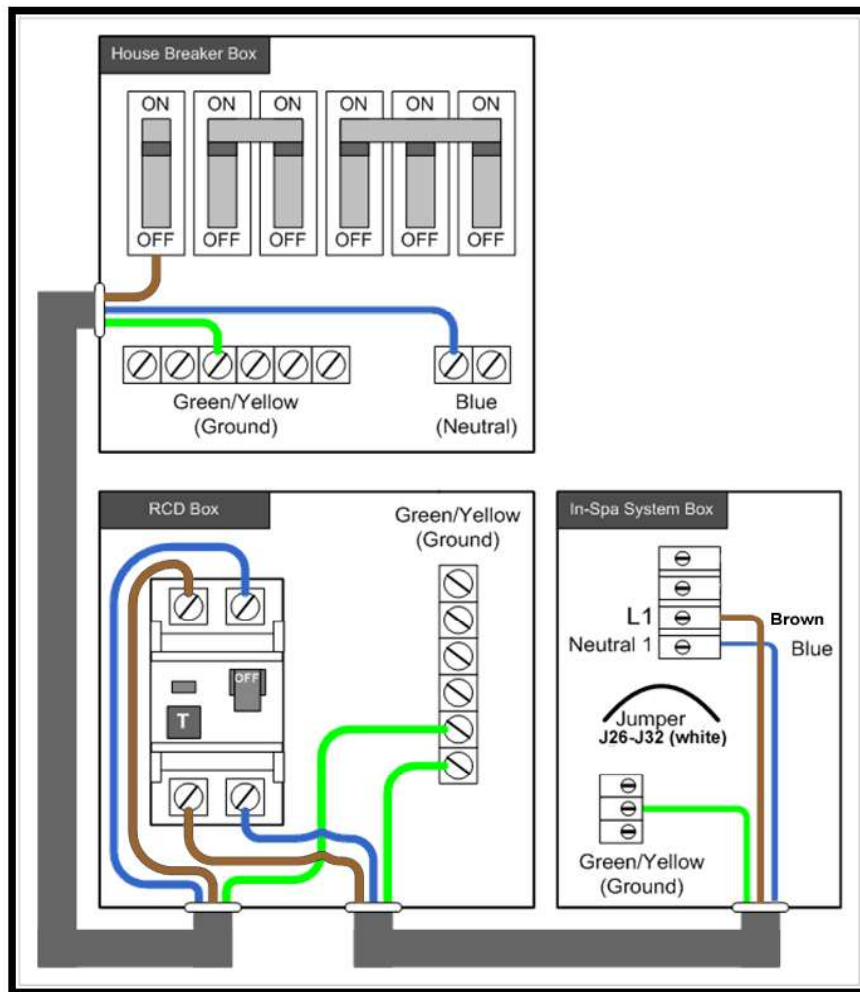


Figure 5 – Electrical Service for Passion, Essence, Desire, Pure, and Pristine models

See wire size chart on page 9.



**Figure 6 – Electrical Service (Single Service, 1x32A)
for Passion, Essence, Desire, Pure, and Pristine models**

All wiring is 3x4 mm², solid copper
See wire size chart on page 9.

Note: DIP switch A2 MUST BE OFF.

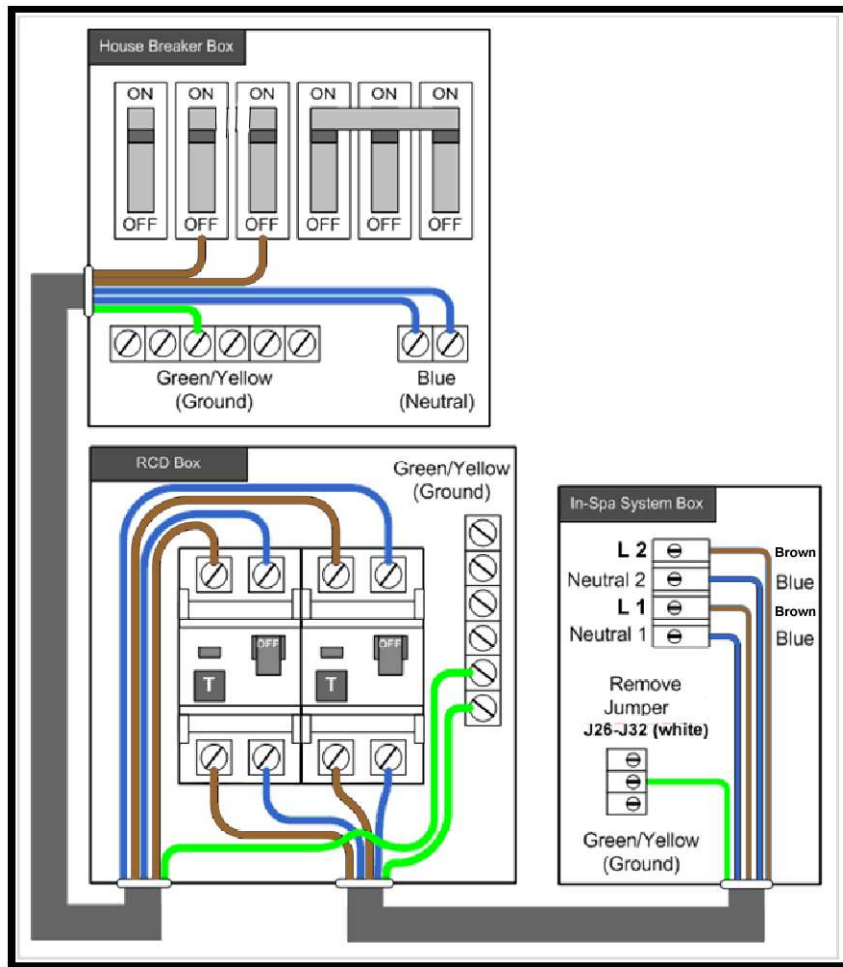
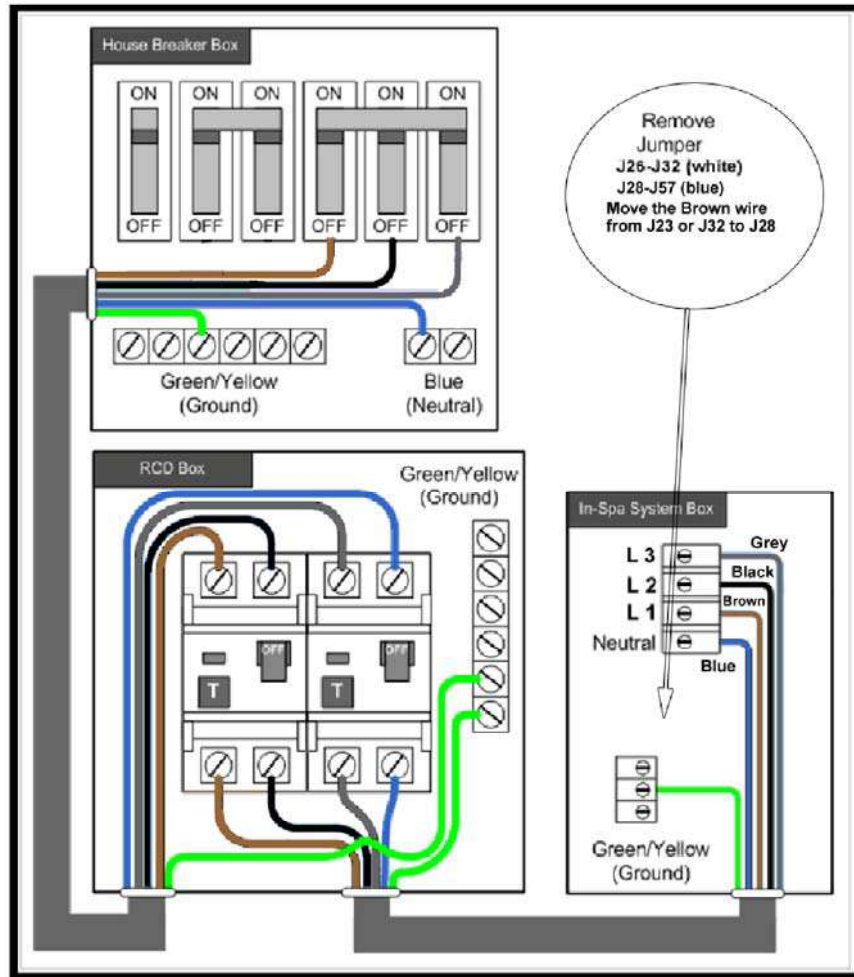


Figure 7 – Electrical Service (Dual Service, 2x16A) for Passion, Essence, Desire, Pure, and Pristine models

All wiring is 5x1.5 mm², solid copper
See wire size chart on page 9.

Note: DIP switch A2 MUST BE ON.



**Figure 8 – Electrical Service (Three Phase, 3x16A)
for Passion, Essence, Desire, Pure, and Pristine models**

All wiring is 5x1.5 mm², solid copper
See wire size chart on page 9.

Note: DIP switch A2 MUST BE ON.

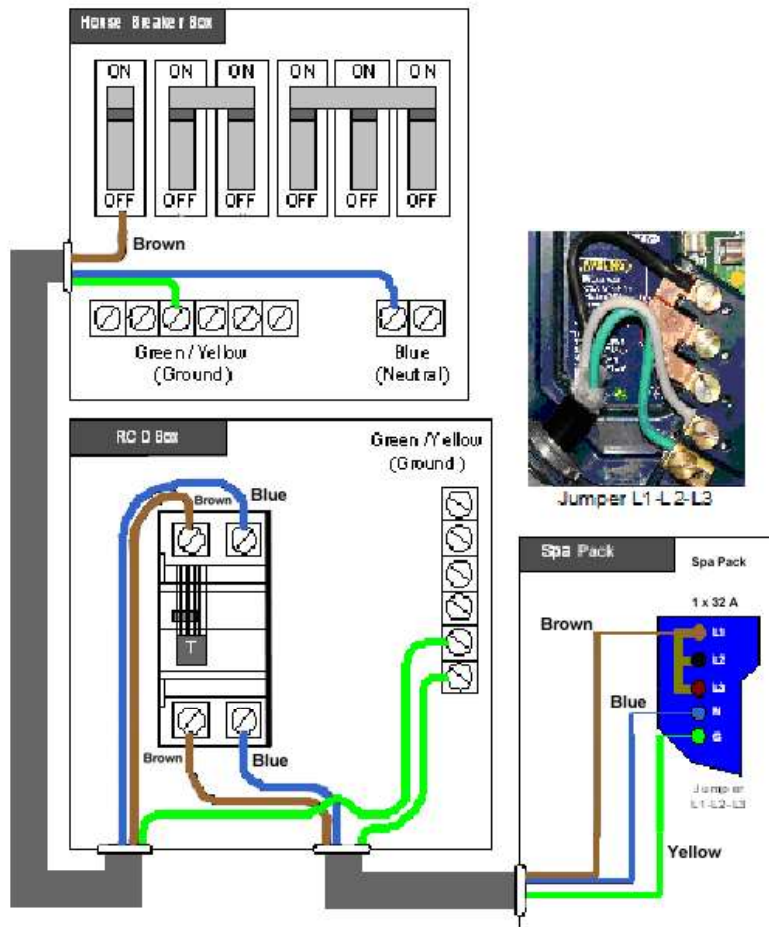


Figure 9 – Electrical Service (Single Service, 1x32A) for XP1 and XP2

Important: Match the Breaker setting (Br) of the spa pack to the electrical phase wiring as described on page 52.

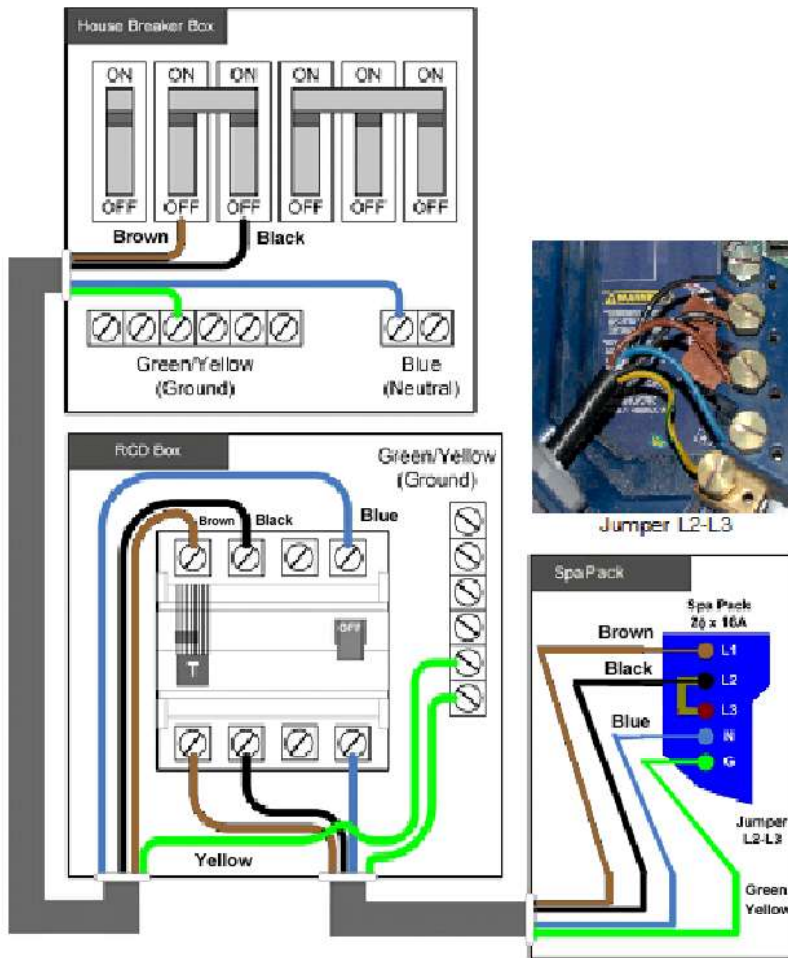


Figure 10 – Electrical Service (Dual Service, 2x16A) for XP1 and XP2

Important: Match the Breaker setting (Br) of the spa pack to the electrical phase wiring as described on page 52.

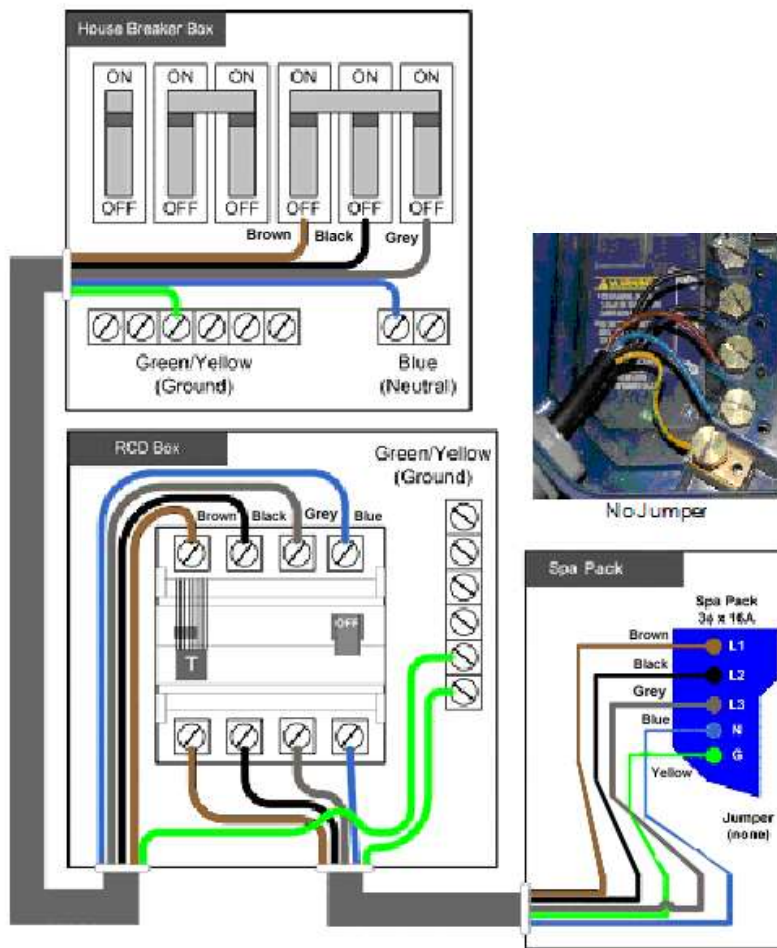


Figure 11 – European Electrical Service (Three Phase, 3x16A) for XP1 and XP2

Important: Match the Breaker setting (Br) of the spa pack to the electrical phase wiring as described on page 52.

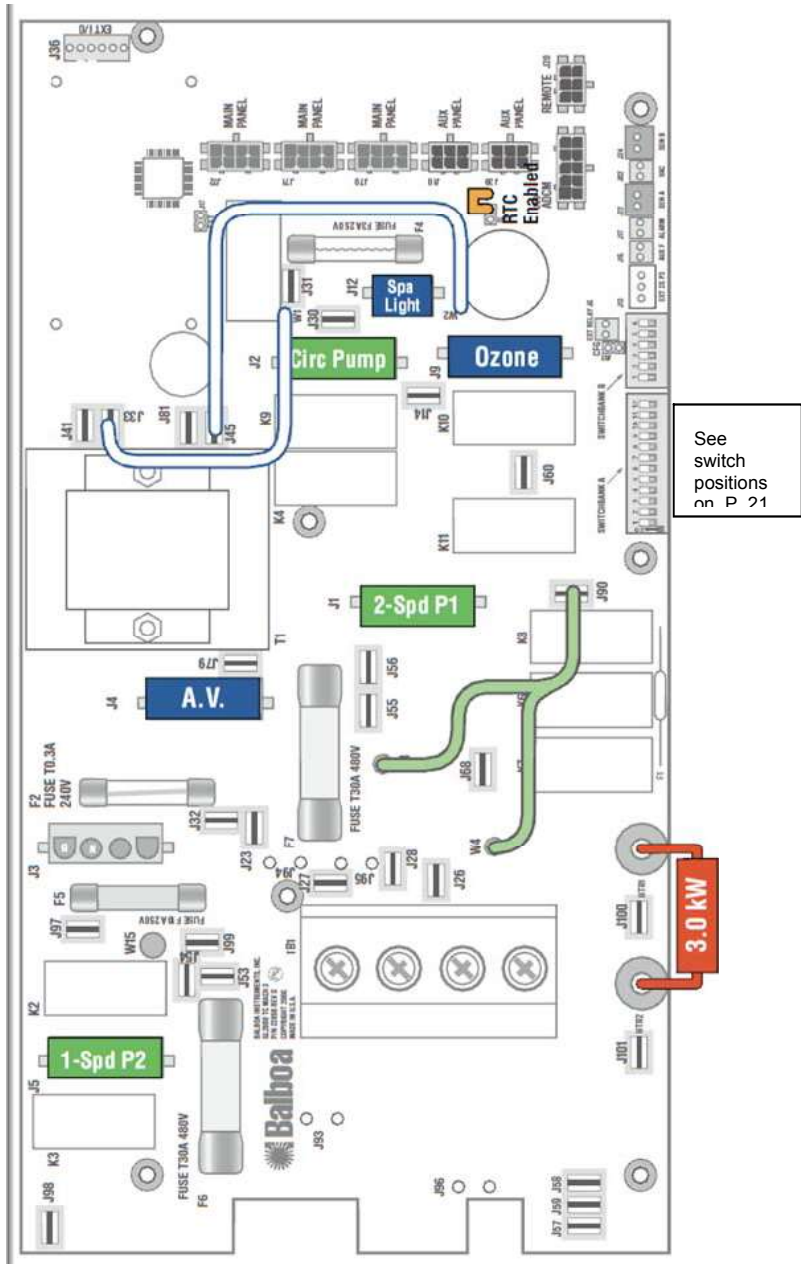


Figure 13 – Wiring Diagram for Passion, Essence, Desire, Pure, and Pristine models with HSEX2000 Control Pack

See wire size chart on page 9.

WARNING: Main Power to system should be turned OFF BEFORE adjusting DIP switches.
WARNING: Persistent Memory (A12) must be RESET to allow new DIP switch settings to take effect.

When the Logic Jumper is not installed on J83 (CFG),
 DIP Switch Settings are enabled.
 DIP Switches will then operate as shown below.

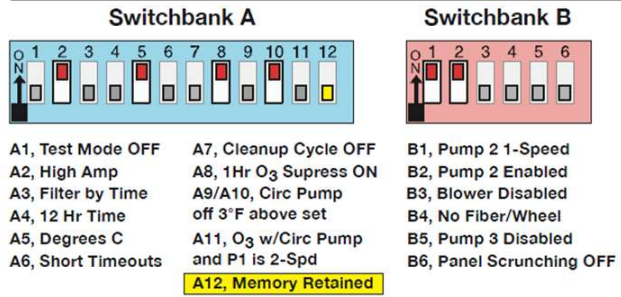


Figure 14 –Board Diagram for Passion, Essence, Desire, Pure, and Pristine models export version with HSEX2000 Control Pack.

WARNING:

- Setting DIP switches incorrectly may cause abnormal system behavior and/or damage to system components.
- Refer to Switchbank illustration on Wiring Configuration page for correct settings for this system.
- Contact Balboa if you require additional configuration pages added to this hot sheet.

DIP Switchbank A Key

A1 Test Mode (normally Off)
 A2 In "ON" position, heater can run while any/all high-speed pumps or blowers are running (High amperage)
 In "OFF" position, heater is disabled while any high-speed pump or blower is running (Low amperage)
 A3 In "ON" position, filter cycles are programmed by duration for non-time capable panels
 In "OFF" position, filter cycles are programmed to start and end times for time capable panels
 A4 In "ON" position, displays time in 24 hours (military/European time)
 In "OFF" position, displays 12 hour time
 A5 In "ON" position, displays temperature in Celsius
 In "OFF" position, displays temperature in Fahrenheit
 * Sets default for user preferences - only applies when persistent memory is reset (A12 On) during power-up
 A6 In "ON" position, Equipment timeout 30 minutes (4 hours for Pump 1-Low)
 In "OFF" position, Equipment timeout 15 minutes (2 hours for Pump 1-Low)
 A7 In "ON" position, Cleanup Cycle – 30 minutes after spa use/timeout, Pump 1-Low & Ozone or Circ Pump and Ozone run for 1 hour
 In "OFF" position, no Cleanup Cycle
 A8 In "ON" position, Ozone suppression for one hour after pump/blower button press
 A9 and A10 See Table for Circ Pump Behavior settings
 A11 In "ON" position
 (non-circ mode operation) Pump 1 is two-speed, Ozone is ON in Filter & Cleanup Cycles only
 (in any circ mode) Pump 1 is one-speed, Ozone is ON with circ pump
 In "OFF" position
 (non-circ mode operation) Pump 1 is two-speed, Ozone is ON with Pump 1-Low
 (in any circ mode) Pump 1 is two-speed, Ozone is ON with circ pump
 A12 Persistent memory reset (normally off) (used when spa is powering up)

A9	A10	Circ Pump Behavior
OFF	OFF	No Circ Pump or Circ Pump not plumbed w/heater
ON	OFF	24 Hours
OFF	ON	24 Hr w/3°F Shut-Off
ON	ON	Acts like Pump 1-Low (Filter Cycles, Polls)

DIP Switchbank B Key

B1 In "ON" position, single-speed Pump 2
 In "OFF" position, two-speed Pump 2
 B2 In "ON" position, Pump 2 enabled
 In "OFF" position, Pump 2 disabled
 B3 In "ON" position, Blower enabled with Pump 2 low relay
 In "OFF" position, Blower disabled
 B4 In "ON" position, Fiber and Wheel instead of Spa Light
 (if A9 & A10 are both OFF, Fiber uses J2 connector; if either A9 or A10 is ON, X-FOW Kit required to run Fiber)
 In "OFF" position, Spa light enabled
 B5 In "ON" position, Pump 3 enabled (Jets 3 replaces Blower on Aux panel)
 In "OFF" position, Pump 3 disabled
 B6 In "ON" position, Alternate Panel layout (ML900 scrunching enabled - ML550 / 700 Jets 3 replaces Blower)
 In "OFF" position, Normal Panel layout

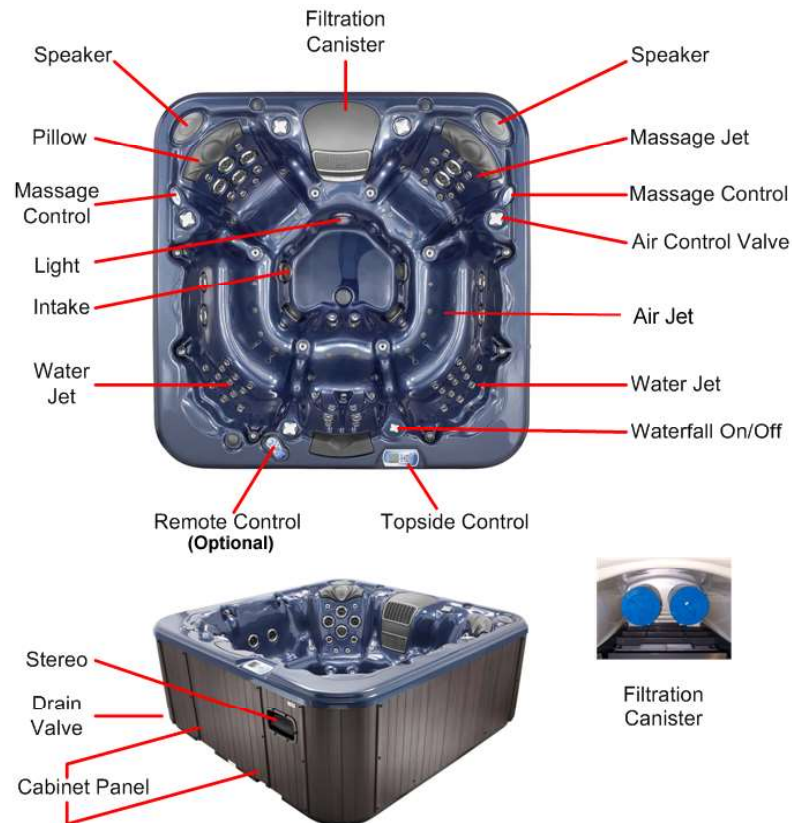
Startup

Important – Read these step-by-step startup procedures before starting your hot tub. Failure to follow any of these steps listed may result in damage to the equipment and may void your warranty.

Note: If you are unsure of any of the above startup procedures, please call our customer care center at 727.573.9611. For best results, read each step in its entirety before proceeding.

⚠ Caution: Running the hot tub pump dry (without water running through it) can cause IMMEDIATE damage and will void the warranty! Be sure that the hot tub is installed properly in accordance with the instructions in this manual.

Refer to the following picture for an explanation of your hot tub's controls, components, and technical terms. Note that not all models have all features and components.



Before Adding Water

Before adding water, go through these simple steps now to prevent common issues when setting up your hot tub for the first time. Verify that the following have all been rechecked.

1. Turn off all power to the hot tub at the main breaker panel.
2. Open the side panels to access the internal components.
3. Check that all slide valves are opened (T-handles pulled out) to the heater and all pumps.
4. Check that there are no obvious signs of loose wires or broken pipes.



Figure 16 - Valve Open/Closed

5. Check that the two heater unions are hand tight.

⚠ Caution: Do not use a wrench. Over-tightening may cause damage to unions and gaskets, which will not be covered under warranty.



Figure 17 - Unions Tight (Balboa – Above Top; IN.PL – Above Bottom)

6. Check that the unions on all pumps are tight.
7. Clean out any foreign debris from within the service access area or inside of the hot tub itself.
8. With the drain open and filters removed, thoroughly rinse out the hot tub with warm water until the drained water runs clear. Run water through the filtration canister and jet lines to remove any incidental dust, dirt, and debris that may have accumulated during shipment or installation. Drain all water completely.
9. Make sure that the hot tub drain valve is closed and the cap is on tight (see page 59).
10. Install the filter(s) in the filtration canister.
11. Check that all of the hot tub jets are open (turned full counter-clockwise).
12. Now is the best time to clean and polish the surfaces of your hot tub (see page 60).

Filling Your Hot Tub

Now it's time to fill your hot tub with water. Do not turn on the electricity yet until the hot tub is completely filled. To properly fill your hot tub:

1. Make sure that the filters (in the filtration canister) are gently screwed into place. Turn them clockwise until they stop being careful not to over-tighten them (this avoids cracking the filter).
2. Connect a standard garden hose to a faucet with regular cold tap water (not softened water or hot water).



Figure 68 – Filtration Canister

⚠ Caution: The water from your hot water tank should not be used to fill the hot tub.

3. Put the pre-filter (if equipped**) on the other end of the hose, point the pre-filter into a suitable drain, turn on the water, and allow any sediment to be flushed down the drain. Once the water stream runs clear, turn off the hose.
4. Put the pre-filter (if equipped) into the filtration canister and turn on the hose.
5. **Fill slowly.** If too much water pressure is used, foaming water can force air into the pipes and cause startup problems.

Important: To assure that the pump is properly primed, **fill the hot tub through the filter area only.**

6. Fill the hot tub until the water level is about 1" above all jets (or about ½" below the pillow). Do not over fill.

Note: Every person entering a hot tub displaces a given volume of water, so adjust water level to the number of people regularly using the hot tub.

Turn off the hose and check again for any small leaks.

Operational Checks, XP1 and XP2

Note: For Passion, Essence, Desire, Pure, and Pristine models, see page 27.

⚠ Caution: Do not turn on any pump until your hot tub is properly filled with water. Running any pump without water in your hot tub can cause IMMEDIATE damage, which is not covered under warranty!

By now you have rechecked your tub's mechanical connections and filled it with water to about 1" above all jets by adding cold tap water through the pre-filter (if equipped). Turn on power to the hot tub at the main breaker panel and test the operation of the electrical system. If you encounter a problem, please reference the troubleshooting guide on page 49.

** Pre-filters are available by calling 727.573.9611

1. Turn on the breaker and test the operation of the **Siemens** Ground-Fault Circuit Interrupter (GFCI) breaker by pushing the small button. This should automatically trip the hot tub's circuit breaker.


⚠ DANGER: If this breaker does not trip, immediately call your electrician. Do not use your hot tub!

Only if pushing this button successfully trips this circuit breaker should you reset this breaker and proceed to the next step.


2. Go to the topside control panel and look at the display. The system goes through a brief startup sequence after which Pump 1 starts in filtration mode and the panel displays the current water temperature.



Figure 7 – Topside Buttons

3. Press the Pump 1 button . You should hear the first VST pump turn on a higher speed, see water circulating in the hot tub, see the icon swirl on the display, and see CO in the VST Seat Control (see pages 37-40).

⚠ Caution: If water does not flow from the jets after 2 minutes, turn power off at the main panel and bleed air from the system (see page 47). Turn power on again. Sometimes momentarily turning a pump off/on will prime it. Only do this four times.

4. Press  again. You should hear the first pump turn on a higher speed and the icon swirl faster.











Note: Repeatedly pressing the button raises the speed each time (40%, 60%, 100%, and OFF^{††}).

5. If the water is running smoothly through the lines, open the air control valve; you should see an increase in jet pressure. Check and adjust the water/airflow of every jet if necessary. Do this for all pumps to ensure proper operation. Each jet^{††} in your hot tub can be adjusted for directional flow. Turn the outer jet dial fully counterclockwise to permit water flow from a jet and allow the VST system control intensity. Pivot the angle of a jet to achieve an optimal massage. Adding an air mixture intensifies the level of your massage. Turn the air control valve counterclockwise to increase the air









^{††} If the spa is in filtration or heating modes, the pump slows to 10% and does not turn OFF.

mixture and clockwise to turn it off.

Note: To minimize heat loss, close the air control valve when your hot tub is not in use.

6. Continue pressing   until Pump 1 slows.
Note: When programmed for *continuous* (12x2) filtration and when temperature limits allow, Pump 1 and the ozone generator run continuously to help keep your water clean.
7. Press the Pump 2 button   (if equipped). You should hear the second pump (fixed-speed) turn on, see water circulating in the hot tub, and see the icon swirl on the display.
8. Press   again. You should hear the second pump turn on a higher speed and see the icon swirl faster. If Pump 2 has not primed after 2 minutes repeat same priming procedure of step 3 above for Pump 1. Check and adjust the water and airflow of every jet from Pump 2 if necessary.
9. Press   a third time to turn off Pump 2. A built-in timer automatically turns Pump 2 off after 20 minutes, unless you turn it off first.
10. Press the Pump 3 button   (if equipped). You should hear the second VST pump turn on, see water circulating in the hot tub, and see the icon swirl on the display.

If Pump 3 has not primed after 2 minutes repeat same priming procedure of step 3 above for Pump 1. Check and adjust the water and airflow of every jet from Pump 3 if necessary.

Note: Repeatedly pressing the button raises the speed each time (40%, 60%, 100%, and OFF).
11. Continue pressing   until Pump 3 turns off. A built-in timer automatically turns Pump 3 off after 20 minutes, unless you turn it off first.
12. Press the Light button   to turn the light on. Press this button again to cycle through the many available colors. Once a desired color is found, pressing this button again stays on this color.
13. Press   again to turn the light off. A built-in timer automatically turns the light off after two hours, unless you turn it off first.
14. Press the Blower button   to turn on the air blower (if equipped). Check that air goes to the air jets on the bottom of each seat.
15. Press the Blower button again to turn the Blower off. A built-in timer automatically turns the Blower off after 20 minutes.

Operational Checks, Passion, Essence, Desire, Pure, Pristine

⚠ Caution: Do not turn on any pump until your hot tub is properly filled with water. Running any pump without water in your hot tub can cause IMMEDIATE damage, which is not covered under warranty!

By now you have rechecked your hot tub's mechanical connections and filled it with water to about 1" above all jets by adding cold tap water through the pre-filter (if equipped). Turn on power to the hot tub at the main breaker panel and test the operation of the electrical system. If you encounter a problem, please reference the troubleshooting guide on page 49.

1. Turn on the breaker and test the operation of the Ground-Fault Circuit Interrupter (GFCI) breaker by pushing the small button. This should automatically trip the hot tub's circuit breaker.

⚠ DANGER: If this breaker does not trip, immediately call your electrician. Do not use your hot tub!

Only if pushing this button successfully trips this circuit breaker should you reset this breaker and proceed to the next step.

2. Go to the topside control panel. The hot tub first goes into a 6-minute Priming mode, indicated by "Pr" message. Water heating is disabled during priming. To exit Priming mode and begin normal hot tub operation, press "Up" or "Down" button. The circulation pump starts and water flows through the returns.
3. Press the Jets 1 button. You should hear the pump turn on, see water circulating, and see the Jets 1 light illuminate on the panel.
4. Press the Jets 1 button again. You should hear the pump turn on a higher speed.

⚠ Caution: If water is not flowing from the jets after 2 minutes, turn the power off at the main panel and bleed air from the system (see page 47). Turn the power on again. Sometimes momentarily turning the pump off/on will help to prime. Only do this 4 times.

5. If the water is running smoothly through the lines, open the air control valve to the jets and you should see an increase in jet pressure. Check and adjust the water and airflow of every jet if necessary.

Each jet in your hot tub can be adjusted for massage intensity and directional flow. Turn the outer jet dial counterclockwise to increase the water volume and clockwise to turn it off. Pivot the angle of a jet to achieve an optimal massage.

An air mixture intensifies the level of your massage. Turn the air control valve counterclockwise to increase the air mixture and clockwise to turn it off.

To minimize heat loss, close the air control valve when the hot tub is not in use.

6. Press the Jets 1 button a third time to turn off the pump.

7. Press the LIGHT button to turn on all lights. Verify that the LED light system is on. Press the LIGHT button multiple times to cycle through the many available color patterns. Press the LIGHT button again to turn off the LED light system.
8. If equipped, press the Jets 2 button. You should hear the pump turn on, see water circulating, and see the Jets2 light illuminate on the panel.
9. Press the Jets 2 button again to turn off the pump.
10. If equipped, press the Blower button. You should hear the blower turn on, see water bubbling, and see the blower light illuminate on the panel.
11. Press the Blower button again to turn off the blower.

Water Balancing

Note: Perform water balancing weekly and whenever you change water (or when the hot tub is first filled) to ensure proper water condition.

Once your hot tub reaches 95°F, use our *Bromine Test Strips* (not included) and add the necessary chemicals (not included) to stabilize your water chemistry. Turn Pump 1 on high speed before starting your tests to distribute chemicals evenly. Wait 5 minutes between measurements to allow added chemicals to mix thoroughly.

Important: Test the condition of your water in the following order:

1. **Total Alkalinity** (80-120 ppm) – Use our *Alkalinity Increaser* to raise total alkalinity and *Alkalinity Decreaser* to lower it. Low total alkalinity has little buffering capacity making the pH erratic. High total alkalinity has too much buffering capacity making the pH difficult to change.
2. **pH** (7.2-7.8) – Use *Spa Up* to raise the pH level and *Spa Down* to lower it.

⚠ **Caution:** A pH lower than 7.2 can harm the metal surfaces of your hot tub and irritate your eyes and skin. A pH higher than 7.8 can create calcium deposits (scaling) on the shell and equipment.
3. **Hardness** (150-400 ppm) – Add *Increase Calcium* until the proper level is achieved. Unfortunately, there is no practical way to lower the native water hardness other than using a different source of water when filling your hot tub. Low hardness causes equipment corrosion and water foaming.
4. **Sanitizer** (3.0-5.0 ppm) – Use our *Deluxe Bromine Kit* to add Bromine until the proper level is achieved. Neglected hot tub water can breed bacteria and algae causing bather discomfort, skin rashes, and/or irritation.

Test	Range
Total Alkalinity	80-120 ppm
pH	7.2-7.8
Calcium Hardness	150-400 ppm
Sanitizer	3.0-5.0 ppm

Figure 20 - Recommended Ranges for Balanced Water

Topside Controls & Operation

Note: For Passion, Essence, Desire, Pure, and Pristine models, see page 41.

XP1 and XP2 (IN.K600)

The topside control panel uses a paged-style menu system to operate and program your hot tub. Basic button functions are described next.

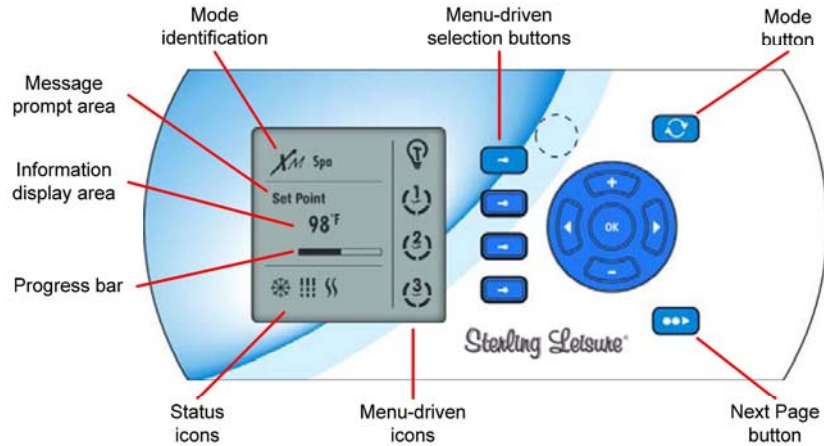












Figure 21 – Topside Callouts

-  Press the **Mode** button to display the operating modes (*Spa*, *Options* and *Audio*). Pressing the function button (described below) next to a mode selects that mode. Pressing Mode in a menu exits the menu without saving the values.
-  Press the corresponding **function** button next to an icon to select that mode or operate that device.
-  Press **Next Page** for more pages.
-  Press **OK** to toggle display between the time or water temperature.
-  Press the Increase/Decrease (+/-) buttons to raise or lower values in a menu.
-  Press the Forward/Backward (</>) buttons to move between selections.

The system normally displays the current water temperature. Press the Increase/Decrease (+/-) buttons to set the desired (set) water temperature.

Note: During programming, the heater is disabled and its icon flashes.

Spa Mode

Spa Mode allows you to operate the basic devices of your hot tub plus access Economy feature. To access Spa Mode, first press  to access the mode selection menu and then select the Spa Mode with . Press  next to the feature or device you wish to operate on that page. The corresponding display icon animates indicating its status. Press  to go to the next page.

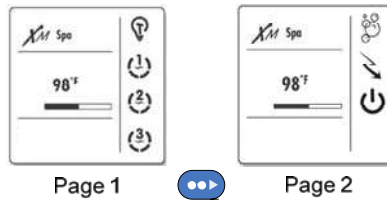




Figure 22 – Spa Mode Pages



Press  to turn the LED light on/off. Press again to cycle through the many colors. Once a desired color is found, press again to stay on this color. A built-in timer turns the light off after 2 hours, unless you turn it off first.




Pump 2 is a 2-speed pump. Press  to turn a pump on low speed, pressing again turns it on high speed, and pressing it a third time to turns it off. A built-in timer turns either of these pumps off after 20 minutes.




The blower is single-speed. Press  to turn the blower on/off. A built-in timer turns the blower off after 20 minutes.





Press  to turn **Economy mode** on/off. Typically used when you plan to be away from your hot tub, Economy mode allows you to set back your hot tub's water temperature by 10°F to help you lower your operating costs. See page 33 for more information on programming this mode.



Press  to initially turn pump 1 or 3 (if equipped) on to 40% speed. Each successive press of this button raises the speed of the VST motor to 60%, then 100%, then back down to 60%, then to 40% and then to 0%. Continue pressing the button until the pump turns off. A built-in timer turns this pump off after 20 minutes, unless you turn it off first. Pump 1 will continue running on 10 percent speed if there is a request for filtration or heating.

Options Mode

In Options mode, the system shows you which option you wish to program or alter (Spa, Keypad, or Clock). The Info option allows you to review various information about your hot tub. To access Options mode, first press  to access the mode selection menu and then select the Options mode with .

The following submenus are accessible from the Options mode choices (Spa, Keypad, Clock, and Info).

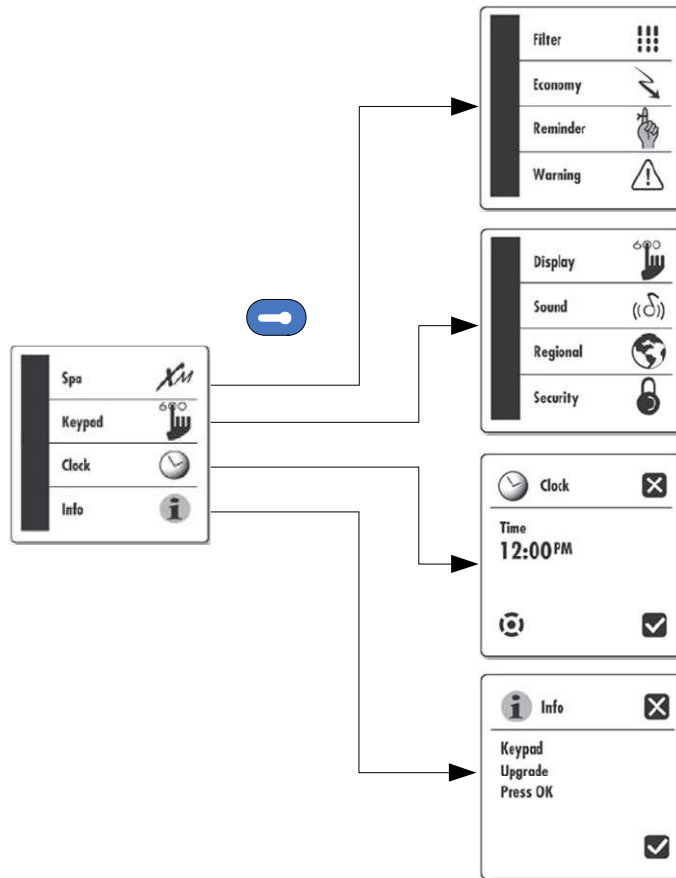
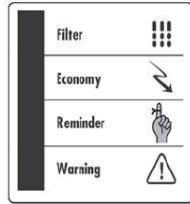


Figure 23 – Options Mode Pages

Hot Tub Submenus




This submenu allows you to personalize operating settings of your hot tub – such as the total filtration cycle, economy times, and a maintenance reminder – and to display any warning messages. When your hot tub is in a filter cycle, the  icon appears on the topside control panel.



Figure 24 – Filter Cycle Screens

Your hot tub can be programmed to specify how long it filters the water each day (filter cycle). Four pages of menu control: when the filter cycle turns on/off (start time), how long it runs each time it turns on (duration), how many times per day cycles should run (frequency), and how much free chlorine (sanitation) should be generated in a cycle (default is 12 a.m., 12 hours, 2 times/day).

Note: When your hot tub starts a filter cycle, the pumps turn on for about one minute to purge the plumbing lines.






- Start** Press +/- to set the starting hour of the Filter Cycle, press > to select minutes, and then press +/- to set the starting minute. Press   to go to the next screen.
- Duration** Press +/- to set the duration of each Filter Cycle (i.e., whenever a cycle runs, how long should it run). Press  to go to the next screen. (12 hr cycle is recommended)
- Frequency** Press +/- to set the number of times each day the Filter Cycle runs (2 recommended). Press   to go to the next screen.



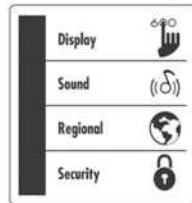
Figure 25 – Economy Screens

Economy mode allows you to automatically set back your hot tub's water temperature by 10°F every day for a certain period of time to help you lower operating costs. Remember to select Economy Mode times that differ from your normal bathing times.

Start Press +/- to set the starting hour of economy mode. Press > to select minutes. Press +/- to set the starting minute of economy mode. Press to go to the next screen.

Stop Press +/- to set the ending hour of economy mode. Press > to select minutes and +/- to set the ending minute of economy mode. Press to save the settings.

Keypad Submenus



This submenu allows you to personalize operating settings of your hot tub's display.



Figure 26 – Display Screens

These settings allow you to adjust the properties of the display.

Contrast Press +/- to set amount of contrast on the display. Press to go to the next screen.

Backlight Press +/- to set the intensity of the backlight (for night viewing). Press to go to the next screen.

Orientation Press +/- to set a normal or inverted display. Press to save the settings.



Figure 27 – Sound Screens

These settings control how the audible beep functions. You can assign a beep to each keypad press and an audible alarm for warnings.

Keypad Press +/- to turn the keypad audible beep on/off. Press to go to the next screen.

Alarm Press +/- to turn the audible alarm on/off. Press to save the settings.

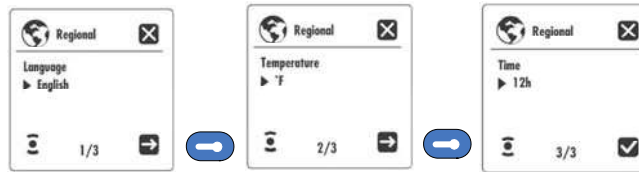


Figure 28 – Regional Screens

These setting control the language, temperature units, and time format.

Language Press +/- to select your language. Press to go to the next screen.

Temperature Press +/- to select a temperature reading in degrees F/C. Press to go to the next screen.

Time Press +/- to select a 12/24 hour clock display. Press to save the settings.



This submenu allows you to personalize the keypad security of your hot tub to prevent unauthorized changes to the settings. When the keypad is locked the lock icon is displayed.

A *Partial* keypad lock allows access to basic hot tub functions (pumps, light, etc.) but blocks access to the temperature set point and Programming mode.

A *Full* keypad lock is a total keypad lockout.

Press +/- to set a partial or full keypad lock. Press to go to the next screen. Press to save the settings.

Note: To unlock the partial keypad, select and hold Options menu key for 5 seconds.

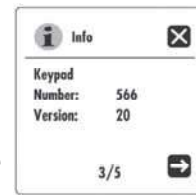
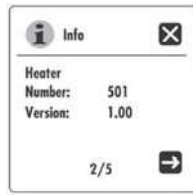
Note: To unlock the full keypad, select and hold Light menu key for 5 seconds.

Clock Submenu



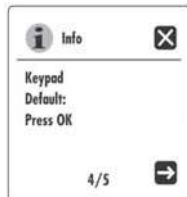
This submenu allows you to set the time of the clock. Press +/- to set the hours. Press > to access minutes. Press +/- to set the minutes. Press [OK] [Left Arrow] to save the settings.

Information Submenus



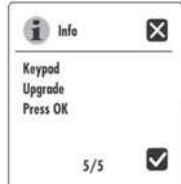
These sub-menus allow you to view hot tub equipment data such as the electronic controller, heater, and keypad software version. You can also reset all programmed settings back to default factory values, and finally to upgrade keypad software.

Keypad Default



This submenu allows you to reset the keypad setting to the factory default. Press **OK** button to reset the keypad to the factory defaults. Press [OK] [Left Arrow] to go to the next screen.

Keypad Upgrade



This submenu allows service personnel to perform a firmware upgrade on the keypad. This action should be performed by authorized service personnel only. Press the **X** [Left Arrow] button to abort the upgrade. Press the **OK** button to start the upgrade. Press [OK] [Left Arrow] to save the settings.

Smart Winter Mode



If the system (sensor located inside controller) detects ambient conditions below 42°F, it automatically enters the Smart Winter Mode for period of 24 hours. In this mode, the pumps runs for one minute, several times per day to prevent water from freezing in the pipes.

Floating Remote Control (Optional for XP1 Only)



All hot tub functions can be operated from the infrared water-resistant remote control. The buttons toggle their operation based on which mode you select. In **Spa Mode** you can control Pumps 1-3 and the Light from their respective buttons. Their icons are color coded orange to this mode.

Programming code for the spa pack is 0420.

Figure 29 - Spa Mode Callouts

For complete information on controlling the hot tub features with the optional floating remote control, request the manufacturer's manual.

NOTE: The remote control option must be requested PRIOR to manufacturing. It can not be purchased as an after-market add on.

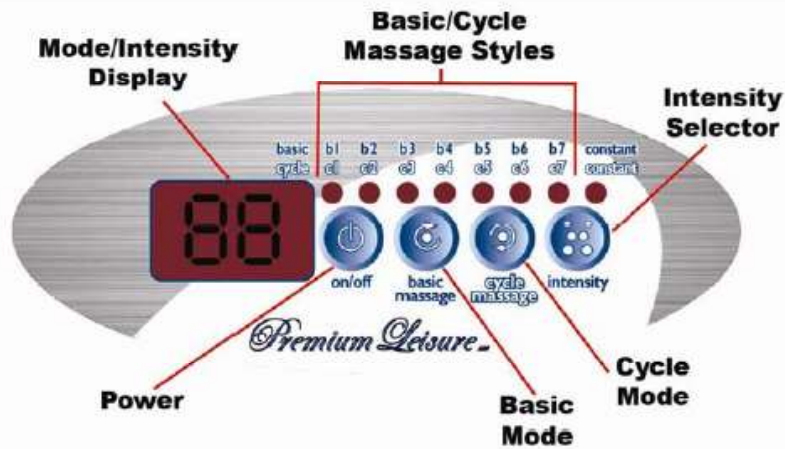
VST Operating Instructions

Using the Variable Speed Technology (VST) Seat Controls

Note: There are 2 VST seats in the XP1 and 1 VST seat in the XP2 only.

Massage Control Panel

Each seat has its own massage control panel that adjusts the style and pattern allowing each person to set individual hydrotherapy preferences. There are no interactions between any of these seats, permitting uninterrupted enjoyment of each individual massage setting.



Basic Massages vs. Cycle Massages

Choose one of the seven **Basic Massages** for a *repetitive* hydrotherapy experience that lasts 11-12 minutes.

Choose one of the seven **Cycle Massages** for an *alternating* hydrotherapy experience that lasts 12-15 minutes. The cycle begins with a 2-3 minute gentle warm up, advances to a 2-3 minute deeper massage, runs through the 5-6 minute selected massage and finishes with a 2-3 minute cool down.



VST Operation

Your massage control panel uses four buttons to select the style, pattern and intensity of your customizable VST massage. The style button selects what type of massage starts and ends your personal hydrotherapy massage. The pattern button selects what type of massage occurs in between (the central pattern).



Press to turn the VST massage system **On/Off**. Also press to move from basic or cycle mode to constant mode. (Note: The pump automatically turns off after approximately 20 minutes of continuous use).



Press to select one of the seven **Basic Massage** styles – *Effleurage, Petrissage, Friction, Vibration, Percussion, Triggering, and Rolling*. An LED steadily illuminates below the style you select.



Press to select one of the seven **Cycle Massage** styles – *Shiatsu, Deep, Thai, Classical, Sport, Swedish, and Relaxation*. An LED blinks below the cycle you select.



Used only with a *Constant* aquatic massage, you may also opt to enjoy a conventional, continuous massage at your desired **Intensity (1-10)** with all jet groups on. Press and the digital display shows you are in "Co" mode and defaults to a 4 intensity. Press and hold this key to turn intensity down (3, 2, 1). Press and hold again to turn intensity up (1-10). Each press changes the direction of the intensity from 1-10 or 10-1.

Intensity Note: The jet pressure intensity levels are defined in increments of 10 percent as follows:

<u>INTENSITY READOUT</u>	<u>JET PRESSURE %</u>
01	10 percent
02	20 percent
03	30 percent
04	40 percent
05	50 percent
06	60 percent
07	70 percent
08	80 percent
09	90 percent
10	100 percent

**Basic
Massage**

B1 - B7

Minutes 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A Repetitive Massage

If you want an extended massage that is hyper-focused to suit your mood, select one of the seven Basic Massages. From start to finish you will enjoy the same technique. They all offer different ways to hyper-focus your hydrotherapy from mild to intense.



Basic button

Below is a brief description of the type of massage you can expect along with the corresponding proprietary algorithm that turns the VST motor in to your personal masseur/masseuse. Simply match the readout on the VST control panel with this chart and pick your favorite massage!

Basic	Description	Jet Pressure
B1 Effleurage	A soothing, stroking movement to encourage lymphatic return.	
B2 Petrissage	A slow, rhythmical movement that simulates kneading action.	
B3 Friction	A mild, scrubbing technique used to stimulate cellular activity.	
B4 Vibration	A calming technique that warms and relaxes the muscles.	
B5 Percussion	A stimulating technique that assists blood flow and circulation.	
B6 Triggering	A form of trigger-point therapy that precisely applies and releases pressure.	
B7 Rolling	A restful technique that penetrates deeply into the tissues.	

Cycle Massage	Warm Up	Deep Massage	C1 - C7							Cool Down
Minutes	1 2 3	4 5 6	7 8 9 10 11 12	13 14 15						

An Alternating Massage

In professional massage therapy, the body is first prepared for the impending massage with a brief warm-up to soften the muscle tissues. Then the selected massage ensues, before a cool down caps the therapy. Premium Leisure's Cycle Massages mimic these experiences.



Cycle button

Below is a brief description of the type of massage you can expect along with the corresponding proprietary algorithm that turns the VST motor in to your personal masseur/masseuse. Simply match the readout on the VST control panel with this chart and pick your favorite massage!

Cycle	Description	Jet Pressure
C1 Shiatsu	A gradually increasing stroke to help correct imbalances in the body.	
C2 Deep	A sustained, intense pressure to penetrate deep within tissues.	
C3 Thai	A rhythmic, pressing action that helps loosen tense muscles.	
C4 Classic	A mild, sweeping technique that relaxes and soothes the body.	
C5 Sport	A pulsating pressure that stimulates and invigorates muscles.	
C6 Swedish	A gentle technique that helps to improve circulation.	
C7 Relaxation	A marvelous technique to help instill a meditative state.	


Passion, Essence, Desire, Pure, Pristine (ML700)




Figure 30 – ML700 Topside Control Panel

Control Panel Legend

 Heat icon: Indicates different stages of heating

 Jets icon: Spins fast on high speed; spins slow on low speed

 Light icon: Light is on/off

F1, F2 indicators: Filter cycle 1 or 2 will be illuminated

PL, TL indicators: Locking Panel or Set Temperature will be illuminated

Temperature Up/Down Buttons

Press the Arrow Up or Arrow Down buttons once to display the set temperature. Each time either button is pressed again, the set temperature will increase or decrease depending on which button is pressed. After three seconds, the LCD display will automatically display the current temperature the hot tub water.

Mode Button

This button is used to switch between **standard**, **economy** and **sleep** modes. Press “Mode” To enter mode programming, press “Cool” through to desired mode (LCD flashes until confirmed), then press “Mode” to confirm selection.

Standard mode heats the spa water to the set temperature. The “Standard” icon will display until the mode is changed.

Economy mode heats the spa water to the set temperature only during filter cycles. The “Economy” icon will display until mode is changed. Pressing “Jets 1” button while in Economy mode puts the spa in “Standard-In-Economy mode,” which operates the same as Standard mode, and then reverts to Economy mode automatically after one hour. During this time, a press of the “Mode” button will revert to Economy mode immediately. Because your hot tub is equipped with a 24-hour circulation pump the filtration cycle program operates only on a limited basis. At the start of each filter cycle the blower (if equipped) will run for 30 seconds; and the pump 1 (low) and, if equipped, pump 2 (high) will run for five minutes to prevent the spa water from becoming stagnant in the plumbing and air lines and improve skimming action to remove debris and suspensions from the

water surface. In addition, the programmable filtration cycle (start/end) times of each cycle will designate the start and end time where the heater is allowed to operate in economy and sleep modes. Sleep mode heats the spa water to within 20°F (11°C) of the set temperature only during filter cycles. The “Sleep” icon will display until mode is changed.

Standby Mode: Pressing “Warm Arrow Up” or “Cool Arrow Down” then “Jets2” button will turn off all spa functions temporarily. This is helpful when changing filter cartridges. Press any button to exit Standby mode.

Jets 1 Button

Press the “Jets 1” button once to turn pump 1 on or off, and to shift between low and high speeds. If left running, the low speed turns off after two hours and high speed turns off after 15 minutes.

Jets 2 Button (If Equipped)

Press the “Jets 2” button once to turn pump 2 on or off. If left running, the pump 2 turns off after 15 minutes.

Aux Button

Press the “Aux” button once to turn blower on or off (if equipped). If left running, the blower turns off after 15 minutes.

Light Button

Press the “Light” button to turn the spa light system on and off. The LED light system is preprogrammed with an assortment of lighting effects. When you turn Light off and turn on again within five (5) seconds, it advances to the next effect. When you turn Light off for more than five (5) seconds, it remembers that last effect you selected. The next time you turn on the Light will display the same effect. The Light will automatically turn off after approximately four (4) hours.

For spas equipped with LED light system and music module the following sequence effects can be selected via on-off Light button:

1) Color wheel; 2) Music modulated mode; 3-8) Different colors; 9) Flashing through the color sequence.

Time Button

Once your spa has been properly connected the first time the “Time” icon appearing on the screen and flashing. Press “Time” pad, then “Mode.” Select the hour by pressing “Warm” or “Cool” (each press changes time by 1 hour). Press “Mode” pad again and select minutes by pressing “Warm” or “Cool” (each press changes time by 1minute). Press “Mode” pad to exit the time setting procedure and enter the optional filter cycle programming. Press “Time” pad to exit programming. The Time setting on 2000 systems is not preserved in the event of power loss; time will have to reprogram upon each power up.

Inverting the Information Display Area Readout

Press “Warm Arrow Up” or “Cool Arrow Down” button, followed by the “Aux” button to change the numbers in the display to read upside down.

Circulation Pump Operation

Your system is equipped with a circulation pump. The circulation pump provides 24-hour continuous water circulation and filtration. The circulation pump turns over the entire spa water capacity at a minimum of 5-9 times every hour (depending on water capacity). It works like this: a dedicated, energy efficient circulation pump constantly draws water from the spa, runs it through the filter and the heater (heating only when necessary), then back to the spa. The ozone output is on whenever the circulation pump is running except when the jet pump(s) or blower is (are) activated by the user. The ozone generator will turn off for one (1) hour any time a function button (Jets 1, Jets 2 or Aux.) is pressed. The Circulation pump will turn off for 30 minutes at a time when the water temperature reaches 3°F (1.5°C) above the set temperature (most likely this will happen in a very hot climate or during summer).

Heater Operation

Your spa is equipped with an electrical heater. By setting your thermostat to the desired temperature, your heater will automatically turn on and off as needed. The temperature set point (set temperature) can be adjusted from 80°F to 104°F/26°C-40°C. To raise the set temperature press the “Warm Arrow Up” button. To lower the set temperature, press the “Cool Arrow Down” button. The start up temperature is set at 100°F/37.5°C. The last measured temperature is constantly displayed on the LCD. In Economy mode the heater heats the spa water only during filter cycles. In sleep mode the heater heats the spa water to within 20°F (11°C) of set temperature only during filter cycles.

Filter Cycle Programming - Optional

As explained above in a 24-hour circulation pump system the filtration cycle program operates only on a limited basis. At the start of each filter cycle the blower (if equipped) will run for 30 seconds; and the pump 1 (low) and, if equipped, pump 2 (high) will run for five minutes to prevent the spa water from becoming stagnant in the plumbing and air lines and improve skimming action. In addition, the programmable filtration cycle (start/end) times of each cycle will designate the start and end time where the heater is allowed to operate in economy and sleep modes. The default filter cycles are as follows:

The first filter cycle is automatically activated at 8 a.m. and operates the pump until 10 a.m. The filter indicator icon will light when filter 1 cycle is running.

The second filter cycle is automatically activated at 8 p.m. and operates the pump until 10 p.m.. The filter indicator icon will light when filter 2 cycle is running.

Time of day settings are not preserved in the event of power loss; time will have to be reprogrammed upon each power up.

Spa settings (temperature set point, filter cycles) are preserved.

Ozonator System

Your spa is equipped with an ozone purification system. You will find that your spa water stays fresh and clear with significantly less chemical sanitizer usage. You will be able to go longer between complete spa draining. The ozone generator operates in conjunction with the circulation pump. Ozone generator is on any time the circulation pump is running. Ozone generator will turn off for one (1) hour any time a function button (Jets 1, Jets 2, Aux) is pressed.

Freeze Protection

If the temperature sensor detects a temperature drop to 44°F (6.7°C) within the heater, then the pump automatically activates to provide freeze protection. The equipment stays on until four (4) minutes after the sensors detect that the spa water temperature has risen to 45°F (7.2°C) or higher. In colder climates, an optional additional freeze sensor may be added to protect against freeze condition that may not be sensed by the standard sensors. Auxiliary Freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a four (4) minute delay in turnoff. See your dealer for details.

Locking the Panel

Press "Time", "Jets 1" then "Warm Arrow Up" buttons within three (3) seconds. When locked, the "PL" indicator light will light. All buttons are frozen except the "Time" button. To unlock the panel, press "Time", "Jets 1" then "Cool Arrow Down."

Locking the Temperature Setting

Press "Warm Arrow Up" or "Cool Arrow Down" then "Time," "Jets 1," and "Warm Arrow Up" buttons within three (3) seconds to activate lock. When locked, the "TL" indicator light will light when the set temperature is locked. To unlock the set temperature, press "Warm Arrow Up" or "Cool Arrow Down" then "Time", "Jets 1," and "Cool Arrow Down."

Stereo System



Figure 31 – Stereo Callouts

The built-in AM/FM/Weather Band stereo CD system (if equipped) plays CDs and MP3s.

Playing a CD

1. Press the **POWER** button on the stereo
2. Press the **OPEN** button on the top of the stereo
3. Insert a CD
4. Press the **CD** button on the remote control
5. Press **PLAY** on the remote control
6. Press the **Previous/Next** button on the remote control to go to the previous/next track

Listening to the Radio

1. Press the **POWER** button on the stereo
2. Press the **Stereo** button on the top of the remote control
3. Press the **Channel Up/Down** button on the remote control to scan for the next/previous station
4. Press the **Previous/Next** button on the remote control to go to the previous/next pre-programmed station

For complete information on the audio capabilities and features, see the manufacturer's manuals (enclosed).

Cover

Place the insulated cover on your hot tub. Keeping the cover in place anytime the hot tub is not in use reduces the heating time and minimizes operating costs. The time required for initial heat-up varies depending on the starting water temperature, ambient temperature, and the capacity of your hot tub.

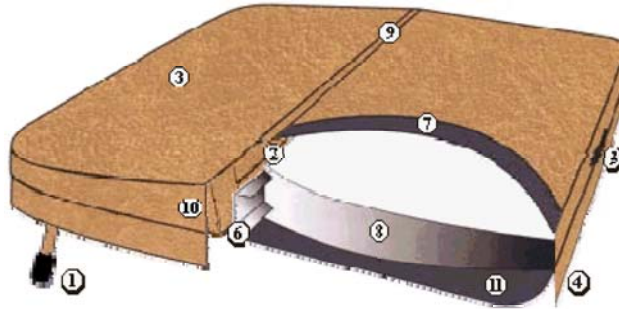


Figure 32 - Cover Callouts

- | | |
|--------------------------------|-------------------------------------|
| 1. Lock-down tab | 7. Heat-sealed insulation |
| 2. Double-stitched seams | 8. Chemical-resistant vapor barrier |
| 3. Marine-grade cover material | 9. Polystyrene seam stoppers |
| 4. Edge overlap material | 10. Reinforced edges |
| 5. Grip handle | 11. Breathable underside material |
| 6. Aluminum channel | |

Use the lock-down tabs to prevent access to the hot tub by children and to prevent the wind from lifting the cover off.



Figure 33 - Lockdown Tabs

Sitting, standing, and snow buildup on the cover will break the cover. Dragging it over rough surfaces will scuff or tear the fabric. Always lift by the handles or use the optional cover lift device.

Frequently Asked Questions

Who do I call for warranty information or service?

Call our customer care center between 8 a.m. and 5 p.m. EST Monday through Friday at 727.573.9611. Our representatives are eager to assist or you can get parts and information online at www.HotTubParts.com.

How do I bleed air from my system?

When draining and refilling your hot tub, the pump may become air locked. Air-locked pumps stop water from flowing in your hot tub and is easily resolved by bleeding off the trapped air. To do this:

1. Turn off the GFCI breaker
2. Open the access panel below the topside control panel
3. Loosen a heater union until you hear the trapped air escape
4. Once water drips out in a continuous stream, hand tighten the union until the water stops leaking
5. Loosen the discharge union on Pump 2 (if equipped)
6. Once water drips out in a continuous stream, hand tighten the union until the water stops leaking
7. Turn on all pumps to make sure that there are no leaks
8. Put the access panels back on
9. Turn on the GFCI breaker



Figure 34 - Bleeding Air

What happens when my warranty expires?

Premium Leisure will continue to provide service for your hot tub after your warranty has expired via our customer care center at 727.573.9611.

Where can I get more Chemicals or other accessories?

Visit www.hottubparts.com or call 877.530.PARTS.

How should I clean my hot tub?

Use non-sudsing cleaners and non-oily polishes (see page 60). Our Citra Bright Spray Cleaner and our Tub Rub cleaning pad quickly removes scum lines and helps restore your shell's original beauty. Rinse all filters, covers, pillows, and surfaces thoroughly with warm tap water. Our Filter Clean concentrated cleanser is a safe, effective way to clean and re-use your filters and our Jet Clean plumbing cleanser cleans the inside of all plumbing in your hot tub. Call 727.573.9611 to order these easy-to-use cleaning products.

How often should I drain my hot tub?

You should drain and refill your hot tub every 1-3 months depending on usage. Every other time you drain and refill, you should also replace the filters and wipe down the hot tub (see pages 60).

How do I adjust my jet?

Simply turn the jets counterclockwise to open and clockwise to close. Be careful not to overturn the jets, as damage can occur.

⚠ Caution: Do not turn off too many jets at the same time. This can create backflow and possible damage to your hot tub!

Are the jets removable? Interchangeable? Replaceable?

Most jets are made removable and adjustable for customized hydrotherapy.

How do I use aromatherapy (if equipped)?

- Remove scented bead cartridge from plastic cover.
- Twist off aromatherapy injector valve cap located on top of hot tub.
- With the scented bead cartridge in your hand, splash water into it from your other hand.
- Insert cartridge into the injector.
- Replace cap and tighten.



Turning on the pump activates the aromatherapy via the jets.

T r o u b l e s h o o t i n g

If a problem arises, you can check this list for a quick solution. If this does not resolve your problem, please call our customer care center, at 727.573.9611. Additional information is also available at www.PremiumLeisure.com. You will need your serial number to access this site.

Important – Most problems can be quickly resolved by resetting the GFCI breaker. Try this first before proceeding.

XP1 and XP2 Troubleshooting

PROBLEM	CAUSE	SOLUTION
Breaker trips	Wiring error	Spa Neutral wire not connected to GFCI (connected to Neutral bus)
	Wrong GFCI	GFCI breaker is wrong size. For XP1 and XP2 ensure you use ONLY a Siemens GFCI breaker.
	Dirty filters	Thoroughly clean filters. If problem persists, oils may have accumulated in the hot tub. Flush and rinse plumbing. Drain and thoroughly clean shell (see pages 60).
Foamy Water	Soaps, skin oils, or undissolved sanitizer particles	Close the air control valves and allow filtration cycle to run Add defoamer Drain and clean hot tub Clean or change filters Rinse all bathing suits before bathing
Leak	Loose connection	Check and hand-tighten unions at heater & pumps, or clamps on jets
	Drain open	Close drain valve or replace cap
Light doesn't work	LED burnt out	Replace LED light
	Loose wire	Check wiring harness to LED
	Loose plug	Reseat L1 plug on hot tub pack
Low/no jet pressure	Air lock	Bleed air from the system (page 47)
	Dirty filter	Check and clean or replace filter
	Closed jets	Open all jets by turning CCW
	Closed valves	Open all T-handle shutoff valves on heater and pumps
	ACV open	Close air control valves
	Low water	Fill hot tub 1" above all jets
Moved my hot tub and now it	Wiring error at GFCI	Check Neutral wiring of GFCI (see diagrams on pages 10-21)

PROBLEM	CAUSE	SOLUTION
doesn't work	No power to hot tub	Reset circuit breakers on GFCI panel and main circuit breaker panel
Nothing works	Breaker has tripped	Check and reset breaker. If problem persists, check for loose electrical connections. Check for Neutral wiring error at GFCI.
Pump not running	No power to hot tub	Reset circuit breakers on GFCI panel and main circuit breaker panel
Pump runs continuous	Normal	Hot tub is set for 12x2 filtration. Readjust if necessary.
VST not working	Pump not turned on	Check that the pump (2 or 3) is turned on for that VST seat (see page 37-40). Check connections on VST interface box.
Speaker does not pop up	Speaker mechanism broken	Replace speaker.
Water does not flow	Air lock	Bleed air from the system (page 47)
	Closed jets	Open all jets by turning counterclockwise
	ACV open	Close air control valves
Water too hot	High set temperature	Turn down set temperature on topside control panel
	High ambient temperature	Remove the cover from the hot tub
Water will not heat	Thermostat is set too low	Check and reset to desired temperature
	Air open	Close air control valve
	Dirty filter	Check and clean filter
	Blown fuse	Check and replace fuse
	Slide valve closed	Check and open all valves
	Cover off	Put cover back on hot tub
	Hot tub in Standby	Press the Standby button and take hot tub out of Standby

Error Codes: XP1 and XP2

CODE	DESCRIPTION	CORRECTIVE ACTION
COM	Topside error	<ul style="list-style-type: none"> • Swap topside plug position (C1 to C2) • Change topside control panel
bL Er	Device not detected	<ul style="list-style-type: none"> • Open the access panel to spa pack and reseal corresponding plug (see page 53)
O3 Er		<ul style="list-style-type: none"> • Reset GFCI breaker
P1 Er	Or	<ul style="list-style-type: none"> • Reset Br and LL settings (see page 53)
P2 Er	Air-locked	<ul style="list-style-type: none"> • Bleed air from system (see page 47)
P3 Er	pump	

CODE	DESCRIPTION	CORRECTIVE ACTION
Rh Er	Heater malfunction	<ul style="list-style-type: none"> • Reseat both red heater plugs • Change heater
Rh HL	Water high limit temp. exceeded	<ul style="list-style-type: none"> • Add cold water to hot tub (see <i>Filling Your Hot Tub</i> on page 24) • Turn on Pump 1 to circulate water • Shade hot tub from intense direct sun with Gazebo or other structure
Rh nC	Heater not connected properly	<ul style="list-style-type: none"> • Open the access panel to spa pack and reseat small red "Rh" plug • Remove red "Rh" plug and check for bent pins – remove red collar • Reset GFCI breaker
Rh nf	Water not flowing properly	<ul style="list-style-type: none"> • Check for closed jets and closed slide valves on heater and pumps • Check for dirty filter/plugged return line • Check for proper water level (see <i>Filling Your Hot Tub</i> on page 24) • Close air control valves
Rh nH	No heat	<ul style="list-style-type: none"> • Open the access panel to spa pack and reseat both red heater plugs • Reset GFCI breaker • Reset Br and LL settings (see page 53)
SP br	Improper BR setting	Administer BR current to proper setting (see <i>Low-Level Settings</i> on page 53)
SP F1	F1 blown	Change F1 (Buss Fuse Class G #SC-20)
SP F2	F2 blown	Change F2 (Buss Fuse Class G #SC-30)
SP F3	F3 blown	Change F3 (Buss Fuse Class G #SC-30)
SP Hr	Internal hardware error	<ul style="list-style-type: none"> • Reset circuit breakers on GFCI panel and main circuit breaker panel • Turn on/off all pumps and accessories
SP in	Input voltage low	<ul style="list-style-type: none"> • Check incoming voltage to GFCI • Check incoming voltage to spa pack
SP OH	Water temperature overheat	Open the hot tub cover and add cold water through the filter
SP Ot	Internal overheat	<ul style="list-style-type: none"> • Open the access panel to the spa pack (below the control panel) and allow two hours to cool down • Reset GFCI breaker

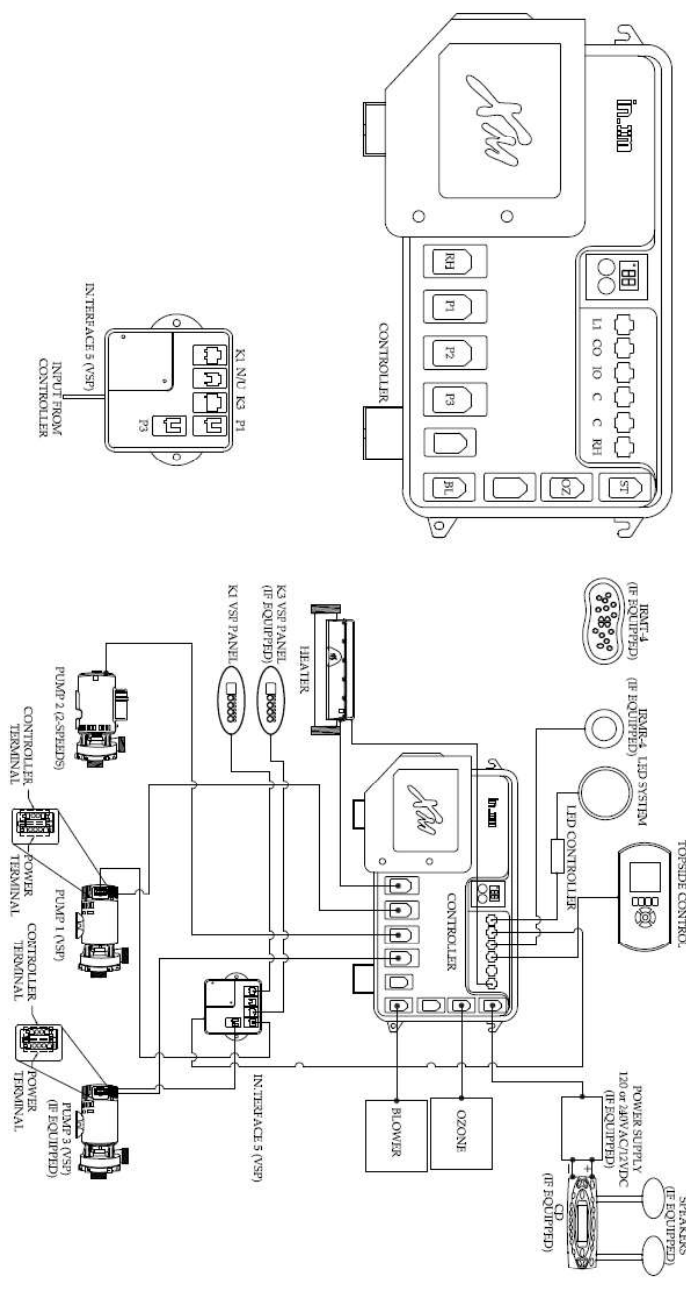


Figure 35 – Functional Diagram for XP1 and XP2.

Low-level Settings: XP1 and XP2

The spa pack – located inside the hot tub below the topside control panel – has a service panel used to set low-level programming options. During troubleshooting, you may need to check or reset these settings.

Resetting the Spa Pack



To reset the spa pack, press the Select button twice.

Resetting the Low-Level and Breaker Setting

To reset the low-level setting (LL), press and hold down the Select button for 5 seconds. Use the Change button to set LL **even if it is the present value**. Press Select to save (breaker settings appear next).

Model	LL
XP1	01
XP2	02

After setting LL, the breaker current setting (Br) appears. Press the Change button to select the appropriate value for your configuration and then press Select to save.

Configuration	Br	Ph
240V 60Hz	48	-
240V 50Hz 1φ	32(16)	1
240V 50Hz 2φ	16	2
240V 50Hz 3φ	16	3

For export spas, press the change button to select the number of phases. (Be sure the copper jumper configuration on the power terminal matches the phase number.)

Figure 36 - Spa Pack Callouts



Passion/Essence/Desire/Pure/Pristine Troubleshooting

PROBLEM	CAUSE	SOLUTION
Breaker trips	Wiring error	Load Neutral wire not connected to GFCI (connected to Neutral bus)
	Wrong GFCI	GFCI breaker is wrong size
	Ozonator (or blower) wet	Remove tube from ozonator (or blower) and allow 2 days to dry out
Foamy water	Soaps, skin oils, or undissolved sanitizer particles	Close the air control valves and allow filtration cycle to run Add defoamer Drain and clean your hot tub Clean or change filters Rinse all bathing suits before bathing
Leak	Loose connection	Check and hand-tighten unions at heater & pumps, or clamps on jets
	Drain open	Close drain valve or replace cap
Light doesn't work	LED burnt out	Replace bulb
	Loose wire	Check wiring harness to LED
	Loose plug	Reseat J20 plug on hot tub pack
Low/no jet pressure	Air lock	Bleed air from the system (page 47)
	Dirty filter	Check and clean or replace filter
	Closed jets	Open all jets by turning CCW
	Closed valves	Open all T-handle shutoff valves on heater and pumps
	ACV open	Close air control valves
	Low water	Fill hot tub 1" above all jets
Moved my hot tub and now it doesn't work	Wiring error at GFCI	Check Neutral wiring of GFCI (see diagrams on pages 10-21)
	No power to hot tub	Reset circuit breakers on GFCI panel and main circuit breaker panel
Nothing works	Breaker has tripped	Check and reset breaker. If problem persists, check for loose electrical connections. Check for Neutral wiring error at GFCI.
	Fuse blown	Check for blown Fuse 4 (F4) inside of spa pack.
Pump not running	No power to hot tub	Reset circuit breakers on GFCI panel and main circuit breaker panel
Water does not flow	Air lock	Bleed air from the system (page 47)
	Closed jets	Open all jets by turning counterclockwise
	ACV open	Close air control valves
Water too hot	High set temperature	Turn down set temperature on topside control panel
	High ambient temperature	Remove the cover

PROBLEM	CAUSE	SOLUTION
Water will not heat	Thermostat is set too low	Check and reset to desired temperature
	Air open	Close air control valve
	Dirty filter	Check and clean filter
	Blown fuse	Check and replace fuse
	Slide valve closed	Check and open all valves
	Cover off	Put the cover back on
	Hot tub in Economy mode	Press the Standby button and take out of Economy

Error Codes: Passion, Essence, Desire, Pure, Pristine

MESSAGE	MEANING	ACTION REQUIRED
<i>(none)</i>	No message on display. Power has been cut off to hot tub.	The control panel is disabled until power returns. Hot tub settings are preserved.
OHH HH	The hot tub has shut down from high heat detection. One of the sensors detected 118°F (48°C) at the heater.	Do not enter the water. Remove the cover and allow the water to cool. Once cool, push any button. If the hot tub does not reset, turn off the GFCI and call service.
OHS OH	The hot tub has overheated and shut down. One of the sensors detected that the hot tub water is 110°F (43°C).	Do not enter the water. Remove the cover and allow the water to cool. At 107°F (42°C), the hot tub resets automatically. If the hot tub does not reset, turn off the GFCI and call service.
ICE IC	Potential freeze condition detected (Ice)	No action required. The pump will automatically operate regardless of the hot tub status.
SnA SA	Sensor A is not working correctly. Hot tub is shut down.	Check the sensor "A" plug connection to circuit board. The problem may appear temporarily in an overheat situation and disappear when the heater cools. If the problem persists, contact service.
SnB SB	Sensor B is not working correctly. Hot tub is shut down.	Check the sensor "B" plug connection to circuit board. The problem may appear temporarily in an overheat situation and disappear when the heater cools. If the problem persists, contact service.

MESSAGE	MEANING	ACTION REQUIRED
SnS Sn	Sensors are out of balance.	If this alternates with the temperature, it may be temporary. If the display shows only this message (periodically blinking), the hot tub is shut down. If the problem persists, contact service.
HFL HL	A substantial difference between sensors was detected (possible flow problem).	Check water level in hot tub and add water if necessary. Be sure that slide-valves are open. Make sure the pump is primed and has power. If the problem persists, contact service.
LF	<i>Low Flow</i> – persistent problem. Displays after the fifth occurrence of the "HL" message within 24 hours. Heater shuts down but other hot tub functions run normally.	Heating ability of the hot tub will not reset automatically; press any button to reset.
dr	Inadequate water, poor flow, or air bubbles detected in the heater. Hot tub is shut down for 15 minutes.	Check the water level and add water if necessary. Be sure that slide-valves are open. Make sure the pump is primed and has power. Press any button to reset (automatically reset within 15 minutes). If the problem persists, contact service.
drY dy	Inadequate water detected in heater. Displays on third occurrence of "dr" message. Hot tub is shut down.	Check water level in hot tub. Add water if necessary. Be sure that slide-valves are open. Make sure the pump is primed and has power. Press any button to reset.
Pr	When the hot tub is first activated, it goes into Priming mode.	The Priming mode runs for up to four minutes and then the hot tub begins to heat and maintain the water temperature in Standard mode.
-- F	Temperature unknown	After the pump has been running for two minutes, the temperature will be displayed.
-- C	Temperature unknown	After the pump runs for two minutes, the temperature displays
---	Temperature not current	The hot tub is in either Economy or Sleep modes and the pump has not run for a while. To view the current temperature, switch to Standard mode or operate Jets 1 for at least one minute.

MESSAGE	MEANING	ACTION REQUIRED
SbY	Hot tub is in standby mode	Press any button except Jets 1 to leave Standby mode.
PHL	pH is low	Add pH increaser (pH up)
PHH	pH is high	Add pH decreaser (pH down)
SAL	Sanitizer is low	Add sanitizer
SAH	Sanitizer is high	Remove hot tub cover and allow sanitizer to evaporate
drn	Pump is on during Standby mode to assist in draining the water	Press Jets 1 to turn off pump once the water has drained out
rtC	Hardware failure	Contact customer service
PSf	Hardware failure	Contact customer service
CrC	Firmware install problem	Contact customer service if this message appears on more than one power up
CFE	Configuration error. Hot tub cannot start up	Contact customer service
9FI	Could not trip GFCI	Contact customer service and do not use the hot tub.
StU	Pump appears to be stuck on	Contact customer service and do not use the hot tub
Hot	Pump was stuck on the last time it was powered on	Contact customer service and do not use the hot tub

Reminder Messages

Message	Frequency	Action Required
rPH	7 days	Test and adjust pH chemical levels.
rSA	7 days	Test and adjust sanitizer chemical levels.
rCL	30 days	Remove, clean, and reinstall filter.
rt9	30 days	Test & reset GFCI breaker.
rdr	90 days	Drain and refill hot tub.
rCO	180 days	Clean and condition cover.
rtr	180 days	Clean and condition exterior surfaces.
rCH	365 days	Install new filter.
rCA	As needed	Install new Mineral cartridge.

Maintenance and Care

Important – The warranty on your hot tub and equipment depends on proper sanitation (see page 60). In addition, the following maintenance procedures must be followed periodically.

Cabinets

Your cabinet is made from a polymer that combines the durability of plastic with the beauty of simulated wood. To clean the cabinet, a mild soap and water solution easily removes residue.

Cover

The 5-inch thick tapered cover on your hot tub is made from a weatherproof marine-grade vinyl. Your cover will last much longer if you heed the following suggestions:

- 1) Don't drag the cover on the ground; wearing of the vinyl could easily develop into a tear.
- 2) The insulating foam in your cover is not designed to hold the weight of a person or an animal.

Important – Cracked foam in the cover is not covered under warranty! Do not stand on it.

- 3) Occasionally clean the inside of your cover with our special All Purpose Cleaner rinsed with warm water. (Using soap or vinyl cleaners on the inside of your cover causes foamy water.) Call our order line at 727.573.9611 to order our All Purpose Cleaner.
- 4) Our special Vinyl Cover Cleaner applied to the outside of the cover and stitching once yearly will keep your cover looking better longer. Call our order line at 727.573.9611 to order our special Vinyl Cover Cleaner.
- 5) Do not lift the cover by the safety straps, they are made to secure the tub to the cabinet and may tear.

Draining and Refilling

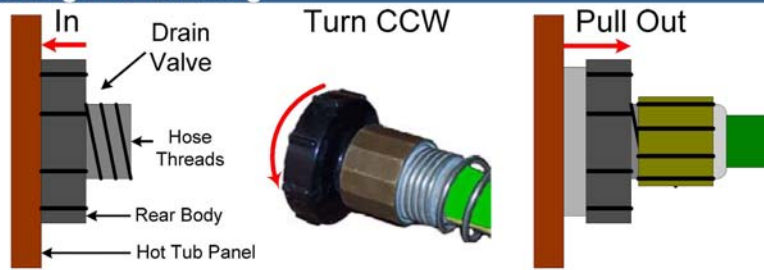


Figure 37 - Drain Operation

- 1) Turn off the GFCI breaker.
- 2) Remove hot tub cover and allow water to cool down.
- 3) Select a safe, suitable drainage area capable of safely assimilating 300 plus gallons of water that may contain unsanitary contaminants and chemical residue that could cause harm to plants or grass.
- 4) Locate drain valve at front of the hot tub (see page 22). Hold the rear body to prevent it from turning, then loosen and remove the front cap.
- 5) Attach a garden hose to the exposed threads and route the hose downhill to your drainage area.
- 6) Twist the drain fitting 1/3 turn counterclockwise to unlock the drain valve and pull it outward to open completely. The water will drain by gravitational flow.
- 7) After the hot tub drains, perform steps 3-5 in reverse order to close the drain prior to refilling hot tub.
- 8) Attach the garden hose to a thoroughly-flushed pre-filter (not included, rinsed of all residual sediment) and refill your hot tub through the filtration canister.
- 9) After refilling, turn on the GFCI breaker to the hot tub.

If the pump runs but no water flows, see page 47 to see how to bleed air from the system.

Filters

The filters in your hot tub should be removed and cleaned every 2 weeks with our special Filter Clean concentrated cleanser and typically replaced every 4-6 months (depending upon use). You can clean your filters with the water pressure from the end of a garden hose then rinsed with warm water. This ensures that the water is being filtered properly.

DO NOT USE BLEACH. We recommend having replacement filters on hand that can be swapped between cleanings. Doing so enables you to quickly exchange the dirty filters with clean ones and immediately start your hot tub again. Call our order line at 727.573.9611 to order replacement filters and our special Filter Clean concentrated cleanser.

Jets

Remove and clean the jets as needed using our special our Jet Clean plumbing cleanser, water, and a cloth or soft-bristled brush. Call our order line at 727.573.9611 to order our special our Jet Clean plumbing cleanser.

Light

Drain the hot tub and clean the light lens as needed using an optical cloth and an eyewear cleaning product specifically designed not to scratch optical surfaces. If the back side of the lens is also dirty remove the rear panel, remove the light from the holder, and clean in this same manner.

Pillows

Remove and clean the headrest pillows as needed using our Citra Bright Spray Cleaner and our Tub Rub cleaning pad and rinsed thoroughly with warm water. Call our order line at 727.573.9611 to order our Citra Bright Spray Cleaner and our Tub Rub cleaning pad.

Sanitation

Sanitation level is influenced by two factors:

1. Filter Cycle (filtration) time
2. How much you use your hot tub each week

If your water chemistry and water clarity are all proper and your sanitation level is still too low/high, you can adjust the sanitation intensity up/down by adding more/less sanitizer a little at a time and testing the water again after two days.

Shutdown / Winterizing



Your Sterling Leisure hot tub is designed to operate year round. If you plan to leave your hot tub unused for long periods of time in severely cold weather, you should winterize your hot tub to avoid accidental freezing due to a power or equipment failure.

We highly recommend that you have a hot tub professional winterize and restart your hot tub.

⚠ WARNING: Damage from improperly winterizing or restarting your hot tub is not covered under your warranty. You can call our customer care center, at 727.573.9611 for recommended service organizations to assist you in properly winterizing your hot tub.

Surface

The acrylic surface of your hot tub should be cleaned with our Citra Bright Spray Cleaner and our Tub Rub cleaning pad and thoroughly rinsed with warm (not cold) water before refilling. (See also page 60.) Call our order line at 727.573.9611 to order cleaners.

⚠ WARNING: NEVER use paint solvents, acids, acetone, benzene, lacquer thinner, toluene, xylene, or similar chemicals to clean your hot tub shell.

Water Management

Our chemical water purification system is a perfect match for your hot tub.

Depending on usage, the water in your hot tub should be changed every 1-3 months. Upon each change of water it is a good practice to wipe down the hot tub.

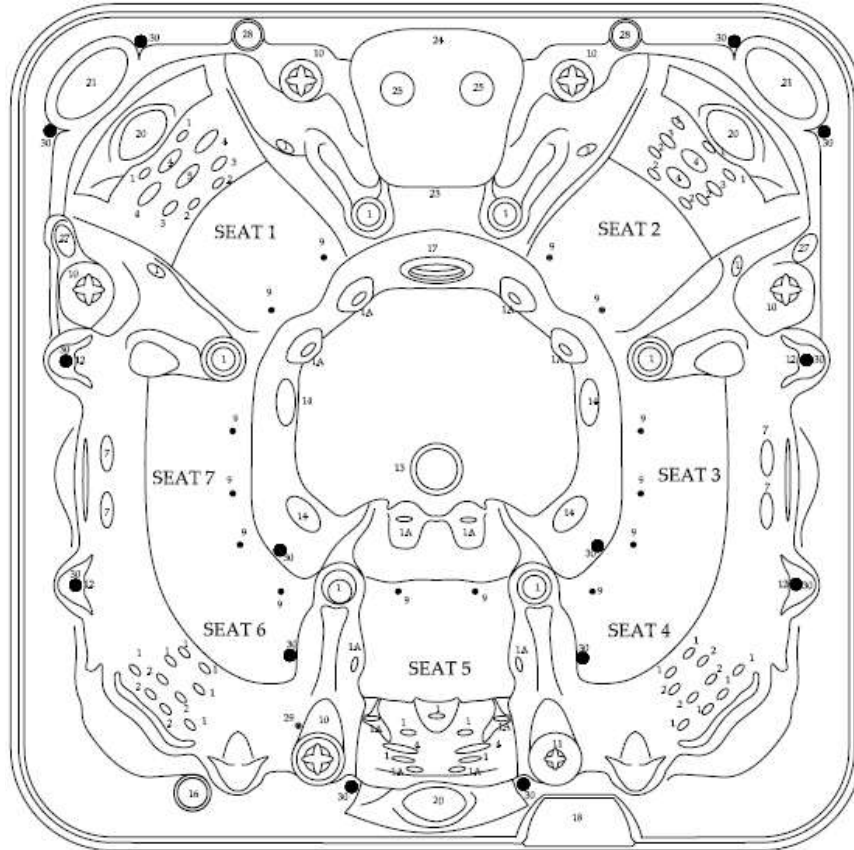
If your water quality seems improper, increasing the time the hot tub filters the water (see pages and 43) may clear up your problem.

Below are some answers to common water chemistry questions.

pH	It is common to have pH fluctuations after adding chemicals to your hot tub or after a party. Let your jets run and give your water time to stabilize. 9 times out of 10, your pH will come back into the 7.2-7.8 range on its own.
MILDEW on cover	Mildew usually grows in the folds and seams of your cover and then drips into your hot tub water causing cloudiness and/or odor. Clean with our special Citra Bright Spray Cleaner and then rinse the inside of your cover with clean warm water.
Foamy water	Foam typically results from soap residue on your skin and hair, or laundry detergent residue on clothing. Take a soapless shower and rinse all clothing in warm water prior to bathing.
CLEAR green or brown water	Your "source water" most likely has dissolved heavy metals. When this is the case, order our special Metal Gon metal remover. Using a pre-filter can remove these contaminants before they get into your hot tub (see page 24).
CLOUDY green water	Algae can be resolved by adding a respected brand of algaecide.
CLOUDY white water	Although a normal condition immediately after filling that dissipates after time, with stabilized water this is a visual indication that the total alkalinity or pH or both are at improper levels. Test your water weekly and maintain proper water chemistry (see page 28).
ODOR and/or CLOUDY water	If your water develops an odor and/or cloudiness, clean your cover and filters and try increasing the amount of time the hot tub filters per day by turning your filtration cycle time or duration up.
HEAVY use	After a period of heavy use, your hot tub may cloud. Shock your hot tub with 2 ounces of non chlorine shock and wait 36 hours.

Specifications

XP1



Specifications*

Dimensions	92"L x 92"W x 36"D
Seats	7 (2 VST)
Water Jets	74
Air Jets	14
Capacity	350 USG /1325 L
Dry Weight	1000 Lbs/454 Kg
Filled Weight	3916 Lbs/1776 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A (SIEMENS ONLY)

* Specifications are subject to change without notice.

XP1 Callouts

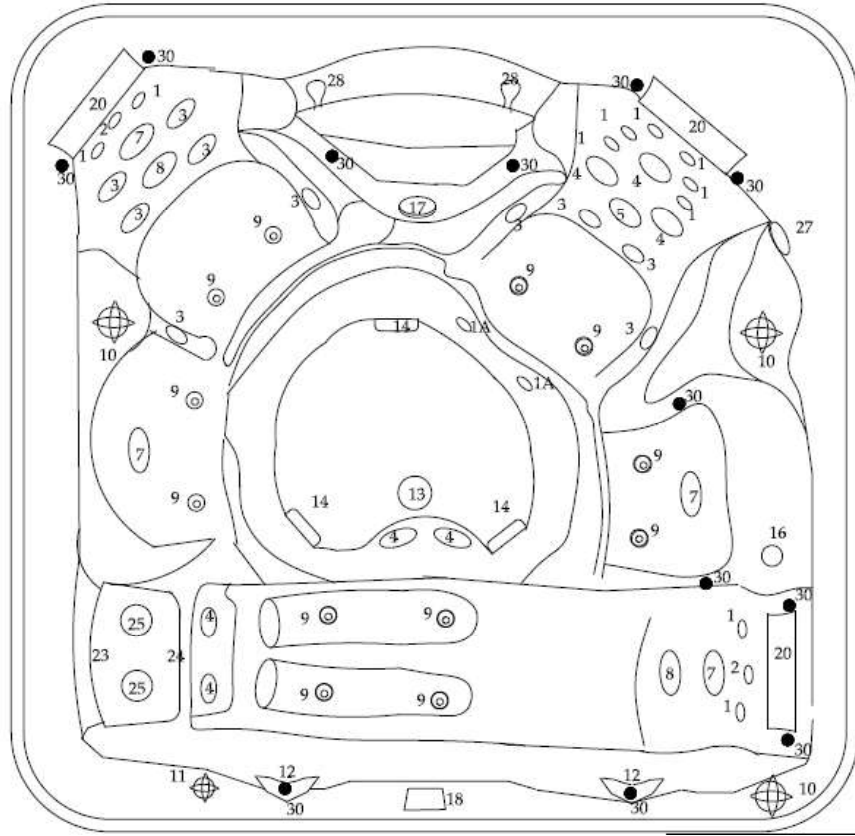
Label	Part#	Description
1	212-1509DSGSS 218-5150; 212-1550G	Jet Directional 2" (Gr); Compensator Ring 2" Body Jet 2" w. gasket, nut
1A	820478, 606475, 608476	Assy. ozone cluster(s.s. face, body, 90 ell)
2	212-1529DSGSS 218-5150; 212-1550G	Jet Pulsator 2" (Gr); Compensator Ring 2"; Body Jet 2" w. gasket, nut
3	212-7929DSGSS 718-6960; 212-0300G	Jet Mini storm Dir. 3" (Gr); Compensator Ring 3"; Body, Jet 3" w. Gasket, Nut
4	212-8169DSGSS 218-4010; 212-0400G	Jet Poly storm Directional 4" (Gr); Compensator Ring 4"; Body, Jet 4", Gasket, Nut
5	212-8179DSGSS 218-4010; 212-0400G	Jet Poly storm Twin Roto 4" (Gr); Compensator Ring 4"; Body, Jet 4", Gasket, Nut
7	212-7639DSGSS 212-6680; 212-0040G	Jet, Directional 5"(Gr); Compensator Ring 5"; Body, Jet 5", Gasket, Nut
8	630-0038	Cup holder LED light Assy
9	7822	Air Injector (Graphite)
10	621471	Cross Air control 1" Gr-Silver
11	621473	Cross w waterfall Valve 1" Gr-Silver
12	630-0038	Cup holder LED light Assy
13	640-4449DSG, 7379	Floor Drain (Graphite), Drain Valve, Economy
14	1215, 1216, 1217, 1218	Suction VGB 170GPM(GR)
16	621085, 1206	Aroma Therapy Injector (Gr), Cartridge
17	1219, 218-6680, 7096	Light Kit 5", 5" comp. ring, LED light
18	515518, 7514	Topside IN. K600 (Gr), Overlay (Gr)
20	823500	Pillow (Gr)
21	1141	Speaker oval Pop-up
23	822353	Filter Grill (Gr)
24	822354	Filter Lid(Gr)
25	6136	50 sq. ft. Cartridge Filter
27	5151092	VSP panel
28	675-0809DSG	Pop-Up Water feature(Gr)
29	515504, 515501	Remote Control IRMT/Receiver IRMR
30	3115, 3122, 3124,3123, 3126, 3129, 3130, 630-0038	LED contr, 21_LED Light, Quad Daisy chain, Dual Daisy chain, 1" FRST lens, nut, o-ring, cup holder LED

XP1 Parts

#	Description
7136	2 speed Motor 230V, 60Hz, 12/4.4A
310114SD 515170	Wet end 310-1740 8ft 2-speed cord
5131089	Variable Speed Motor 230V, 60Hz, 8A
310114SD 5151105	Wet end 310-1720 8ft VS cord
5151091	Pump interface cable
5151090	Interface VS controller
3801, 515193	Blower, Max Air w/cord 4ft. 240V, 50/60Hz, 2.5A
1261	Equipment Pack
515121	Heater
5050, 515193, 7395	Ozonator w/ Cord injector

#	Description
5952	Prospec Power Supply
515193	4' cord
6148	Gecko Stereo Receiver
6153	Tuner Antenna
515153	Electrical Junction Box
515152	Cord
xxxxx	Cover (92"x92") R12
7876	Owner's Manual
5547	Siemens 60 A GFCI

Specifications*



Dimensions	82"L x 82"W x 36"D
Seats	5 (1 VST)
Water Jets	38
Air Jets	12
Capacity	235 USG /890 L
Dry Weight	780 Lbs/355 Kg
Filled Weight	2740 Lbs/1245 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A (SIEMENS ONLY)

* Specifications are subject to change without notice.

XP2 Callouts

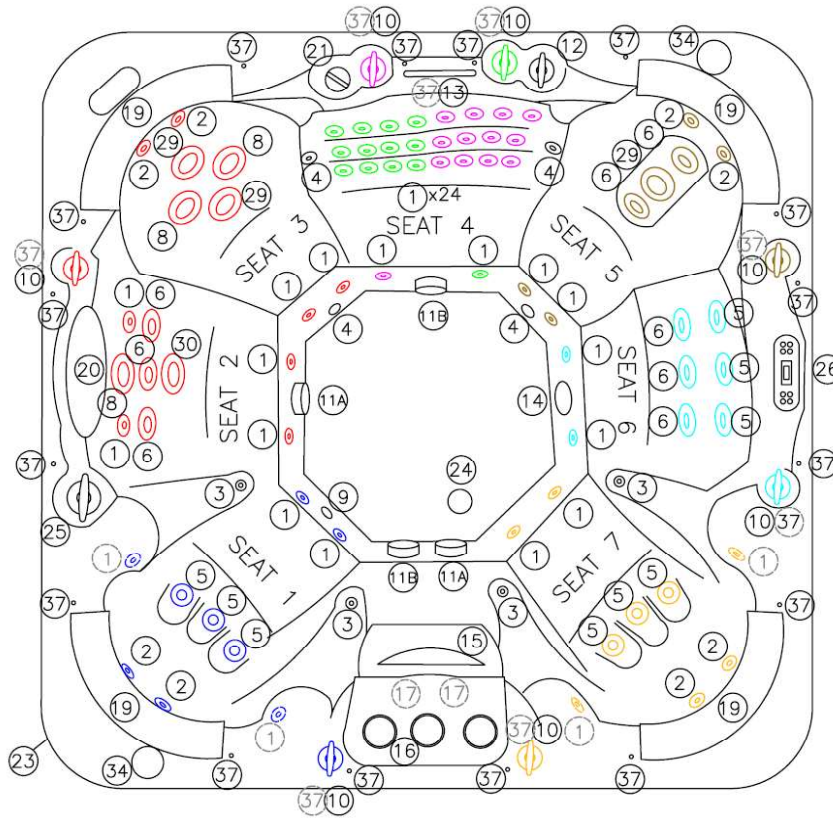
Label	Part#	Description
1	212-1509DSGSS 218-5150; 212-1550G	Jet Directional 2" (Gr); Compensator Ring 2" Body Jet 2" w. gasket, nut
1A	820478, 606475, 608476	Assy. ozone cluster(s.s. face, body, 90 ell)
2	212-1529DSGSS 218-5150; 212-1550G	Jet Pulsator 2" (Gr); Compensator Ring 2"; Body Jet 2" w. gasket, nut
3	212-7929DSGSS 718-6960; 212-0300G	Jet Mini storm Dir. 3" (Gr); Compensator Ring 3"; Body, Jet 3" w. Gasket, Nut
4	212-8169DSGSS 218-4010; 212-0400G	Jet Poly storm Directional 4" (Gr); Compensator Ring 4"; Body, Jet 4", Gasket, Nut
5	212-8179DSGSS 218-4010; 212-0400G	Jet Poly storm Twin Roto 4" (Gr); Compensator Ring 4"; Body, Jet 4", Gasket, Nut
7	212-7639DSGSS 212-6680; 212-0040G	Jet, Directional 5"(Gr); Compensator Ring 5"; Body, Jet 5", Gasket, Nut
8	630-0038	Cup holder LED light Assy
9	7822	Air Injector (Graphite)
10	621471	Cross Air control 1" Gr-Silver
11	621473	Cross waterfall Valve 1" Gr-Silver
12	630-0038	Cup holder LED light Assy
13	640-4449DSG, 7379	Floor Drain (Graphite), Drain Valve, Economy
14	1215, 1216, 1217, 1218	Suction VGB 170GPM(GR)
16	621085, 1206	Aroma Therapy Injector (Gr), Cartridge
17	1219, 218-6680, 7096	Light Kit 5", 5" comp. ring, LED light
18	515518, 7514	Topside IN. K600 (Gr), Overlay (Gr)
20	823500	Pillow (Gr)
21	1141	Speaker oval Pop-up
23	822353	Filter Grill (Gr)
24	822354	Filter Lid(Gr)
25	6136	50 sq. ft. Cartridge Filter
27	5151092	VSP panel
28	675-0809DSG	Pop-Up Water feature(Gr)
30	3115, 3122, 3124,3123, 3126, 3129, 3130, 630-0038	LED contr, 21_ED Light, Quad Daisy chain, Dual Daisy chain, 1" FRST lens, nut, o-ring, cup holder LED

XP2 Parts

#	Description
7136	2 speed Motor 230V, 60Hz, 12/4.4A
310114SD 515170	Wet end 310-1740 8Ft 2-speed cord
5131089	Variable Speed Motor 230V, 60Hz, 8A
310114SD 5151105	Wet end 310-1720 8Ft VS cord
5151091	Pump interface cable
5151090	Interface VS controller
3801, 515193	Blower, Max Air w/cord 4ft. 240V, 50/60Hz, 2.5A

#	Description
1261	Equipment Pack
515121	Heater
5050, 515193, 7395	Ozonator w/ Cord injector
5952 515193	Prospec Power Supply 4' cord
6148 6153	Gecko Stereo Receiver Tuner Antenna
515153 515152	Electrical Junction Box Cord
xxxxx	Cover (82.5"x82.5") R12
7876	Owner's Manual
5547	Siemens 60 A GFCI

Passion (Model 2009)



Specifications*

Dimensions	93"L x 93"W x 38"D
Seats	7
Water Jets	85
Air Jets	0
Capacity	420 USG /1590 L
Dry Weight	1090 Lbs/495 Kg
Filled Weight	4000 Lbs/1814 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A

- Specifications are subject to change without notice.

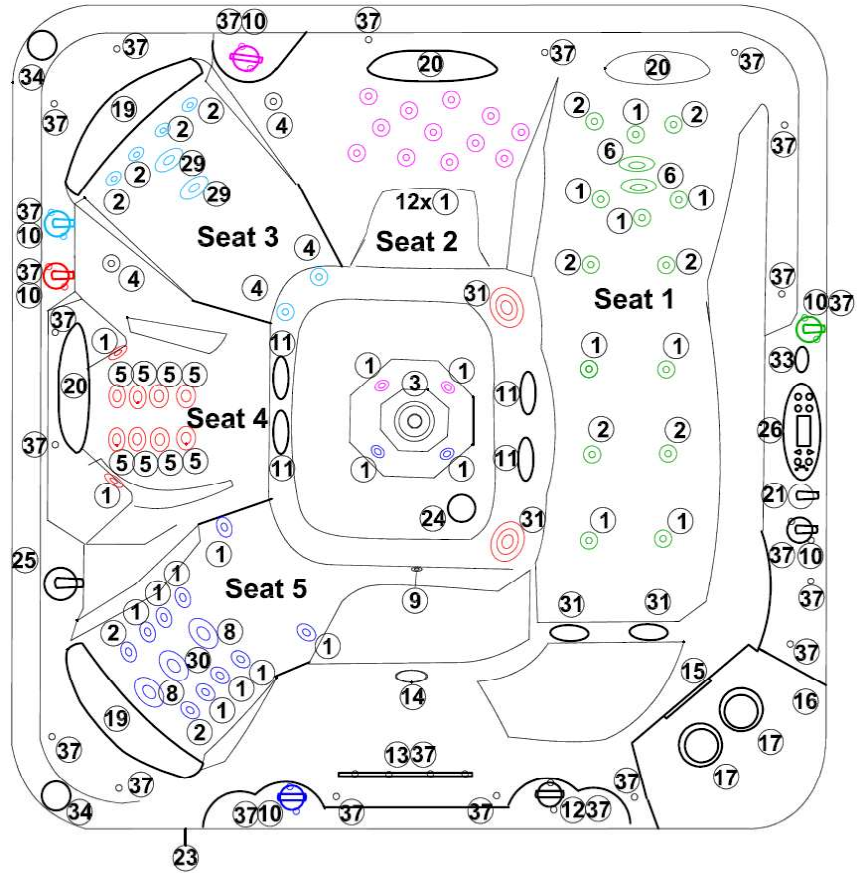
Passion Callouts

REF. #	ITEM DESCRIPTION	PART #	QTY	NOTES
1	ADJ. CLUSTER STORM JET (DIR)	212-1550G, 218-5150, 212-1509DSGSSSM	44	
2	ADJ. PULS. CLUSTER STORM JET	212-1550G, 218-5150, 212-1529DSGSSSM	8	
3	OZONE/CLUSTER JET	211-0320G, 711-9860, 212-9879DSGSS	4	
4	NON ADJ. CLUSTER JET	212-1550G, 218-5150, 212-1499SS	4	
5	MINI ROTO JET	212-0300G, 718-6960, 212-7939DSGSSSM	9	
6	POLY STORM TWIN ROTO JET (LARGE FACE)	212-0400G, 218-4010, 212-8179DSGSSSM	8	
7	ADJ. CLUSTER STORM JET (GRAPHITE)	212-1550G, 218-5150, 212-1549DSG	0	
8	POWER STORM JET (DIR.)	212-0040G, 218-6680, 212-7639DSGSSSM	3	
9	WALL FITTING (GRAPHITE)	7818	1	
10	AIR CONTROL	HS6603569DSGS	7	
11A	HI-FLO SUCTION (200GPM)	640-3609DSG (90)	2	
11B	HI-FLO SUCTION (200GPM)	640-3639DSG (STR)	2	
12	WATERFALL VALVE	HS6004359DSGS	1	
13	WATERFALL 6"	675-4008L (CLEAR)	1	
14	LIGHT ASS. W. LED	1219	1	
15	WEIR DOOR FILTER (100 SQ. FT)	HS550109S	1	
16	FILTER LID	7902	1	
17	47 SQ. FT FILTER CARTRIDGE	6136	2	
18	PILLOW 9"	3035	0	
19	PILLOW	3036	4	
20	PILLOW FLAT OVAL	3034	1	
21	AROMATHERAPY INJECTOR, AROMA GARDENIA	HS6702819DSG, 1206	1/1	
22	POWER SUPPLY 115VAC/12VDC/15A	6151	1	
23	ACRYLIC 100" X 100"	GR 7021100100	1	
24	SPA FLOOR DRAIN(OZONE FIT.)	6404449DSG	1	
25	DIVERTER VALVE 2"	HS6003069DSGS	1	
26	SPA SIDE CONTROL, OVERLAY	52798, 11638	1	ML700
27	AUX. SPA SIDE	52682	0	AX20(OPTION)
28	SPA COVER (BROWN,GRAY)	7888,7887	1	93 X 93 X 10RC H21
29	POWER STORM JET (MASSAGE)	212-0040G, 218-6680, 212-7749DSGSSXM	3	
30	POWER STORM JET (ROTO)	212-0040G, 218-6680, 212-7609DSGSSSM	1	
31	POLY STORM DIR. JET (LARGE FACE)	212-0400G, 218-4010, 212-8169DSGSSSM	0	
32	POLY STORM ROTO JET	212-0400G, 218-4010, 212-8019DSGSS	0	
33	AM-FM RADIO/CD, ANTENNA, BEZEL,REMOTE	6148,6153,6149,6150	1/1/1/1	
34	SPEAKERS, SUB WOOFER	675-0319DSG, 6152	2/1	
35	SPA PANELS (CORNER R10 X32", GAP LAP TRIM 32")	7728/7729, 7783/7782	8/8	RED OAK, GRAY SLATE
36	SPA PANELS (SIDING 3" X 32", 3" X 27", 6" X 27")	7727/7704/7725, 7781/7775/7779	56/36/4	RED OAK, GRAY SLATE
37	LEDS SYSTEM WITH AUDIO UNIT, RGA CABLE	3119,3120,3121,3122,3123,6154,6337078	1/1/6/1/5/1/16	

Passion Parts

ELECTRICAL CONTROL HS2000	55012	1	240V, 48A, 60HZ
PUMP 1 ASS.(MOTOR, CORD, WETEND, P. UNION)	7136, 6023, 310-1750HS, 400-5650	1	230V, 12/4.4A, 3HP, 60HZ (SEAT 4+WF)
PUMP 2 ASS.(MOTOR, CORD, WETEND, P. UNION)	4732, 6024, 310-1750, 400-5650	1	230V, 16A, 4HP, 60HZ (SEATS 1+2+3 OR SEATS 5+6+7)
CIRC. PUMP ASS. (MOTOR, CORD, WETEND, P. UNION)	6163, 6166, 6101001, 400-4060	1	115V, 1.3A, 1/12HP, 60HZ (JETS J4+J9+J24)
BLOWER	3801	0	115V, 1HP, 60HZ
OZONE GENERATOR	7095	1	115V, 60HZ
OWNER'S MANUAL	7876	1	STERLING LEISURE

Essence (Model 2008)



Specifications*

Dimensions	91"L x 91"W x 37"D
Seats	6
Water Jets	71
Air Jets	0
Capacity	380 USG /1438 L
Dry Weight	1010 Lbs/458 Kg
Filled Weight	4178 Lbs/1895 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A

* Specifications are subject to change without notice.

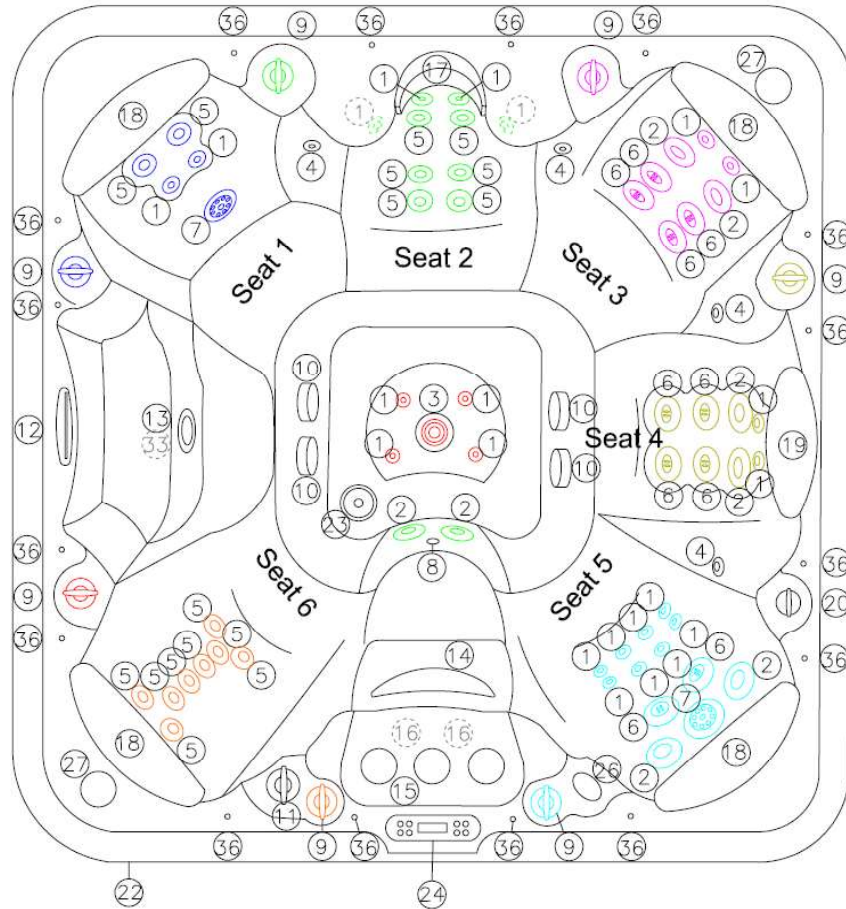
Essence Callouts

REF. #	ITEM DESCRIPTION	SPA PART #	QTY	NOTES
1	ADJ. DIR. CLUSTER STORM JET	212-1550G, 218-6150, 212-1509DSGSSSM	34	
2	ADJ. PUJ.S. CLUSTER STORM JET	212-1550G, 218-5150, 212-1529DSGSSSM	12	
3	ADJ. WHIRPOOL JET	212-2010G, 218-6680, 212-2069DSGSS	1	
4	NON ADJ. CLUSTER JET	212-1550G, 218-5150, 212-1499SS	4	
5	MINI ROTO JET	212-0300G, 718-6960, 212-7939DSGSSSM	8	
6	POLY STORM TWIN ROTO JET (LARGE FACE)	212-0400G, 218-4010, 212-8178DSGSSSM	2	
7	ADJ. CLUSTER STORM JET (GRAPHITE)	212-1550G, 218-5150, 212-1549DSG	0	
8	POWER STORM JET (DIR.)	212-0040G, 218-6680, 212-7639DSGSSSM	2	
9	WALL FITTING (GRAPHITE)	7818	1	
10	AIR CONTROL	HS6603569DSGS	6	
11	HI-FLO SUCTION (200GPM)	640-3609DSG (90)	4	
12	WATERFALL VALVE	HS6004359DSGS	1	
13	WATERFALL 6"	675-4008I, CI.FAR	1	
14	LIGHT ASS. W. LED	1219	1	
15	WEIR DOOR FILTER (100 SQ. FT.)	HS550109S	1	
16	FILTER LID	7902	1	
17	47 SQ. FT FILTER CARTRIDGE	8136	2	
18	PILLOW 9"	3035	0	
19	PILLOW	3037	2	
20	PILLOW FLAT OVAL	3034	3	
21	AROMATHERAPY INJECTOR, AROMA GARDENIA	HS6702819DSG, 1206	1/1	
22	POWER SUPPLY 115VAC/12VDC/15A	6151	1	
23	ACRYLIC 100" X 100"	GR 7021100100	1	
24	SPA FLOOR DRAIN(OZONE FIT.)	6404440DSG	1	
25	DIVERTER VALVE 2"	HS6003068DSGS	1	
26	SPA SIDE CONTROL OVERLAY	52798, 11638	1	ML700
27	AUX. SPA SIDE	52682	0	AX20(OPTION)
28	SPA COVER (BROWN, GRAY)	7892, 7891	1	91" X 91" X 10RC H21
29	POWER STORM JET (MASSAGE)	212-0040G, 218-6680, 212-7799DSGSSSM	2	
30	POWER STORM JET (ROTO)	212-0040G, 218-6680, 212-7609DSGSSSM	1	
31	POLY STORM DIR. JET (LARGE FACE)	212-0400G, 218-4010, 212-8169DSGSSSM	4	
32	POLY STORM ROTO JET	212-0400G, 218-4010, 212-8019DSGSS	0	
33	AM-FM RADIO/CD, ANTENNA, BEZEL, REMOTE	6148, 8153, 6149, 6150	1/1/1/1	
34	SPEAKERS, SUB WOOFER	675-0318DSG, 6152	2/1	
35	SPA PANELS (CORNER R10 X32", GAP LAP TRIM 32")	7728/7729, 7783/7782	8/8	RED OAK, GRAY SLATE
36	SPA PANELS (SIDING 3" X 32", 3" X 25", 6" X 25")	7727/7730/7731, 7781/7774/7776	56/36/4	RED OAK, GRAY SLATE
37	LEDS SYSTEM WITH AUDIO UNIT, RGA CABLE	3119, 3120, 3121, 3122, 3123, 6154, 6337078	1/1/7/1/3/7/16	

Essence Parts

ELECTRICAL CONTROL HS2000	55012	1	240V/48A/60HZ
PUMP 1 ASS.(MOTOR, CORD, WETEND, P. UNION)	7136, 6023, 310-1750HS, 400-5650	1	230V/12/4, 4A/3HP/60HZ (SEATS S1+J3+WF)
PUMP 2 ASS.(MOTOR, CORD, WETEND, P. UNION)	4732, 6024, 310-1750, 400-5650	1	230V/16A/4HP/60HZ (SEAT S2,4 OR SEAT S3,5)
CIRC. PUMP ASS., (MOTOR, CORD, WETEND, P. UNION)	6163, 6166, 6101001, 400-4060	1	115V/1.3A/1/12HP/60HZ (JETS J4+J9+J24)
BLOWER	3801	0	115V/1HP/60HZ
OZONE GENERATOR	7095	1	115V/60HZ
OWNER'S MANUAL	7876	1	STERLING LEISURE

Desire (Model 2012)



Specifications*

Dimensions	91"L x 91"W x 37"D
Seats	6
Water Jets	65
Air Jets	0
Capacity	380 USG /1438 L
Dry Weight	1010 Lbs/458 Kg
Filled Weight	4178 Lbs/1895 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A

* Specifications are subject to change without notice.

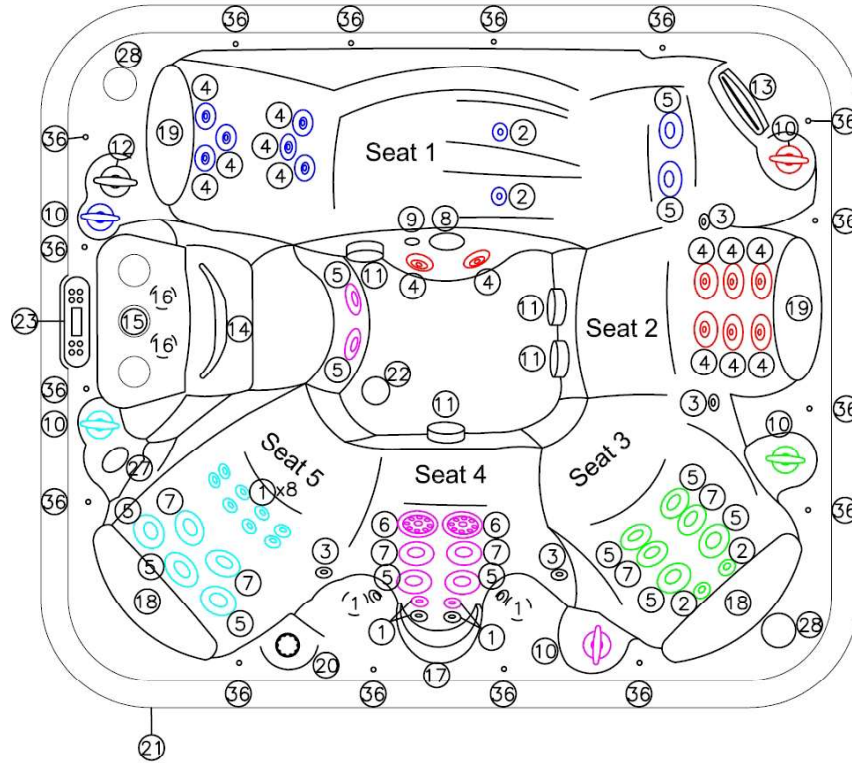
Desire Callouts

REF. #	ITEM DESCRIPTION	SPA PART #	QTY	NOTES
1	ADJ. DIR. CLUSTER STORM JET	212-1550G, 218-5150, 212-1509DSGSSSM	22	
2	POLY STORM DIR. (LARGE FACE)	212-0400G, 218-4010, 212-8169DSGSSSM	8	
3	ADJ. WHIRLPOOL JET	212-2010G, 218-6680, 212-2069DSGSS	1	
4	NON ADJ. CLUSTER JET	212-1550G, 218-5150, 212-1499SS	4	
5	MINI ROTO JET	212-0300G, 718-6960, 212-7939DSGSSSM	16	
6	POLY STORM TWIN ROTO JET (LARGE FACE)	212-0400G, 218-4010, 212-8179DSGSSSM	10	
7	POWER MASSAGE JET	212-0400G, 218-4010, 212-7749DSGSSXM	2	
8	STANDARD WALL FITTING	30147	1/1	
9	AIR CONTROL	HS8603569DSGS	7	
10	HI-FLO SUCTION (200 GPM), GASKET	6403609DSG (90), 7113250	4/4	
11	WATERFALL VALVE	HS6004359DSGS	1	
12	WATERFALL 6"	6753807S	1	
13	LIGHT ASSY, 5in	1219	1	
14	WEIR DOOR FILTER (100 SQ. FT)	HS950109S	1	
15	FILTER LID	7902	1	
16	CARTRIDGE MOUNTING ASSY / FILTER CARTRIDGE	4009120R136	2/2	
17	PILLOW HORSESHOE GRAPHITE	3032	1	
18	PILLOW MED WRAP GRAPHITE	3037	4	
19	PILLOW FLAT OVAL GRAPHITE	3034	1	
20	WICK AROMA THERAPY BODY, COVER, SAMPLER KIT	13883, 13887, 10400	1/1/1	
21	POWER SUPPLY 115VAC/12VDC/15A	6151	1	
22	ACRYLIC STERLING MARBLE W/MICROBAN 100"X100"	7911	1	
23	SPA FLOOR DRAIN (3/4 BARB LO-PROFILE), COVER	4624200, 99814	1	
24	SPA SIDE CONTROL, OVERLAY	55185	1	VL700S(OVAL)
25	SPA COVER (GRAY)	7912	1	90" X 90" X 10RC
26	AM-FM RADIO/CD, ANTENNA, BEZEL, REMOTE	6148, 6153, 6149, 6150	1/1/1/1	
27	SPEAKERS, SUB WOOFER	675-0319DSGH, 6152	2/1	
28	SPA PANELS (CORNER R10 X32", GAP LAP TRIM 32")	7783/7782	8/8	SLATE GRAY
29	SPA PANELS (SIDING 3" X 32", 3" X 25", 6" X 25")	7781/7774/7778	56/36/4	SLATE GRAY
30	SMALL CONTROL LED	3119	1	
31	STEREO INPUT MODULE	3120	1	
32	QUAD RGB LED DAISY	3121	6	
33	LIGHT 5" - 21 LED	3122	1	
34	DUAL RGB LED DAISY	3123	4	
35	CORD 3FT SINGLE RCA	6154	1	
36	THREADED FACET LIGHT 1/2"	6337078	16	

Desire Parts

Not Shown	ELECTRICAL CONTROL HS2000	55012	1	240V, 48A, 60HZ
Not Shown	PUMP 1 ASS. (MOTOR, CORD, WETEND, P. UNION)	7136, 6023, 310-1750HS, 400-5650	1	230V, 12A/3.9A, 3HP, 60HZ (SEATS 1+6-WF)
Not Shown	PUMP 2 ASS. (MOTOR, CORD, WETEND, P. UNION)	4732, 6024, 310-1750, 400-5650	1	230V, 16A, 4HP, 60HZ (J3+SEATS 2+4 OR 3+5)
Not Shown	CIRC. PUMP ASS. (MOTOR, CORD, WETEND, P. UNION)	6163, 6166, 310-1001, 400-4060	1	115V, 1/15HP, 60HZ (JETS J4+J9+J24)
Not Shown	OZONE GENERATOR	7095	1	115V, 60HZ
Not Shown	OWNER'S MANUAL	7876	1	STERLING LEISURE

Pure (Model 2026)



Specifications*

Dimensions	90 ½"L x 82 ½"W x 35 ½"D
Seats	5 (1 Lounge)
Water Jets	50
Air Jets	0
Capacity	350 USG /1325 L
Dry Weight	900 Lbs/408 Kg
Filled Weight	3818 Lbs/1732 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A

* Specifications are subject to change without notice.

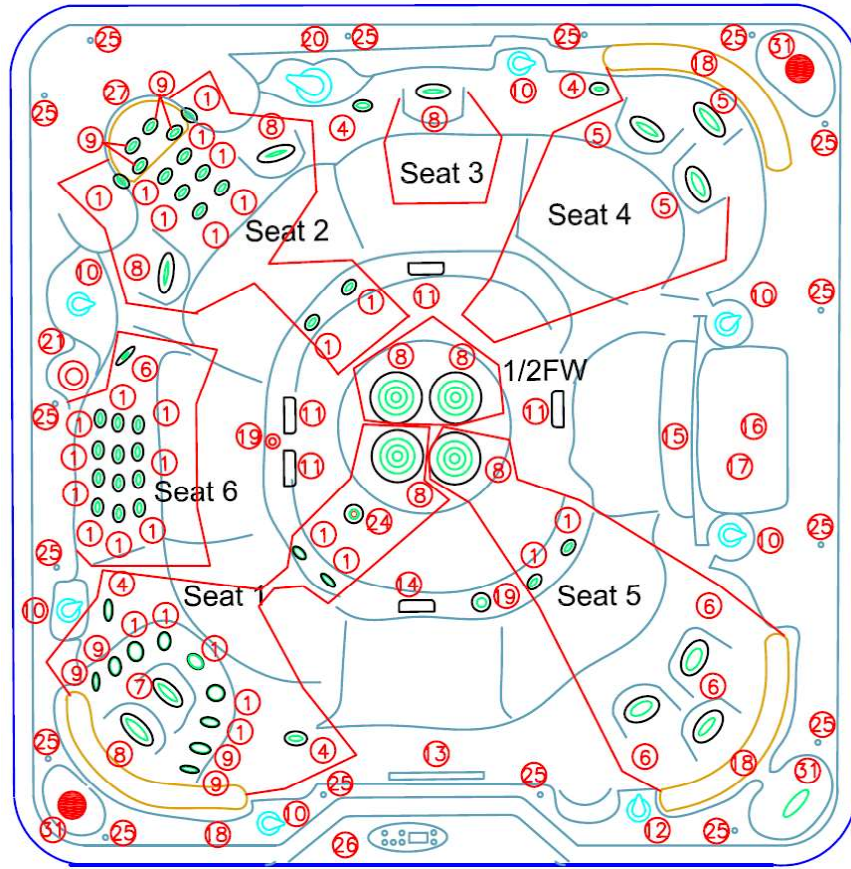
Pure Callouts

REF. #	ITEM DESCRIPTION	SPA PART #	Q-TY	NOTES
1	ADJ. DIR. CLUSTER STORM JET	2121550G, 2185150, 2121509DSGSSSM	14	
2	ADJ. PULS. CLUSTER STORM JET	2121550G, 2185150, 2121529DSGSSSM	4	
3	NON ADJ. CLUSTER JET	2121550G, 2185150, 2121499SS	4	
4	MINI ROTO JET	2120300G, 7186960, 2127939DSGSSSM	14	
5	POWER STORM JET (DIR.)	2120040G, 2186680, 2127639DSGSSSM	13	
6	POWER STORM JET (MESSAGE)	2120400G, 2184010, 2127749DSGSSXM	2	
7	POWER STORM JET (ROTO)	2120040G, 2186680, 2127609DSGSSSM	6	
8	LIGHT ASSY. 5in, 21 LED	1219, 3122	1/1	
9	STANDARD WALL FITTING	30147	1	
10	AIR CONTROL	HS6603569DSGS	5	
11	HI-FLO SUCTION (200GPM), GASKET	640-3609DSG (90), 7113250	4	
12	WATERFALL VALVE	HS6004359DSGS	1	
13	7" CASCADE WATERFALL SS/GRAY	6753607S	1	
14	WEIR DOOR FILTER (100 SQ. FT)	HS550109S	1	
15	FILTER LID	7902	1	
16	47 SQ. FT FILTER CARTRIDGE	6136	2	
17	PILLOW HORSESHOE GRAPHITE	3032	1	
18	PILLOW MED WRAP GRAPHITE	3037	2	
19	PILLOW FLAT OVAL GRAPHITE	3034	2	
20	WICK AROMA THERAPY BODY, COVER, SAMPLER KIT	13883, 13887, 10400	1/1	
21	ACRYLIC CARIBBEAN BLUE 100"X100"	7601	1	
22	SPA FLOOR DRAIN (3/4 BARB LO-PROFILE), COVER	4624200, 99814	1/1	
23	SPA CONTROL PANEL	54239	1	ML700
24	AUX. SPA SIDE(REMOTE/RECEIVER)	(52706/53236)	0	AX20(OPTION)
25	SPA COVER (BROWN, GRAY)	7886, 7885	1	92" X 83" X 10RC H12
26	POWER SUPPLY 115VAC/12VDC/15A	6151	1	
27	AM-FM RADIO/CD, ANTENNA, BEZEL, REMOTE	6148, 6153, 6149, 6150	1/1/1/1	
28	SPEAKERS, SUB WOOFER	6750319DSGH, 6152	2/1	
30	SMALL CONTROL LED	3119	1	
31	STEREO INPUT MODULE	3120	1	
32	QUAD RGB LED DAISY	3121	6	
33	LIGHT 5" - 21 LED	3122	1	
34	DUAL RGB LED DAISY	3123	2	
35	CORD 3FT SINGLE RCA	6154	1	
36	THREADED FACET LIGHT 1/2"	633/0/8	16	
35	PANELS (CORNER R10 X32", GAP LAP TRIM 32")	7728/7729, 7763/7762	8/8	RED OAK, GRAY SLATE
36	PANELS (3" X 32", 3" X 27", 6" X 27", 3"X23", 6"X23")	7727/7704/7725/7732/7733, 7761/7775/7779/7773/7777	52/18/2/18/2	RED OAK, GRAY SLATE

Pure Parts

N/A	ELECTRICAL CONTROL HS2000	55012	1	240V, 48A, 60HZ
N/A	PUMP 1 ASS. (MOTOR, CORD, WETEND, P. UNION)	7136, 6023, 3101750HS, 4005650	1	230V, 12/4.4A, 3HP, 60HZ (SEATS S1+S2+S4+WF)
N/A	PUMP 1 ASS. (MOTOR, CORD, WETEND, P. UNION)	7135, 6024, 3101750HS, 4005650	1	230V, 12A, 3HP, 60HZ(S3 +S5)
N/A	CIRC. PUMP ASS. (MOTOR, CORD, WETEND, P. UNION)	6163, 6166, 3101001, 400-4060	1	115V, 1.3A, 1/12HP, 60HZ (JETS J4+J9+J24)
N/A	BLOWER	3801	0	115V, 1HP, 60HZ
N/A	OZONE GENERATOR	7095	1	115V, 60HZ
N/A	OWNER'S MANUAL	7676	1	STERLING LEISURE

Pristine (Model 2011)



Specifications*

Dimensions	87"L x 87"W x 37"D
Seats	6
Water Jets	60
Air Jets	0
Capacity	325 USG /1230 L
Dry Weight	900 Lbs/408 Kg
Filled Weight	3610 Lbs/1637 Kg
Electrical	240VAC 48A 60Hz
GFCI	60A

* Specifications are subject to change without notice.

Warranty

Lifetime Spa Structural Warranty

Premium Leisure LLC warrants the Sterling Leisure spa shell structure against the loss of water through the fiberglass laminate of the shell caused by defects in materials and workmanship for as long as the original purchaser owns the spa. Contact manufacturer if you have any questions concerning warranty issues.

Ten (10) Year – Spa Surface Warranty

Premium Leisure LLC Warrants the Sterling Leisure interior acrylic spa surface against blisters, cracks, or delaminating resulting from a defect in the acrylic surface material for a period of five (5) years from the date of purchase, based on the following formula: Suggested retail price divided by months covered (120), multiplied by months owned plus shipping = replacement cost.

Lifetime Manifold Plumbing Parts Warranty

Premium Leisure LLC warrants the Sterling Leisure plumbing manifolds, fittings, and parts to be free of defects in materials or workmanship for *as long as the original purchaser owns the spa*.

Two (2) Year – Limited Spa Equipment Warranty

Premium Leisure LLC warrants the Sterling Leisure electrical equipment and components to be free of defects in materials and workmanship for a period of two (2) years on major spa components (electrical system, spa controls, motors) and two (2) years authorized field service on these items. Ninety (90) day (Parts ONLY) Limited Warranty on all optional accessory items (optional cabinets, fixtures, trim kits, skirts, CD & MP3 players, all other music and video devices, ozone, waterfall assembly, LED lighting, etc). All perishable, cosmetic or owner serviceable items, spa cover, light bulb, light lenses, fuses, headrests, cabinet, filters, cover-lift, spa drain, jet inserts, etc are warranted to be free of defects in materials and workmanship at the time of delivery. These items may be covered by a manufacturer's warranty, which may have a longer duration than this Limited Warranty. Premium Leisure LLC may serve as an agent in presenting claims under the manufacturers' warranties, but disclaims any liability there under. In the event Premium Leisure LLC provides parts to replace an alleged defective part under warranty owner will be billed for the cost thereof and credited, minus freight, upon both the defective part being returned to Premium Leisure LLC and the manufacturer of said part accepting warranty claim.

Warranty Performance

In the event of a suspected defect, under the terms of this Limited Warranty, notify manufacturer. Use all reasonable means to protect the spa from further damage. A service representative will provide the technical labor only, to affect the repair subject to the terms and conditions contained in this Limited Warranty. The service representative may assess reasonable travel charges. Visits to simply diagnose, troubleshoot, or inspect problems are not covered under this Limited Warranty. If we determine that repairs are not feasible due to functional defect, we reserve the right to provide a replacement part or spa in lieu of repair. We will replace with a part of value equal to the original purchase. In such event, owner is responsible for expenses including removal, shipping, and re-installation of the existing or replacement hot tub. The replacement spa or part will carry the balance of the original spa's warranty, if any. Either party's waiver of any breach or failure to enforce any of the terms or conditions of the warranty shall not in any way affect, limit or waive such party's right at any time to enforce strict compliance with every term and condition thereof.

Limitations and Exclusions

This Limited Warranty applies to spas sold after January 1, 2008. This Limited Warranty takes effect from the date the unit was originally purchased or six months from the date of manufacture whichever comes first. This Limited Warranty applies only to the Original Purchaser and terminates with any transfer of ownership. This Limited Warranty does not apply to a spa used for any commercial, rental, club purposes or for any spa used outside of the United States. The purchaser must establish the date of purchase by dated sales invoice of delivery receipt.

This Limited Warranty does not cover damage resulting from abuse, misuse, or neglect including any installation, operation, maintenance or use of the spa other than in accordance with the Owner's Manual of the spa. Damage caused by operation of the spa at water temperatures outside the range of 32 degrees F. and 120 degrees F., damage caused by dirty, clogged, or calcified filter cartridges, damage to the spa surface caused by improper use of chemicals or cleaning agents, allowing un-dissolved spa sanitizing chemicals to lie on the surface, damage caused by improper pH balance or other improper water chemistry, damage caused by failure to provide even and sufficient support for the spa, are considered abuses and may invalidate this Limited Warranty. Damaged caused by repairs or alterations performed by anyone other than an authorized service representative is not covered. Failure caused by accidents, acts of God, nonstructural normal wear and tear, cosmetic blemishes and other causes beyond our control are excluded.

The warranty is in lieu of all other warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. In no event shall manufacturer be liable for incidental or consequential damages.

DISCLAIMERS

The spa owner is required to provide unencumbered access to the spa for any warranty repair or inspection. Manufacturer shall not be liable for loss of use of spa or other incidental or consequential costs, expenses or damages, which may include, but are not limited to water damage, or the removal of a permanent deck or other customer fixture. Under no circumstances shall we, or any of our representatives be held liable for injury to any person or damage to any property, however arising. This warranty gives you specific legal rights and you may have other rights. No service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. The jurisdiction and venue for any litigation arising with respect to the transaction evidenced by this warranty shall be the Circuit Court in and for Pinellas County, Florida and Buyer hereby agrees to such jurisdiction and venue.

Sterling Leisure®

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