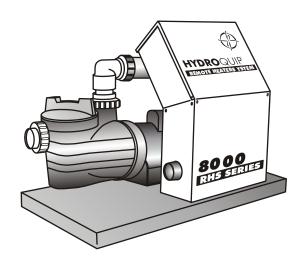
HYDROQUIP

ULTIMATE SERIES SOLID-STATE

SYSTEM OPERATION MANUAL

THE SMART CHOICE



8700

CONTENTS

Important Safety Instructions	2
INTRODUCTION	
Major Component Illustration	4
SYSTEM OPERATION	
Heater Operation	5 6-7 8 9-10
OPERATIONAL CONSIDERATIONS	
Warm Weather Conditions Chemical Water Treatment Filtration	11
Freeze Protection & Winterizing	12 12
TROUBLESHOOTING	13-14
Warranty Information	17

IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS

- **DANGER** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- WARNING RISK OF CHILD DROWNING. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a spa or hot tub unless they are supervised at all times.
- LANGER To reduce the risk of injury to persons, do not remove suction fittings.
- ▶ Spa location must accommodate sufficient drainage of water around the base of the structure, as well as the power source compartment.
- ▶ Prolonged immersion in water that is warmer than normal body temperature can result in a dangerous condition known as 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 dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia include (1) unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit spa, (4) physical inability to exit spa, (5) fetal damage in pregnant women, (6) unconsciousness resulting in danger of drowning. WARNING The use of alcohol, drugs or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.
- DANGER RISK OF ELECTRICAL SHOCK. Install at least 5 feet (1.5m) from all metal surfaces. (A spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a solid copper conductor attached to the wire connector on the terminal box that is provided for this purpose. Refer to NEC and local codes in effect at the time of installation.)
- ▶ A pressure wire connector is provided on the control box to permit connection of a solid copper bonding conductor between this point and any equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5m) of the unit as needed to comply with local requirements.
- ▶ Bond accessible metal to the dedicated connector on the equipment grounding bus, bond the equipment ground bus to the local common bonding grid as part of the installation in the form of (1) a reinforced concrete slab for support, (2) a ground plate provided beneath the hot tub or spa, or (3) a permanent ground connection that is acceptable to the local inspection authority.
- DANGER RISK OF ELECTRICAL SHOCK. Do not permit any electrical appliance, such as a light, telephone, radio, or television, within 5 feet (1.5m) of a spa or hot tub.

To reduce the risk of injury:

- ▶ The water in a spa or hot tub should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10-15 minutes) and for young children.
- 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 or hot tub water temperatures to 100°F(38°C).

- Before entering the spa or hot tub, the user should measure the water temperature with an accurate thermometer.
- The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of 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 or hot tub.
- Persons using medication should consult a physician before using a spa or hot tub since some medication may affect heart rate, blood pressure, and circulation.

For Units with a GFCI (Ground Fault Circuit Interrupter)

This unit may be provided with a ground-fault-circuit-interrupter located on the control box. Before each use and with the unit operating, push the test button. The unit should stop operating and the reset button should appear. Push the reset button. The unit should now operate normally. If the interrupter does not perform in this manner, a ground current is flowing indicating the possibility of electrical shock. Disconnect the power, or unplug from receptacle, until the fault has been identified and corrected.

For Cord and Plug Connected Units

Connected to a grounded, grounding type receptacle only. NEVER connect the spa to an extension cord.

Do not bury the cord.

WARNING To reduce the risk of electrical shock, replace damaged cord immediately.

For Permanently Installed Units

A terminal marked "G" or "ground" is provided in the wiring box located inside the equipment compartment. To reduce the risk of electric shock, connect the terminal or connector to the grounding terminal of your electrical service or supply panel with a continuous green insulated copper wire in accordance with National Electric Code Table 250-95 and any other local codes in effect at the time of the installation.

For Permanently Installed Units not Provided with an Internal Disconnecting Method

The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-30 of the National Electric Code, ANSI/NFPA 70 1987. The disconnecting means must be readily accessible to the tub occupant but installed at least 5 feet (1.5m) from the tub water.

For Units with Gas Heaters

WARNING - Do not install indoors. This unit uses a gas heater that requires proper ventilation and is intended for outdoor use only.

For UL Listed Equipment Assemblies

- Install at least 5 feet (1.5m) from tub water using nonmetallic plumbing. Install blower no less than 1 foot (305mm) above the maximum water level to prevent water from contacting electrical equipment. Install in accordance with the installation instructions.
- To reduce the risk of drowning from hair and body entrapment, install a suction fitting(s) with a marked flow rate in gallons-per-minute that equals or exceeds the flow rate marked on the equipment assembly.

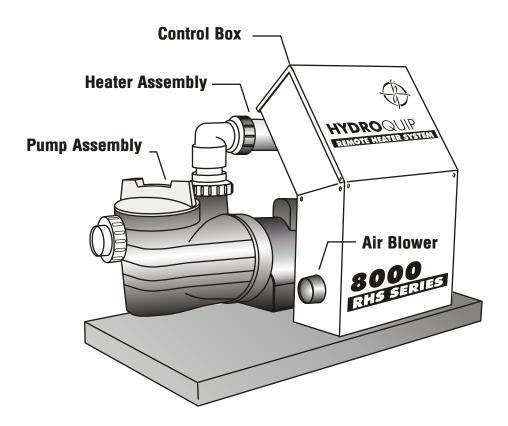
INTRODUCTION

Congratulations on your new purchase. **Hydro-Quip** Equipment & Control Systems are constructed of the finest materials and assembled under the strictest quality control standards. With proper care and maintenance your system will provide you with many years of reliable performance.

The following pages contain informative information concerning the operation and care of your system.

(Note: Your Control may differ from the illustration below although the basic operation and configuration will be the same.)

Major Components



HEATER OPERATION

Your control system may have a convertible heater (120 volts; or 240 volts). Refer to the system data label to determine which, if any, convertible options are available to you. The heater configuration was set at the factory and may have been changed by your installer.

A covered, 300-gallon spa will experience a heat rise approximately as detailed below.

Your system will operate with one of the following configurations:

120 Volts - The heater will operate on demand at 1500 Watts during low speed pump operation. It will automatically shut off when the high-speed pump or blower is activated. You can expect a heat rise of 1°F to 2°F per hour.

240 Volt - The heater will operate on demand at 5500 Watts during high and low speed pump operation. It will continue to operate when the blower is activated. You can expect a heat rise of 6°F to 8°F per hour (12°F-16°F @ 11kw).

HEATER START-UP

Initial Start-Up: When the system is first started (or any time the power is reset) it will go through a series of diagnostic checks, displaying various information on the display, and finally ending with the control panel reading "PR" or Priming Mode. If no buttons are pressed the system will start up after 4 minutes. Priming mode can be bypassed by pressing the "Warm" or "Cool" button and setting a temperature which will cause the pump to start and system to begin initiating a heat call.

The system does not use a Flow or Pressure switch and therefore must perform various checks within the heater to assure there is proper water flow. All heat calls will begin with a short 3 second power of the heater to make sure there is water present and to determine the direction of the water flow. After this initial check the system will do an extended water temp & flow test that is displayed on the keypad by a rapidly flashing heater light. This will take place for 2 minutes after which time the heater will come on if everything is proper with the installation of the system. The heater light on the keypad will be solid when the heater is "ON".

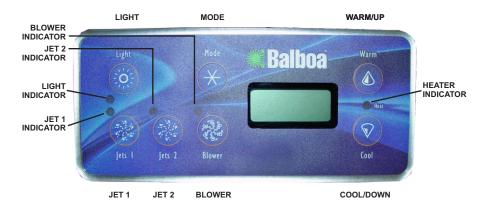
Heat Rise Expectations:

Heat rise is dependent on many factors, these figures are based on a covered 300gl spa

- 5500W = 6°F to 8°F per hour
- 11,000 = 12°F to 16°F per hour
- Gas = Dependent on Gas Heater output

If any error codes are displayed please refer to the "Error Identification" section of the manual on pages 9 & 10.

YOUR SPASIDE CONTROL



Default System Operation: When power is applied, or there is a loss of power the system will initiate its default programming. The filter cycle will start 6 minutes after power has been applied and repeat 12 hours later if programmed to do so.

Pump 1 Key: Pressing this key when the pump is OFF will turn it on to Low Speed, a second press switches the pump to High speed, a third press turns the pump OFF. If the pump is already to turn Pump 2 on and off, an automatic timer will turn the pump off after 30 minutes of operation. A light will appear next to the Pump 1 button when it is active. If the pump cannot be turned off a filter cycle is active.

Pump 2 Key: Press this key to turn Pump 2 on and off, an automatic timer will turn the pump off after 30 minutes of operation. A light will appear next to the Pump 2 button when it is active.

Blower Key: Press this key to turn the blower on and off, an automatic timer will turn the blower off after 30 minutes of operation. A light will appear next to the Blower button when it is active.

Light Key: Press this key to turn the light on and off, an automatic timer will turn the light off after 4 hours of operation

SPASIDE CONTROL - Continued

Temperature Set Keys: Press he "Cool/Down" button or "Warm/Up" button to display the current set water temperature. Pressing either button while the set temperature is displayed will increase or decrease the set temperature by 1°F. The temperature is adjustable between (80°F - 104°F / 26°C - 40°C)

Mode Key: This button is used to switch between Standard, Economy, and Sleep modes. Press "Mode" to enter mode programming, press "Cool" to cycle through the available modes (the LCD will flash until confirmed), then press the "Mode" button to confirm and save the setting.

Standard Mode: Maintains the desired water temperature. Note that the displayed water temperature is only accurate when the pump has been running for at least 1 minute. "Std" will be displayed briefly when you switch into Standard Mode.

Economy Mode: Heats the spa only during filter cycles. "ECN" will appear solid when the temperature is not current and flash when the temperature is not current.

Pressing "Jet 1" while in Economy mode puts the system in **Standard-in-Economy Mode**, "SE" which operates the same as Standard Mode then reverts back to Economy Mode after 1 hour. When in this mode pressing "Cool" or "Warm" followed by "Light" will switch the mode back to Economy immediately.

Sleep Mode: Heats the spa to within 20°F (11°C) of the set temperature only during filter cycles. "SLP" will appear on the display until this mode is changed.

Standby Mode: Pressing "Cool" or "Warm" followed by the "Blower" or "Pump 2" key will turn off all spa functions temporarily. This mode is helpful when changing the filter and preforming other basic service where having the pump running is not desirable. Pressing any button exits Standby mode. If no user action is taken Standby mode is cancelled after 1 hour and system operation returns to normal.

FILTRATION PROGRAMMING

The filtration programming of the system is "Duration" and "Frequency" based. The "Duration" is the length of time the system filters and the "Frequency" is the number of time per day the cycle runs.

Duration is user programmable (F1 - F12) or 1 to 12 hours per cycle

Frequency is user programmable from 1 or 2 cycles per day: D=Day Cycle Only, N=Night Cycle Only, DN=Day & Night Cycle

The first filter cycle starts 6 minutes after the system is powered on and the second cycle (if programmed) starts 12 hours later.

Press "Cool" or "Warm" followed by the "Pump 1" to enter filtration programming mode, the current filtration setting is displayed $F \times$. Press the "Cool" or "Warm" to adjust the filtration duration (F1 - F12), press "Pump 1" again to adjust the "Frequency of the cycle (D, N or DN), then press "Jet 1" again to exit the programming mode. If continuous filtration is desired program the system to F12 and DN.

USER PREFERENCES

There are a number of aspects of the spa control operation that may be customized by the user using the User Preference sub-menu.

Press "Cool" or "Warm" followed by the "Pump 1" then "Light" within 3 seconds of the previous key press to enter this mode. If "USR" does not show on the display [press the 'Cool" button until "USR" is displayed then press "Jet 1" to enter the User Preferences sub-menu.

Once in the sub-menu press "Cool" or "Warm" to cycle through the setting available for modification:

SR (Suppress Reminders) - When set to "SRY" reminders are never displayed on the panel. When set "SRN" reminders are displayed on the panel periodically. Available reminders are based on the spaside and software used.

TC (Temperature Readout) - When set to "TCY" the temperature is displayed in Celsius. When set to "TCN" the temperature readout is displayed in Fahrenheit.

24 (Time Display) - When set to "24Y" time is displayed in 24hr. (Military) format. When set to "24N" time is displayed in standard (AM/PM) format.

Ad (Dolphin II Remote Address) - When set to "ADO" no addressing is used. Use this setting for a Dolphin I remote or a Dolphin II remote that is set to "No Address" (this is the factory default for the Dolphin II remote). When set to "AD1" through "AD7" the number is the address (see your Dolphin remote manual for details).

ERROR IDENTIFICATION

To assist the user in identifying problems with the spa, the system will display error messages in the lower window. These messages will be helpful when communicating with your local dealer or qualified technician if a problem should arise.

Diagnostic Messages

Meaning	Action Required
No message on display. Power has been cut off to the spa.	The control panel will be disabled until power returns. Time of day will be preserved for 30 days with a battery back-up on ES8750 and CS8750 systems.
"Overheat" - The spa has shut down. 1 On some systems, an alarm may sound. One of the sensors has detected 118°F (approximately 47.8°C) at the heater.	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. Once the heater has cooled, reset by pushing any button. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
"Overheat" - The spa has shut down. 1 One of the sensors has detected that the spa water is 110°F (approximately 43.3°C).	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. At 107°F (approximately 41.7°C), the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
"Ice" - Potential freeze condition detected.	No action required. The pumps and the blower will automatically activate regardless of spa status.
Spa is shut down. ¹ The sensor that is plugged into the Sensor "A" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
Spa is shut down. ¹ The sensor that is plugged into the Sensor "B" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
Sensors are out of balance. If this is alternating with the temperature, it may just be a temporary condition. If the display shows only this message (periodically blinking), the spa is shut down.	If the problem persists, contact your dealer or service organization.
A substantial difference between the temperature sensors was detected. This could indicate a flow problem.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.
Persistent low flow problems. (Displays on the fifth occurrence of the " <code>HFL</code> " message within 24 hours.) Heater is shut down, but other spa functions continue to run normally.	Follow action required for " HFL" message. Heating capacity of the spa will not reset automatically; you may press any button to reset.
Inadequate water detected in heater.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.
Inadequate water detected in heater. (Displays on third occurrence of " dr " message.) Spa is shut down. ¹	Follow action required for " dr" message. Spa will not automatically reset; you may press any button to reset.
When your spa is first actuated, it will go into Priming mode.	See the M-7 Installation Instruction Manual for complete instructions on Power-up and Pump Priming. The Priming mode will last for up to 4 minutes and then the spa will begin to heat and maintain the water temperature in the Standard mode.
	No message on display. Power has been cut off to the spa. "Overheat" - The spa has shut down. 1 On some systems, an alarm may sound. One of the sensors has detected 118°F (approximately 47.8°C) at the heater. "Overheat" - The spa has shut down. 1 One of the sensors has detected that the spa water is 110°F (approximately 43.3°C). "Ice" - Potential freeze condition detected. Spa is shut down. 1 The sensor that is plugged into the Sensor "A" jack is not working. Spa is shut down. 1 The sensor that is plugged into the Sensor "B" jack is not working. Sensors are out of balance. If this is alternating with the temperature, it may just be a temporary condition. If the display shows only this message (periodically blinking), the spa is shut down. 1 A substantial difference between the temperature sensors was detected. This could indicate a flow problems. (Displays on the fifth occurrence of the "HFL" message within 24 hours.) Heater is shut down, but other spa functions continue to run normally. Inadequate water detected in heater. Inadequate water detected in heater. (Displays on third occurrence of "dr" message.) Spa is shut down. 1 When your spa is first actuated, it will go into

ERROR IDENTIFICATION (CONT.)

Message	Meaning	Action Required
F	Temperature unknown.	After the pump has been running for 1 minute, the temperature will be displayed.
	Temperature not current in Economy or Sleep mode.	In Economy or Sleep mode, the pump may be off for hours outside a filter. If you wish to see the current spa temperature, either switch to Standard mode or turn Jets 1 on for at least 1 minute.
569	Standby Mode has been activated by pressing a button combination on the user panel.	Press any button, except "Jets 1", to leave Standby Mode and return to normal operation.
5Ed	The spa is operating in Standard Mode.	Temperature display is current after pump has been running for at least 2 minutes.
Ecn	The spa is operating in Economy Mode.	" $E c n$ " will appear solid on the display when the temperature is not current. " $E c n$ " will alternate with the temperature when the temperature is current.
5E	The spa is operating in Standard-in-Economy Mode.	Operates the same as Standard mode, then reverts to Economy mode after 1 hour. Press "Mode" to switch directly to Economy mode.
SLP	Sleep Mode has been activated by pressing a button combination on the user panel.	" $5LP$ " will appear solid on the display when the temperature is not current. " $5LP$ " will alternate with the temperature when the temperature is current.
PHL	pH is low.	Add pH increaser according to manufacturer's instructions.
PHH	pH is high.	Add pH reducer according to manufacturer's instructions.
5AL	Sanitizer is low.	Add sanitizer according to manufacturer's instructions.
SAH	Sanitizer is high.	Remove spa cover and allow sanitizer to dissipate.
drn	The pump is on during Standby Mode to assist in draining the spa.	Press "Jets 1" to turn off the pump when water has drained (or power off the spa.)
rE[Hardware failure.	Contact your dealer or service organization.
PSE 1	Hardwa nfa ilure.	Contact your dealer or service organization if message appears on more than one power up.
$\Gamma \Gamma \Gamma$	Firmware install problem.	Contact your dealer or service organization if message appears on more than one power up.
CFE	Configuration error. Spa cannot start up.	Contact your dealer or service organization.
9F I	Spa could not trip GFCI.	Contact your dealer or service organization. Continued operation may be unsafe.
5EU	A pump appears to be stuck on, causing the water temperature to creep up, possibly to hazardous levels.	POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer or service organization.
HOE	A pump appears to have been stuck on the last time spa was powered.	POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer or service organization.

OPERATIONAL CONSIDERATIONS

The following describes situations you may encounter and situations to be aware of.

WARM WEATHER CONDITIONS

Since your spa will normally be expected to maintain warm to hot water to be ready for your use, a great deal of attention has been directed to the *energy conservation* detail of insulation so as to keep electrical costs down. This *energy conservation efficiency* may be achieved by extensive insulation of the skirt, plumbing and spa shell, and in some climates full foam insulation may have been provided.

This *energy conservation* feature may cause an inconvenience during warmer times of the year. During warm periods of the year, the temperature within the equipment compartment can elevate to a point that the pump will automatically turn off for a short period of time (15-30 minutes) to allow the pump to cool down before automatically restarting. This cool down feature will not harm your spa but serves only to protect the pump from damage and as an indicator that it is too hot. To minimize this occurrence, refrain from using your Hydrotherapy Jets for prolonged periods of time during warm seasons.

The jet pump chosen for your spa has been specifically sized for *maximum* performance and your Hydrotherapy enjoyment.

CHEMICAL WATER TREATMENT

Your dealer is familiar with local water conditions and which chemicals are compatible with the water and are designed specifically for your spa. This is the best person to advise you on proper water quality management.

The one thing you can do to insure years of trouble free equipment operation is to maintain proper water chemistry.

Two basic goals of the chemical water treatment are sanitizing and balancing the water.

Sanitizing simply means keeping the water free from living microorganisms including algae, bacteria and viruses. The current most popular chemicals for sanitizing include chlorine, bromine and ozone.

Balancing water means establishing a balance among pH, total alkalinity and total hardness. Water that is unbalanced can corrode the spa and it's support equipment or leave deposits of minerals. Properly balanced water is essential to allow the sanitizing chemical to work effectively. There are numerous chemical additives to help you in controlling pH, total hardness and total alkalinity. **NEVER** use softened water when filling your spa. Softened water is extremely corrosive to the metal parts of the spa equipment and may lead to an unforeseen failure.

Sometimes, despite your most diligent efforts, your water may become too far out of balance to be managed chemically. At this point it is probably better to drain and clean the spa and start over with fresh water.

Equipment failure caused by improper water chemistry will not be covered under warranty.

FILTRATION

Please refer to your Spa Manufacturer's owner's manual regarding the operation, maintenance and cleaning of your filtration system.

Dirty or clogged filters can cause flow restrictions and you may experience difficulty in reaching and/or maintaining desired heat levels.

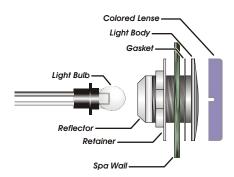
FREEZE PROTECTION & WINTERIZING

When freezing weather and/or power losses are expected, contact your local spa dealer for freeze protection or winterizing recommendations for both the spa and the equipment system. Freeze related damage is not covered by the Hydro-Quip warranty.

SPA LIGHT

Your control may contain a high intensity, light to enhance nighttime use.

This illustration shows how and where to find the bulb for replacement. It also shows the mounted spa light with a replacement (colored) lens. Colored lenses will further the enhancement of the light. Simply snap on or off to change the mood of your spa.



TROUBLESHOOTING

The following describes situations and possible solutions to common problems you may encounter as a spa owner.

NOTHING OPERATES

Main Breaker is OFF - Set to On.
Sub-Panel Breaker Off - Set to On.
Equipment GFCI Off - Set to On.
Power switch in Off position - Set to On.
Components not plugged in - Plug in components.
Power cord not plugged in - Plug in power cord.
Over or High Temperature Protection On - Refer to Section 3

NO, LOW OR SURGING WATER FLOW

Air Lock in Plumbing System - "Bleed" the system.

Restricted Flow - Insure that the water shut-off valves are open and that suction fittings are not blocked by debris.

Dirty Filter - Clean or replace filter.

Low Water Level - Increase water level to recommended level.

NO LOW SPEED PUMP OPERATION

Programming Incorrect - Contact your local dealer.

Over or High Temperature Protection On - Press button to reset.

Pump Not Plugged-In - Plug in the Pump.

NO JETS OR BLOWER OPERATION

Blower or Pump Not Plugged-In - Plug in the Blower or Pump. Over or High Temperature Protection On - Press button to reset.

NO THERAPY JET OPERATION

Water Shut-Off Valves are Closed - Open Shut-Off valves.

Dirty Filter - Clean or replace filter.

Jets Not Properly Adjusted - Adjust Jets properly.

Diverter Valve Not Properly Adjusted - Adjust diverter valve properly.

Thermal Overload Tripping - Check for restricted flow of water.

Over or High Temperature Protection On - Reset Power and Monitor.

WATER LEAKS

Spa Overfilled - Adjust water level.

Too Many People in the Spa - Adjust water level.

Drain-Valve Left Open - Close drain valve.

Couplings or Unions Loose - Tighten or contact your local dealer.

Pump Seal Leaking - Contact your local dealer.

Plumbing / Connections Leaking - Contact your local dealer.

Water Leaking from Spaside Control - Contact your local dealer.

Water in Air Blower Plumbing - Contact your local dealer.

NO HEAT

Temperature Not Set Correctly - Adjust Set Point.

Over or High Temperature Protection On - Press button to reset.

Current Limiting On - 120V Systems will not heat if High Speed or Blower is on. Contact your local dealer.

No Power - Reset breaker at service panel.

Low Water Flow - Clean or Replace filter.

HIGH HEAT

Filter Cycles Running Too Long - Adjust filter cycles down. Temperature Set Too High - Adjust Set Point. High Ambient Temperature - Remove spa cover.

GFCI BREAKER TRIPS OCCASIONALLY

Lightning or Electrical Storm, Power Surge, Extremely Humid Conditions, or Radio Frequency Interference - Reset GFCI Breaker.

NOTE: The GFCI breaker must be properly installed by a licensed electrician.

GFCI BREAKER TRIPS IMMEDIATELY

Defective Component or Improper GFCI Breaker Installation - Contact a qualified service technician or the factory for assistance.

NO LIGHT OPERATION

Light Bulb Defective - Replace bulb or contact your local dealer. **Reflector has Fallen Off -** Replace deflector or contact your local dealer. **Light Not Plugged-In -** Plug in the Light.

SYSTEM DATA LABEL

The system data label is located on the control box. This label is very important and contains information you will need to establish your electrical service. The voltage and amperage ratings are shown on the bottom of the label. Product, Model, Serial and Code numbers are also shown on the label.

Note: This information will be necessary if you should ever have to request warranty or any other type of service.

HYDROQUIP THE SMART CHOICE
ORDER CODE:
MODEL:
SERIAL:
CODE:
VOLTS:
AMPS:
PRODUCT:
REFER TO NEC FOR BREAKER SIZING

NOTES

Use this section to jot down any information you may need at a later date.

Dealer:	Date of Install:		
Contact:	Phone:		
Address:			
City:	State:	Zip:	
Notes:			

WARRANTY INFORMATION

To all original purchasers, **HYDROQUIP** warrants its products to be free from defects in material and workmanship for a period of two (2) years from the date of purchase.

HYDROQUIP will repair or replace the part, which in our opinion, is defective.

This warranty excludes damage as a result of: normal wear, freezing, low voltage, chemical abuse, accident, negligence, alteration, improper installation, use or care.

To obtain warranty service, return defective products within the warranty period to **HYDROQUIP**.

Purchaser is responsible for removal or reinstallation labor, freight charges, or any other such costs incurred in obtaining warranty service.

HYDROQUIP assumes no responsibility for incidental or consequential damages. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

THE SPA DEALER MAY PROVIDE A DIFFERENT WARRANTY,
CONTACT YOUR SPA DEALER FOR DETAILS

