33 Wade Road
Latham, NY 12110
(518) 786-1111

25012 / 2-01

SAR200 English
60Hz Operation Guide

OWNERS MANUAL

Luxury Spa Line

UL® 60 Hz Guide

MODEL: _____

SERIAL NUMBER: _____

DATE INSTALLED: _____

DEALER: _____

ADDRESS: _____

TELEPHONE: _____

NOTE: THE SERIAL NUMBER/IDENTIFICATION LABEL IS LOCATED WITHIN THE EQUIPMENT COMPARTMENT AND SKIMMER HOUSING.

Model	Average Fill Gallons	Weight Filled lbs.	Weight Empty lbs.
#5000 - Polo	150	1585	385
#6000 - Adelphi	240	2385	400
#4000 - Putnam	340	3250	475
#2000 - Excelsior	325	3142	490
#3000 - Clarendon	350	3336	480
#1000 - Canfield	375	3640	580
#2000 - Olympia	375	3630	570
#9000 - Gideon	450	4397	725
#8000 - Pavilion	525	4989	705

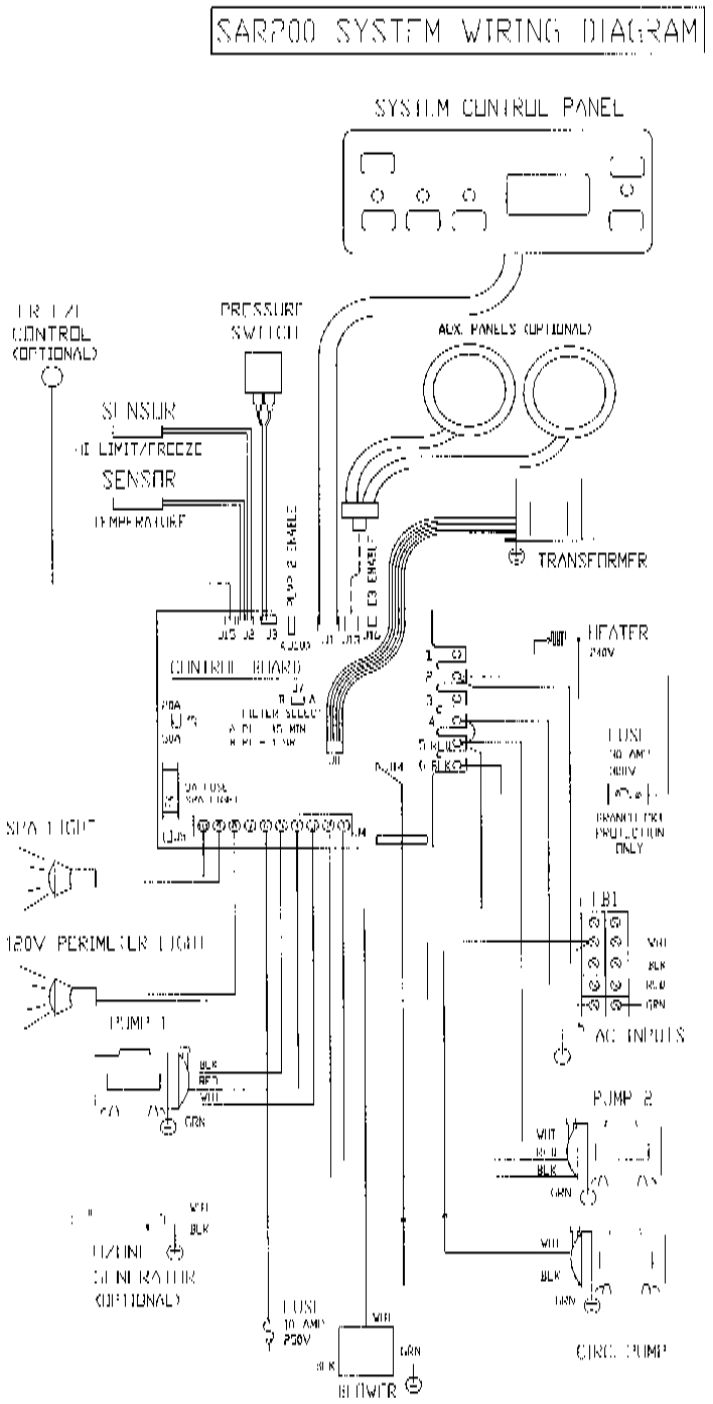
Thank you for your recent Saratoga Spa purchase.

This owners manual has been designed to acquaint you with your Saratoga Spa's operation and general maintenance.

Keep this manual available for future reference.

If you have any questions regarding your Saratoga Spa, contact your local dealer.

Thank you.



9. TROUBLE SHOOTING:

The following corrective actions can be undertaken by the spa owner. If the spa problem cannot be corrected after following these instructions, call your Saratoga Spa dealer for service.

SPA DOES NOT OPERATE:
1. Check main power to spa.

2. Check GFCI.

3. Check water temperature. If temperature is above 112ºF., unit will automatically trip the internal high heat safety limit switch. The display panel will flash "OH". In such a condition, turn off all power to the spa and contact your dealer or service center. **DO NOT ENTER THE WATER.**

4. If the display panel displays "FLO", **alternately** with the temperature, the following may be the situation:

- The filters may be plugged. Remove the filters and clean or replace.
- The amount of water flow may be inadequate. Make sure water level is correct.
- The system is air bound. Loosen clamp on 3/4 hose on top of the heater and relieve the air. Retighten clamp.
- A flow switch may have malfunctioned. Contact your Saratoga dealer or service center. The spa will continue to operate, but the heater will not activate.

5. If the display panel is **constantly** displaying "FLO", the flow switch has a malfunction and the spa will shut down. Contact your Saratoga Spa dealer or service center.

6. If the display is showing "ICE", it is indicating a freeze protection situation. Your spa is designed to protect itself from freezing conditions. If the high-limit sensor (mounted on the heater) detects a temperature at or below 40ºF., the pumps and blower will automatically run and circulate the water to prevent damage to the spa. When the temperature reaches 45ºF., the pumps and blower will turn off. No corrective action is necessary.
Note: Additional freeze protection is available for particularly cold applications. See your dealer for further details.

7. If the display is showing "SN1", the high limit temperature is nonfunctional. Contact your Saratoga dealer or service center.

8. If the display is showing a "SN3", the water temperature sensor is nonfunctional. Contact your Saratoga dealer or service center.

9. If the display panel is alternately flashing "SSEt" and the temperature, than your spa is in the summer setting mode. Your spa is equipped with *Summer Setting* to prevent heat buildup, when water temperature becomes 2˚ greater than set temperature, the circulation pump and ozone generator will turn off for 3 hours. After 3 hours, the circulation pump and ozone generator will turn on again for 1 hour, then turn off again for 3 hours and will keep repeating this cycle. When the circulation pump and ozone generator are off, "SSEt" and the water temperature will alternately display on the panel (SSEt = summer setting). The circulation pump and ozone generator turns on automatically if the water temperature drops below 1˚ of the set temperature. No corrective action is necessary.

SPA SHUTS DOWN DURING NORMAL OPERATIONS:
1. Check venting around equipment area.
2. Check house GFCI breaker.
3. Check for water in control area.

PUMP DOES NOT WORK OR SURGES:
1. Check water level. Fill if necessary.
2. Check to see if filter cartridges are dirty. If so, then clean.

WEAK WATER FLOW:
1. Check and clean filter cartridges.
2. Jet inserts are not completely in jet.
3. Check volume control on jet insert.

WATER FLOW, BUT NO HEAT:
Remember, upon filling spa, do not expect instant hot water. It may take 12-24 hours to heat cool tap water to desired temperature depending on heater size.
1. Check cover on spa. Be sure it is in place.
2. Check water level. Fill if necessary.

WATER DOES NOT CLEAR UP:
1. Check water chemistry. Balance water.
2. Clean filter cartridges.
3. Check bromine or chlorine level. Shock if necessary.
4. Check ozone converter for proper operation.

NOTE: Spa water may be chemically saturated. If so, remove existing water and refill with new water.

CONTROL PANEL DOES NOT OPERATE
Check Panel lock feature:

- To lock p ess or , then press .
- To lock the set t ture, press or , then press (pump 1).

To unlock the pa d/or temper press or , then press .

Lock feature symbols are LOC for panel loc, LOCF for

CONTENTS

Spa must always be covered when not in use in both indoor and outdoor installations. (Read Below)

IMPORTANT: Whenever the spa is not in use it is essential that the thermal cover be kept in place. When filled this insures effective temperature maintenance and economical operation as well as preventing the spa from pumping out water during power filtration cycle. When empty, this prevents potential damage to the spas surface finish which can result from excessive heat by the sun. These types of damage are specifically excluded from warranty protection . It is also recommended that the thermal cover tie-downs always be used to discourage access to the spa by unsupervised children and minimize heat loss.

Safety Alert Symbol

This is a safety alert symbol. It is used in this manual and on the safety signs and labels to alert you to potential hazards. When you see this symbol, read and obey the message that follows it. Failure to obey safety messages could result in serious personal injury or death.

1. IMPORTANT - SAFETY INSTRUCTIONS:

WHEN INSTALLING AND USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

READ AND FOLLOW ALL INSTRUCTIONS.

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

A wire connector is provided on this unit to connect a minimum No. 8 AWG (8.4 mm^2) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.

DANGER - Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.

DANGER - Risk of Injury. The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible.

Never operate the spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

DANGER - Risk of Electric Shock. Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4 mm^2) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.

DANGER - Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a spa. These units DO NOT have an integral ground fault circuit interrupter. The installation of a ground fault circuit interrupter MUST be done by a qualified Electrician and must meet all local and national codes.

WARNING - To reduce the risk of injury:

The water in a spa should never exceed 104°F. Water temperatures between 100°F and 104°F are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100°F.

Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.

The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.

WARNING - The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.

The causes, symptoms, and effects of hyperthermia may be described as follows: Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of Hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include:

1. Failure to perceive heat.
2. Failure to recognize the need to exit the spa or hot tub.
3. Unawareness of impending hazard.
4. Fetal damage in pregnant women.
5. Physical inability to exit the spa or hot tub.
6. Unconsciousness resulting in drowning.

Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure and circulation.

SAVE THESE INSTRUCTIONS.

The electrical supply for this product must include a suitable rated switch or circuit breaker to open all ungrounded supply conductors to comply with section 422-20 of the National Electrical Code ANSI/NEPA 70-1987. The disconnecting means must be readily accessible to the tub occupant but installed at least 5 feet (1.5m) from tub water.

Example: At low total alkalinity levels, the water's PH easily drifts, making frequent PH adjustments necessary and more chemical treatment expense.

On the other hand, a high total alkalinity level keeps the waters PH rigidly fixed. If PH adjustment is necessary, you will need unusually large amounts of treatment chemicals to change the water's PH.

RECOMMENDED RANGE - 80 to 120 PARTS PER MILLION (PPM)

POTENTIAL PROBLEMS:

1. PH difficult to maintain. If total alkalinity is too low, PH will drift.
2. Corrosive tendencies. If total alkalinity is too high:
   1. PH difficult to adjust (it remains fixed.)
   2. Cloudy water.
   3. Potential for scaling.
   4. High PH and low sanitizer efficiency.

TESTING:WEEKLY
ADJUSTING TOTAL ALKALINITY
Total Alkalinity can be raised with Alkalinity Increaser at the manufacturer's recommendation for dosage.

CALCIUM HARDNESS
Calcium hardness is the amount of dissolved calcium in your spa's water. Too little calcium in the water will etch plaster surfaces, too much will leave deposits on surfaces and equipment.
RECOMMENDED RANGE: Above 200 ppm

POTENTIAL PROBLEMS
Calcium Hardness Too Low:
- Some surfaces may be etched.
- May lead to equipment corrosion.

Calcium Hardness Too High:
- May contribute to cloudy water.
- Scaling of surface, piping and equipment.

TESTING : WEEKLY
ADJUSTING CALCIUM HARDNESS
Raise hardness by the addition of calcium chloride. Decrease calcium hardness by draining spa and replacing with water containing lower levels of calcium hardness.

DISINFECTANT
Brominating Tablets, Granular Chlorine and a Non-Chlorine type shock are popular disinfectants and are particularly well suited to compliment your ozone purification system spa. They are also very suitable products in water with elevated temperatures.

Brominating Tablets are effective as a spa water sanitizer and disinfectant. Follow manufacturer's directions for proper dosage. It is recommended to maintain an active bromine residual of 2.0 to 4.0 ppm.

Granular Chlorine (Dichlor Dihydrate, Lithium Hypochlorite), is designed to dissolve quickly and completely, provide a steady source of available chlorine to control the growth of algae, kill bacteria and destroy organic contaminants. It is recommended to maintain a chlorine residual of between 1.0 and 3.0 ppm.

Non-Chlorine type shock will oxidize or destroy most of the organic contaminants that result from bather load. This quick acting oxidizing shock treatment goes to work almost immediately improving water quality and eliminating irritating wastes and odor. This product is intended to be a shock treatment only.

SHOCK TREATMENT
Adding disinfectant to the water in amounts much larger than normal is called shocking the spa. An occasional shock treatment destroys algae, bacteria, and chloramines. After shocking your spa, do not allow bathers to enter the spa until disinfectant levels drop to normal.

WHAT CAUSES LOSS OF DISINFECTANT?
- ALGAE: The presence of algae will consume large amounts of disinfectant. If you have an algae problem, the use of an algaecide in addition to disinfectant may be necessary.
- BATHER LOAD: The greater the number of people using your spa, the more disinfectant you will need to use.
- IMPROPER PH: A high PH above 7.8 substantially retards disinfecting. Keep the PH between 7.2 and 7.8.
- SUNLIGHT: The sun's Ultraviolet (UV) rays readily dissipate disinfectant levels.
- WATER TEMPERATURE: High water temperature accelerates the loss of disinfectant.
- WEATHER: Rain and wind can carry a significant amount of contaminants into your spa.

REMEMBER:
PH 7.2 to 7.8
TOTAL ALKALINITY 80 TO 120 PPM
BROMINATING TABLETS AND NON-CHLORINE SHOCK 2.0 TO 4.0 PPM,
GRANULAR CHLORINE 1.0 TO 3.0 PPM
CALCIUM HARDNESS ABOVE 200 PPM

TEST PH WEEKLY
TEST DISINFECTANT DAILY
(Spa test kits are available through your Saratoga Spa Dealer.)

OZONE GENERATORS
Your Saratoga Spa comes equipped with an ozone generator. It automatically produces ozone 24 hours a day due to our Whisper Clean Continuous Circulation System.

WHAT IS OZONE?
Ozone is nature's natural purifier. It is a chemical known as O^3 and is produced from simple oxygen molecules in our atmosphere. Ozone will remove oils, greases, suntan lotions, sweat, urea, etc. from spa water more effectively than any other oxidizer commercially available. Ozone also assists chlorine, or bromine, to destroy bacteria and viruses and will do so more effectively. Ozone only leaves simple oxygen in the water as a by-product.

HOW IS OZONE PRODUCED?
Ozone is produced in nature from lightning during electrical storms and is also produced from ultraviolet rays from the sun to form our protective ozone layer. Your ozone converter uses a special corona discharge unit which duplicates this natural sanitizer.
Note: Always follow instructions and dosages listed by chemical manufacturers. Use only spa chemicals in your spa. Do not

DRAINING THE WATER (Continued)

5. When empty, inspect spa shell and clean as required.
6. Remove garden hose. Close valve - hand tighten.
7. Refill spa with tap water.
8. Reattach panel.
9. Restore power to spa.

WINTERIZING YOUR SPA

Follow directions 1 through 4 above (to drain spa).

5A. Hydro Jet Pumps:
1. Remove pump(s) from bracket(s) - Vacuum up water from return and suction sides of plumbing.
2. Reverse vacuum and blow out each line.
3. Remove drain plugs - Vacuum up water.
4. Put three cups antifreeze in wet end of pump(s).
5. Reinstall pump(s) with unions loose, drain plug out.

5B. 24 Hour Circulation Pump:
1. Disconnect 3/4 clamps from return and suction side of pump.
2. Remove pump.
3. Vacuum up both suction and return side of pump.
4. Reverse vacuum and blow out each line.
5. Vacuum up water from circulation pump.
6. Re-Attach pump and 3/4 hose.
7. From Whisper Clean cartridge add two cups of anti-freeze.

Note: Spa must be covered when empty.

8. WATER QUALITY MAINTENANCE:

GENERAL INFORMATION

As the owner of a spa, endless hours of entertainment, recreation, and relaxation await you. Caring for your spa will become a routine and pleasant part of your daily activities. You will be able to maintain your spa water and keep your spa equipment in excellent condition. To do so you first must balance your spa's water.

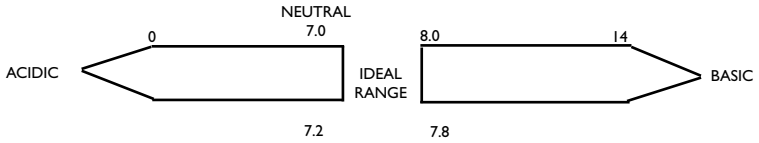
BALANCED WATER

Balanced water insures spa bathers' safety as well as protecting the spa heater and components from corrosion. Also, balanced water protects the spa surface from unsightly scale deposits which reduce the efficiency of the spa equipment. You can obtain balanced water by correctly adjusting a few chemical components in the water. Specifically, you will need to adjust the PH, total alkalinity and calcium hardness

PH

PH is measured on a scale that runs from 0-14. PH indicates whether water is neutral, acidic, or basic.

The drawing below shows a PH equal to 7.0 is neutral. A PH below this point is acidic and a PH above this point is basic.



RECOMMENDED RANGE - 7.2 to 7.8

If the PH is too low it can
1. Corrode metal surfaces.
2. Use excess sanitizer.
3. Irritate bathers' skin and eyes.

If the PH is too high it can
1. Deposit scale on surfaces.
2. Contribute to cloudy water.
3. Cause eye irritation.
4. Reduce sanitizer efficiency.

TEST PH WEEKLY

ADJUSTING PH

To raise PH add PH Increaser at the rate suggested on the container. *To lower PH* add PH Decreaser at the rate suggested on the container. After initial application, allow water to circulate approximately two hours. Test PH and add second dose if required.

TOTAL ALKALINITY

There are minerals in your spa's water that act as buffering agents. Total alkalinity is the measurement of these alkaline materials that help prevent corrosion and staining. The correct amount of alkalinity in your spa's water will keep the water's PH consistent while allowing for economical PH adjustment when necessary.

NOTE: Improper water chemistry can result in product failure and invalidate your warranty.
NOTE: It is the opinion of the Saratoga Spa Co. that Biguanide products are incompatible with our system and therefore void the warranty when used in conjunction with a Saratoga Spa.

2. INSTALLATION INSTRUCTIONS:

Your Saratoga Spa is totally self-contained and portable. You can locate it just about anywhere you wish. Preferable places are a patio, deck, or indoors. Regardless of your choice, the spa should always be placed on a structurally strong level surface.

When selecting a site for your spa, be sure to allow for drainage away from the electrical compartment of your spa. Also, allow for access to the equipment compartment.

Do not block air vents to your spa. The air vents allow for circulation of air throughout the equipment compartments. These vents are found on the face of the equipment compartment panel, the floor of the equipment compartment, and under the corners of the spa at the equipment compartment end.

This spa is manufactured to be a portable unit. Any permanent installation of this product is done at the risk of the owner. Permanent installation of this unit violates warranty coverage.

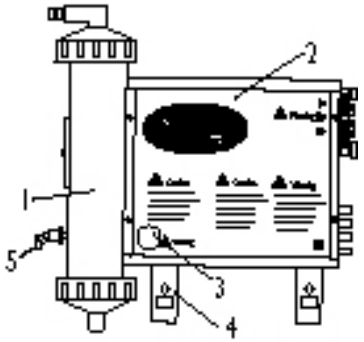
3A. ELECTRICAL REQUIREMENTS:

Saratoga Spas must be wired in accordance with all applicable local electrical codes.

All electrical work should be done by an experienced, licensed electrician familiar with spa installations.

NOTE: As of January 1, 1996, The National Electrical Code (NEC) requires a GFCI (Ground Fault Circuit Interrupter) on all spa installations.

The SAR 200 Series Control is available in a 240 Volt - 4KW heater with 50 AMP service.



240 VOLT WIRING INSTRUCTIONS:

1. Open the Equipment Module's wiring access panel to allow access to the input power wiring.

2. Connect the input power wiring as shown below. 240 Volt installations require a 60Hz, single phase, three wire electrical service. Plus ground (Line 1, Line 2, Neutral, and Ground), and must be connected using a minimum supply conductor ampacity of 50 AMPS and a minimum circuit breaker size of 50 AMPS.

   Note: Use copper wire only (3 wire w/ground. 8 gauge under 50', 6 gauge over 50').

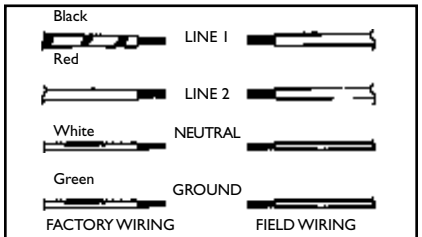
240 VOLT MODELS

These spas must be connected to a "Dedicated" 240 Volt 50 AMP grounded circuit. The term "dedicated" means the electrical circuit is not being used for any other electrical items (lights, appliances, etc.) If the spa is connected to a non-dedicated circuit, overloading will occur and nuisance tripping of the GFCI breaker switch at the house breaker panel will occur.

A ground lug connector is provided on the exterior surface of the control box inside the equipment compartment. This is to permit the connection of a bonding wire between this point and any metal equipment, enclosures, pipe or conduit within five feet of the spa. This bonding wire must be at least #8 AWG solid copper wire.

CAUTION: Use only approved pressure-type wire splicing lugs or connectors suitable for the size and type of wiring used!

1. Heater
2. Circuitry Housing
3. Conduit for power input on Backside
4. Mounting brackets
5. Pressure Switch



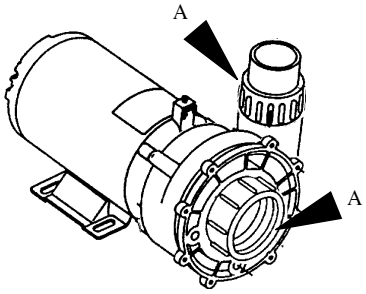
Black wire - LINE 1
Red wire - LINE 2
White wire - NEUTRAL
Green wire - GROUND
240 VOLTS - 50 AMPS / 30 AMPS

3B. START-UP PROCEDURES:

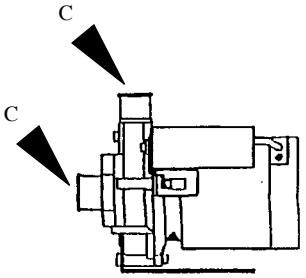
IMPORTANT: BEFORE FILLING WITH WATER, DO THE FOLLOWING:

A. HAND TIGHTEN UNIONS
B. TIGHTEN DRAIN VALVE
C. TIGHTEN CLAMPS

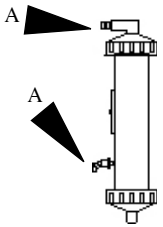
NOTE: Above items may become loose in transit.



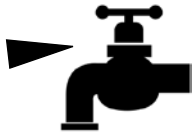
Jet Pump(s)
Two in all models except Putnam, Adelphi and Polo.



Circulation Pump



Heater



3C. INITIAL START-UP:

1. Fill the spa with water by removing the *Whisper Clean* cartridge (the *Whisper Clean* cartridge is the cartridge with the coarse thread (ACME) style. Run water until it reaches a minimum level of 2" above the top of the filter.

Note: When filling your spa, the air purge valve must be open in your filter cartridge area. Leave valve open until all pumps are running normally, then tighten valve snug.

Note: This is the minimum level allowed to run Whisper Clean Circulation System. All models will need to be filled 2" above highest jets.

When using mineral cartridge system, please refer to your dealer for specific instructions on installation.

CAUTION: The Equipment Module must never be operated without water in the spa; serious damage to the heater and/or pump may result.

2. Check all plumbing (clamps, union and drain valve) connections for leaks.

3. Bring power to spa control system. The SAR 200 control will begin heating the spa to the set temperature (Preprogrammed for 100ºF.) The minimum temperature is 80ºF and the maximum temperature is 104ºF. The spa has a 24 hour circulation pump and ozone generator to constantly filter and ozonate the water. One minute after power-up, the blower will run for 30 seconds and the pumps will run on high speed for 15 minutes. The airline purge and power filtration cycle is repeated every 24 hours at this exact time.

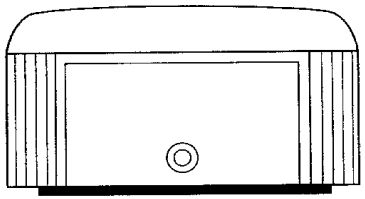
NOTE: If water is not coming out of the whisper clean jets, the system is air bound - Refer to the Trouble Shooting Section of this manual for further instruction.
(page 14)

NOTE: It may be necessary to press and release the ground fault circuit interrupter (GFCI) RESET button.

NOTE: If power is interrupted, the filtration cycle will be reset and the temperature setting will return to the factory preset 100˚F.

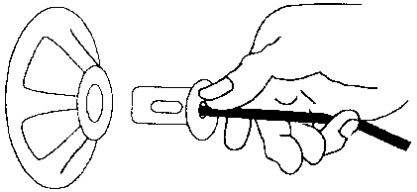
5. Water must be balanced and shocked upon start up. See your dealer or pages 12 & 13 of this manual for details. This procedure must be repeated each time

REPLACING LIGHT BULB

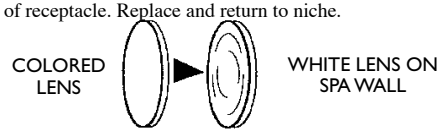


Replacement Bulb: GE 912 bulb.

Locate the light lens inside your spa. Remove the corresponding wood panel by unscrewing the six screws.



Grasp the bulb holder on the back of the light niche. Twist counter clockwise to release it from niche. Pull bulb out of receptacle. Replace and return to niche.



Colored lenses for your underwater mood light come equipped with your spa. If desired, simply snap them over the light lens on the inside of your spa.

CARE OF THE EXTERIOR SURFACE (ACRYLIC SPA SHELL)

Your Saratoga Spa is manufactured with a tough Acrylic surface. Some staining or water marking may occur at or above the water surface.

Removal of these surface conditions can usually be accomplished with a soft cloth by merely wiping them away. Stubborn stains can be removed first by draining the spa and then using a nonabrasive product.

WOOD SPA SKIRT

The wooden skirt around your Saratoga Spa is manufactured with the finest quality wood available. A good quality wood sealer or natural color wood oil should be applied twice a year to keep your spa skirt looking good as new.

NOTE: DISCOLORATION OF THE SPA SKIRT IS CONSIDERED NATURAL AND IS NOT COVERED BY THE SPA SURFACE WARRANTY.

Your Saratoga Spa dealer may stock original factory finish or recommend another sealer that is available in your area.

CARE OF THE THERMAL COVER

Your vinyl thermal spa cover has been designed for your particular spa. Monthly cleaning and conditioning is recommended to maintain its beauty.

To clean and condition the vinyl cover:

1. Remove the cover from the spa and lean it against a wall or fence.
2. With a garden hose spray away all loose dirt and debris.
3. Using a large sponge and a solution of two gallons of water to one teaspoon of dishwashing liquid, scrub the vinyl in a circular motion. Make sure to rinse all soap off the cover before it dries.
4. Be sure to rinse the inside of the cover without soap. Towel dry.
5. To condition the vinyl after cleaning, apply a thin film of saddle soap. (Follow directions on the container.)

Note: A complete line of cover care products are available. Contact your spa dealer for details.

IMPORTANT REMINDERS:
DO NOT WALK, SIT, OR STAND ON THE FOAM INSULATED COVER.

• DO NOT DRAG OR LIFT THE SPA COVER USING THE FLAPS OR COVER TIE-DOWNS.
• Always REMOVE ANY SNOW BUILT UP TO AVOID BREAKAGE OF THE FOAM CORE.
• Always LOCK COVER STRAPS TO SECURE COVER TO THE SPA WHEN NOT IN USE.

IMPORTANT: **Whenever the spa is not in use it is essential that the thermal cover be kept in place. When filled this insures effective temperature maintenance and economical operation. When empty this prevents potential damage to the spas surface finish which can result from excessive heat caused by the sun. This type of damage is specifically excluded from warranty protection. It is recommended that the thermal cover tie-downs always be used to discourage access to the spa by unsupervised children and minimize heat loss.**

WATER LEVEL

All models must maintain water level 2" above highest jet. Bather use and evaporation can lower water levels. Failure to maintain proper fill level will result in damage to the spa. Spas left uncovered are more prone to water loss resulting in the potential for severe water loss and damage to the unit and its surroundings not covered by warranty.

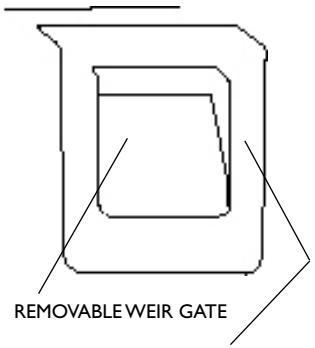
DRAINING THE WATER TO DRAIN SPA:

1. Disconnect the spa from the power supply by tripping the GFCI breaker located in the house breaker panel.

2. Take off equipment access panel and locate hose bib shut off. Attach garden hose and route hose to an appropriate draining area.

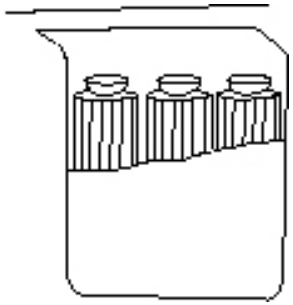
3. Open the valve on the hose bib. The spa will drain by gravitational flow.

4. Saratoga Spas will drain to the lower suction fittings in the foot well of the spa. It will be necessary to vacuum or sponge up the remaining water in the spa.



TO REMOVE SKIMMER LID:
Lift directly up and release from holding clips.

TRIPLE
CARTRIDGE SYSTEM



(2) POWER FILTRATION CARTRIDGES:
These cartridges are located on the outside with fine threads (NPT).

WHISPER CLEAN CARTRIDGE: This cartridge is located in the center. Filling spa and installing optional purifier cell takes place here. (ACME Thread)

ALL MODELS: FILL SPA TO MINIMUM OF 2" OVER THE TOP OF FILTER CARTRIDGES.

Note: Before running circulation system, all models must be filled 2" above the highest jet.

7. SPA CARE AND MAINTENANCE:

Your Saratoga Spa is manufactured from the highest quality, most durable materials available today. We recommend that a spa maintenance program be followed. The care you take will ultimately determine how long your spa or its individual components will last. This section will help you maintain your investment.

FILTER MAINTENANCE

As with any water filtering system, the filter cartridges may become clogged with particles, body oils or calcification, that will result in poor water quality. It is important to maintain a clean unobstructed filtering system.

FILTER CARTRIDGE REMOVAL AND INSTALLATION

1. Remove and carefully set the skimmer cover off to the side.
2. Remove any floating items from within the filter compartment.

2A. Turn system off or put into SSEt mode.

3. Grasp the top of the filter cartridge and turn counter clockwise until it is free from the base retainer. Leave Screen Adapter in place.
4. To reinstall the filter cartridge, reverse the order in which it was removed. DO NOT OVER TIGHTEN!!

5. Turn system back on. Reset temperature setting.

NOTE: Do Not use spa without Saratoga Spa Filter Cartridges In Place.

NOTE: Spa cartridges are a disposable item and are not covered under warranty.

VALVE MAINTENANCE

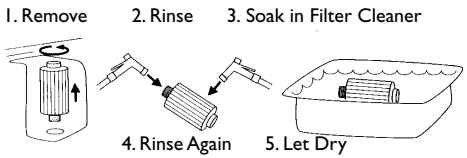
Should valve become difficult to operate:
1. Shut system down.
2. Remove valve cover.
3. Clean or remove debris from valve or diverter.
4. Reassemble and thread down valve cover.

WARNING: Use only authorized Saratoga Spa Cartridges. The use of other spa manufacturers cartridges will void your warranty. The Whisper Clean Cartridge is specially made for your spa and can only be found at a Saratoga Spa Dealership.

WARNING: The Whisper Clean Filter Cartridge and Power Filtration Cartridge must be installed in the correct location, as shown. Improper installation may result in damage to the circulation system and will void your warranty.

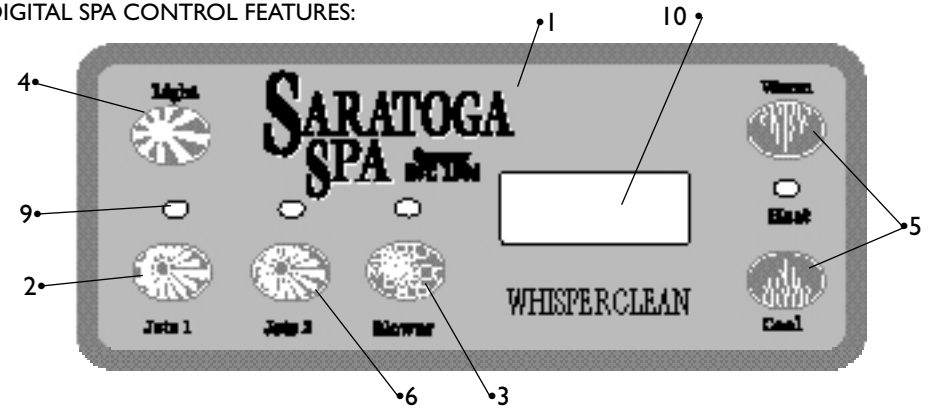
FILTER CARTRIDGE CLEANING

1. Shut system off at GFCI or put into summer set mode. Remove cartridge.
2. Place the cartridge on a clean surface, spray with a garden hose. It will be necessary to rotate the cartridges to insure all filter pleats have been cleaned.
3. Complete cleaning by spraying down throughout the center of the cartridge (inside out).
4. Allow cartridge to dry. Reinspect and reinstall.
5. A complete and more thorough cleaning can be achieved by soaking cartridges in filter cleaner. Follow directions on the label.



3D. DIGITAL TOP-SIDE FEATURES:

DIGITAL SPA CONTROL FEATURES:



Note: Jets 2 is not applicable in models Polo, Adelphi and Putnam spas..

the spa is drained and refilled.

1 DISPLAY PANEL
The display will indicate operation of the hydro jet pump(s), air blower, spa light, water temperature. and display the topside diagnostics.

2 JETS 1 BUTTON
Activates the hydro jet pump for maximum hydrotherapy jet action. Touch button once for low speed, again for high speed and again to turn off.

3 BLOWER BUTTON
Activates the air blower. When operating, bubbles of air will come from air jets or versa-flo jets in the spa.

4 MOOD LIGHT BUTTON
Activates the mood light (on - off).

5 WARM AND COOL BUTTONS
Used to set the desired water temperature, up or down.

6. JETS 2 BUTTON
` When the spa is equipped with two hydro jet pumps, this button will activate the secondary hydro jet pump for additional hydrotherapy jet action. Touch button once for low speed, again for high speed and again to turn off.
Note: Not present on Polo, Adelphi or Putnam spas.

7. SATELLITE PANEL (Gideon & Pavilion Only)
The Gideon and Pavilion models feature two round remote control buttons which operate pump #2. Touch button once for low speed, again for high speed and again to turn off. (Not pictured here.)

8. PANEL LOCK
• To lock p ess or ,
then press .
• To lock the set t ture, press or
, then press (pump 1).
To unlock the pa d/or temper press
or , then press .

LCD screen displays "LOC" when panel is locked, "LOCF" when temperature is locked and "ULOC" when the locking feature is removed.

9. INDICATOR LIGHTS - *LED Light*
Signals operation of pump, blower or heater.

10. DISPLAY SCREEN - *LCD*
Shows temperature, temperature setting, all self diagnostic functions and locking and unlocking symbols.

Self Diagnostics
The Saratoga Digital Spa Control features a series of self diagnostic symbols: OH, FLO, ICE, SN1,

4. SPA OPERATION & TEMPERATURE SETTING:

OPERATING THE HYDRO JETS:

Press the Jets 1 or Jets 2 pad to activate and deactivate the hydro jet pumps. Touch button once for low speed, again for high speed, and again to turn pump off. Either pump when activated, will automatically turn off after 15 minutes of operation. The spa light will begin flashing 15 seconds before the pump shuts off as a reminder.

NOTE: Jets 2 pad not available on Polo, Adelphi and Putnam.

OPERATING THE AIR BLOWER:

Press the blower pad to turn the blower on and off. The blower will automatically turn off after 15 minutes of operation.

OPERATING THE MOOD LIGHT:

The mood light is dimmable. Press the light pad once for the brightest setting. Press the pad a second time for the intermediate setting, and again for the dimmest setting. Press the pad a fourth time to turn off the light. The mood light will automatically turn off after 4 hours of operation.

Note: A low voltage (120VAC) jack, located on the spa pac, is provided for perimeter lighting (it will activate when the light is on). See your dealer for additional details.

SETTING THE TEMPERATURE:

The current temperature is constantly displayed on the control panel. When either pad is pressed, the set temperature will appear. (The set temperature is designated by a triangle.) Each time either pad is pressed again, the set temperature will increase or decrease depending on which pad is pressed. The warm button will increase desired temperature and the cool button will decrease desired temperature. After three seconds, the control panel will automatically display the current spa temperature. The panel is preset at 100˚F.

Note: The above functions will not activate if panel or temperature lock is engaged. See page 7 for details.

NOTICE: Saratoga Spas are designed for maximum heat retention. The unit is not designed to cool water. If the set or desired temperature is below that of the ambient temperature, the unit will not be able to achieve this demand. Depending on the desired temperature, it may be necessary to add cool water to the unit to lower your spa's water temperature.

5. HYDROTHERAPY JET SYSTEM:

STANDARD VERSA-FLO JET
Two styles (Directional and Spinner), provide a mix of water and air that are volume adjustable by turning the scalloped outer ring. ***Directional*** - To change from a straight steam to directional, with finger, move inner nozzle to position desired. ***Spinner*** - To change from small whirly pattern to a larger pattern, with finger, flick inner nozzle to either side. Note: Both styles are interchangeable. To accomplish, simply pull outer ring out and unscrew counterclockwise. Make sure hydro pumps are off.

CLUSTER VERSA-FLO JET
Provides a concentrated stream of water and air.

MINI VERSA-FLO JET
Two styles (Directional and Spinner), provide a mix of water and air that are volume adjustable by turning the scalloped outer ring. ***Directional*** - To change from a straight steam to directional, with finger, move inner nozzle to position desired. ***Spinner*** - Spins continuously, no pattern adjustment available. Note: Both styles are interchangeable. To accomplish, simply pull outer ring straight out. Make sure hydro pumps are off.

POWER MASSAGE (patent #4860392)
Powerful jet provides water to massage your back from under the built-in headrest down a channel for deep hydrotherapy action. Jet is volume adjusted only by turning the Versa-Flo valve. Found on select units.

WHISPER CLEAN JET
Connected to the whisper clean system, the jet induces temperature controlled water and ozone O^3 into the spas footwell 24 hours a day.

POWER JET
Largest in the Versa-Flo family; This jet provides a mix of water and air that is volume adjustable by turning scalloped outer ring. To change from a smaller whirly pattern to a larger pattern, with finger, click inner nozzle to either side on selected models.

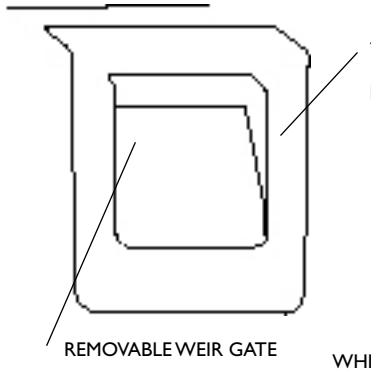
UNDERWATER CFE (PATENT PENDING)
Underwater jet patterned after the Power Massage. This jet runs a ribbon of water parallel to the surface of the spa. Not found on all units.

GATTLING JET
A seven nozzle jet which operate like a gattling gun rotating water output through each opening.

BI-PLANE CFE (PATENT PENDING)
The latest in the CFE series jets. Located behind the pillow in selected spas, the Bi-Plane CFE provides for two jets in one with a mini valve for complete control. The upper jet provides a stimulating neck massage while the lower jet handles the back.

6. SPA FILTER CARTRIDGE INSTALLATION:

WARNING: USE ONLY AUTHORIZED SARATOGA SPA CARTRIDGES.



TO REMOVE SKIMMER LID:
Lift directly up and release from holding clips.

REMOVABLE WEIR GATE

POWER FILTRATION CARTRIDGE: This cartridge has the fine thread at the bottom. (NPT)

WHISPER CLEAN CARTRIDGE: This cartridge has the widely spaced coarse (ACME) threads at the base. Filling of the spa and installation of optional purifier cells are done here.

DUAL CARTRIDGE SYSTEM