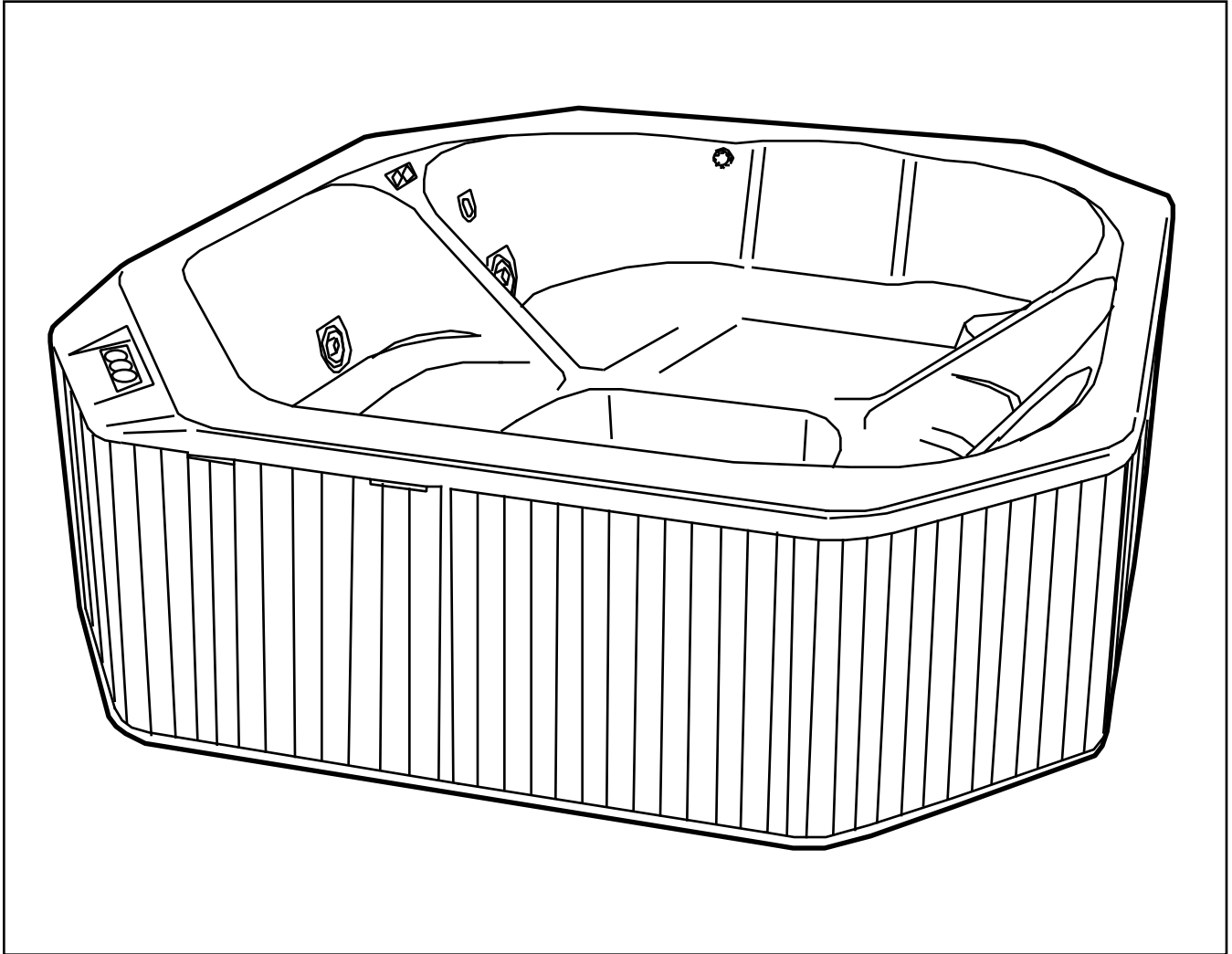


THE CIRRUS™

Portable Whirlpool Spa Owner's Manual



IMPORTANT SAFETY INFORMATION

READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS

Jacuzzi Whirlpool Bath does not recommend spa water temperatures in excess of 104°F. High 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 service, 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 an ground fault circuit interrupter (GFCI) located in the electrical cabinet. Check at least once a month to be sure this is operational. (The procedure for testing is described on page 7 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 with 10 feet of the spa, they must be on a circuit protected by an 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 _____

Spa Serial Number _____ Model #C400000

(See page 2 for location of serial number.)

The Cirrus™ Portable Whirlpool Spa

Owner's Manual

Model C400000

Contents

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The Cirrus™ Portable Whirlpool Spa Specifications and Installation Instructions

The Cirrus, by Jacuzzi Whirlpool Bath, is a spacious octagonal whirlpool spa which will seat up to seven people with comfort to spare. Designed to provide the revitalizing hydromassage for which Jacuzzi Whirlpool Bath is famous, the Cirrus features three directionally adjustable whirlpool jets and six high volume fully adjustable jets located strategically about the spa. The Cirrus also features a Water Rainbow™ spout with flow control to create a dazzling water-fall effect, as well as an underwater light with interchangeable colored lenses.

For convenience, a clearly labeled control panel allows push-button control of the integrated heater, filter, whirlpool, and air blower functions, as well as thermostatic control of water temperature from inside or outside the spa. Also, adjustment of the Silent Air Induction feature may be made by means of the control knobs. A 7-day timer (located on the System Control Module) can be set for automatic control of temperature and filtration.

The Cirrus features two patented front load skimmer/filters which make up the 50 sq. ft. filtration system. This system has been designed by Jacuzzi Whirlpool Bath to allow easy access to the filter cartridge without having to drain the spa or open the skirt door. The spa shell, which is foam insulated to save energy costs, is tastefully surrounded by a handsome factory installed redwood skirt.

The complete equipment pack of the Cirrus is mounted within the perimeter of the spa, so the spa is easy to install. The spa requires a 230 VAC 50 AMP, 4 wire, grounded separate circuit and is equipped with a ground fault circuit interrupter (GFCI). The Cirrus is available in several lustrous acrylic colors with color-coordinated fittings. (See the Jacuzzi Whirlpool Bath Color Guide.)

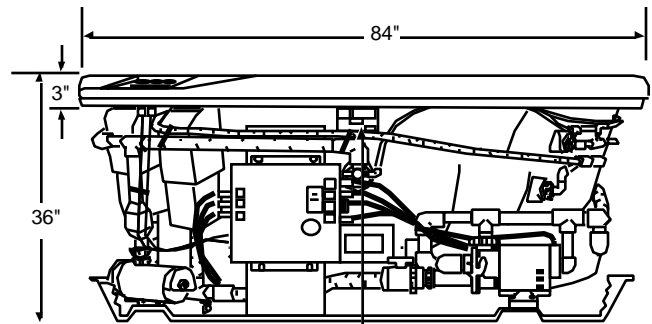
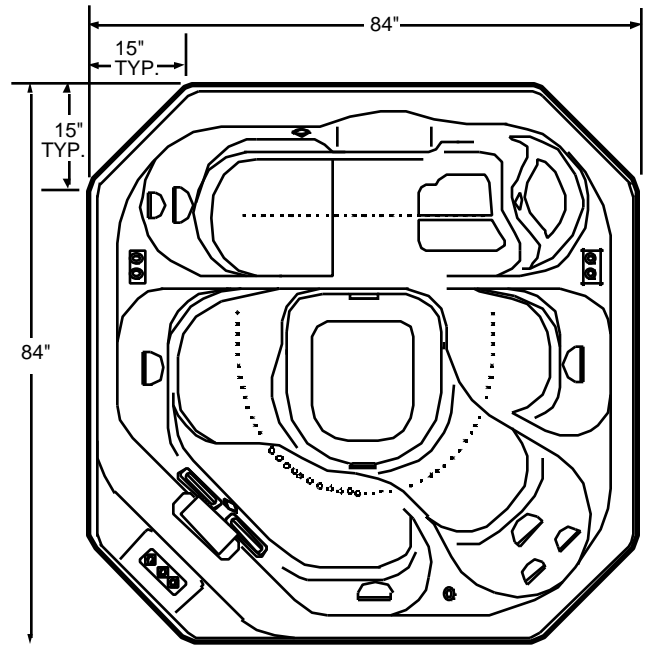
Options available for the Cirrus include a gas heater to be used as an additional remote heating source, a rigid insulating spa cover to protect the spa from debris and reduce heat loss, and an assortment of pillows.

ARCHITECTURAL SPECIFICATIONS (Short Form)

Whirlpool spa shall be the Cirrus™ whirlpool spa as manufactured by Jacuzzi Whirlpool Bath in colors and sizes shown in drawings and schedules.

SPECIFICATIONS

MODEL	DIMENSIONS	WHIRLPOOL MOTOR/PUMP	FILTER MOTOR/PUMP	FLOOR LOADING	OPERATING GALLONAGE	ELECTRIC HEATER	SHIPPING WEIGHT	ELECTRICAL REQUIREMENTS
Cirrus (C400000)	84" (2134. mm) L. 84" (2134. mm)W. 36" (914. mm) H.	0.75 HP 230 VAC 4.8 AMPS 3450 RPM Single Phase 60 Hz	0.75 HP 230 VAC 4.8 AMP 3450 RPM Single Phase 60 Hz	95 lbs./sq. ft. 465 kg/m ² Total Weight: 4659 lbs. (2118 kg)	375 U.S. gal. (1419 ltrs.)	6 KW 26 AMPS	884 lbs. (402kg)	230 VAC 50 AMP 60 Hz Separate Circuit (see page 4)



SERIAL NUMBER LOCATION

OPTIONS

- Gas Heater
- Rigid Insulating Cover
- Pillows

INSTALLATION

Installation Instructions Inspection and Shipping Claims

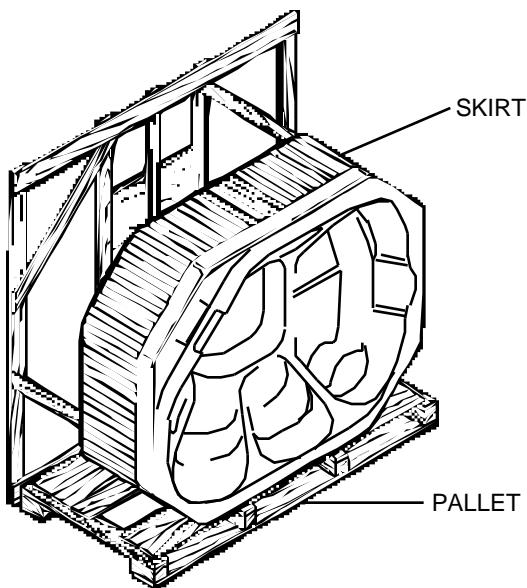
Check for shipping damage upon receipt of the spa. Jacuzzi Whirlpool Bath is not responsible for damage to the spa sustained during shipping. If damage is evident before unpacking, see instructions regarding shipping claims on the outside of the carton and immediately file a claim with the carrier.

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 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) 938-7070 or (510) 938-7411 for Warranty Service.

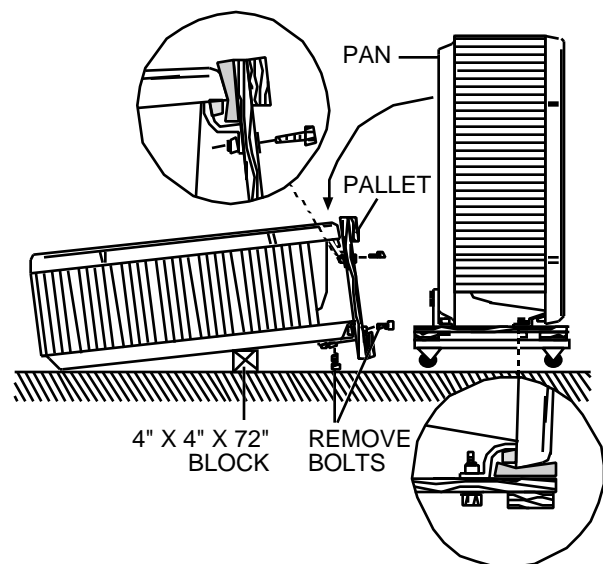
Note: Damage or defects which could have been discovered and repaired prior to installation and which are claimed after final installation of the spa, are excluded from our warranty.

Unpacking

1. Read disclaimer for shipping damages on side of crate.
2. Remove sides and top of crate, as well as plastic bags, leaving pallet intact.
3. Check for shipping damage.
4. Remove and set aside unattached accessory pieces.
5. Move spa to final site with pallet still attached as shown.
6. Place a 4" x 4" x 72" wooden block beside the pan side of the spa so it is parallel with the pallet.
7. Tip the spa over onto its bottom with the block supporting the spa.
8. Remove the bolts and brackets securing the pallet to the pan and spa.
9. Remove the pallet and the 4" x 4" block, then carefully lower the spa to a horizontal position.
10. Attach the loose skirt panel included in skirt package.
11. Record the spa serial number on the inside front cover of this manual. (See illustration on page 2 for the serial number location.)



CAUTION: DO NOT CUT OR REMOVE THE BOLTS THAT SECURE THE PALLET TO THE SPA UNTIL AFTER THE SPA HAS BEEN TIPPED OVER.

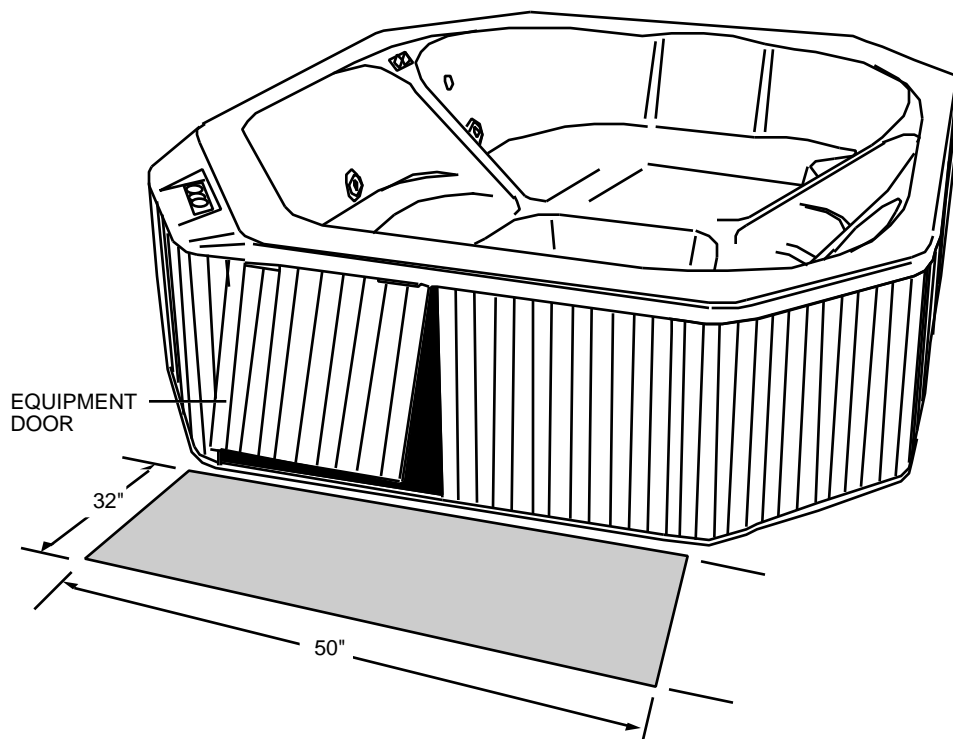


INSTALLATION

Positioning Your Spa

Because your Cirrus spa is portable, you can locate it just about anywhere you wish—on a deck, patio, or even indoors. Be sure to position it above ground in an area with good drainage and on a level, continuous surface which can support the weight of the spa when filled with water and people; this weight is approximately 4659 lbs. (95 lbs. per square foot). You must also provide access to the spa's equipment for service and general maintenance.

MINIMUM SERVICE ACCESS



Electrical Requirements

Your Cirrus, as it comes from the factory, requires a 230 VAC 50 AMP 4-wire grounded type electrical service and must be in a separate circuit having no other appliance connected in that circuit. If you do not have this kind of 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 on the next page.

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

INSTALLATION

Electrical Precautions

CAUTION Do not apply electrical power to the spa unless it is filled with water to the normal water level, which is approx. 7" below the spa rim (see location of water level indicator on face of skimmer on page 6). If the spa's motor/pumps are actuated when there is not 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.

Do not locate lighting fixtures directly above the spa; lighting and electrical receptacles must be located at least 5 ft. from the spa. Lighting located between 5 and 10 ft. from the spa must be on a circuit protected by a GFCI. (Refer to National Electrical Code, 680-6.)

Do not use electrically connected devices, such as television, radio, telephones, stereo speakers, lights or cooking devices within 5 ft. of the spa when the spa is being used.

All fixed metal objects located within 5 ft. of the spa, such as fence posts, railings, door frames, greenhouse structures, gutters, etc., must be attached to the bonding bar on the outside of the spa System Control Module using #8 solid copper wire. **With #8 solid copper wire, bond the spa to the house electrical panel or approved local bond.**

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. Bonding lugs are available at your local electrical supply store. (Bond bar location is shown below.)

Outdoor Installations

If you install the spa outdoors, we recommend that you provide a concrete pad for it to rest on. To do this, construct forms for an 8' x 8' x 4" thick level pad. Install a #10 gauge wire mesh 6" x 6" 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 bond bar on the spa System Control Module (min. 36"), but should **not** be located under the base of the spa. Then pour the concrete pad.

Drainage

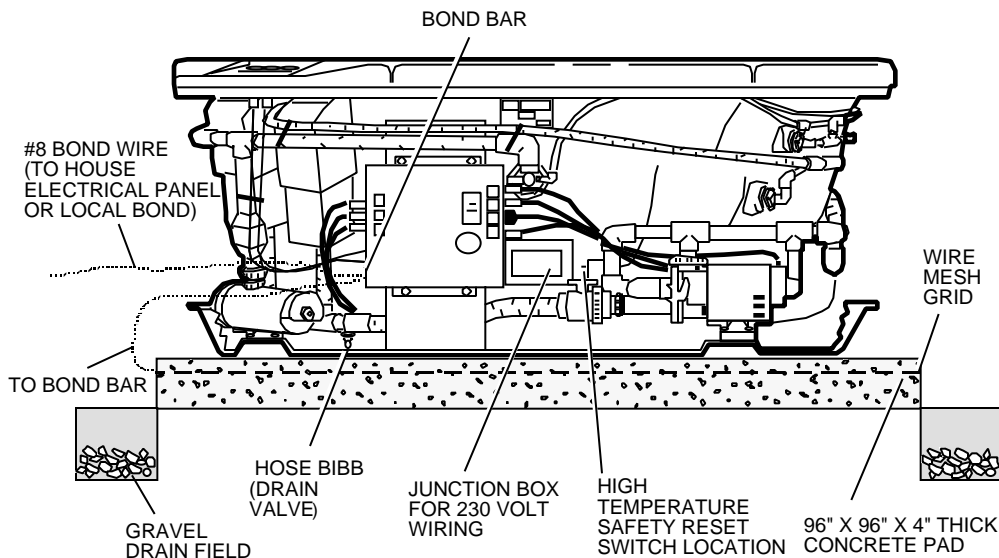
Whether you install your spa indoors or outdoors, you can drain it completely by attaching a garden hose to the hose bibb (drain valve) located on the suction plumbing of the spa. Simply run the hose to the house sewer line or drain field and open the hose bibb.

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, install a drain line and/or gravel drain field. (See illustration below.)

Indoor Installations

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.

SUPPORT AND DRAINAGE



INSTALLATION

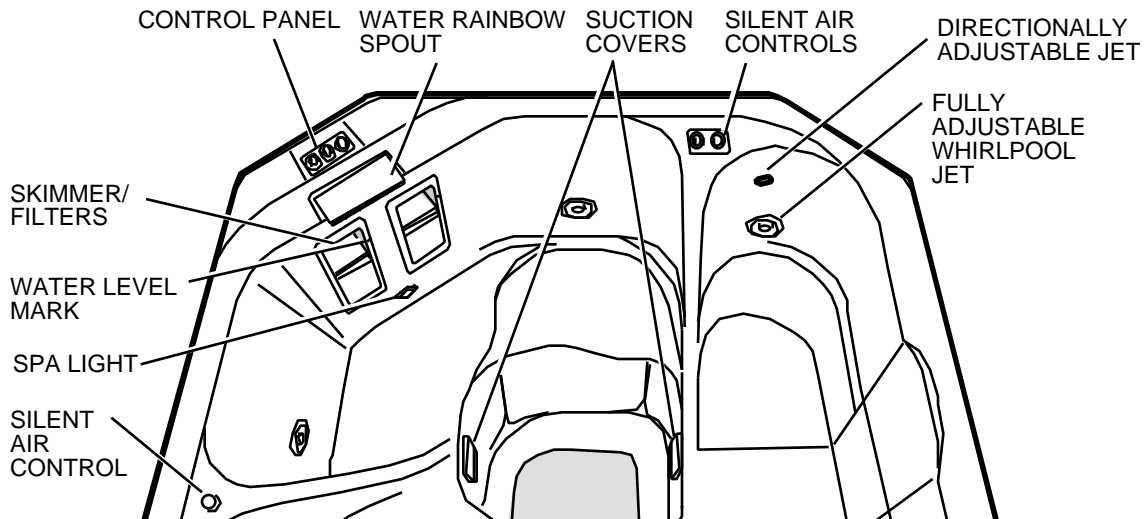
Equipment Set-Up

1. Remove the plastic sheet covering the spa. Use care; stepping into the spa with shoes will scratch the acrylic surface.
2. Remove any packing materials from the spa.
3. Remove each filter cartridge from its plastic bag.
4. Pull open the skimmer/filter door by the handle located in the middle of the door and remove the skimmer basket. Then insert the filter cartridge into the filter housing and reinsert the basket so that it fits in place over the filter cartridge and close the skimmer/filter door.
5. Clean the interior of the spa 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.
6. Install the skirt panel which was not installed on the spa at the factory. To do this, secure with the screws provided in your spa accessory package and follow instructions provided with panels.
7. On initial start-up, it is necessary to purge and sanitize the system as stated below.
 - Remove the (optional) spa cover completely.
 - Close the drain valve on the suction plumbing.
 - Open the six fully adjustable jets.
 - Fill the spa with water to its normal operating level, which is to the water level indicator mark on the skimmer/filter frame.
8. Turn on circuit breakers at the main electrical panel.
9. Select JETS on the SYSTEM switch.
10. 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.
11. Turn off JETS.
12. Turn off circuit breakers.
13. **Immediately** open the drain valve and drain the spa completely.

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

8. Close the drain valve and fill the spa with water to approx. 7 inches below the spa rim, or to water line indicator mark on the skimmer frame. (See illustration this page.)
9. Turn on circuit breakers at the main service panel.
10. Set the heater thermostat for the maximum temperature.
11. Test the spa for proper operation. (Refer to Operating Instructions.)
12. 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)-938-7070, or 510-938-7411 for Warranty Service.



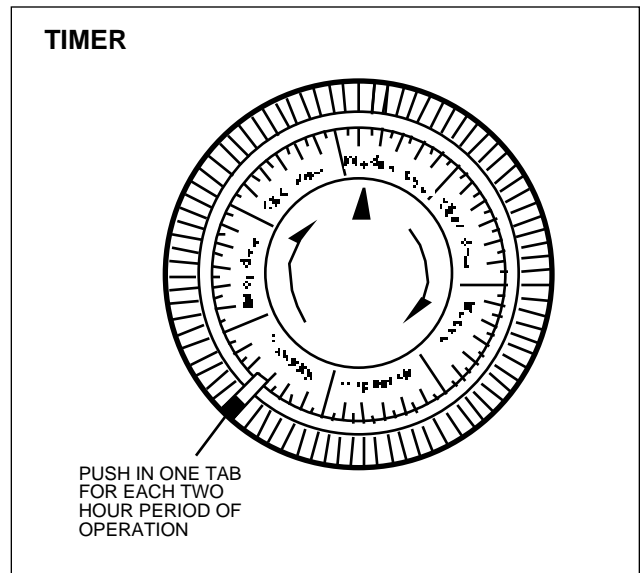
OPERATION

Basic Control Set-Up (continued)

- Make sure the circuit breaker buttons are pushed in.
- Locate the HIGH TEMPERATURE SAFETY SWITCH, which is a raised 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 shut down the spa if the water becomes excessively hot. 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 about 100°F.
- Set the built-in timer (see below). Use of the timer allows two modes of operation: timed HTR/ FLTR and FILTER ONLY. With the SYSTEM switch turned OFF and the HEATER control knob set to the desired temperature, the timer will activate the heater and filter pump to operate during the time period set on the timer. With the SYSTEM switch turned OFF and the HEATER control knob turned to its lowest setting, the water will be filtered without heat during the time period set on the timer.
- Close the redwood skirt door.

Setting the Timer

The built-in 7-day timer is located in the System Control Module. The tooth-like tabs which are located on the dial can be set to activate the filter system for two-hour periods on any day(s) of the week. First set the correct time. Set the time of day by rotating the outer dial and aligning the correct time with the small arrow on the inside of the dial. Note: Both correct time and day must be set. Next slide one of the tabs toward the center of the dial at the time you wish the filter system to operate. Note that the timed mode can begin at any time of day or night at any specified day of the week.



OPERATION

Controls

A switch panel giving you convenient control of the jets, filter, heater/filter, blower and light is located on the spa rim.

To ensure your safety and allow easy operation, your spa is equipped with two air-activated switches. One, the SYSTEM switch, controls the whirlpool jets, heat, and filtration. The other switch, ACCESSORY controls the blower system and optional light.

System

The SYSTEM switch controls the following four functions in the continuous sequence indicated:

1. OFF
2. JETS
3. HTR/FILTER
4. FILTER

(The next selection is OFF again)

Use the JETS function as a reference to indicate your location in the function sequence, since that function is the most obvious when operating.

For best performance and increased equipment life, pause a second or two between pushbutton selections.

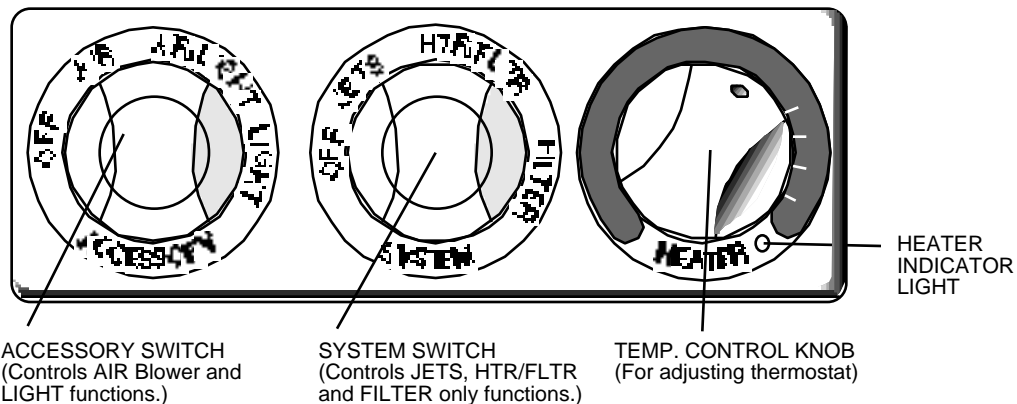
Accessory

The ACCESSORY switch controls these functions in this sequence:

1. OFF
2. AIR
3. AIR/LIGHT
4. LIGHT

(The next selection is OFF again)

CONTROL PANEL



OPERATION

Heater Control

Turn on the heater by selecting the HTR/FLTR mode on the SYSTEM selector switch.

With this selection, you can verify that the spa's heater is operating by viewing the HEATER INDICATOR light on the spa control panel.

Set the HEATER CONTROL knob by rotating it to the desired temperature. The temperature will be higher when rotated clockwise. When the water temperature is lower than that set by the HEATER Control knob, the heater and filter motor/pump will be activated. The heater and filter functions will automatically turn off when the desired temperature is reached. When the heater is on, the water is also being filtered. The heater will also maintain water temperature in the JETS mode.

The HEATER CONTROL is designed to maintain a minimum temperature of approximately 45-50°F., its lowest setting. See page 15 for winterizing procedures.

Setting the Thermostat

When your spa has power and HTR/FLTR has been selected on the control panel, your HEATER thermostat is working to maintain the temperature to which you have set the HEATER knob. You will notice by the indicator light that the heater is on when the water temperature falls below the desired temperature and will turn off when that temperature has been reached.

When the spa is not in use, you can set the thermostat to a lower temperature; then, when you wish to use the spa, adjust the HEATER CONTROL knob to the desired temperature. The water temperature will rise at a rate of about 6°F. per hour with the optional spa cover, foam insulation

and skirt panels in place, and if the air temperature is 50°F. or warmer. 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 desired temperature is 100°F., it will take about 5 hours to heat up sufficiently.

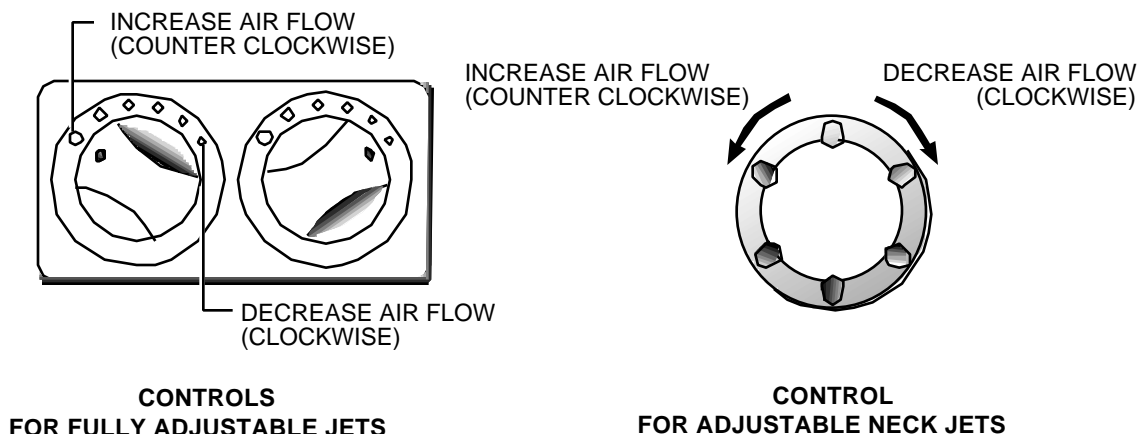
Once you have determined the desired setting on the thermostat knob, it is not necessary to change or readjust it again during normal operation unless you decide on a different setting.

The optional spa cover available for your spa will help control heat loss from the water surface and thereby reduce energy consumption. You can improve the spa's heat retention by keeping the spa 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 spa 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 in the HTR/FLTR mode when the heater has just turned off; the indicator lamp on the control panel will turn off at this time.

CIRRUS SPA CONTROLS



OPERATION

Normal Operation/Whirlpool System

You can enjoy the Cirrus spa with or without activating the whirlpool. Either way, bathing in your spa can be pleasurable, as well as therapeutic. After a busy, stressful day, you can look forward to soaking in your spa in still water with no turbulence—only the gentle warmth of the soothing and relaxing water.

For a more invigorating spa experience, you can take advantage of the built-in whirlpool system. To do this, push the SYSTEM switch button to select the JETS mode. Sit or recline in the spa so you are comfortable. Since all the jets are directionally adjustable, you can direct a jet toward an area where muscles feel tense or stiff. The warmth of the water and the stimulating water flow from the jet will pleasantly increase circulation.

For the total whirlpool effect and all-over feeling of well being, you can adjust all jets so they point in a clockwise or counterclockwise direction to circulate the air and water mixture in a circular motion all about the spa.

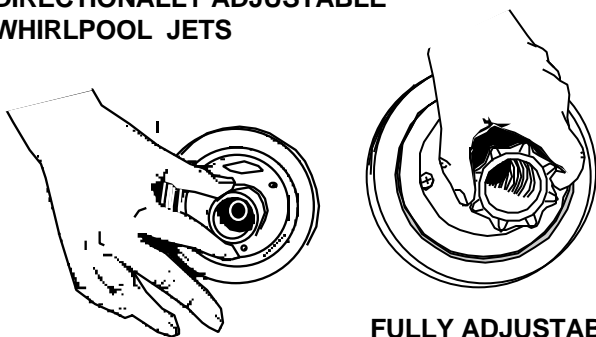
Air Blower

The Cirrus features a built-in air blower and factory drilled air holes in the seats of the spa to add to your enjoyment.

The blower sends air to a channel located under the spa's seats; this air is distributed through the air holes, and as the pressurized air is released from the holes, tiny bubbles are formed. These bubbles travel upward through the water and expand until they reach the surface and burst. The exciting visual effect of the bursting bubbles contributes to the overall hydromassage experience.

Activate the blower by pushing the ACCESSORY switch.

DIRECTIONALLY ADJUSTABLE WHIRLPOOL JETS



FULLY ADJUSTABLE WHIRLPOOL JETS

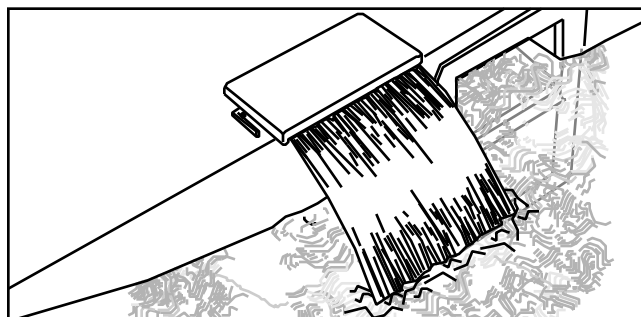
Water Rainbow™

The Water Rainbow spout will add the soothing sound of a waterfall to your bathing pleasure, as well as provide a beautiful cascade of shimmering water for an exciting visual effect.

Activate the waterfall feature by first turning on the JETS, HTR/FILTER, or FILTER function, then rotate downward the flow control level located on the left side of the spout. Use this lever to adjust the amount of water flowing through the Water Rainbow spout. The waterfall effect will be greatest in the JETS mode. Turning off the flow at the fully adjustable jets will dramatically increase Water Rainbow flow.

CAUTION: The water circulating through the Water Rainbow spout is not fresh water and not suitable for drinking.

WATER RAINBOW SPOUT



Silent Air Induction

The intensity of the whirlpool action is determined by how much air is inducted into the water. You have control of this by adjusting the air induction control knobs located on both control panels. For maximum air induction, rotate each control knob fully counter clockwise to the largest circle. For fewer air bubbles, decrease the amount of air induction by rotating the control knobs clockwise. When the knobs are turned to the smallest circles, only water is being circulated. (See page 10)

Filtration

When you are ready to leave the spa, push the SYSTEM switch button once to turn off the whirlpool. This puts the spa in HTR/FLTR mode. Adjust the HEATER knob to the temperature at which you wish the water maintained. In this way, the water will be filtered when the heater goes on to maintain the temperature. Running the filter pump for at least two hours per day is sufficient. Another way to be sure the water will be filtered is to turn the SYSTEM off and set the built-in timer in the System Control Module to turn the system on at a certain time to filter the water. Be sure there is sufficient water in the spa (filled to the waterline indicator mark on the skimmer/filter frame) when the timer is set, or the spa's motor/pump could be damaged. (See page 8 for instructions on setting the timer.)

MAINTENANCE

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 spa's 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 with water quality products, for the health and safety of spa users, as well as to make your spa bathing as enjoyable as possible.

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 two hours 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 de-foamer 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 may clog filters which must be cleaned as prescribed under the section entitled "Filter Maintenance" in this manual.

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

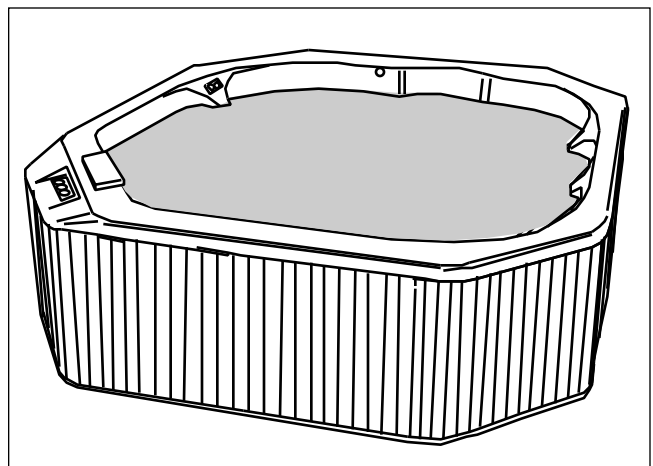
Follow the "Filter Maintenance" procedure described in this manual to ensure optimum performance of your spa's filtration system.

Water Chemistry

You can ensure better water chemistry by testing your 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. Make sure, also, 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.



MAINTENANCE

Water Chemistry (continued)

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 with heavy use. If using sodium dichlor, add one heaping tablespoon for each 150 gallons of spa 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 spa 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. Purge and sanitize your spa (according to instructions in "Equipment Set-Up" section of the "Installation Instructions") and clean the spa surfaces thoroughly before refilling with fresh water. Then re-establish water chemistry. 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

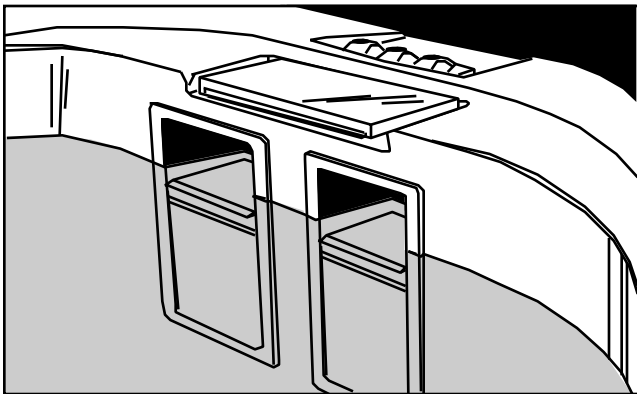
The water level in the spa must be maintained at its normal level. Evaporation and splashing will cause the water level to drop.

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 drain valve in the suction plumbing, (Via access hole in pan). (See illustration on page 5) Turn the handle and drain the spa.

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

NORMAL WATER LEVEL



The suction covers located in the foot well area should be checked at least once a week for collected debris, such as leaves, hair, etc., and cleaned as necessary. It may not be necessary to remove the suction cover to clean it, but if you need to, remove the center screw with a Phillips type screwdriver and clean the cover by flushing with water from a hose.

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.

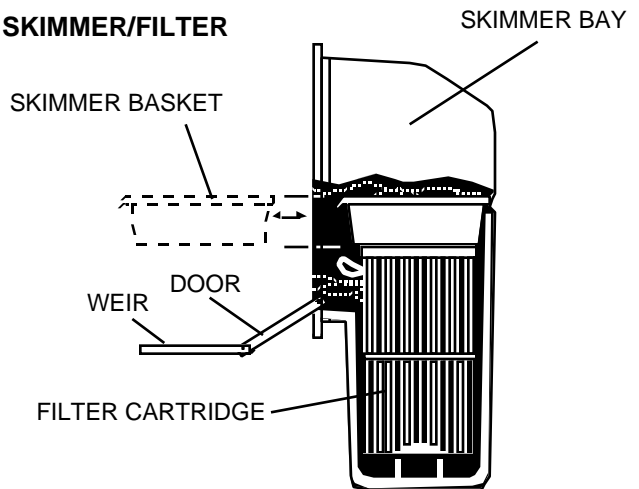
If heavy rains raise the spa water level, drain the spa to its normal level.

The optional rigid spa 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.

Skimmer Basket Maintenance

The basket located in the skimmer of the spa should be checked at least once a week for collection of debris, such as leaves, hair, etc., and cleaned as necessary. To clean the basket, remove it from the skimmer by pulling it out, then backflush it with a garden hose and reinstall.

FRONT ACCESS SKIMMER/FILTER



Filter Maintenance

The filters should be checked periodically. In normal use, check the filters at least once a month. Keep the filters clean; obstructed filters 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 from a garden hose. 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.

Replacement cartridges are available through your Jacuzzi Whirlpool Bath Dealer.

MAINTENANCE

Automatic Filtration/Maintenance

If you plan to be away, you should maintain minimum water quality by running the filter system. To do this, set the timer to turn the system on for at least two hours each day. This will cause the filter system to turn on at a desired time. Set the timer according to instructions on page 8.

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 spa.

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 the power at the circuit breaker.
3. Drain the spa completely by attaching a garden hose to the drain valve on the suction plumbing. Then remove the hose and leave the drain valve open to completely drain the spa.
4. Remove the filter cartridges. Clean them, and store them 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.) by turning the HEATER KNOB all the way counterclockwise.
3. Maintain a chemical balance. (See Water Quality section.)
4. Keep the spa covered.

Factory Installed Redwood Skirt

Your Cirrus spa is supplied with a factory-installed redwood skirt which completely surrounds the spa. The door can be opened for routine maintenance, setting the timer, and for testing the GFCI before use.

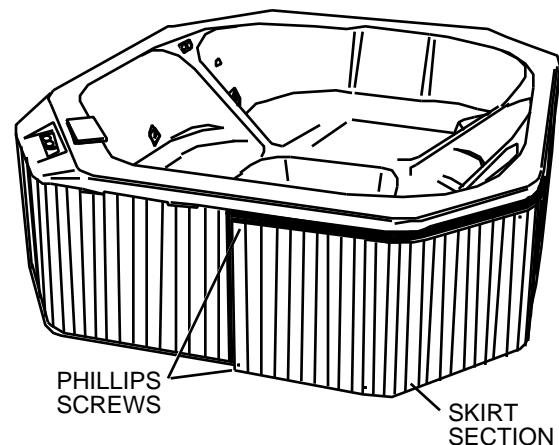
The skirt is made of kiln-dried redwood and can be left natural to weather, or you may choose to apply a stain or clear finish. Consult your local paint dealer for the appropriate product. **NOTE: WE RECOMMEND A WATER BASED MATERIAL. OIL OR SOLVENT BASED FINISHING MATERIALS WILL DEGRADE THE SKIRT BACKING MATERIAL**

If it becomes necessary to remove one or more of the skirt panels for major service access, simply remove the screws with which the section is secured.

To detach any of the panels, first remove all screws from the panel being detached.

The panels can be re-attached to the spa by reversing the above procedure.

Note: When you remove the skirt, you will notice the plastic covered, foam insulation blocks. These blocks are designed to be removed when service is required and reinstalled when service has been completed.

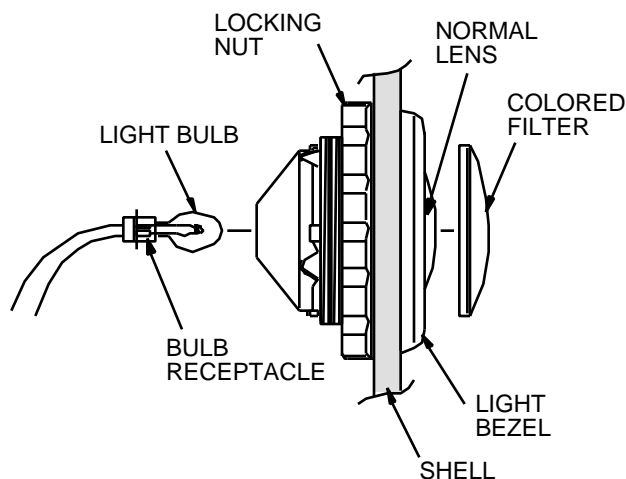


MAINTENANCE

Spa Light

Two filters, one blue and one red, are provided with your spa. To change the filter, simply snap the colored filters in place on top of the normal lens. Two replacement bulbs (GE Model 912, 12W, 12V) are also included. Put them in a safe place for future use. When a bulb burns out, replace it from the **back** of the light fitting, on the outside of the shell, by pulling out the bulb receptacle.

LIGHT BULB REPLACEMENT



Cleaning Your Spa

Your Cirrus spa shell 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 manufacturing 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.

Covering Your Spa

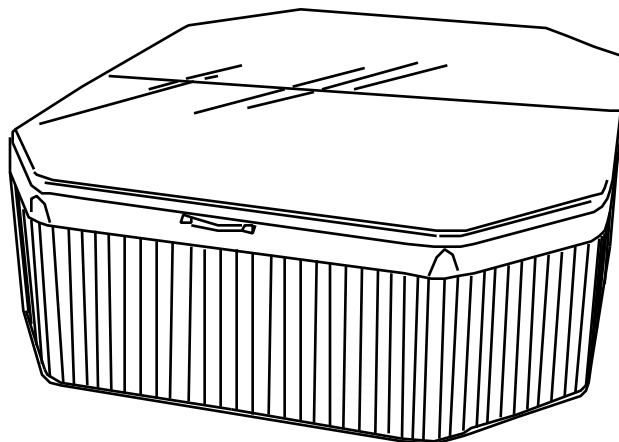
An optional rigid spa cover is available to place on top of the spa. The use of this cover will help reduce energy costs by minimizing heat loss and evaporation from your spa. In addition, the attractive spa cover is an effective means of preventing debris such as leaves and dirt from entering your spa 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.

CIRRUS SPA WITH RIGID INSULATING COVER



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

PROBLEM	PROBABLE CAUSE	REMEDY
1. Control Switches do not respond.	A. No power to the unit.	A. Turn on circuit breakers. Reset GFCI.
	B. Actuated too rapidly.	B. Wait 60 seconds, system will be restored automatically.
	C. High Temperature Safety Switch is tripped.	C. Reset button on heater after water has cooled. See *Note if switch continues to trip.
2. Heater not functioning.	A. No power to heater.	A. Check house circuit breaker and GFCI.
	B. Heater mode not selected.	B. Select HEATER/FILTER mode.
	C. Thermostat set lower than water temperature.	C. Turn to desired temperature.
	D. High temperature safety switch tripped.	D. Reset button on heater after water has cooled; see *Note if switch continues to trip.
	E. Flow switch not operating.	E. Check flow switch and plug in connection on System Control Module.
	F. Abnormally low water flow.	F. See problem Six below.
	G. Heater relay not operating.	G. *
	H. Heater element failure.	H. *
3. Heater not functioning but the heater light on.	A. Element malfunction.	A. *
	B. Relay malfunction.	B. *
4. Water not clean.	A. Clogged or blocked suction strainer or skimmer basket.	A. Clean strainer/skimmer basket.
	B. Filter clogged (dirty).	B. Clean or replace.
	C. Poor water chemistry.	C. See "Chemistry" section.
	D. Insufficient filtering time.	D. Run filter.
	E. Improper maintenance.	E. See "Maintenance" section.
	F. High content of solids in water.	F. Use clarifier or drain and refill spa.
	G. Filter motor plug not connected to System Control Module.	G. Check filter motor connection on System Control Module.
5. Abnormal water usage.	A. Leak in suction line, discharge line, or connections.	A. Repair leak.
	B. Excessive evaporation and or splashing.	B. Use rigid spa cover; lower thermostat setting.
6. Low water flow from jets.	A. Normal operation in FILTER, HTR/FLTR or AIR mode.	A. Select JETS mode for maximum flow.
	B. Low water level.	B. Fill to water level indicator mark on skimmer/filter frame.
	C. Clogged or blocked suction strainer or skimmer basket.	C. Clean strainers or skimmer baskets.
	D. Dirty filter.	D. Clean or replace.
	E. Adjustable jet partially closed.	E.. Open jet.

* **Note:** The skills and tools necessary for the safe repair of this spa require the services of qualified service personnel. Contact your Jacuzzi Whirlpool Bath Authorized Service Agent or Dealer.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY
6. Low water flow from jets. (Continued)	F. Suction or discharge line partially plugged.	F. *
	G. Pump running at subnormal speed.	G. *
	H. Worn or damaged pump seal.	H. *
	I. Subnormal voltage.	I. Call an electrician or your power company.
7. No water flow from jets.	A. Power turned off.	A. Turn on power at service panel.
	B. Selector switch in OFF.	B. Select another function.
	C. Motor(s) not connected.	C. Check motor plug connections on System Control Module.
	D. House circuit breaker tripped; no power to system.	D. Reset circuit breaker.
	E. Spa circuit protector tripped.	E. Reset circuit protector.
	F. High temperature safety switch tripped.	F. Reset button on heater after water has cooled; See *Note if switch continues to trip.
	G. GFCI tripped.	G. Reset GFCI.
	H. Faulty pump or motor.	H. *
8. Noisy pump and motor.	A. Clogged strainer(s).	A. Clean strainer(s).
	B. Leakage of air into suction line.	B. Locate and repair leaks.
	C. Vibrating parts attached to motor or support brackets.	C. Tighten fasteners.
	D. Low water level	D. Add water to normal level.
	E. Damaged or worn motor bearings.	E. *
	F. Impeller rubbing inside case.	F. *
	G. Debris inside pump.	G. *
9. Water leakage at pump shaft (rotating connection between pump and motor)	A. Worn or damaged pump seal.	A. *
10. Motor will not start	A. Power off.	A. Turn on power at service panel.
	B. OFF mode selected.	B. Select FILTER, HTR/FILTER, or JETS mode.
	C. House circuit breaker tripped or in OFF position.	C. Reset circuit breaker.
	D. Spa circuit protectors tripped.	D. Reset circuit protectors.
	E. GFCI tripped.	E. Reset GFCI.
	F. High temperature safety switch tripped.	F. Reset button on heater after water has cooled; see *Note if switch continues to trip.

* **Note:** The skills and tools necessary for the safe repair of this spa require the services of qualified service personnel. Contact your Jacuzzi Whirlpool Bath Authorized Service Agent or Dealer.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY
10. Motor will not start. (Continued)	G. Subnormal voltage.	G. Call an electrician or your power company.
	H. Improper or defective wiring	H. *
	I. Locked shaft or impeller.	I. *
	J. Motor windings burned out.	J. *
	K. Defective starting switch inside motor.	K. *
11. Motor stops.	A. Motor overload condition.	A. Let cool for one hour. Motor overload will reset; if problem persists, see *Note.
	B. High temperature safety switch tripped.	B. Reset button on heater after water has cooled; see *Note if switch continues to trip.
	C. Selector switch failure.	C. *
	D. Relay failure.	D. *
	E. Inadequate supply wiring.	E. Consult electrician to correct wiring to unit.
12. Air Blower does not operate.	A. Power off.	A. Turn on power at service panel.
	B. ACCESSORY switch is OFF.	B. Select other function.
	C. House circuit breaker tripped, no power to system.	C. Reset circuit breaker.
	D. GFCI tripped.	D. Reset GFCI.
	E. Faulty motor.	E. *
13. Accessory Switch and system switch in off position, but motor and heater still operating.	A. Timer is functioning.	A. Normal function, Turn timer to an off position, or reset tabs in off position.
14. Timer will not activate spa.	A. SYSTEM switch is not in off position.	A. Turn SYSTEM switch to off position.
	B. SYSTEM switch is in HTR/FLTR position and spa is at temperature set on thermostat.	B. Turn SYSTEM switch to off position, or turn HEATER control down. (If thermostat is already at minimum setting, and spa is at or above that temperature, timer will not operate.)
	C. Timer failure.	C. *

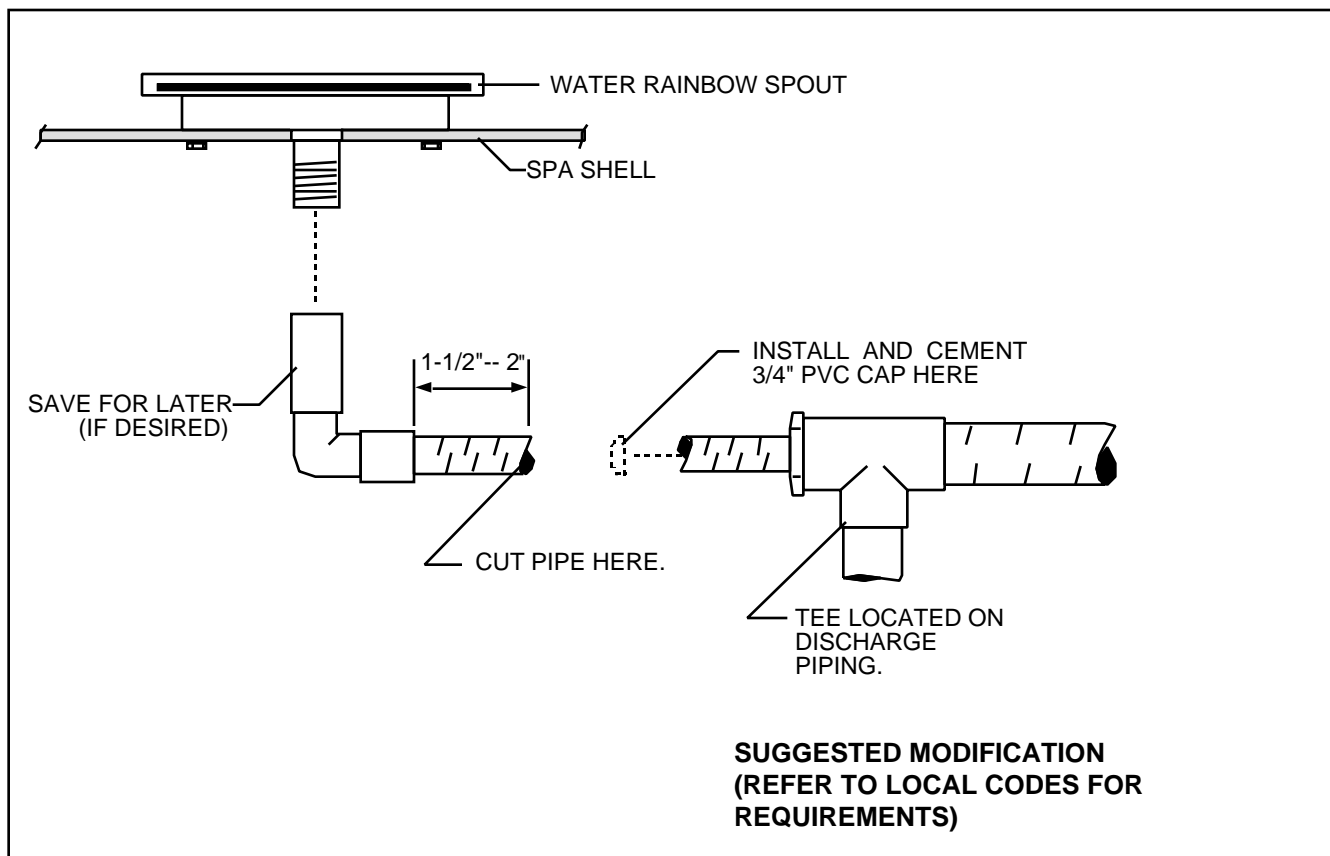
* **Note:** The skills and tools necessary for the safe repair of this spa require the services of qualified service personnel. Contact your Jacuzzi Whirlpool Bath Authorized Service Agent or Dealer.

Alternate Use of Water Rainbow Spout as Fill Spout

You can use your Water Rainbow spout as a fill spout by permanently plumbing it to a fresh water supply as local codes permit. Local plumbing codes may require the use of an anti-siphon valve for such connection. **Do not interconnect water supply with recirculating system of the spa.**

To make the connections necessary to the Water Rainbow system of the spa.

- Make sure spa is unplugged and completely drained.
- Unscrew the spout from the 3/4" pipe.
- Cut 3/4" piping as shown in illustration below.
- Cap off the piping by cementing a 3/4" PVC cap where cut has been made.
- Connect permanent plumbing line to the spout.



**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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