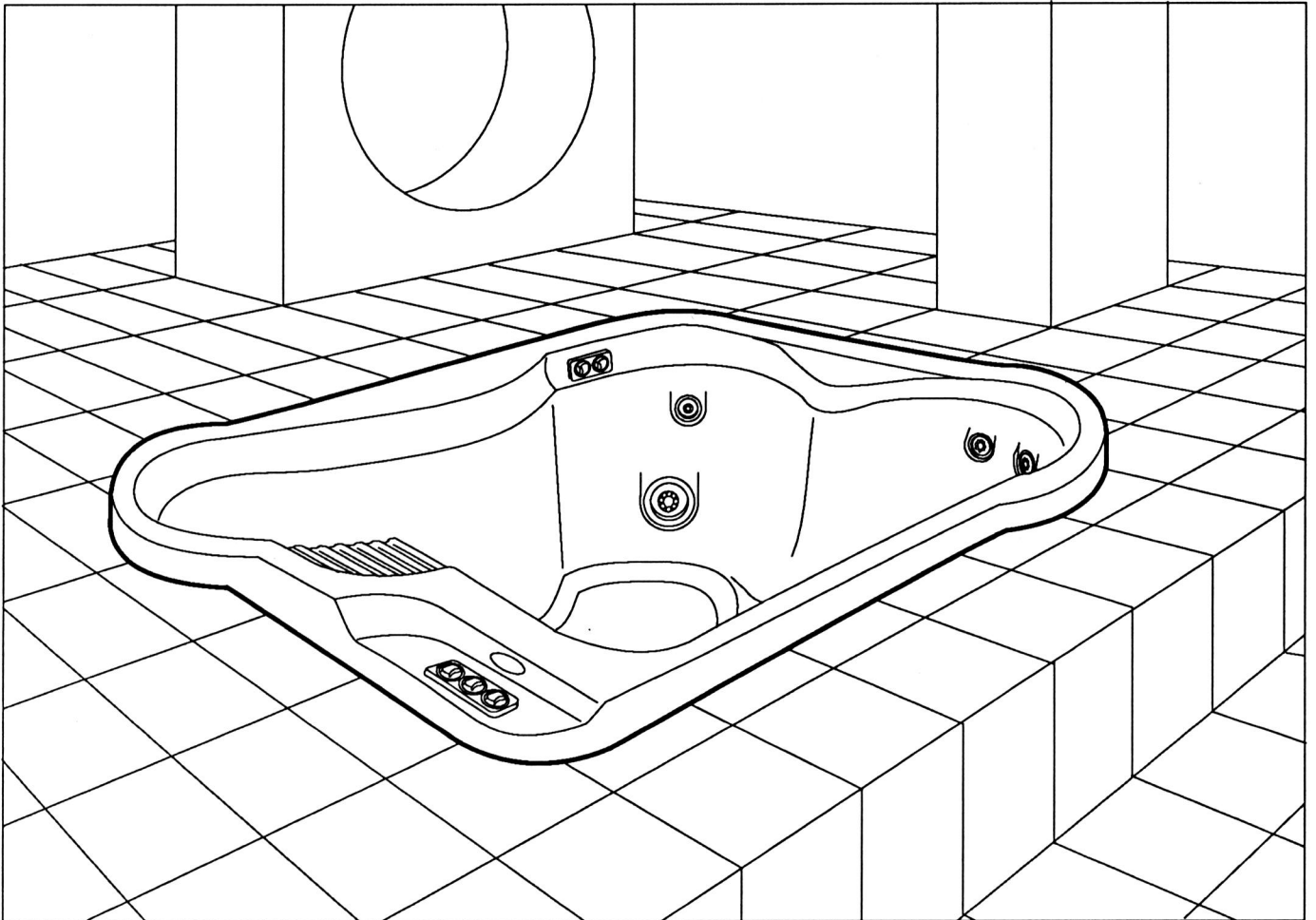


THE DELFINO™

Owner's Manual



IMPORTANT SAFETY INFORMATION

READ ALL INSTALLATION INSTRUCTIONS

Jacuzzi Whirlpool Bath does not recommend spa water temperatures in excess of 104°F. Water temperatures in excess of 104°F and prolonged periods of use can raise the internal human body temperature excessively and impair the body's ability to regulate its internal temperature. Limit your initial use of the spa to 10-15 minutes. High body temperatures affect people differently; consult your physician about your safety and comfort before using the spa.

The elderly, the infirm, and children should not use the spa unattended. Infants should not be permitted in the spa at water temperatures over 100°F. Pregnant women and people with heart conditions should consult their physicians before using the spa at water temperatures over 100°F.

Extra care should be taken when using the spa and consuming alcoholic beverages. Alcohol, drugs, or certain medications such as tranquilizers affect a person's ability to withstand high temperatures and may produce dangerous effects.

Keep body, hair, and clothing a minimum of 12 inches away from suction fitting and skimmers at all times when the spa is operating. Hair longer than shoulder length should be secured close to the head, or a bathing cap should be worn. Do not remove the suction grilles! They are safety devices and must always be in place on the suction fitting to minimize the potential hazard of hair entanglement or body entrapment.

The wet surface of the spa is slippery. Use care when entering and exiting.

While the optional spa cover is rigid, it is not designed to support any weight. Therefore, as a safety precaution, do

not sit, stand or lie on it.

The spa must be installed with adequate access and water drainage system. (See Installation Instructions.)

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

This unit is equipped with a ground fault circuit interrupter (GFCI) located at the end of the line cord. Check at least once a month to be sure this is operational. (The procedure for testing is described on page 6 of this manual.)

Do not use electrically connected devices such as television, radio, or stereo speakers, lights, cooking devices, or telephones within 5 feet of the spa while the spa is being used. Lighting fixtures must not be located directly above or within 5 feet of the spa. If located within 10 feet of the spa, they must be on a circuit protected by a GFCI.

Do not apply power to the spa unless it is filled with water to the normal water level, which is to the water level indicator mark on the skimmer frame. Activating the spa when there is an insufficient amount of water can damage the circulation pump and may cause a fire.

Read manufacturer's safety information provided with all optional equipment.

Save These Instructions for Future Use.

Owner's Record

Date Purchased _____

Purchased From _____

Installed By _____

Serial Number _____ Model #B700000

(See page 1 for location of serial number.)

The Delfino

Owner's Manual

Model B700000

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The Delfino™

Installation Instructions

The Delfino™, by Jacuzzi Whirlpool Bath, comes with integrated electric heater, filter, skimmer and whirlpool system. The 60" X 72" spa includes factory applied foam insulation around the spa shell to ensure better heat retention.

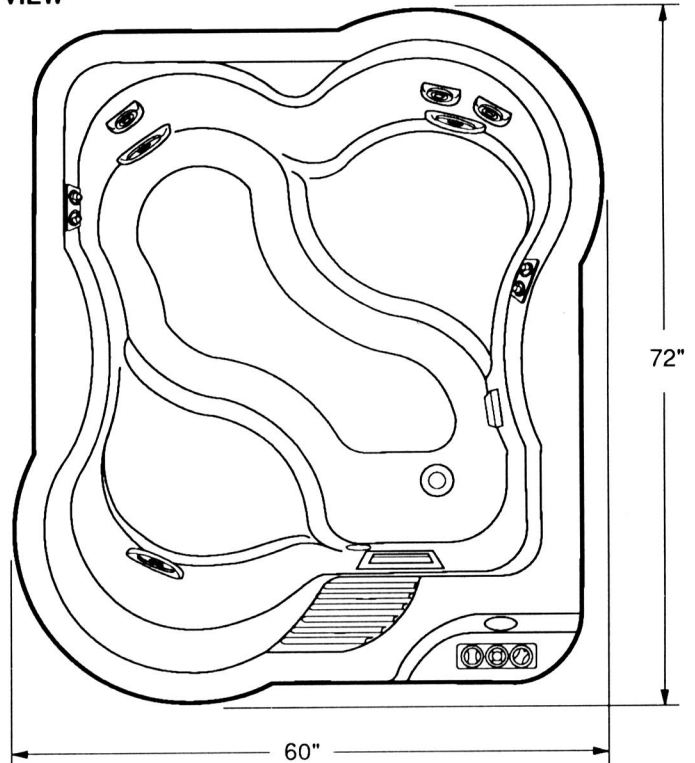
STANDARD FEATURES

- Two-level seating for three people.
- Four fully adjustable Power Pro™ jets
- Three directionally adjustable jets
- Silent Air Induction system
- Integrated heater
- Patented front load filter

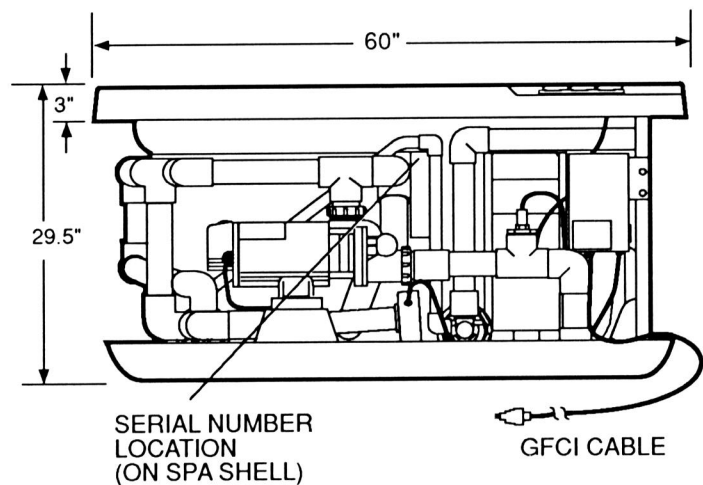
OPTIONS

- Water Rainbow™ Spout
- Gas or Electric Heater
- Timer
- Lamp Kits

TOP VIEW



SIDE VIEW



SPECIFICATIONS

DIMENSIONS	WHIRLPOOL MOTOR/ PUMP*	OPERATING GALLONAGE	PRODUCT WEIGHT	ELECTRIC HEATER	SHIPPING WEIGHT	ELECTRICAL REQUIREMENTS*
72" (1829 mm) L 60" (1524 mm) W 29.5" (749 mm) H	2.0 HP speed 115 VAC 2.7/13.8 AMP 1725/3450 RPM Single Phase 60 Hz	158 U.S. gal (598 liters)	349 lb (158.6 kg)	1.5 kW 12.3 AMP	510 lb (227.3 kg)	115 VAC 20 AMP 60Hz Separate Circuit (see page 17 for min. voltage requirement)

PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

INSTALLATION

Inspection and Shipping Claims

Check for shipping damage upon receipt of the spa. Jacuzzi Whirlpool Bath is not responsible for damage to the spa sustained during shipping. If damage is evident before unpacking, see instructions regarding shipping claims on the outside of the carton and immediately file a claim with the carrier.

Once the spa has been removed from the carton and before it is permanently installed (see below on this page for unpacking instructions), check the spa completely for damage. Fill the shell with water and operate the system (see Operating Instructions) to check for leaks which may have resulted from shipping or handling. All Jacuzzi Whirlpool Bath spas are factory tested for proper operation and water tight connections prior to shipping. If leaks or other problems are detected, immediately notify your Jacuzzi Whirlpool Bath dealer or Authorized Service Agent, or call Jacuzzi Whirlpool Bath, (510) 938-7411, for Warranty Service.

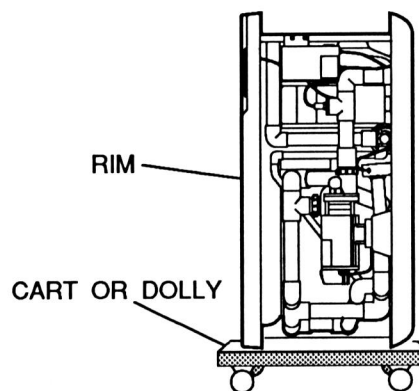
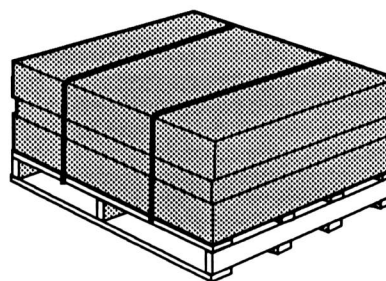
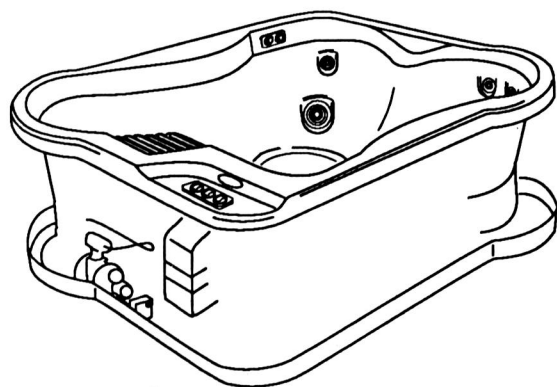
Note: Damage or defects which could have been discovered and repaired prior to installation and which are claimed after final installation of the spa, are excluded from our warranty.

Unpacking

1. Remove the outer carton by cutting the bands and lifting the cover and the sides. Leave the remaining plastic sheet attached to the top of the spa shell to keep the shell clean and free from debris during installation.
2. Lift the spa from the carton (approximate weight 350 lbs.) and set it in place of intended use.
3. If, after having been removed from the carton, the spa must be turned onto its side to move it, make sure the surface of the cart or dolly on which it is placed is large enough to support the entire width of the spa, including the rim and base. Do not allow the spa to rest on the equipment side. See illustration at lower right.
4. Before installation begins, remove the owner's packet from the accessory package. This package contains the Warranty Card and the Owner's Manual. Record the serial number on the inside front cover of this manual and on the warranty card. (See illustration on page 1 for the serial number location.)
5. Place the filter cartridge in a dry place for later use.

Important! Read all the instructions contained in the Owner's Manual before beginning installation.

DELFINO



**SURFACE MUST SUPPORT
RIM AND BASE**

INSTALLATION

Positioning Your Spa

Be sure to position the spa on a level, continuous surface which can support the weight of the spa, water and people; this weight is approximately 1965 lbs. You must also provide access to the spa's equipment side for service and general maintenance.

Electrical Requirements

Your Delfino, as it comes from the factory, requires a 115 VAC 20 AMP electrical outlet and must be in a grounded separate circuit having no other appliance connected in that circuit. If you do not have a 115 VAC 20 AMP circuit, a qualified electrician should be called in to install the necessary wiring. Inadequately sized wiring may cause a voltage drop which might cause the unit to malfunction and bring about permanent damage to the spa's electrical system. The circuit must also have a ground wire in order to take advantage of the designed-in safety features of the spa. A bond wire must also be used. Bond according to procedure described in "Electrical Precautions", item 5.

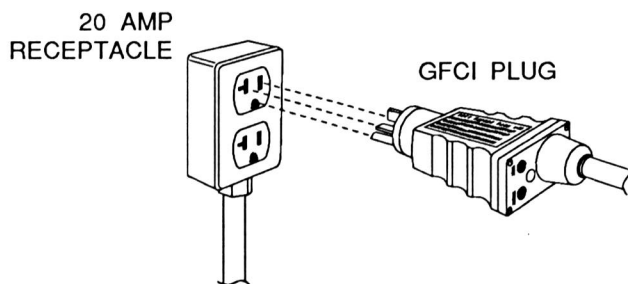
Caution: Without proper grounding and bonding, a system malfunction may cause fatal shock.

Electrical Precautions

1. The spa is supplied with a 15 ft. line cord which terminates with an integral Ground Fault Circuit Interrupter (GFCI) plug. Locate the spa near an outlet, but no closer than 10 ft. **DO NOT USE AN EXTENSION CORD!** Using an extension cord is hazardous and will decrease the amount of power to the unit, causing slow heating, poor whirlpool performance, or system malfunction.
2. Make sure the line cord does not lie across a walkway or a heavily traveled area where it may be a safety hazard or become damaged.
3. Do not locate lighting fixtures directly above the spa. If lighting is located within 5 feet of the spa, it must be on a circuit protected by a GFCI (Ground Fault Circuit Interrupter).
4. Do not use electrically connected devices, such as televisions, radios, telephones, stereo speakers, light or cooking devices within 5 ft. of the spa when the spa is being used.
5. All fixed metal objects located within 5 ft. of the spa, such as, railings, door frames, greenhouse structures, etc., must be attached to the bonding bar on the outside of the spa electrical cabinet using #8 solid copper wire. **With #8 solid copper wire, bond the spa to the house electrical panel or approved local bond. Bonding lugs are available at your local electrical supply store. (See illustration on page 5 for bond bar location.)**
6. An approved ground may be an 8 ft. long ground rod, a plate electrode, or a buried metal water pipe with at least 10 ft. of buried pipe. Check your local building code for requirements.

WARNING!

The continuous service ground wire is located in the line cord supplied. **Do not modify this cord in any way!** Tampering with the ground wire or using an adaptor which would make the built-in grounding device and GFCI ineffective would cause electrical shock. Such modification would also nullify the warranty.



CAUTION

Do not apply electrical power to the spa unless it is filled with water to the normal water level, which is approx. 6" below the spa rim (see location of water level indicator on face of skimmer on page 11). If the spa's motor/pumps are actuated without sufficient water in the unit, the circulation pump could be irreparably damaged. Not heeding this caution will nullify the warranty. In addition to damaging the unit, operating the unit with insufficient water could cause a fire.

INSTALLATION

Outdoor Installations

Do not install the Delfino Spa outdoors. It is designed for use indoors only. A companion spa product "Alexa" is available through your dealer for use in outdoor installations.

Indoor Installation

If you are planning to construct a concrete pad for the spa to rest on, we recommend the following. Construct forms for a 7'x6'x4" thick level pad. Install a #10 gauge wire mesh 6"x6" steel reinforced grid. Attach a #8 solid copper wire to the grid with a ground clamp. This wire should be long enough to reach the ground bar on the spa electrical cabinet (min. 36"), but should not be located under the base of the spa. Then pour the concrete pad (see drainage).

[For installations above grade note the following and "positioning your spa"- page 3.]

Water which splashes on the floor during use of the spa may cause a walking hazard and/or structural damage unless good drainage is provided and proper waterproof building materials are used in the area surrounding and beneath the spa. Take into consideration also, the high room humidity which will exist due to high spa water temperatures. Providing natural or forced ventilation of the room will help maintain comfort and minimize moisture damage to the building. Jacuzzi Whirlpool Bath is not responsible for damages resulting from excess moisture or water spillage. Consult an architect or engineer for aid in designing your indoor installation.

Drainage

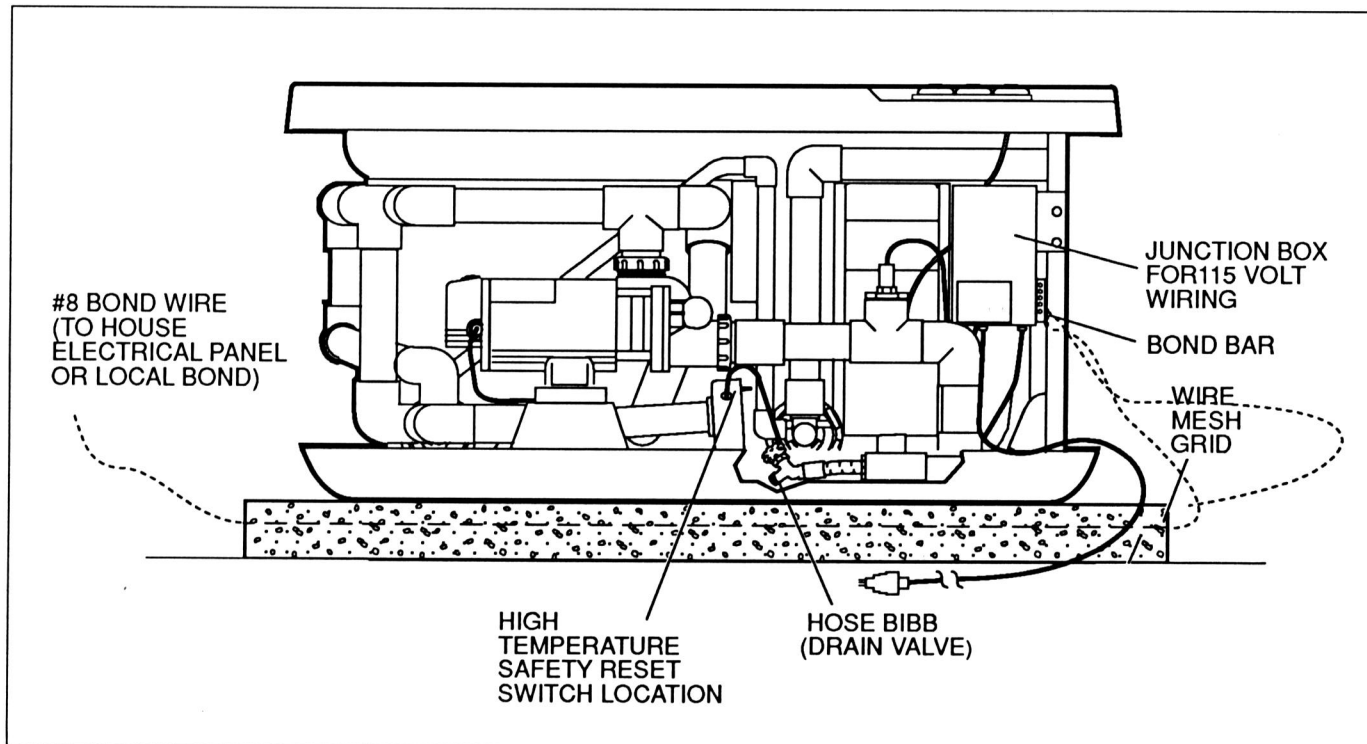
You can drain the Delfino by attaching a garden hose to the hose bibb (drain valve) located on the suction plumbing of the spa. Simply run the hose to the house sewer line or drain field and open the hose bibb.

Make sure the area surrounding the spa has good drainage to keep water from collecting at the base of the spa—especially near the equipment area. If drainage is poor and the installation is at grade level, install a drain line.

Optional Timer Installation

It is possible to install a timer if you wish to control the on/off function of your bath and thus automatically filter and heat your bath water at a specific time of day(s). Such a timer must be an outdoor type (although it can also be used indoors) having a rating of 20 AMPS for 1HP with the required 20 AMP receptacle and plug configuration. This type of timer is typically plugged into the house receptacle, and the spa line cord is plugged into the timer. Several appropriate timers are available, including one made by Intermatic, model #P171-32, which you can buy from your Jacuzzi Whirlpool Bath Dealer (JWB PN 5400000). Follow the timer manufacturer's instructions for installation and operation.

DRAINAGE AND SUPPORT



INSTALLATION

Equipment Set-Up

1. Remove the plastic sheet covering the spa. Use care; when stepping into the spa; shoes will scratch the acrylic surface.
2. Remove all packing materials from the spa.
3. Open the skimmer/filter door by the handle located in the middle of the door and remove the skimmer basket. Insert the filter cartridge into the filter housing and re-insert the strainer so that it fits in place over the filter cartridge. Close the skimmer/filter door.
4. Clean the interior of any remaining construction debris. Remove stubborn stains, paint, or tar with turpentine, isopropyl alcohol or paint thinner. A mild liquid dishwashing detergent on a damp cloth is fine for cleaning off other dirt. Plaster can be removed by scraping with a wooden edge; do not use a metal scraper, wire brush, or other metal tools, as they will damage the spa's surface.
5. On initial start-up, it is advisable to purge and sanitize the system as stated below. Carefully follow the procedure described here to purge and sanitize your spa.

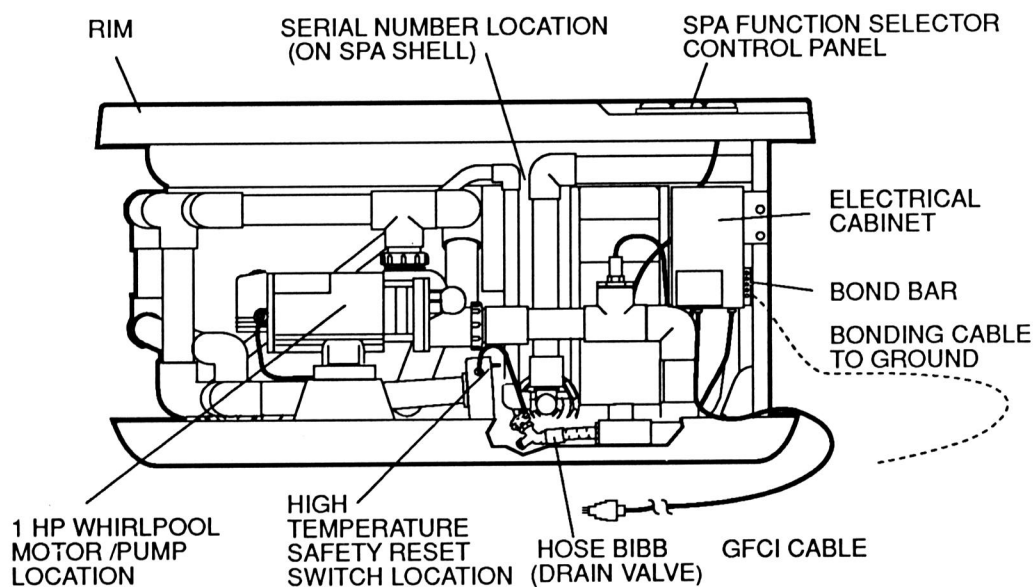
- Close the hose bibb located on the suction plumbing.
- Fill the spa with water to its normal operating level, which is to the water level indicator mark on the skimmer/filter frame (6" below the spa rim). (See diagram pg. 11)

- Select WHIRLPOOL on the function selector switch.
- Add 1/4 cup sodium dichlor (a fast dissolving granular type of chlorine) to the water and let the whirlpool run for 15-20 minutes only.
- Select OFF on the function select switch.
- Unplug the line cord.
- Open the hose bibb and drain the spa completely.

CAUTION: Leave the Optional rigid cover off the spa during this procedure. Do not use the spa during this procedure. Drain the spa immediately afterward.

6. Close the hose bibb and fill the spa with water to approx. 6 inches below the spa rim or to water line indicator mark on the skimmer frame.
7. Set the heater thermostat for the maximum temperature.
8. Test the spa for proper operation. (Refer to "Operating Instructions" pg. 7)
9. Refer to Water Quality section of the "Operating Instructions." Test for water quality, then add treatment chemicals to ensure proper levels.

All Jacuzzi Whirlpool Bath spas are factory tested for proper operation and water tight connections prior to shipping. If leaks or other malfunctions are detected, immediately notify your Jacuzzi Whirlpool Bath dealer or Authorized Service Agent, or call Jacuzzi Whirlpool Bath, (510) 938-7411 for Warranty Service.



OPERATION

Basic Control Set-Up

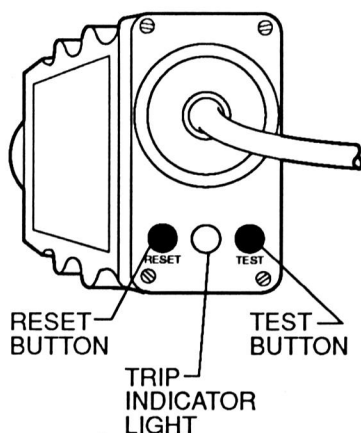
The control set-up on your spa is designed to give you fingertip control of the heater, air induction, and whirlpool/filter pump systems of your unit from inside or outside the unit. Follow the basic control set-up described on page 7 to familiarize yourself with the several functions of the control panels.

CAUTION

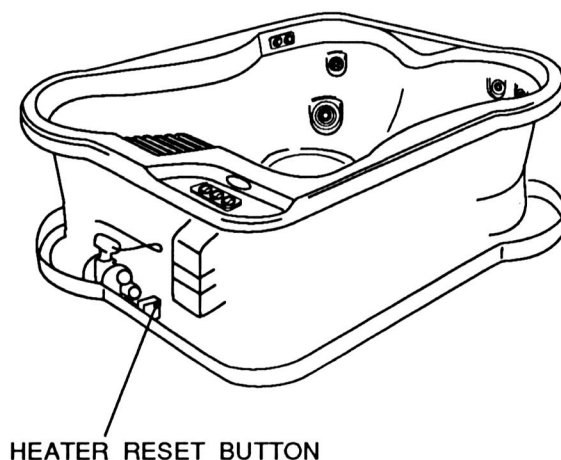
Do not turn on power unless the spa is filled with water to the normal water level, which is approximately 6" below the rim (See water level mark on skimmer). If the motor/pump is actuated when without sufficient water in the unit, the circulation pump and heater could be irreparably damaged. Not heeding this caution will nullify the warranty. In addition to damaging the unit, operating the spa with insufficient water could cause a fire.

- Fill the spa with water to the water level mark on skimmer.
- At the house service panel, turn on the circuit breaker or a switch that controls the electrical service to your spa. Plug the line cord into a 115VAC 20 AMP receptacle. (Make sure there is no other appliance on that circuit.)
- Your spa is provided with a Ground Fault Circuit Interrupter (GFCI) on the line cord. At initial start-up (and at least once a month thereafter), with power on, push the test button located on the GFCI. The reset button should pop out. Push this button in to reset. If the interrupter fails to operate in this manner, there is a ground current flowing or a device malfunctioning, indicating the possibility of electric shock. **Turn off power and do not use the spa until the source of the breakdown has been identified and corrected.**
- Locate the HIGH TEMPERATURE SAFETY SWITCH, which is a button on the end of the heater. Push this button to be sure it is in the reset mode. The purpose of this switch is to turn off the heater in case of excessive heat in the heater housing. If, for some reason, the switch is tripped, the reset button must be pushed in for the heater to operate again after the water has cooled to 90°F.

DETAIL OF GFCI



DELFINO (Shown with heater exposed.)



OPERATION

Function Selector Switch

To ensure your safety and allow easy operation, your spa is equipped with an air-activated function selector switch located on the control panel at the rim, near the front corner. This push-button switch selects the following four functions in the continuous sequence indicated:

1. OFF
2. JETS
3. HEATER/FILTER
4. FILTER ONLY

(The next selection is OFF again.)

You know which function you are selecting when the whirlpool system (**JETS**) is activated; use that function as a reference to indicate your location in the function sequence, since that function is the most obvious when operating.

For best performance, pause a second or two between push-button selections.

Control Panel

Setting the Thermostat

Turn on the heater by selecting the HEATER/FILTER mode on the selector switch.

You can verify that the heater is operating by opening the skirt door, and checking that the red indicator light is illuminated on the back of the heater housing.

The heater adjustment knob is located on the control panel. To set the thermostat, rotate the knob to the desired temperature. If the water temperature reaches a level higher than desired, turn the heater knob back to a lower setting. The water temperature will stabilize after

a while and fall a few degrees before the heater turns on again. When the water temperature reaches the temperature set by the thermostat, the heater and motor/pump will turn off.

The water temperature will rise at a rate of about 2°F per hour, depending on the temperature of the air surrounding the spa. This rate will necessitate a waiting period before using the spa, the length of which will be determined by the temperature of the water before turning on the heater. For example, if the water in the spa is kept at about 70°F when the spa is not in use, and the water temperature at which you plan to use the spa is 100°, then it will take about 15 hours to heat up sufficiently.

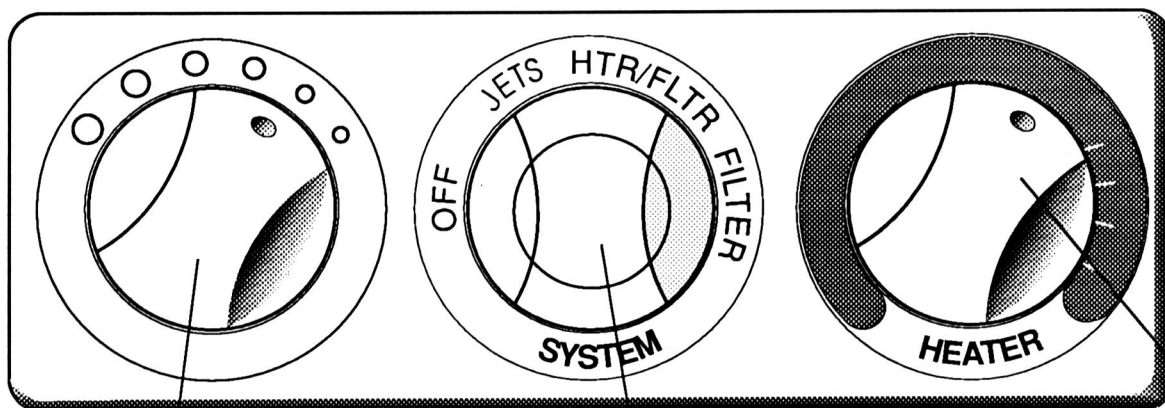
Once you have determined the desired setting on the thermostat knob, it is not necessary to change or readjust it again during normal operation unless you decide on a different setting.

The optional insulated cover available for your spa will help control heat loss from the water surface and thereby reduce energy consumption. You can improve the heat retention by keeping the cover in place on the spa while heating the water.

Notes on Determining Water Temperature:

As spa products generally perform in a narrow range of operating temperatures, we recommend that you use a medical (clinical) type thermometer for an accurate measurement of water temperature. Other types of thermometers generally available, such as those used for swimming pools, are not sufficiently accurate to determine spa water temperatures. Take water temperature readings when the heater has just turned off, for the greatest accuracy.

CONTROL PANEL



AIR INDUCTION
Controls two nearest jets

SYSTEM SWITCH
Controls Whirlpool, Heater/Filter
and Filter functions)

TEMPERATURE CONTROL KNOB
(For adjusting thermostat)

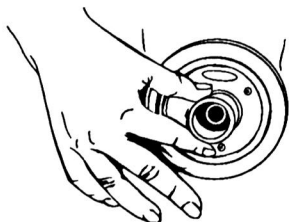
OPERATION

Normal Operation Whirlpool System

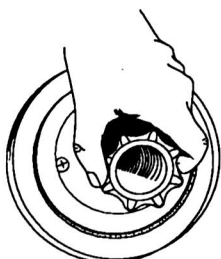
You can enjoy your spa with or without activating the whirlpool. Either way, bathing in your spa can be pleasurable, as well as therapeutic.

For a more invigorating experience, you can take advantage of the built-in whirlpool system. To do this, select the JETS mode. Sit or recline in the spa so you are comfortable. Since the whirlpool jets are adjustable, you can direct a jet toward any location on the body, particularly toward any area that feels tense or stiff. The warmth of the water and the stimulating water flow from the jet will pleasantly increase circulation.

DIRECTIONALLY
ADJUSTABLE
WHIRLPOOL JET

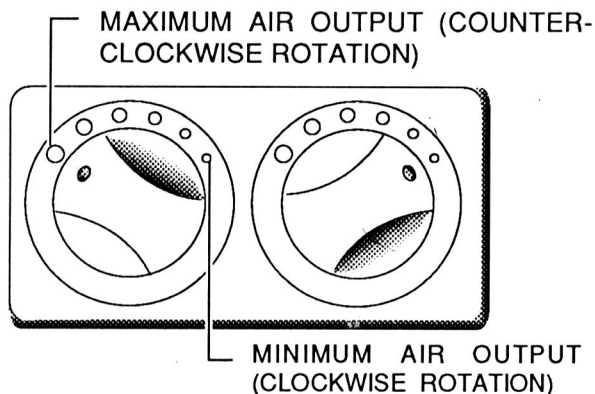


FULLY
ADJUSTABLE
WHIRLPOOL JET



Silent Air Induction

The intensity of the whirlpool action is determined by how much air is induced into the water. You have control of this by adjusting the five air induction control knobs located on the control panels. For maximum air induction, rotate each control knob fully counterclockwise to the largest dot. For fewer air bubbles, decrease the amount of air induction by rotating the control knob clockwise. When the knobs are turned to the smallest dot, only water is being circulated.



Filtration

When you are ready to leave the spa, select the HEATER/FILTER mode to maintain the water quality and temperature. If you want to filter the water without heating, select the FILTER ONLY mode.

The filter pump should be run at least one hour per day to allow filtration of the water and to maintain water clarity. Select the FILTER mode and run the filter each day. If the HEATER/FILTER mode is selected and the heater operates at least one hour per day, it will be filtering at the same time, and it will not be necessary to operate the unit in the filter mode.

MAINTENANCE

Water Quality and Water Chemistry

Maintaining water quality and water chemistry in your spa is extremely important and should be a regular part of your spa maintenance program, as a neglected spa can be a breeding place for dangerous bacteria.

The water quality of your spa is maintained by a combination of filtration and chemistry. The integral filter system helps maintain the water cleanliness and clarity by trapping most solid materials such as hair and other debris resulting from normal use. However, the most important part of maintaining water chemistry is keeping the proper level of disinfectant in the water at all times. This is accomplished by adding chlorine or bromine to the water, which will control particles too small to be trapped by the filter, such as bacteria and algae, and will oxidize any organic materials. Follow instructions provided here, and also those with water quality products for the health safety and enjoyment of spa users.

Filtration

The filtration system of your spa will keep your water clear and clean if used properly. We recommend that you run your filter system for at least one hour each day. The filter cartridge elements will trap most solid materials and debris in the water. However, the presence of materials such as body oils or other particles which are too small to be captured in the filters may bring about various undesirable water quality conditions. These conditions can be corrected with the use of spa treatment chemicals which are available from your Jacuzzi Whirlpool Bath dealer. Such conditions include the following:

Foaming: A defoamer is available to minimize foaming of the water. This condition is usually caused by the addition of soaps or oils, or other fatty substances to the spa water. The interaction of these with hot water, especially at high pH (more alkaline), will cause the water to foam. (See "Water Quality Definitions.")

Oil Film or Cloudy Water: Add clarifier to congeal oil film on the water surface into globules sufficiently large to be trapped by the system's filter. Cloudiness is caused by particles that are too small to be trapped in the filter and is also due to the presence of human body oils, lotions, and cosmetics. During normal use, these materials can accumulate on the filter element and clog its pores. The addition of clarifier will make the water clearer, but clogged filters must be cleaned as prescribed under the section entitled "Filter Maintenance" in this manual.

Hard Water: Add a de-mineralizer to break down or deionize mineral particles present in the water.

Follow the "Filter Maintenance" procedure described in this manual to ensure optimum performance of your filtration system.

Water Chemistry

You can ensure better water chemistry by testing the spa water every day and adjusting the chemical balance frequently. Obtain a water quality test kit designed especially for spas from your Jacuzzi Whirlpool Bath dealer. The test kit must be of the type which allows you to test for the disinfectant (chlorine) level, pH, and total alkalinity. Also, make sure, that chemicals used in your spa are especially for spa use and not for swimming pools, as water quality maintenance of spas and swimming pools is very different.

Set up a daily program, at first, to check the disinfectant level, pH, and total alkalinity of the water. Familiarize yourself with the amount of chemicals to add and determine how often to make chemical adjustments during normal use. Remember that the more heavily the spa is used, the more often you should check the water chemistry.

When adding any chemicals, always run the filter system to ensure complete dilution with the water. Do not add chemicals directly into the skimmer opening.

Disinfecting:

When filling the spa for the first time, follow the purge/sanitizing instructions in the "Equipment Set-Up procedure" of the Installation Instructions.

Add a disinfectant to the water on a regular basis to help control the amount of bacteria, algae and organic materials. Such bacterial contaminants, if not controlled, could cause skin rashes or other physical problems. To disinfect the spa for normal use, first establish the amount of chlorine or bromine to add and determine how often you need to add it.

We recommend that you maintain a free chlorine level of 2.0-5.0 ppm at all times except when you must exceed that during the initial purge/sanitizing procedure or during superchlorination (see "Water Quality Definitions" below). Superchlorinate your spa every two weeks when heavily

MAINTENANCE

Water Chemistry (continued)

used. If using sodium dichlor, add one heaping tablespoon for each 150 gallons of water. Scrub the spa surfaces with this solution to remove any oily deposits. This will ensure that any bacteria or algae which are resistant to the normal disinfectant level are killed. After adding the disinfectant, run the filter system and allow the free chlorine level to return to the 2.0 to 5.0 ppm range before using the spa again. **Do not install a rigid cover until the disinfectant level is back to normal. High concentrations of chlorine or bromine will damage metallic plated finishes if the cover is in place.**

Balancing pH:

For good hygiene and equipment longevity, maintain the pH of your spa water according to the instructions provided. pH is the measure to determine if the spa water is too acid (low pH) or too alkaline or basic (high pH). The ideal range for spa water is 7.2 to 7.6 pH. For excessive acidity (below 7.2 pH), add soda ash or sodium bicarbonate to the water. For excessive alkalinity (above 7.6 pH), add dry acid to the spa water. **Caution:** Refer to the spa chemical manufacturer's instructions for the initial amount of chemicals to add for the gallonage of your spa. Low pH can cause equipment damage, as acidic water will dissolve metals, while high pH can cause scale or calcium deposits to build up in the system or on the shell. After adding chemicals, run the filter system for at least 30 minutes before testing water quality again for accurate readings.

Balancing Total Alkalinity:

Total alkalinity is the measure of base materials in the

water. The recommended range for total alkalinity is between 80 ppm and 150 ppm. If the chemistry of the water is not within this range, you will have difficulty adjusting the pH level, which will affect your adjustments for the proper amount of free available chlorine. If the alkalinity of your spa water is high, it is advisable to drain the water from the spa and begin the balancing process over again. If the spa is used heavily, change the water at least every month.

WATER QUALITY DEFINITIONS

pH: A chemical term used in expressing relative acidity or alkalinity in numeric values with 7.0 usually regarded as neutral, and for purposes of this manual, indicating pure water. From 7 to 0 indicates increasing acidity, and 7 to 14 indicates increasing alkalinity.

PPM: Parts per million.

Free chlorine: Chlorine that has not combined with other chemicals and that is available to destroy bacteria in the spa water.

Trichlor: A form of chlorine used in pool or spa water treatment; usually supplied in tablet form. Not recommended because of its higher acidic nature and slow dissolving action. Prolonged contact with the spa shell may bleach or permanently mark the shell.

Sodium dichlor: The type of chlorine that is recommended for spa use, as it is available in fast dissolving granular form. It is neither excessively acid nor alkaline in character and does not readily dissipate in higher water temperatures.

Calcium hypochlorite: A granular chlorine product that is inexpensive and effective but not recommended because

it often tends to form calcium deposits on heater parts and plumbing fittings and leaves an unattractive film on the spa at the water line.

Sodium hypochlorite: A liquid chlorine product that is inexpensive and effective but not recommended because the liquid is readily spilled onto the spa or a surrounding area, causing permanent damage. It has limited effectiveness at high water temperatures and readily affects pH balance.

Total alkalinity: The measure of the amount of alkaline materials (such as carbonates, bicarbonates and hydroxides) in the water. High alkalinity inhibits the effectiveness of chemicals to change the pH. If the alkalinity of your spa water is high (above 150 ppm), it is advisable to drain the water from the spa and begin the balancing process over again. Low total alkalinity (below 60 ppm) could be corrosive and damage your spa system.

Superchlorination: (Also referred to as "shock treatment".) The addition of an above-normal level of disinfectant to kill any bacteria or algae that might have become resistant to normal levels of disinfectant.

MAINTENANCE

Water Level/Drain

The water level in the spa must be maintained at its normal level, which is approximately 6" from the top of the rim. Evaporation and splashing will cause the water level to drop.

When concentrations of impurities from evaporation, water quality chemicals, body oils, perfumes, dirty feet, and winds, etc., accumulate in the spa and cannot be filtered out, it is necessary to drain your spa and refill it with fresh water. This should be done every 2 months or more often depending on the amount of use.

To drain the spa, turn all controls to OFF, then turn off circuit breakers at the main electrical panel. Connect a garden hose to the hose bibb in the suction plumbing. Turn the handle and drain the spa.

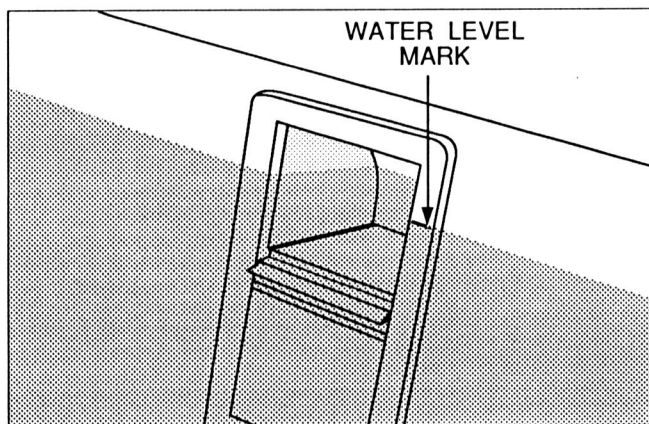
After draining the spa, clean the spa shell, suction covers, skimmer, and filter, then close the hose bibb and refill the spa with fresh water. Check the pH level and maintain water quality.

CAUTION: Be sure to replace the suction cover immediately after cleaning. It is a safety device and must be in place over the suction fitting to minimize potential hazard of hair and body entrapment.

If heavy rains raise the spa water level, drain the spa to its normal level.

An optional rigid cover, when in place over the spa, will help reduce evaporation and control the amount of debris entering the spa when the spa is not occupied. In addition, its use will reduce energy consumption.

NORMAL WATER LEVEL



Filter Maintenance

The filter should be checked periodically. In normal use, check the filter at least once a month. Keep the filter clean; an obstructed filter reduces water quality and inhibits proper system performance.

A removable filter cartridge is located inside the skimmer. To remove it, pull open the skimmer door by the handle located in the middle of the door. Slide the basket out, then pull the filter cartridge upward and out of the housing by the loop at the top of the filter. Clean the filter by separating the folds of the filter and spraying with fresh water. Then reinstall the cartridge in the housing and replace the basket, reversing the above procedure.

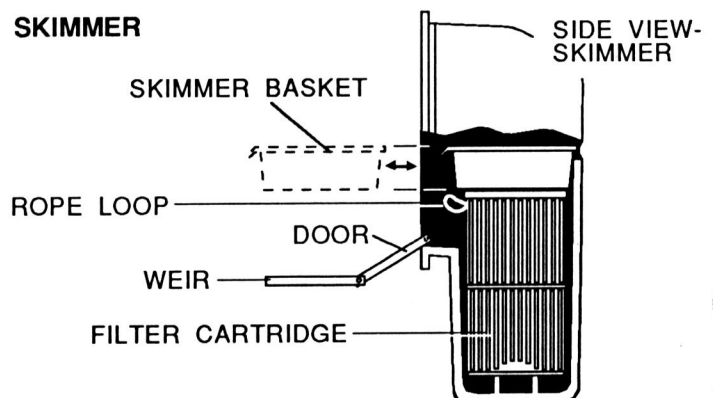
Oils will coat the filter, resulting in a reduced flow. To remove such materials, soak the cartridge in a plastic pail containing a commercial filter cleaning solution (available from your Jacuzzi Whirlpool Bath dealer or most pool supply stores). Follow the manufacturer's instructions for use. Another method is to soak the filter cartridge in a plastic pail containing a mild solution of trisodium phosphate (TSP) and water. An hour of soaking time is usually required to break down oil coatings from the cartridge. Use a stronger solution of TSP and water to remove algae. Most hardware or paint stores stock TSP. Use the same method of cleaning when the cartridge becomes plugged with clay or vegetation.

Suction Strainer Maintenance

There are two suction strainers on your spa. One is located in the foot well area of the spa; the other is located under the skimmer cover and can be pulled off easily for access to the suction strainer. The strainers should be checked at least once a week for collected debris, such as leaves, hair, etc., and cleaned as necessary. Remove the center screw with a Phillips type screwdriver and clean the cover by flushing with water from a hose.

WARNING: Be sure to replace the suction strainer immediately after cleaning. It is a safety device and must be in place over the suction fitting at all times.

SKIMMER



MAINTENANCE

Automatic Filtration/Maintenance

If you plan to be away, you should maintain minimum water quality by running the filter system. To do this, select the FILTER mode. In this mode, the filter system will run continuously until you return, unless you use the optional timer.

If you will be away for an extended period, however, we recommend that you drain the spa (following the procedure described under Winterizing on this page), as long periods without maintenance of water quality could be detrimental to the unit.

Another means of maintaining minimum water quality while away for less than two weeks is to follow the procedure outlined for winterizing your spa in a warm climate. (See Winterizing). **Note:** We do not recommend using this procedure if you are absent during the summer when algae build-up is most likely.

Always keep your spa covered when not in use to reduce heat loss and evaporation and to prevent debris from falling in.

Winterizing

In a climate where winter temperatures are below freezing, follow this procedure when the spa will NOT be used:

1. Select the OFF mode.
2. Turn off power to the unit at the house circuit breaker.
3. Drain the spa.
4. Remove the filter cartridge, clean it, and store it dry.
5. Keep water and debris out by covering with a rigid spa cover.
6. Before using the spa again, review the Operating Instructions.

CAUTION: Not winterizing will cause irreversible damage (at freezing temperatures) to the pump and/or plumbing lines.

Note: If the spa is to be used during winter in a cold climate, see warm climate instructions below.

In a warm climate where there are occasional freezing temperatures, follow this procedure:

1. Select the HTR/FLTR mode.
2. Set the thermostat to its minimum temperature (45-50°F.)
3. Maintain a chemical balance. (See Water Quality section.)
4. Keep the spa covered.

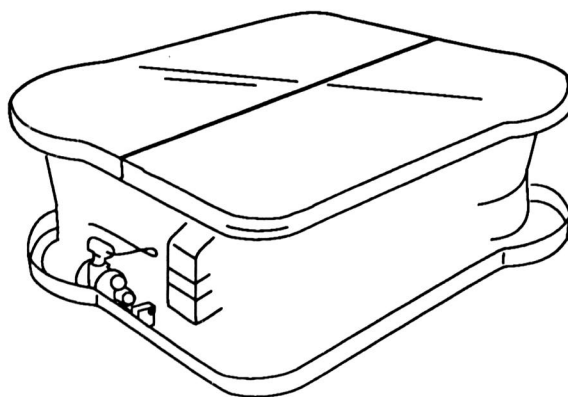
Covering Your Spa

An optional rigid spa cover is available to place on top of the spa. Use of this cover will help to minimize heat loss and evaporation, and thus reduce energy costs. The cover is also an attractive and efficient means of preventing debris such as leaves and dirt from entering your spa when not in use. Follow the instructions for use and care provided with the spa cover.

CAUTION

While the spa cover is rigid, it is not designed to support any weight. Therefore, as a safety precaution and to preserve the life of your cover, you must not sit, stand, or lie on it; nor should you place objects of any kind on top of it.

Jacuzzi Whirlpool Bath does not guarantee or warranty this cover. Refer to spa cover manufacturer's information provided with the cover.



MAINTENANCE

Cleaning Your Spa

Your spashell consists of two layers of plastic materials. Its smooth top surface of acrylic is tough and durable and contains concentrated color. This is supported by a substantial thickness of fiberglass-reinforced polyester resin. A catalyst causes a chemical reaction during manufacture that bonds these layers permanently into a hard, strong material. With a minimum amount of care and cleaning, your whirlpool spa will look new for years.

To clean your spa, simply use a mild, non-abrasive liquid detergent, isopropyl alcohol, or commercially prepared spa cleaner. **Do not use abrasive cleaners.** You can protect and restore the gloss to a dulled surface by applying Meguiar's #10 Mirror Glaze, which is a product specifically designed for use on acrylic finishes. If Meguiar's is not available, an acrylic polish of equal quality or automotive paste wax will do.

Use a spa cleaner for residue buildup at the water level of the spa surface. This may be applied to the acrylic surface with a soft cloth and wiped clean. Use sparingly in small amounts to avoid contaminating the spa water. If heavily soiled, it may be advisable to lower the water level 2 - 3 inches before cleaning; then refill to normal level.

Repairs to the Acrylic

Minor scratches which do not penetrate the color finish (acrylic) can be removed with 600-grit wet/dry sandpaper. Restore the glossy finish with Meguiar's #10 Mirror Glaze or comparable automotive paste wax.

Major scratches or gouges which penetrate the acrylic surface will require refinishing. Ask your Jacuzzi Whirlpool Bath dealer for special instructions.

TROUBLESHOOTING GUIDE

CAUTION: Do not open the Electrical Cabinet door. No user repairable or adjustable parts inside. This equipment requires qualified service personnel for proper repair. Contact your Jacuzzi Whirlpool Bath dealer for service.

PROBLEM	PROBABLE CAUSE	REMEDY
1. Heater not functioning.	A. Heater mode not selected. B. No power to heater. C. Thermostat set lower than water temperature. D. High temperature safety switch tripped. E. Abnormally low water flow. F. Heater relay not operating. G. Heater element failure.	A. Select HEATER/FILTER mode. B. Check house circuit breaker and GFCI. C. Turn to desired temperature. D. Reset button on heater after water has cooled; if switch continues to trip see, *Note. E. * F. * G. *
2. Water not reaching set temperature.	A. Inaccurate thermometer used. B. See category #1 above.	A. Use medical (clinical) thermometer to verify temperature. B. See category #1 above.
3. Water not clean.	A. Clogged or blocked suction strainer or skimmer basket. B. Filter clogged (dirty). C. Poor water chemistry. D. Insufficient filtering time. E. Improper maintenance. F. High contents solids in water.	A. Clean strainer and skimmer basket. B. Clean or replace. C. See "Chemistry" section. D. Run filter. E. See "Maintenance" section. F. Use clarifier or drain and refill spa.
4. Abnormal water usage.	A. Leak in suction line, discharge line, or connections. B. No spa cover; high thermostat setting.	A. Repair leak. B. Use optional rigid spa cover; lower thermostat setting.
5. Low water flow from jets.	A. Normal operation in FILTER mode. B. Plugged strainers. C. Dirty filter. D. Suction of discharge line partially plugged. E. Pump running at subnormal Speed. F. Worn or damaged pump seal. G. Malfunctioning safety suction valve.	A. Select JETS mode for maximum flow. B. Fill to water level indicator mark on skimmer/filter frame. C. Clean or replace. D. * E. * F. * G. *
6. No water flow from jets.	A. Unit not plugged in. B. Selector switch in OFF. C. House circuit breaker tripped, no power to system.	A. Plug unit in. B. Select other function. C. Reset circuit breaker.

* **Note:** The skills and tools necessary for the safe repair of this spa condition requires the services of qualified service personnel. Contact your Jacuzzi Whirlpool Bath dealer.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY
6. No water flow from jets. (Continued)	E. High temperature safety switch tripped. F. GFCI tripped. G. Faulty pump or motor.	E. Reset button on heater after water has cooled; if switch continues to trip, see *Note F. Reset GFCI. G. *
7. Noisy pump and motor.	A. Clogged strainer(s). B. Leakage of air into suction line. C. Vibrating parts attached to motor or support brackets. D. Malfunctioning safety suction valve. E. Damaged or worn motor bearings. F. Impeller rubbing inside case.	A. Clean strainer(s). B. Locate and repair leaks. C. Tighten fasteners. D. * E. * F. *
8. Water leakage at pump shaft (rotating connection between pump and motor).	A. Worn or damaged pump seal.	A. *
9. Motor stops.	A. OFF mode selected. B. House circuit breaker tripped or in off position. C. GFCI tripped. D. Improper or defective wiring. E. High temperature safety switch tripped. F. Inadequate electrical supply. G. Locked shaft or Impeller. H. Motor windings burned out. I. Defective starting switch inside motor.	A. Select FILTER, HEATER/FILTER, or WHIRLPOOL mode. B. Reset circuit breaker. C. Reset GFCI D. * E. Reset button on heater after water has cooled; if switch continues to trip, see *Note F. * G. * H. * I. *
10. Motor will not start.	A. Motor overload condition. B. Selector switch failure. C. Relay failure. D. Inadequate supply wiring. E. Relay failure. F. Motor overheated due to lack of ventilation, especially if on carpeted surface.	A. Let cool for one hour. Motor overload will reset; if problem persists, see *Note. B. * C. * D. Consult electrician to correct wiring to unit. E. * F. Place sheet of plywood under spa. (See page 5).

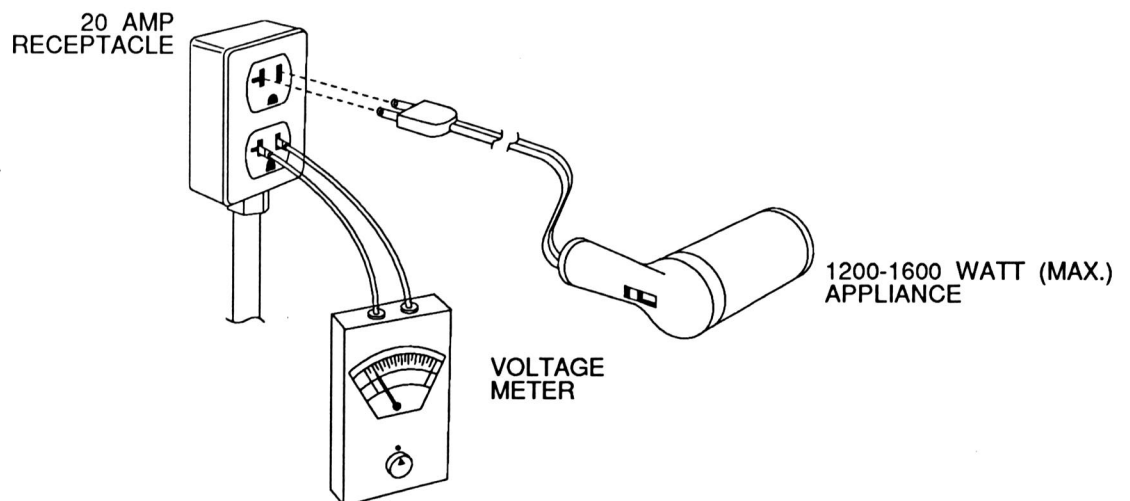
*** Note:** The skills and tools necessary for the safe repair of this spa condition requires the services of qualified service personnel. Contact your Jacuzzi Whirlpool Bath dealer.

IMPORTANT

The Delfino™ spa requires a separate 115VAC 20 AMP capacity electrical supply. If the wiring for the circuit in which your spa is connected is not sized properly for 20 AMPS, or if the outlet used is too distant from the main service panel, there may be a considerable voltage drop. Such a voltage drop would not only cause the unit to malfunction, but it may also cause permanent damage to it's electrical system.

Before operation of your spa, therefore, we recommend that you test the spa's intended electrical supply circuit for sufficient voltage. To do this, you will need an AC voltage meter and a small electric appliance rated at 120 (min.)-1600 (max.) watts (a hair dryer or toaster will do). Plug the appliance into one receptacle and turn it on; take a voltage meter reading from the adjacent receptacle. If the voltage is measured at 115 VAC (a voltage drop of 5%), or if there is less than the 105V minimum operating voltage at the receptacle, the electrical is insufficient. The minimum voltage must be maintained during spa operation.

If your test reveals insufficient electrical supply, several solutions are possible: First, you could have your electrical supply upgraded and provide a dedicated, properly wired circuit with 20 AMP capability to be used for the spa only. Second, you can install a transformer which would boost your existing power to your particular electrical needs for installation of your spa.



**PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
USE INSTALLATION INSTRUCTIONS SUPPLIED WITH PRODUCT.**

Jacuzzi Whirlpool Bath has obtained applicable code (standards) listings generally available on a national basis for products of this type. It is the responsibility of the installer/owner to determine specific local code compliance prior to installation of the product. Jacuzzi Whirlpool Bath makes no representation or warranty regarding, and will not be responsible for any code compliance.

JACUZZI WHIRLPOOL BATH

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