1005219 Revision A

OWNER'S MANUAL

JACUZZI SWIMSPA COLLECTION

- J4000™ 19
- J4000™ 16
- J3000™ 19
- J3000™ 16





Attention New Swim Spa Owner!

Congratulations on the purchase of your new Jacuzzi[™] swim spa! The following is a list of automated functions performed by your swim spa. These functions are listed below in an attempt to suppress any operational concerns you may have during the first 24 hours of ownership! Also listed below are important maintenance recommendations you should observe on a regular basis to protect your new investment.

Maintain Healthy Swim Spa Water

Always maintain your swim spa's water chemistry within the following parameters:

	With CLEARRAY®	Without CLEARRAY®	
рН	7.4—7.6	7.4—7.6	
Free chlorine	No less than 1.0 ppm	3.0—4.0 ppm	
Free bromine	No less than 2.0 ppm	2.0—4.0 ppm	
Total Alkalinity	100—150 ppm	100—150 ppm	
Calcium Hardness	150—250 ppm	150—250 ppm	

IMPORTANT: CLEAR**RAY**[®] Water Purification System is factory installed. If the CLEAR**RAY**[®] system is altered or is not operating efficiently then follow the "without CLEAR**RAY**[®] water chemistry parameters as defined by the Association of Pool and Spa Professionals. CLEAR**RAY**[®] requires an annual bulb replacement to properly sanitize your water.



TO DECREASE RISK OF INFECTION OR DISEASE! Always maintain your spa filter as outlined below to ensure healthy spa water.

Required Filter Maintenance

Your new swim spa is equipped with an advanced water filtration system that provides unsurpassed water quality! To ensure maximum water quality at all times, you should clean the skimming filter cartridge every 3 months, or as necessary.

Required Water Replacement

You should replace the swim spa's water every 3 months. The frequency depends on a number of variables including frequency of use, number of users and attention paid to water quality maintenance. You will know it is time for a change when you cannot control sudsing or you can no longer get the normal feel or sparkle to the water, even though the key water balance measurements are within the proper parameters.

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1.0 Important Spa Owner Information

Your Jacuzzi[®] Swim Spa is constructed to the highest standards and is capable of providing many years of trouble-free use. However, because heat retentive materials are utilized to insulate the swim spa for efficient operation, an uncovered swim spa surface and wall fittings directly exposed to sunlight and high temperatures for an extended period are subject to permanent damage or discoloration. Damage caused by exposing the swim spa to this abuse is not covered under warranty. We recommend that you always keep the swim spa full of water when it is exposed to direct sunlight and that you keep the Jacuzzi[®] insulating cover in place at all times when the swim spa is not in use. Read and carefully follow the requirements for your swim spa's support base found in Section 4.0 titled, "Choosing a Location".

Jacuzzi[®] swim spas constantly strives to offer the finest swim spas available, therefore, modifications and enhancements may be made which affect the specifications, illustrations and/or instructions contained herein.

2.0 FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Rearrange or relocate the receiving antenna;
- 2. Increase the separation between the equipment and receiver;
- 3. Connect the equipment into an outlet on a circuit different from the circuit connected;
- 4. Consult the dealer or an experienced radio/TV technician for help. (Changes or modifications not expressly approved by the party responsible for FCC compliance could void the user's authority to operate this equipment.)

2.1 Industry Canada (IC) Information

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for general population; consult Safety Code 6, obtainable from Health Canada's website: www.hc-sc.gc.ca.

3.0 Important Safety Instructions for all Swim Spa Owners. **READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY!**

This swim spa was manufactured to meet the standards and specifications outlined in the "Virginia Graeme Baker Pool and Spa Safety Act" (VGB Safety Act). When installing and using this swim spa, basic safety precautions should always be followed, including:



DANGER: RISK OF SEVERE INJURY OR DROWNING!

- Extreme caution must be exercised to prevent unauthorized access by children.
- To avoid accidents, ensure that children do not use this spa unless supervised at all times. Adult supervision is a critical safety factor in preventing children from drowning.
- Use the straps and clip tie downs to secure the swim spa cover when not in use. This will • help discourage unsupervised children from entering the swim spa. Keep the cover secure in high wind conditions.
- There is no representation that the cover, clip tie downs, or actual locks will prevent access to the swim spa.
- Keep hair, loose articles of clothing or hanging jewelry away from suction fittings, ro-• tating jets or other moving components to avoid entrapment that could lead to drowning or severe injury.
- Never use the swim spa unless all the suction guards, filter, filter lid, or skimmer assem-• bly are installed to prevent body and/or hair entrapment.
- Never operate or use the spa if the filter, filter lid, or skimmer assembly are broken or • any part of the skimmer assembly is missing. Please contact your dealer or nearest service center for service.
- The suction fittings and suction covers in this swim spa are sized to match the specific • water flow created by the pump(s). If it is necessary to replace the suction fittings, suction covers or pump(s), be sure that the flow rates are compatible and are in compliance with the VGB Safety Act.
- Never replace a suction fitting or suction cover with one rated less than the flow rate marked on the original suction fitting. Using improper suction fittings or suction covers can create a body or hair suction entrapment hazard that may lead to drowning or severe injury.

DANGER: RISK OF SEVERE INJURY FROM ELECTRIC SHOCK OR DEATH FROM ELECTROCUTION!

- Install the swim spa at least 5 feet (1.5m), from all metal surfaces. As an alternative, a swim spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected (bonded) by a minimum No. 8 AWG (8.4 mm²) solid copper conductor attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment box.
- A grounding wire connector is provided on this unit to connect a minimum No. 8 AWG (8.4 mm²) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5m) of the unit.
- Never permit any electrical appliance, such as a light, telephone, radio, television, etc. within 5 feet (1.5m) of a swim spa unless such appliances are built-in by the manufacturer.
- Never bring any electrical appliances into or near the swim spa.
- Never operate any electrical appliance from inside the swim spa or when you are wet.
- The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electric Code/USA. ANSI/NFPA 70. The disconnecting means must be readily accessible and visible to the swim spa occupant but installed at least 5 feet (1.5m) from the swim spa.
- The electrical circuit supplied for the swim spa must include a suitable ground fault circuit interrupter (GFCI) as required by NEC Article 680-42.

WARNING: RISK OF SEVERE INJURY OR DEATH!

- Extreme caution must be exercised to prevent diving or jumping into the swim spa or slipping and falling, which could result in unconsciousness, drowning, or serious injury. Remember that wet surfaces can be very slippery.
- Never stand, walk or sit on the top railing of the swim spa.

WARNING: RISK OF HYPERTHERMIA (OVER-HEATING) CAUSING SEVERE INJU-RY, BURNS, WELTS OR DEATH!

- Water temperature in excess of 104°F (40°C) may be injurious to your health.
- Refer to Section 3.2 Hyperthermia for specific causes and symptoms of this condition.
- The water in the swim spa 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 (children are especially sensitive to hot water) and when swim spa use may exceed 10 minutes.
- The Consumer Products Safety Commission/USA has stated that the water temperature in a swim spa should not exceed 104°F (40°C).
- Always test the swim spa water temperature before entering the swim spa. The user should measure the water temperature with an accurate thermometer since the toler-ance of water temperature-regulating devices may vary as much as +/- 5°F (2°C).

WARNING: RISK OF SEVERE INJURY OR DEATH!

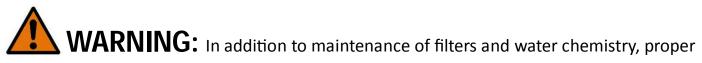
- Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, if pregnant or possibly pregnant, consult your physician before using a swim spa.
- Pregnant or possibly pregnant women should limit swim spa water temperatures to 100°F (38°C).
- Persons suffering from obesity or a medical history of heart disease, low or high blood pressure, circulatory system problems, diabetes, infectious diseases or immune deficiency syndromes should consult a physician before using a spa.
- If you experience breathing difficulties in association with using or operating your swim spa, discontinue use and consult your physician.
- Persons using medication should consult a physician before using a swim spa since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure and circulation.
- Persons suffering from any condition requiring medical treatment, the elderly, or infants should consult with a physician before using a swim spa.
- The use of alcohol, drugs, or medication before or during swim spa use may lead to unconsciousness with the possibility of drowning.



- Prolonged immersion in a swim spa may be injurious to your health.
- Observe a reasonable time limit when using the swim spa. Exposures at higher temperatures can cause high body temperature (over-heating). Symptoms may include dizziness, nausea, fainting, drowsiness, and reduced awareness. These effects could possibly result in drowning or serious injury.
- Never use a swim spa immediately following strenuous exercise. Enter and exit the swim spa slowly. Wet surfaces can be slippery.



- To reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments, maintain water chemistry within the parameters listed on the inside cover of this manual and consult with a licensed engineer regarding proper ventilation if installed indoors or in an enclosed area.
- People with infectious diseases should not use a swim spa to avoid water contamination, which could result in spreading infections to others.
- Always shower before and after using your swim spa. Maintain water chemistry in accordance with manufacturer's instructions. Failure to do so may result in contracting a waterborne illness (e.g. an infection, bacteria or virus)



ventilation is recommended to reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments that could be present in the air or water. Consult a licensed architect or building contractor to determine your specific needs if installing your swim spa indoors.

CAUTION: TO DECREASE RISK OF PRODUCT DAMAGE

- Maintain water chemistry in accordance with manufacturer's instructions.
- Proper chemical maintenance of swim spa water is necessary to maintain safe water and prevent possible damage to swim spa components.



The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

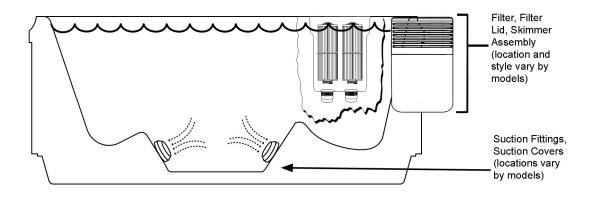
NOTE: This swim spa is not intended nor designed to be used in commercial or public applications. The buyer shall determine whether there are any code restrictions on the use or installation of this swim spa since local code requirements vary from one locality to another.

3.1 Entrapment Risk

The Consumer Products Safety Commission/USA has reported that users of pools and spas have become entrapped (stuck) to drain and/or suction fittings causing death, drowning, or serious injury (see diagram below). This swim spa was manufactured to meet the standards and specifications outlined in the "Virginia Graeme Baker Pool and Spa Safety Act" (VGB Safety Act). Entrapment risk can be minimized if proper precautions are taken.

DANGER: RISK OF PERSONAL INJURY OR DEATH!

Never operate the swim spa if a suction fitting, suction cover, filter, filter lid or skimmer assembly is broken, damaged or missing.



Note: Suction covers must be replaced every 5 years.



Hair entrapment: May occur if hair is entangled, knotted or snagged in a drain suction or skimmer assembly. This has been reported in persons who when submerge themselves underwater, allowing hair to come close and/or within the reach of the suction fittings, suction covers or skimmer assembly.

- Keep hair away from suction fittings, suction covers, filter, filter lid or skimmer assembly.
- Children are at risk for hair entrapment if swimming under water.
- Never allow children to play or get near suction fittings, suction covers, filter, filter lid or skimmer assembly.

DANGER: RISK OF SEVERE INJURY OR DROWNING!

Limb entrapment: May occur when a limb becomes entrapped, inserted or sucked into a suction or outlet opening.

- Always keep suction fittings, suction covers, filter, filter lid or skimmer assembly in place when operating to avoid limb entrapment.
- Never allow children to play or get near suction fittings, suction covers, filter, filter lid or skimmer assembly.

DANGER: RISK OF SEVERE INJURY OR DROWNING!

Body entrapment: May occur when part of the torso becomes entrapped, inserted or sucked into a suction or outlet opening.

• Never allow children to play or get near suction fittings, suction covers, filter, filter lid or skimmer assembly.

DANGER: RISK OF SEVERE INJURY OR DROWNING!

Evisceration (disembowelment) entrapment: May occur when the buttocks become entrapped, inserted or sucked into a suction or outlet opening.

- Never sit on suction fittings, suction covers, filter, filter lid or skimmer assembly.
- Never allow children to play or get near suction fittings, suction covers, filter, filter lid or skimmer assembly.



Mechanical entrapment: May occur when jewelry, swimsuit, or hair accessories become entangled, knotted or snagged in a drain suction or skimmer assembly.

- Never allow your jewelry, swimsuit, or hair accessories to come close to the suction fittings, suction covers, filter, filter lid or skimmer assembly.
- Never allow children to play or get near suction fittings, suction covers, filter, filter lid or skimmer assembly.

3.2 Hyperthermia

Prolonged immersion in hot water may induce hyperthermia (over-heating). The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia is swim spas. A description of the causes, symptoms, and effects of hyperthermia are as follows:

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 (fatigue), and an increase in the internal temperature of the body (feeling of being too hot). The effects of hyperthermia include:

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit the swim spa;
- Physical inability to exit the swim spa;
- Fetal damage in pregnant women; and
- Unconsciousness and danger of drowning.

A Warning Sign is provided in your warranty packet. Please install at a location near your swim spa, where it is visible to users of the swim spa. For additional or replacement Warning

3.3 Important Safety Instructions

When using this electrical equipment, basic safety precautions should always be followed, including the following:

1. **READ AND FOLLOW ALL INSTRUCTIONS.**

- 2. A green colored terminal or a terminal marked G, Gr, Ground, Grounding or the symbol* is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors that supply this equipment. *IEC Publication 417, Symbol 5019.
- 3. At least two lugs marked "Bonding Lugs" are provided on the external surface or on the inside of the supply terminal box/compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the swim spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG (10 mm²).
- 4. All field-installed metal components such as rails, ladders, drains or other similar hardware within 10 ft (3m) of the swim spa shall be bonded to the equipment grounding buss with copper conductors not smaller than No. 6 AWG (10mm²).
- 5. SAVE THESE INSTRUCTIONS.

4.0 Choosing a Location

IMPORTANT: Because of the combined weight of the swim spa, water and users, it is extremely important that the base upon which the swim spa rests be smooth, flat, level and capable of uniformly supporting this weight, without shifting or settling, for the entire time the swim spa is in place. If the swim spa is placed on a surface, which does not meet these requirements, damage to the skirt and/or the swim spa shell may result. Damage caused by improper support is not covered under warranty. It is the responsibility of the swim spa owner to ensure the integrity of the support at all times. We recommend a poured, reinforced concrete slab with a minimum thickness of 4 inches (10cm). Wood decking is also acceptable provided it is constructed so that I meets the requirements outlined above.



WARNING: For swim spas that are to rest on roofs or other platforms not specifically tied into main structural supports, consult a professional Structural Engineer with experience in this type of application. The swim spa must be installed in such a manner as to provide drainage away from it. Placing the swim spa in a depression without provisions for proper drainage could allow rain, overflow and other casual water to flood the equipment and create a wet location in which it would sit in. For swim spas which will be recessed into a floor or deck, install so as to permit access to the equipment, either from above or below, for servicing. Make certain that there are no obstructions, which would prevent removal of all cabinet side panels and access to the jet components, especially on the side with the equipment bay.

CAUTION: If the swim spa is indoors or located in an enclosed area, proper ventilation should be discussed with an Engineer or authority competent enough to understand the necessary provisions needed to vent moist or heated air associated with chemical odors outdoors. <u>When the swim spa is in use considerable amounts of moisture will escape</u> <u>potentially causing mold and mildew. This can cause health risk</u>. Over time, this can damage certain surfaces, surroundings and equipment.

4.1 Outdoor Location

In selecting the ideal outdoor location for your swim spa, we suggest that you take into consideration:

- The proximity to changing area and shelter (especially in colder weather).
- The pathway to and from your swim spa (this should be free of debris so that dirt and leaves are not easily tracked into the swim spa).
- The closeness to trees and shrubbery (remember that leaves and birds could create extra work in keeping the swim spa clean).
- A sheltered environment (less wind and weather exposure can result in lowered operation and maintenance costs).
- The overall enhancement of your environment. It is preferable not to place the swim spa under an unguttered roof overhang since run-off water will shorten the life expectancy of the swim spa cover.
- For swim spas that are to rest on roofs or other platforms not specifically tied into main structural support, consult a professional Structural Engineer with experience in this type of application.
- In the unlikely event that you should ever need to access or gain entry to any portion of the swim spa for servicing, it is highly recommended that you plan your outdoor installation to provide full access to the entire swim spa. Please take this into consideration when placing the swim spa in a deck or enclosed by a surrounding.

- Consider locating your swim spa away from any reflective surface or glass to prevent any damage to the synthetic skirt.
- When possible, do not shim the swim spa. To ensure proper support the swim spa must sit flat on the intended foundation.

4.2 Indoor Location

For indoor installations many factors need to be considered before installing a spa indoors.

WARNING: In addition to maintenance of filters and water chemistry, proper ventilation is recommended to reduce the risk of contracting waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments that could be present in the air or water. Consult a licensed architect or building contractor to determine your specific needs if installing your swim spa indoors.

- Proper Foundation: <u>Consult a Structural Engineer when considering a foundation that</u> <u>will adequately support the swim spa the entire time it is in place.</u> Proper support is critical especially if the spa is to rest on a second story or higher. For swim spas that are to rest on roofs or other platforms not specifically tied into the main structural support, you should consult a professional Structural Engineer with experience in this type of application.
- Proper Drainage: It is extremely important to have in place measures to sufficiently handle excessive water spillage. Be sure the flooring in which the swim spa rests on has adequate drainage and can handle the entire contents of the swim spa. Be sure to make provisions for ceilings and other structures that may be below the swim spas installation. Areas around your swim spa can become wet or moist so all flooring and subsequent furniture, walls and adjacent structures should be able to withstand or resist water and moisture.
- Proper Ventilation: Proper ventilation should be discussed with an Engineer or authority competent enough to understand the necessary provisions needed to vent moist or heated air and air associated with chemical odors outdoors. When the swim spa is in use considerable amounts of moisture will escape, potentially causing mold and mildew over time, which can damage certain surfaces and/or surroundings.
- **Sufficient Access:** In the likely event that you should ever need to access or gain entry to any portion of the swim spa for servicing, it is highly recommended that you plan your indoor installation to provide full access to the entire swim spa.

- **Warranty:** Damage caused by not following these guidelines or any improper installation not in accordance to local codes or authorities is not covered under the swim spas warranty. Please consult your local state or city building ordinances.
- When possible, do not shim the swim spa. To ensure proper support the swim spa must sit flat on the intended foundation.

5.0 General Electrical Safety Instructions

Your new Jacuzzi[®] swim spa is equipped with the ProTouch[™] system. It contains the most advanced safety and self-protective equipment in the industry. None-

theless, this swim spa must be installed properly to ensure dependable usage. Please contact your local Jacuzzi dealer or local building department should you have any questions regarding your installation.

Proper grounding is extremely important. Jacuzzi swim spas are equipped with a current collector system. A pressure wire connector is provided on the surface of the control box, located inside the equipment door to permit connection of a bonding wire between this point and any ground metal equipment, metal water pipe or conduit within 5 feet (1.5m) of the swim spa, or copper clad grounding rod buried within 5 feet (1.5m) of the swim spa. Bonding wire must be at least No. 8 AWG (8.4mm²) solid copper wire. This is a most important safety assurance feature. Before installing your swim spa, check your local building department to ensure installation conforms to local building codes.

6.0 Electrical Installation Instructions (230V Service)

IMPORTANT NOTICE: The electrical wiring of this swim spa must meet the requirements of any applicable local codes. The circuit must be installed by a qualified electrician and approved by a local building/electrical inspection authority.

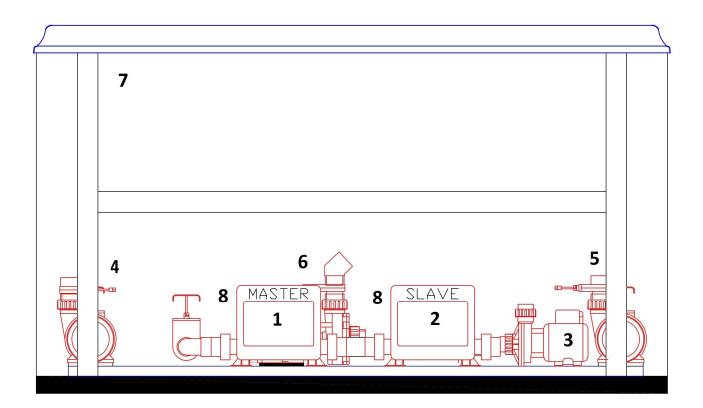




DANGER: TO DECREASE THE RISK OF SHOCK, PRODUCT DAMAGE OR ELECTRI-CAL FIRE

- 1. This spa must be permanently connected (hard wired) to the power supply. **No plug-in connections or extension cords are to be used in conjunction with the operation of this swim spa.** Supplying power to the swim spa, which is not in accordance with these instructions, will void both the independent testing agency listing and the manufacturer's warranty.
- 2. The power supplied to this swim spa must be a dedicated circuit with no other appliances or lights sharing the power provided by the circuit.
- 3. To determine the current, voltage and wire size required, refer to Section 7.0 "Power Requirements" for your specific model.
 - Wire size must be appropriate per NEC and/or local codes.
 - The swim spa controller's terminal block will accept a maximum wire size of #6 AWG.
- 4. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electric Code/USA, ANSI/NFPA 70. The disconnecting means must be readily accessible to the swim spa's occupant but installed at least 5 feet (1.5m) from the swim spa water.
- 5. The electrical circuit supplied for the swim spa must include a suitable ground fault circuit interrupter (GFCI) as required by NEC Article 680-42/USA.
- 6. To gain access to the swim spa's power terminal block, pull the bottom of the door panel to break the magnetic lock of the door to the frame. Place the door panel in a safe location to prevent damage.
- 7. Select the power supply entrance you want to use, Figure A. Make sure to install a 3/4" electrical fitting and conduit through the large opening provided in the side of the control box so you can feed the cable through to the terminal block.
- 8. Connect wires to the terminal block (Figures B-C). ALL WIRES MUST BE SECURELY CON-NECTED or equipment damage could result!
- 9. Install the door panel back into place.

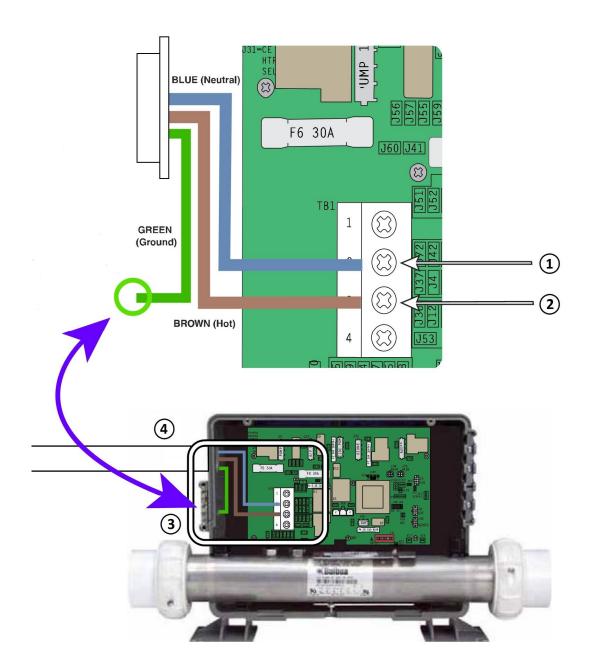
FIGURE 1 EQUIPMENT AREA



- 1. Master spa pack
- 2. Auxiliary spa pack (slave heater)
- 3. Pump 1
- 4. Pump 2
- 5. Pump 3
- 6. Pump 4
- 7. CLEARRAY[®] Water Purification System
- 8. Power Supply Entrance

Note: Equipment location and quantity (such as pumps, CLEARRAY [®] system, heater etc.) varies by model.

FIGURE 2 Terminal Block Connections



- 1. Neutral wire connection (blue)
- 2. Hot wire connection (brown)
- 3. Bonding Lug / Grounding Terminal
- 4. Power wires entrance (Electrical fitting and conduit must be installed)

7.0 Power Requirements

Jacuzzi[®] swim spas are designed to provide optimum performance and flexibility of use when connected to their maximum electrical service. They are configured at the factory. The most common electrical connections are listed below.

EUROPEAN MODELS (50 Hz)		
VOLTAGE	230VAC/28A	
MAX CURRENT DRAW		
J3000™	28	
J4000™	28	
Frequency (Hz)	50	
Number of wires	3	

8.0 Swim Spa Fill Up Procedure

For best results, read each step in its entirety before proceeding with this procedure. Make sure that all drains and drain plugs are closed.

1. Prepare the Swim Spa for Filling

- Clear all debris from the swim spa (Although the swim spa shell has been polished at the factory, you may want to treat it with a specially formulated spa cleaner.) Consult your authorized Jacuzzi dealer for additional information prior to filling.
- Remove both filters, skimmer, polishing filter lids and filters as illustrated in section 13.1.
- 2. Fill Swim Spa
 - Place the end of your garden hose into empty skimming filter fitting as you stand next to the swim spa. Fill swim spa half way, then place the garden hose into the opposite filter fitting while adding the remaining fill water.

CAUTION: TO DECREASE BUILD UP ON COMPONENTS AND MINIMIZE ACRYLIC DAMAGE.



Never fill with water from a water softener. If your water is extremely "hard", it is preferable to fill half-way with hard water and the rest of the way with softened water. Water that is too soft can be corrosive to metal components.

WARNING: TO DECREASE RISK OF INFECTION AND DISEASE. Fill the swim spa with clean tap water from garden hose, to reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments. Fill until water covers all the jets but does not touch the bottom of the lowest headrest (DO NOT OVERFILL!).

IMPORTANT: Always fill your swim spa through both filter fittings after draining. Failure to do so may cause air to be trapped in the pumps, preventing the pumps from circulating water. Remove the hose and replace both filter cartridges as illustrated in Section 13.1.

3. Turn On Power

Turn on the power to the swim spa at the home's circuit breaker. The heater and filter/ circulation pump will automatically activate. Normally, at the initial fill, the water tends to be cold.

4. Activate Jet Pumps

Turn on jet pumps when adding chemicals in step 5 (see section 11.2)

5. Add Start-Up Chemicals

Add the swim spa water chemicals as recommended by your authorized Jacuzzi swim spa dealer. See section titled "Water Quality Maintenance" for general guidance.



WARNING: RISK OF POISONING OR DEATH.

Never leave chemicals opened and accessible to anyone. Use chemicals according to the vendor's instructions. Always store chemicals in a safe and/or locked location. Keep away from and out of reach of children.

6. Establish A Stable Sanitizer Reading

Establish a stable sanitizer reading of no less than 2.0 ppm free bromine. To ensure healthy water conditions, always maintain a constant sanitizer reading within the levels recommended on the inside cover of this manual. If sanitizer levels cannot be stabilized, perform the decontamination procedure steps 9-15 on the following pages.

Note: The "Decontamination Procedure" should also be used after the swim spa has been "Winterized" (Section 13.8) or has been sitting without power for an extended period.

7. Set Swim Spa To Heat

To warm swim spa water to a comfortable temperature, follow these steps:

- The display on the control panel displays the actual temperature of the swim spa water. Tap the "+" or "-" to increase or decrease the water temperature in 1 degree increments.
- The heater will turn off 1oF (0.5°C) above the set temperature and turn on 2oF (1°C) below set temperature.

Note: The temperature range for the swim spa is 65 to 104°F (18.33 to 40°C). To activate the **Extended Temperature feature** that allows the swim spa to reach 106°F (41°C) refer to Section 15 "Error/Display Messages".

Important Heater Details:

- The maximum temperature for which the swim spa can be set is 104°F (40°C) and the minimum is 80°F (27°C).
- Setting the thermostat at maximum will not accelerate the heating process. This will only result in a higher ultimate temperature.
- The heater operates until the water reaches 1 degree above the programmed "set temperature", then turns off. The heater will reactivate after the water cools to approximately 2°F (1°C) below the "set temperature".

8. Place Cover On Swim Spa

- Keeping the insulating cover in place anytime the swim spa is not in use will reduce the time required for heating, thereby minimizing operating costs.
- The time required for initial heat-up will vary depending on the starting temperature.



DANGER: RISK OF PERSONAL INJURY.

Check water temperature carefully before entering swim spa! Excessive water temperature can cause burns, welts and body temperature to rise, hyperthermia (over-heating).

Decontaminating Procedure

Steps 9-15 below are only required when sanitizer levels are unstable after performing Swim Spa Fill Procedures 1-6. Disregard steps 9-15 below if sanitizer levels remain stable after performing steps 1-6 above (refer to the inside cover of the manual.

9. Add 2.5 ounces of sodium dichlor for every 100 gallons of water. Refer to the table below for approximate water fill volume by model.

CAUTION: RISK OF PERSONAL INJURY OR SWIM SPA DAMAGE!



Never add chlorine tablets (trichlor) or acid to your swim spa for any reason! These chemicals may damage components within your swim spa, burn or irritate your skin, create a rash, and void the manufacturer warranty for your swim spa.

Water Fill Volume by Model

Model	Average Fill Volume*	Sodium Dichlor
JC 16	2010 USG (7638 Litres)	50.25 oz
JC 19	2378 USG (9038 Litres)	59.50 oz

* Use average fill volume for chemical maintenance

10. Leave swim spa cover open during this step to allow excessive chemical vapours to exit the swim spa, protecting pillows and plastic knobs from chemical attack. If the swim spa is indoors, open doors and windows for proper ventilation. Turn on all swim spa jet pumps for one hour, open all air controls, and place all massage selector knob(s) in their center "combo" position.

Note: You will need to activate the jet pumps every 20 minutes since these functions have an automatic 20 minute time-out that turns them off.



- To decrease the risk of injury, drowning or entrapment, never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.
- Precautions should be taken to minimize your exposure to chemical vapours (that could cause lung, brain, or skin damage).

- 11. Turn off power to the swim spa at the circuit breaker, then drain the swim spa as outlined in Section 13.2.
- 12. Refill the swim spa with clean tap water from the garden hose until water covers all jets but does not touch the bottom of the lowest headrest with all headrests in their lowest position (DO NOT OVERFILL!)

CAUTION: TO DECREASE BUILD UP ON COMPONENTS AND MINIMIZE ACRYLIC DAMAGE!



Never fill with water from a water softener. If your water is extremely "hard", it is preferable to fill half way with hard water and the rest of the way with softened water. Water that is too soft can be corrosive to metal components.

- 13. Consult your authorized Jacuzzi dealer for chemical recommendations, then add chemicals to swim spa water to achieve a constant sanitizer reading within the levels recommended on the inside cover of this manual.
- 14. Turn on jet pumps when adding chemicals to ensure proper mixing and leave your swim spa cover open until the sanitizer level becomes stable to protect pillows and plastic knobs from chemical attack. Refer to the inside cover of this manual.



WARNING: RISK OF PERSONAL INJURY!

- To decrease the risk of injury, drowning or entrapment, never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.
- To decrease the possibility of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments, maintain water chemistry within step 6 parameters. If you or other bathers experience such a condition, discontinue use and seek medical attention.

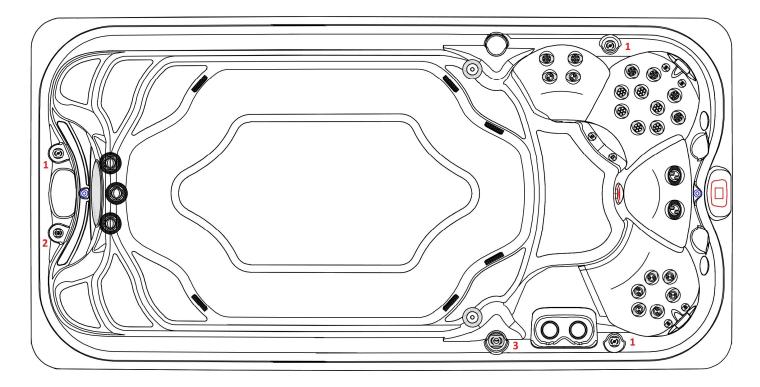
15. Establish a sanitizer reading no less than 1.0 ppm free chlorine or 2.0 ppm bromine, then allow the swim spa to set undisturbed for 8 hours. Retest water after 8 hours to determine if sanitizer levels are stable. If sanitizer levels are stable, your swim spa is ready for use. To ensure healthy water conditions, always maintain a constant sanitizer reading within the levels recommended on the inside cover of this manual. If sanitizer levels are not stable at this time, it will be necessary to repeat this procedure in its entirety until stable sanitizer readings are achieved.

IMPORTANT: If the CLEAR**RAY**[®] water purification system is removed from the swim spa or is not operating effectively follow the "without CLEA**RAY**[®]" chemistry parameters as defined by the Association of Pool and Spa Professionals.

16. After adequate sanitizer levels are achieved, close all swim spa controls to maximize heat retention when the swim spa is not in use.

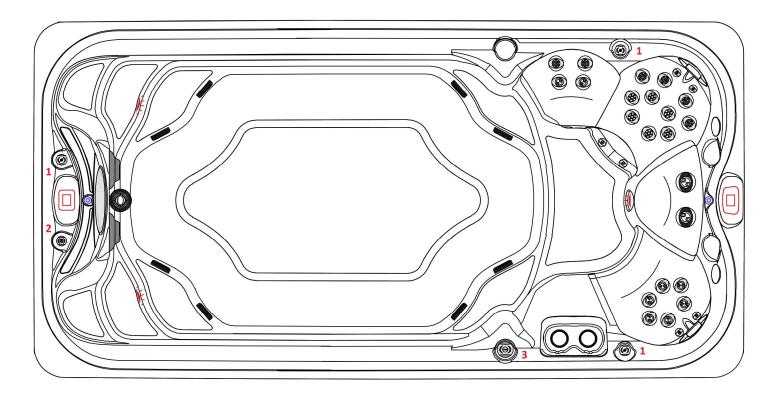
9.0 Swim Spa Features

9.1 J3000[™] 16 / 19 Power Active Swim Spa Features



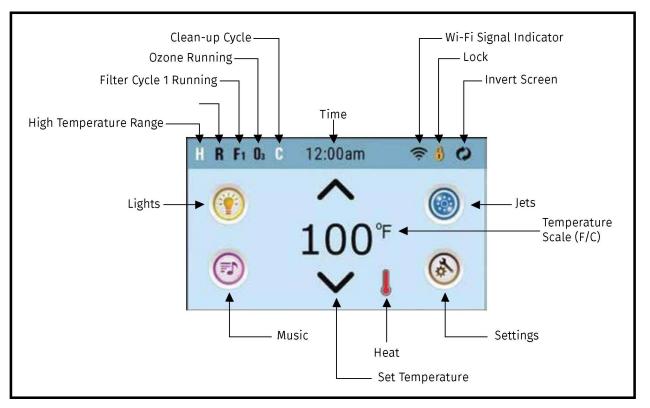
- 1. Air controls (x3)
- 2. Wide sheet Waterfall control (x1)
- 3. 2" Water diverter

9.2 J4000[™] 16 / 19 Power Pro Swim Spa Features



- 1. Air controls (x3)
- 2. Wide sheet Waterfall control (x1)
- 3. 2" Water diverter

10.1 Main Screen



Important information about the swim spa operation can be seen on the "Main Screen". Most features including Set Temperature adjustment, can be accessed from this screen. The actual water temperature can be seen and the Set Temperature can be adjusted. Time of Day, Ozone and Filter status is available along with other messages and alerts. The selected Temperature Range is indicated in the upper left corner of the display. The Spa Equipment Control Icon will spin if any pump is running. A Lock Icon is visible if the panel or settings are locked.

Note: After 30 minutes* the display will automatically go into sleep mode, which turns the display off. This is normal operation. Touch anywhere on the screen to wake the panel up.

- H = High Temperature Range
 - L = Low Temperature Range

F2 = Filter Cycle 2 running

- R = Ready Mode
- RR = Ready / Rest Mode
- IR = Rest Mode

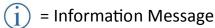
F+ = Both running

- F1 = Filter Cycle 1 running •
 - O3 = Ozone is running. If you do not see the icon that means the ozone is off.
- C = Clean-up cycle is running. Note: Not all systems that can run a Cleanup Cycle display this icon.
- Wi-Fi icon just indicates that the Wi-Fi link is connected
- Invert (or flip) Screen 🛛 🌊

 Lock Icon: When displayed, indicates the panel is in a locked mode. To unlock or lock a setting or panel lock, first press the corresponding icon on the Lock Screen, then press and hold the word "Lock" for 5+ seconds until the text and icon change to the opposite state.

There are 2 lock icons that can be shown on the title bar of most screens. A tall skinny one representing a settings lock is applied. It is shown on screens that are affected by the settings lock. And the standard lock icon Padlock which represents the panel being locked. If both settings and panel are locked, only the panel lock will show since the settings lock doesn't do much in that situation. When the panel is locked, the Settings Screen will only show items not affected by that lock (System Info and Lock Screens)

- Adjust set temperature higher
- Adjust set temperature lower
- Message waiting indicator: The Message Waiting Indicator will show on of the following icons
 - fatal error (swim spa can't function until it is fixed)
 - 🛕 = Normal Error or Warning
 - እ = Reminder Message



```
🎾 = Spa equipment icon
```

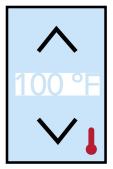
Brings up a screen where the spa jets, blower or other equipment can be controlled. While on the Spa Equipment Screen, you can press a Jets button once for low speed, and if configured press it again for high speed.

 $\langle O \rangle$ = Jet is inactive. Indicates if a pump is running or not.

= Settings is active

= Settings is inactive

L = Different animation sequences, including blinking, may indicate different stages of heating.



Press Up or Down to display the Set Temperature (indicated by a flashing ^oF or ^oC, plus a change in colour of the temperature). Press up or Down again to modify the Set Temperature. The Set Temperature changes immediately.

If you need to switch between High Temperature Range and Low Temperature Range you need to go to the Settings Screen.

10.2 Navigation

- Navigating the entire menu structure is done by touching the screen.
- The two screen selections indicated below can be selected. Touch one of these to enter a different screen with additional controls.
- Most menu screens time out and revert to the main screen after 30 seconds of no activity.
- At the bottom of the screen, at certain times an indicator may appear showing that a message is waiting. Touch this indicator to go to the Message Display Screen. On that screen some of the messages can be dismissed.

NAVIGATION





Settings

Spa Equipment

MESSAGES



A warning message is waiting

10.3 The Spa Screen

The Spa Screen shows all available equipment* to control. The display shows icons that are related to the equipment installed on a particular swim spa model, so this screen may change depending on the installation. The icon buttons are used to select and control individual devices.

Some devices, like pumps, may have more than one **ON** state, so the icon will change to reflect the state of the equipment. Below are some examples of 2-speed pump indicators.





Jets High

30

Common Buttons

If an Up or Down button is shown and pressed when on an editing page, and a value has been selected (highlighted), the value can be increased by pressing the up arrow or decreased by pressing the down arrow.



Exiting Screens

The Back button is on every screen except the Main Screen, the Priming Mode Screen are a Message Display Screen. When you see only this button, or this button plus an Inactive Save Button, it means Back or Exit. It appears on editing screens before you have changed any value, as well as on other screens.

When you see both the Back button and an Active Save button, the Save button will Save, while the Back button will Cancel. If the screen times out due to no activity it will act like cancel.



Active Save Button

Inactive Save Button

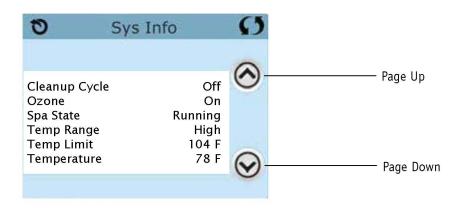
Pages

If there is a right arrow at the bottom of the screen, it takes you to the next page.



Page Up and Down

If an Up or Down button is shown and pressed when on a page with a text list, the list can be scrolled a page at a time.



10.4 The Settings Screen

The Settings Screen is where all programming and other swim spa behaviours are controlled. Each icon on the Settings screen takes you to a different screen, where one or more setting may be viewed and/or edited.

0

Heat Mode

Temp Range

Heat Mode

Ready

High



The Heat Icon (takes you to a screen where you control the Het Mode and the Temperature Range.

Dual Temperature Ranges High vs. Low

This system incorporates two temperature range settings with independent set temperatures. The specific range can be selected on the Settings screen and is visible on the Main Screen in the upper left corner of the display. These ranges can be used for various reasons, with a common use being a "ready to use" setting vs. a "vacation" setting. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the swim spa will heat to the set temperature associated with that range.

High Range can be set between 80°F and 104°F

Low Range can be set between 50°F and 99°F

Freeze Protection is active in either range.

Heat Mode Ready vs. Rest / Circulation Mode / Ready-in-Rest Mode

Heat Mode—Ready vs. Rest

In order for the swim spa to heat, a pump needs to circulate water through the heater(s). The pump that performs this function is known as the "heater pump".

The heater pump can be either a 2-speed pump (Pump 1) or a circulation pump.

If the heater pump is a 2-Speed pump 1, Ready Mode will circulate water evert 1/2 hour, using Pump 1 Low, in order to maintain a constant water temperature, heat is needed, and refresh the temperature display. This is known as "polling".

Rest Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two.

When the heater pump has come on automatically (for example for heating) you can switch between low speed and high speed but you cannot turn the heater pump off.

Circulation Mode

If the swim spa is configured for 24HR circulation, the heater pump generally runs continuously. Since the heater pump is always running, the swim spa will maintain set temperature and heat as needed in Ready Mode, without polling.

In Rest Mode, the swim spa will only heat to set temperature during programmed filter times, even though the water is being filtered constantly when in 24HR circulation mode.

Ready-in-Rest Mode

Ready in Rest Mode appears in the display if the swim spa is in Rest Mode and the Jets 1 Button is pressed. When the heater pump has come on automatically (for example for heating) you can switch between low speed and high speed but cannot turn the heater pump off. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by selecting the Heat Mode line on the Screen shown on the previous page.

Preparation & Filling

Fill the swim spa to its correct operating level. Be sure to open all valves and jets in the plumbing system before filling to allow as much air as possible to escape from the plumbing and the control system during the filling process.

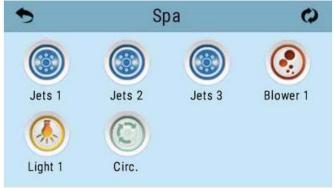
After turning the power on at the main power panel, the top side panel will display a splash screen or start-up screen.

Priming Mode

After the initial star-up sequence, the control will enter Priming Mode and display a Priming Mode screen. Only pump icons appear on the priming mode screen. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump(s) can be energized by selecting the "Jet" buttons. If the swim spa has a Circ Pump, it can be turned on and off by pressing the Circ" button during Priming Mode.

Priming the Pumps

As soon as the Priming Mode screen appears on the panel, select the "Jets 1' button once to start Pump 1 in low-speed and then again to switch to high-speed. Also, select the other pumps, to turn them on. The pumps should be running in high speed to facilitate priming. If the pumps have



not primed after 2 minutes, and water is not flowing from the jets in the swim spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process. Note: Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump(s) will not prime, shut off the power to the swim spa and call for service. **Important:** A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

Exiting Priming Mode

The system will automatically enter the normal heating mode and filtering at the end of the priming mode, which lasts 4-5 minutes.

You can manually exit Priming Mode by pressing the "Back" button on the Priming Mode Screen. Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes. Be sure that the pump(s) have been primed by this time.

Once the system has exited Priming Mode, the top side panel will display the Main Screen, but the display will not show the water temperature yet. This is because the system requires approximately 1 minute of water flowing through the heater to determine the water temperature to display it.



10.5 Spa Behaviour

Pumps

On the Spa Screen, select a "Jets" button once to turn the pump on or off, and to shift between low and high speeds if equipped. If left running, the pump will turn off after a time-Out period.

Non-Circ Systems

The low-speed of pump 1 runs when any other pump is on. If the swim spa is in Ready Mode, Pump 1 low may also activate for at least 1 minute every 30 minutes to detect the swim spa temperature (polling) and then to heat to the set temperature if needed. When the lowspeed turns on automatically, it cannot be deactivated from the panel, however the high speed may be started.

Filtration and Ozone

On non-circ systems, Pump 1 low and the ozone generator will run during filtration. The system is factory-programmed with one filter cycle that will run in the evening (assuming the time-of-day is properly set) when energy rates are often lower. The filter time and duration are programmable. A second filter cycle can be enabled as needed. At the start of each filter cycle, the pumps will run briefly to purge the plumbing to maintain good water quality.

Freeze Protection

If the temperature sensors within the heater detect a low enough temperature, then the pump(s) automatically activate to provide freeze protection. The pump(s) will run continuously or periodically depending on the conditions.

Clean Up Cycle (optional)

When a pump is turned on by a button press, a clean-up cycle begins 30 minutes after the pump is turned off or times out. The pump and the ozone generator will run for 30 minutes more, depending on the system. On some systems you can change this setting.

10.6 Time of Day

Be sure to set the Time of Day. Setting the time of day is important for determining the filtration times and other background features. The Heat (Source Icon on the Settings Screen takes you to a screen where you control the Time-of-Day.

On the Time-of-Day screen, simply select the Hours and Minutes. Use the Up and Down buttons to make changes, then Save.



If no Time-of-Day is set...

In the memory an information screen will appear. If you exit it an Information Icon will appear at the bottom of the Main Screen, until the time-of-day has been set.





10.7 Adjusting Filtration

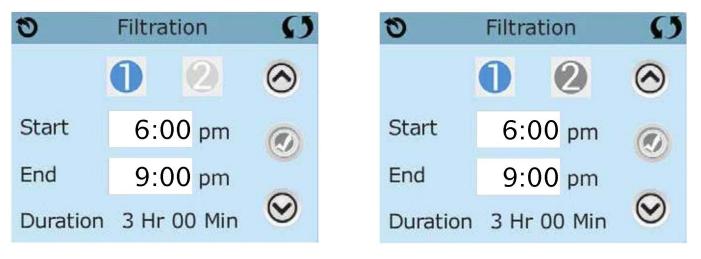
Main Filtration

Using the same adjustment as Setting the Time, Filter Cycles are set using a start time and a duration. Each setting can be adjusted in 15 minute increments. The panel calculate the end time and displays it automatically.



Filter Cycle 2—Optional Filtration

Filter Cycle 2 is OFF by default.







Press "1" to view Filter 1. Press "2" once to view Filter 2. Press "2" again to turn Filter 2 ON or OFF.

When Filter Cycle 2 is ON, it can be adjusted in the same manner as Filter Cycle 1.

It is possible to overlap Filter Cycle 1 and Filter Cycle 2, which will shorten overall filtration by the overlap amount.

Purge Cycles

In order to maintain sanitary conditions, as well as protect against freezing, secondary water devices will purge water from their respective plumbing by running briefly at the beginning of each filter cycle. (Some systems will run a certain number of purge cycles per day, independent of the number of filter cycles per day. In this case, the purge cycles may not coincide with the start of the filter cycle).

If the Filter Cycle 1 duration is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

10.8 Light Cycle Option



If the Light Cycle does not appear on the Settings Screen, the Light Timer feature is not enabled. The Light Cycle Icon on the Settings Screen takes you to a screen where you control the Light Cycle. When available, the Light Timer is ('Disabled") by default. Press "Disabled" to change it to "Enabled" (ON). The settings can be edited the same way that the Filter Cycles

are edited.







Brightness Up Button: Tap to raise the intensity of the lights to the maximum level of 5. The intensity levels are as follows: 5 = 100%, 4 = 80%, 3 = 60%, 2 = 40%, 1 = 20% and 0 = 0%.

Brightness Down Button: Tap to lower the intensity of the lights to the minimum level of 0.

Intensity Indicator: Displays the current intensity level of the lights by the number of bars filled in. this will only work with the solid color option. If the blending mode is on, the light bulb is grayed out. The range is from 0 to 5.

Speed Control Button (Increase): Tap to increase the blending speed of the colors to the maximum speed of 5. The speed settings are as follows: 5 = every 5 secs, 4 = every 10 secs, 3 = every 15 secs, 2 = every 30 secs and 1 = every 60 secs.

Speed Control Button (Decrease): Tap to decrease the blending speed of the colors to the minimum speed of 0.



Color Selector: Tap a color to select a single color.

Back Button: Tap to go back to the previous menu.

Invert Button: Tap to invert the display image.

10.9 Restricting Operation

The control can be restricted to prevent unwanted use or temperature adjustments. Locking the Panel prevents the controller from being used, but all automatic functions are still active. Locking the Settings allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted. Settings Lock allows access to a reduced selection of menu items. These include Filter Cycles, Invert, Information and Fault Log. They can be seen, but not changed or edited.





Panel Locked and Settings Unlocked

Locking / Unlocking

The same steps are used to Lock and Unlock. To lock either Settings or Panel first select the Settings (if it says "Unlocked") or Panel (if it says "Unlocked"), then press the word "Lock" for 5 seconds. To unlock either Settings or Panel first select the Settings (if it says "Locked") or Panel (if it says "Locked"), then press the word "Lock" for at least 5 seconds.



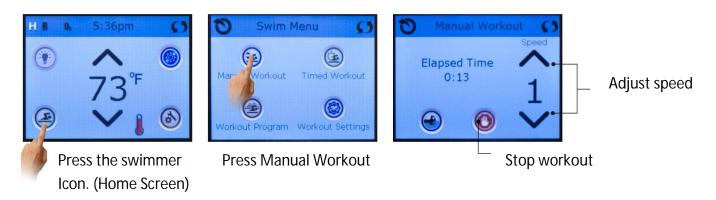
Press here for 5 seconds to lock or unlock

11.0 Pro X Current Control System

Pro X Current Control provides a low cost swim spa solution. Our unique plumbing configuration ensures uniform water flow for a smooth workout experience. Pro X is configured with 4 two-speed pumps and provides a wide variety of workout modes to ensure swimmers achieve their fitness goals.

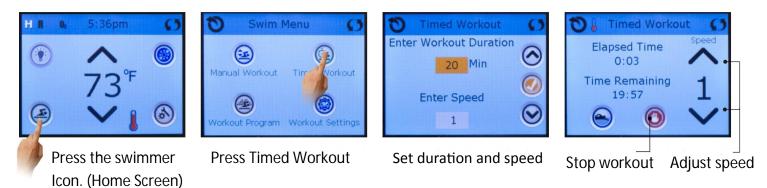
11.1 Manual Workout Mode

With the Manual Workout the user adjusts the speed up and down. The workout runs until it times out after an hour or the user cancels the workout. Workout elapsed time is shown. Workout can be paused / resumed. A swimmer icon animates when the workout is running. The icon stops and turns gray when the workout is paused.



11.2 Timed Workout Mode

Timed Workout is the same as a manual workout except the user has to enter a workout duration and initial workout speed before progressing to the workout screen. Users can do everything they can on the manual workout screen. It adds the workout time remaining to the display.



11.3 Workout Program Mode

Workout Program mode provides a list of workouts to help the swimmer achieve their fitness goals.







Workout Program List



Workout Program List (continued)

Create a custom user workout by following these steps.





1 - Horizontal graph axis represents total workout duration.

2A - One segment of time. The total workout duration is divided into segments of time. Each segment represents the water speed . Each segment can be changed to increase or decrease speed.

2B - Orange editing box. You can edit each segment of time when it is selected by the orange box.

3 - Vertical graph axis represents water speed.

- 4 Delete current workout
- 5 Proceed to next editing stage
- 6 Exit current screen
- 7A Edit current workout
- 7B Save current workout



 Edit Workout
 Image: Constraint of the second seco

Move orange selector box right/left with arrow buttons.
 Press check button to go to the next stage.



1 - Increase / decrease water speed with arrow buttons.

2 - Press check button to go to the next stage.



Press save button to save the workout.



Press check button to go to the next stage



Select "Min" field and increase / decrease workout duration with arrow buttons.



1 - Select "Enter Speed" field and increase / decrease water speed with arrow buttons.

2 - Press check button to go to the next stage.



This screen appears during the workout. Press the red button to stop – the workout.

Press arrow buttons to change water speed during workout if desired.

12.0 Swim Spa Maintenance

Proper and regular maintenance of your swim spa will help it retain its beauty and performance. Your authorized Jacuzzi dealer can supply you with all the information, supplies, and accessory products you will need to accomplish this.



DANGER: RISK OF SEVERE INJURY OR DROWNING BY ENTRAPMENT!

- Keep hair, loose articles of clothing or hanging jewelry away from suction fittings, rotating jets or other moving components to avoid entrapment that could lead to drowning or severe injury.
- Never use the swim spa unless all suction guards, filter, filter lid, or skimmer assembly are installed to prevent body and/or hair entrapment.
- Never operate or use the swim spa if the filter, filter lid, or skimmer assembly are broken or any part of the skimmer assembly is missing. Please contact your dealer or nearest service center for service.
- The suction fittings and suction covers in the swim spa are sized to match the specific water flow created by the pump(s). If it is necessary to replace the suction fittings, suction covers or pump(s), be sure that the flow rates are compatible and are in compliance with the VGB Safety Act, page 2.
- Never replace a suction fitting or suction cover with one rated less than the flow rate marked on the original suction fitting. Using improper suction fittings or suction covers can create a body or hair suction entrapment hazard that may lead to drowning or severe injury.
- Owners must alert all swim spa users to the potential risk of Hair, Limb, Body, Evisceration (disembowelment), and Mechanical Entrapment.

12.1 Cleaning the Filter Cartridges

A reminder message appears on the control panel display after a specified number of days to remind you to clean the skimmer filters. <u>This reminder must be reset at each filter cleaning interval.</u>

12.2 Draining and Refilling

About every 3 months, you will want to replace the swim spa's water. The frequency depends on a number of variables including the amount of use, number of users, attention paid to water quality maintenance etc. During this time, it is also recommended that you use Jacuzzi's Jet Line Cleaner to clean the internal plumbing lines from buildup and debris. Note: Jacuzzi chemicals are for use in the U.S. only.

CAUTION! READ THIS BEFORE DRAINING: To prevent damage to the swim spa components, turn off power to the swim spa at the circuit breaker before draining it. Do not turn the power back on until your swim spa has been refilled.

CAUTION: There are certain precautions to keep in mind when draining your swim spa. If it is extremely cold, and the swim spa in outdoors, freezing could occur in the lines or the equipment (see WINTERIZING). On the other hand, if it is hot outdoors, do not leave the swim spa's surface exposed to direct sunlight.

DRAINING YOUR SWIM SPA

REFER TO FIGURE 1 & FIGURE 2

- 1. Locate nearest drain facility (Check your local bylaws).
- 2. Attach backwash hose to hose bib located on plumbing line beside the swim spa control system.
- 3. Run backwash hose to drain location.
- 4. Open ball valve.
- 5. Close filtration pump return gate valve next to the ball valve (this directs the water out the backwash hose).
- 6. Activate the circ pump.
- 7. Monitor the swim spa while it drains.
- 8. Use a second garden hose to wash down interior surface as the swim spa continues to drain. A sponge may also be used to wipe down the interior surface.

- 9. To completely flush the old water from the plumbing lines: allow fresh water to fill into the foot-well area while the old water continues to be pumped out. Always keep at least 10cm (4 in.) of water in the foot-well so that pump 1 remains primed.
- 10. When the water from the drain hose turns clear (indicating fresh fill water), flush is complete.
- 11. Turn OFF the filtration pump.
- 12. Close the drain-hose bib on the swim spa plumbing line and continue filling swim spa with fresh water.
- 13. Place cover on swim spa (to avoid splash-out).
- 14. Open filtration pump return gate valve.



- 15. Press any button on the topside control panel (other than the pump 1 button) to take the system out of **STANDBY/DRAIN ASSIST** mode. Filtration pump and the heater will activate to circulate and heat the water while filling continues. This also reduces the possibility of an airlock occurring.
- 16. Continue adding fresh fill water until level is approximately 19mm (3/4 in.) from the top of the skimmer opening.

12.3 Cleaning the Swim Spa Interior

To preserve the sheen of your swim spa's surface, it is crucial that you avoid using abrasive cleaners or cleaners which have adverse chemical effect on the surface. If you are not certain as to the suitability of a particular cleanser, consult your authorized Jacuzzi dealer. We recommend using Jacuzzi's Spa All Purpose Cleaner to clean the swim spa's interior surface. Use extreme care to assure that no soap residue is left on the surface. This could cause severe sudsing when the swim spa is refilled. Jacuzzi chemicals are for use in the U.S. only.

12.4 Pillow Care

Clean the headrests in your swim spa as needed by wiping them with a cloth with soapy water. It is not necessary to remove the headrests for cleaning. To remove headrests for long term storage or replacement, grasp both ends of each headrest and gently pull inward towards the center of the swim spa. To reinstall, over mounting strip and press down until headrest mounting bracket emits a "click" sound. Then adjust the headrest height by simply moving up or down as desired.

12.5 Maintaining the Synthetic Cabinet

The synthetic cabinet requires little or no maintenance of any kind, To clean, simply wipe cabinet with mild detergent soap solution and a clean towel.



CAUTION: Never spray cabinet with a high pressure garden hose for any reason since this action may induce an electrical short in the spa's electrical equipment.

12.6 Cleaning the Control Panel

To clean, simply wipe the control panel with a micro-fiber cloth that is used for cleaning polycarbonate lenses.

12.7 Cover Care and Maintenance

Regular monthly cleaning and conditioning is strongly recommended and may increase the longevity of your cover. To clean and condition the cover:

- 1. Use a garden hose to remove any debris.
- 2. Using a large sponge or soft bristle brush, use diluted or mild soap to gently scrub the top.
- 3. Rinse and clean and do not allow soap to dry on the cover. Do not use soap on the underside of the cover.
- 4. Please check with your Jacuzzi dealer for recommended cover care and conditioning products. Use non-petroleum based conditioners to keep the vinyl supple.
- 5. Do not use any solvents, abrasive cleaners or strong detergents. Do not use products that contain silicone or alcohol.

Additional Care and Maintenance Instructions:

- 1. Debris can accumulate on the swim spa cover. Removal of snow or other debris will help to avoid breakage of the foam cores.
- 2. Be sure to lock the cover straps to secure the cover from unwanted or accidental entry.
- 3. Do not place heavy objects on the cover.
- 4. Do not walk, sit or stand on the cover.
- 5. Do not drag or use the flaps / skirt or the cover lock straps to remove the cover.
- 6. Use only recommended cover lifter systems.

- 7. Use only chemicals and cleaners recommended by Jacuzzi.
- 8. Remember to keep swim spa covered when not in use. Maintaining proper water levels assures efficient operation and efficient electrical usage.
- 9. Do not expose your swim spa to the sun for extended periods of time as UV rays can damage the interior surface.
- 10. Use caution when removing cover. Before removing cover, assure all locks have been released to avoid lock breakage and / or cover strap damage.

12.8 Winterizing

Your Jacuzzi swim spa is designed to automatically protect itself against freezing when operating properly. During periods of severe freezing temperatures, you should check periodically to be certain that the electrical supply to the spa has not been interrupted. In extreme, bitter cold weather (less than 32°F) we recommend that the circulation pump is set for 24-Hour operation and that the auto-heating is selected to protect against damage to the swim spa.

If you do not intend to use your swim spa, or if there is a prolonged power outage during periods of severe freezing temperatures, <u>it is important that all water be removed from the swim</u> <u>spa and equipment to protect against damage from freezing.</u>

Expert winterization of your swim spa is highly recommended; contact your authorized Jacuzzi dealer. In emergency situations, taking the following steps can minimize damage.

CAUTION: TURN OFF POWER TO SWIM SPA.

- 1. Follow the directions for draining the swim spa.
- 2. Turn the massage / diverter selector(s) into the middle combo position to allow the water in the plumbing lines to drain.
- 3. Turn the waterfall valve to the open position to allow the water in the plumbing lines to drain.
- 4. Ass the water level drops below the seats, use whatever means necessary to get the water out of the recessed seating areas and into the footwell, such as a wet / dry vacuum.
- 5. Open all the air controls and leave them open until you resume use of the swim spa.
- 6. When the water level ceases to drop, use whatever means available to remove any remaining water from the footwell, such as a wet / dry vacuum.
- 7. Remove the equipment-side cabinet panels and locate the drain plugs in the front of each pump. Remove these plugs to allow for water to drain out of the pumps and heater.

Note: Approximately one to two gallons will be released during this procedure. Use a wet / dry vacuum or other means to keep this from flooding the equipment compartment. Replace the drain plugs.

- 8. Loosen the unions at the ends of the heater(s) and vacuum up any water that comes out of the heaters.
- 9. Reinstall the cabinet side panels and cover the swim spa so that no casual moisture can enter into it.

Consult your Jacuzzi dealer if you have any questions regarding winter use or winterizing.

12.9 Starting Your Swim Spa in Cold Weather

If you want to start up your swim spa after it has sat empty for a time in freezing temperatures, be aware that the water remaining in certain sections of the piping may still be frozen. This situation will block water flow preventing the swim spa from operating properly and possibly damaging the equipment. We recommend you consult your dealer for guidance before attempting to restart your swim spa under these conditions.

13.0 Water Quality Maintenance

To decrease the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and / or respiratory ailments, maintain water quality within specified limits. This will enhance your enjoyment and prolong the life of the swim spa's equipment. Doing so requires regular attention because the water chemistry involved is a balance of several factors. Procrastination in regard to water maintenance will result in poor and potentially unhealthful conditions for soaking and even damage to your swim spa investment. For specific, guidance, on maintaining water quality, consult your authorized Jacuzzi dealer who can recommend the appropriate Jacuzzi chemical products. Jacuzzi chemicals are for use in the U.S. only.



WARNING: FAILURE TO MAINTAIN WATER QUALITY!

- Increase risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and / or respiratory ailments.
- Damage the equipment, components and swim spa shell, which are not covered under the swim spa's warranty.

CAUTION: Never store swim spa chemicals inside the swim spa's equipment bay. The equipment bay may reach elevated temperatures, this is where high voltage electronic devices are located. This area is not intended for storage of any kind.

13.1 pH Control

pH is a measure of relative acidity or alkalinity of water and is measured on a scale of 0 to 14. The midpoint of 7 is said to be neutral, above which is alkaline and below which is acidic. In swim spa water, it is important to maintain a slightly alkaline condition of 7.4 to 7.6. Problems become proportionately severe the further outside of this range the water gets. A low pH will be corrosive to metals in the swim spa equipment. A high pH will cause minerals to deposit on the interior surface (scaling). In addition, the ability of the sanitation agents to keep the swim spa clean is severely affected as the pH moves beyond the ideal range. That is why almost all swim spa water test kits contain a measure for pH as well as sanitizer. Jacuzzi offers products that help you maintain the ideal range. These chemicals are for use in the U.S. only.

13.2 Sanitizing

To destroy bacteria and organic compounds in the swim spa water, a sanitizer must be used regularly. Chlorine and bromine are two most popular sanitizers used to date. The "Proclear Mineral Spa Clarifier" designed especially for your swim spa is a beneficial product for water maintenance. Many other additives are available for your swim spa. Some are necessary to compensate for out of balance water; some aid in cosmetic water treatment and others simply alter the feel or smell of the water. You authorized Jacuzzi dealer can advise you on the use of these additives. When adding spa shock (chlorine or non-chlorine) or pH balancing chemicals activate the jet pump(s) and leave the swim spa cover open for a minimum of 20 minutes. By doing this you will allow excessive chemical vapors to exit the swim spa, protecting pillows and plastic knobs from chemical attack.



WARNING: RISK OF PERSONAL INJURY, DROWNING OR ENTRAPMENT!

Never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.

CAUTION: RISK OF PERSONAL INJURY OR SWIM SPA DAMAGE!

Never add chlorine tablets (trichlor) or acid to your swim spa for any reason! These chemicals may damage components within your swim spa, burn or irritate your skin, create a rash and void the manufacturer warranty for your swim spa.

13.3 Other Additives

Many other additives are available for your swim spa. Some are necessary to compensate for out of balance water, some aid in cosmetic water treatment and others simply alter the feel or smell of the water. With our chemical products your authorized Jacuzzi dealer can advise you on the use of these additives. Jacuzzi chemicals are for use in the U.S. only.

13.4 CLEARRAY[®] (Ultraviolet) Water Purification System

CLEAR**RAY** Water Purification System is exclusive technology utilizing natural ultraviolet technology to eliminate waterborne bacteria, viruses and algae in swim spas. The ultraviolet light otherwise known as UV-C or germicidal light inactivates the microorganisms disrupting the DNA so that it cannot reproduce and is considered lifeless. CLEAR**RAY** is plumbed in-line with your filtration system. After the water is drawn from the pump, filter and heater it is directed through the CLEAR**RAY** system. Water passes through an ultraviolet light energy that treats and disinfects the water. The water is then pumped back into the swim spa giving you crystal clear water instantly. The system has a ballast that is the power supply for the purification system; it has two LED indicator lights. The "Power On" (red color) indicating incoming power flow and the "Lamp On" (green color) indicating the system is properly working. CLEAR**RAY** is standard on all models.

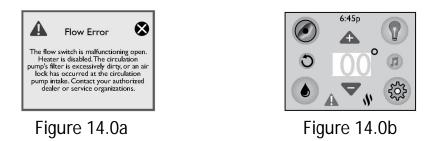
After a year the bulb must be replaced. If the CLEAR**RAY** timer has been programmed correctly a message will appear on the LCD display when the time allotted has expired. In order to clear the message, a new CLEAR**RAY** UV bulb needs to be installed and the time must be reset. Contact your authorized Jacuzzi dealer to assist in changing our the bulb.

14.0 Error / Display Messages



There are a number of unique functions designed into your Jacuzzi swim spa to protect it from damage and / or to aid in troubleshooting. When this occurs the swim spa will notify you by showing the screen below, Figure 14.0a. A solid white light indicates that all operations are normal. A solid red light indicates that immediate attention is required to clear or fix an error code. Following is a list of all the possible messages along with their meanings. Always insist on genuine Jacuzzi replacement parts.

Note: if you tap "X" the display will change to Figure 14.0b. The error icon will remain on the screen as a reminder. If the error is not taken care of or fixed, the error display will reappear in 2 hours, Figure 14.0a.



- 1. **<u>Open Flow Switch</u>**: (Heater is deactivated. The filter/circulation may also be deactivated). The flow switch is malfunctioning open, the circulation pump's filter cartridge is excessively dirty or an air lock condition has occurred at the circulation pump intake. Contact your authorized dealer or service organization.
- 2. <u>**Closed Flow Switch**</u>: (Heater is deactivated. The filter/circulation may also be deactivated). The flow switch is malfunctioning closed. Contact your authorized dealer or service organization.
- 3. **Toggling Flow Switch**: (Heater is deactivated). The flow switch is behaving erratically. Heater is disabled, check for dirty filter. Make sure to clean the filter(s) and correct proper water level before contacting your dealer or service organization.
- 4. **Shorted Hi-limit Temp Sensor**: The hi-limit temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 5. **Open Hi-limit Temp Sensor**: The hi-limit temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 6. **Shorted Water Temp Sensor**: The temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 7. **Open Water Temp Sensor**: The temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 8. <u>**Closed Flow Switch on Start-up**</u>: Flow switch is non-functional. Closed or shorted flow switch on system start-up (system disabled). Contact your authorized dealer or service organization.
- 9. **Frozen on Start-up**: Flow switch is non-functional. Shorted flow switch on system startup (system disabled) and freeze condition detected. Contact your authorized dealer or service organization.

10. Cool Warning: Swim spa water is more than 20°F / 11°C cooler than the temperature set point , the circulation pump and heater will automatically activate to provide freeze protection. The swim spa will stay in this mode until the water temperature reaches 14°F / 8°C below the set temperature. No corrective action is necessary.
Note: The heater icon will be blinking and the error icon will be displayed under the

temperature.

- 11. <u>Freeze protection</u>: A potential freeze condition has been detected. No action is required. Jet pump(s) operate until the swim spa is out of danger. No corrective action is necessary. If condition persists, contact your authorized dealer or service organization.
- Overheat protection: DO NOT ENTER THE WATER! Water temperature is above acceptable limits. Heater is deactivated. Remove swim spa cover to speed cooling. If condition persists, contact your authorized dealer or service organization.
 Note:
 - As a safety measure, the red lights of the swim spa will flash on and off as an indication that the swim spa is in an overheat condition.
 - The heater icon will be blinking and the error icon will be displayed under the temperature.



WARNING: RISK OF HYPERTHERMIA (OVERHEATING) CAUSING SEVERE INJURY, BURNS OR WELTS.

13. <u>Controller Overheat Protection</u>: Controller temperature has exceeded acceptable limits. If condition persists, provide shade for equipment side of swim spa. Contact your authorized dealer or service organization.

Note: The heater icon will be blinking and the error icon will be displayed under the temperature.

- 14. **Panel Com Error**: The topside controller is having trouble communicating to your swim spa. Contact your authorized dealer or service organization.
- 15. <u>CLEARRAY Replacement Reminder</u>: This message will appear when the CLEARRAY bulb reminder time has expired. The CLEARRAY bulb must be replaced.
- 16. <u>Clean Filter Reminder</u>: This message will appear when the filter reminder time has expired. Remove the filters for cleaning or replacement.
- 17. <u>Water Refresh Reminder</u>: This message will appear when the "Water Refresh" timer has expired. The water needs to be drained and refilled with fresh water.

15.0 Troubleshooting Procedures

In the unlikely event your swim spa is not working the way you believe it should, please first review all the installation and operating instructions in this manual and check the message on the panel display second, if you are still not satisfied it is working properly, please follow the appropriate troubleshooting instructions:

PROBLEM	PROCEDURE			
NONE OF THE COMPONENTS OPERATE (i.e pump light)	 Check the control panel lights 1. If there are letters or symbols displayed on the screen, refer to the previous Section to determine the meaning and required action. 2. If nothing appears on the screen: A: Check the household circuit breaker B: Contact your dealer or authorized service organization 			
PUMP DOES NOT OPERATE	 Activate the "JETS" If no sound is detected or if a "buzzing" sound is detected, turn off power to the swim spa and contact your dealer or service organization. If the motor operates but no water flows to jets: A. Pump may not be properly primed. See instruction below. B. Contact dealer or authorized service organization. 			
Pump Priming Instructions:				

- 1. Turn off power to the swim spa.
- 2. Remove the handle from the massage selector supplied by the pump you are priming.
- 3. Loosen the massage selector's cap slightly (counterclockwise), listening for the air to seep out.

4. Tighten the cap finger-tight, replace the handle and turn the swim spa's power back on. **Note:** This method must be used for the jet's pumps because these pumps are not connected to the main filter system in any way.

CAUTION: If freezing conditions exist and pump is not operational, take measures to protect the system from freeze damage. See the section on Winterizing.

PROBLEM	PROCEDURE	
POOR JET ACTION	1.	Make certain the jets pump is turned on.
	2.	Check position of massage selectors.
	3.	Open air control for selected jet system
	4.	Check for adequate water level.
	5.	Check for dirty filter.
WATER IS TOO HOT	1.	Reduce thermostat setting.
	2.	Switch swim spa to "Econo" mode to turn heater on only during
		pre-programmed time.
	3.	Make sure the pumps are turned off an not constantly running.
NO HEAT	1.	Check thermostat setting.
	2.	Keep the cover in place while heating.
	3.	If the heater indicator is displayed, but no temperature increase
		is experienced after a reasonable period of time, contact your
		dealer or authorized service organization.
FILTER / CIRCULATION	1.	Verify filter / circulation pump is programmed to run 8 hours
PUMP OFF		a day.
	2.	Make sure there are no errors preventing the pump from
		turning on.
	3	Swim sna water is warmer than 95° F (3 4° C) and two degrees

3. Swim spa water is warmer than 95°F (34°C) and two degrees warmer than the set temperature.

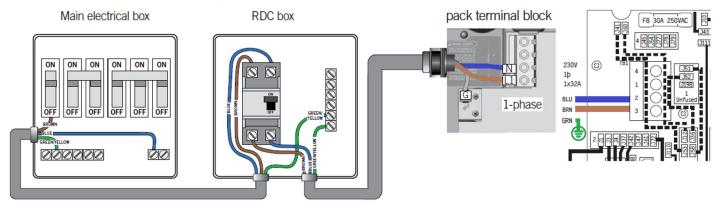
Jacuzzi builds the best swim spas in the industry. Nonetheless, we are always striving to improve the quality and features of our products. Your input as a Jacuzzi swim spa owner is a cherished part of this process. If you have any comments or suggestions, or wish to be informed on any new products for your swim spa, please write to us.

CONGRATULATIONS on your good taste and welcome to the happiest and most relaxed family in the world!

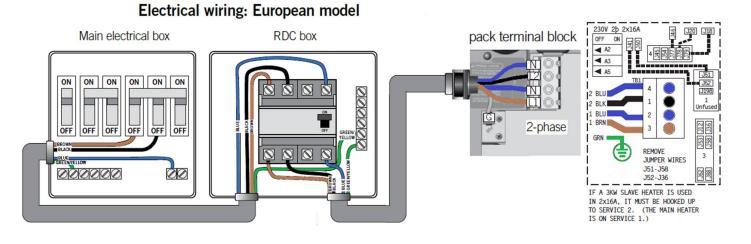
16.0 Typical Swim Spa Wiring Diagrams

230 VOLT 50 Hz SINGLE PHASE RCD WIRING

Electrical wiring: European model



230 VOLT 50 Hz DUAL PHASE RCD WIRING



230 VOLT 50 Hz THREE PHASE RCD WIRING

