



TROPIC SEAS SPAS™



OWNERS MANUAL



CERTIFICATE OF AUTHENTICITY

Thank you for your purchase. This certificate hereby verifies that the spa you have purchased from an Artesian Spas (May Manufacturing, LLC) authorized dealer is authentic, brand new and original. The spa has been crafted and built in the U.S.A in accordance with industry quality standards.

WARRANTY REGISTRATION

Please activate your warranty and register your spa at www.TheTropicSeasSpas.com click on owner login or mail the registration card in the back of the owner's manual.

Spa Serial # _____

Spa Model: _____

Date Purchased: _____

Installation Date: _____

Dealer Name: _____

Telephone #: _____



PROUDLY MADE FOR
THE WORLD IN THE USA



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IMPORTANT SAFETY INSTRUCTIONS

PLEASE TAKE THE TIME TO READ ALL OF THESE WARNINGS AND CAUTIONS PRIOR TO USING YOUR SPA.

PLEASE, be a responsible spa owner. When installing and using this spa, always adhere to basic safety precautions. Be sure to list emergency telephone numbers at the telephone nearest the spa, including physician, hospital, ambulance, police, and the fire department. Be certain to explain safety precautions to all new or occasional users of your spa. Remember, they may not be aware of the possible risks associated with the spa water temperature. Have at least one family member learn CPR (cardiopulmonary resuscitation). **IT COULD SAVE A LIFE!**

READ AND FOLLOW ALL INSTRUCTIONS

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

2. A wire connector is provided on this unit to connect a minimum 8 AWG (8.4 mm) 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.

3. For cord connected/convertible units. **DANGER - Risk of Injury** -

a) Replace damaged cord immediately.

b) Do not bury cord.

c) Connect to a grounded, grounding type receptacle only.

4. **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.

5. **DANGER - Risk of Injury** - The suction fittings in this area 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 the flow rates are compatible.

Never operate 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.

6. **DANGER - Risk of Electrical Shock** - Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum 8 AWG (8.4 mm) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.

IMPORTANT SAFETY INSTRUCTIONS

7. **DANGER - Risk of Electric Shock** - Do not permit any electrical appliance such as a light, telephone, radio, or television, within 5 feet (1.5m) of a spa.

8. **WARNING - To reduce the risk of injury:**

a) The water in a spa should never exceed 40°C (104°F). Water temperatures between 38°C (100°F) and 40°C are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

b) 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 38°C (100°F).

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

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

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

f) 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

EQUIPMENT ASSEMBLIES

An equipment assembly shall be additionally provided with the following important safety instructions

1. **WARNING** - Risk of Accidental 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 closely supervised at all times.

2. **DANGER** - To reduce the risk of drowning from hair and body entrapment, install a suction fitting(s) with a marked flow rate that equals or exceeds the flow rate marked on the equipment assembly.

3. **DANGER** - To reduce the risk of injury, do not remove the suction fittings. Never operate a spa or hot tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the equipment assembly.

IMPORTANT SAFETY INSTRUCTIONS

4. **DANGER**- Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5m) of a spa or hot tub.

5. **WARNING** - Risk of Electric Shock. Install at least 5 feet (1.5m) from inside wall of hot tub or spa using non metallic plumbing.

6. **WARNING** - To reduce the risk of injury:

a) The water in a spa should never exceed 40°C (104°F) Water temperatures between 38°C (100°F) and 40°C are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

b) 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 38°C (100°F).

c) Before entering a spa or hot tub, the user should measure the water temperature since the tolerance of water temperature regulating devices varies.

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

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

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

7. For equipment assemblies with a gas heater

WARNING - Risk of suffocation. This equipment assembly uses a gas heater and is intended for outdoor use only unless proper ventilation can be provided for an indoor installation.

8. For equipment assemblies with a blower

WARNING - Install blower no less than 1 foot (305mm) above the maximum water level to prevent water from contacting electrical equipment.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

Marking for equipment assemblies

 WARNING
REDUCE THE RISK OF ELECTROCUTION 1. Install at least 5 feet from water using nonmetallic plumbing. 2. Do not install under spa skirt or within an enclosure that would restrict ventilation. 3. If blower is included, install at least 1 foot above maximum water level.
REDUCE THE RISK OF CHILD DROWNING 1. Supervise children at all times. 2. Attach spa cover after each use. 3. Install a suction guard with marked flow rate no less than 170 GPM to avoid hair and body entrapment.
REDUCE THE RISK OF OVERHEATING 1. Check with a doctor before use if pregnant, diabetic, in poor health, or under medical care. 2. Exit immediately if uncomfortable, dizzy or sleepy. Spa heat can cause hyperthermia and unconsciousness. 3. Spa heat in conjunction with alcohol, drugs, or medication can cause unconsciousness.
WHEN PREGNANT , soaking in hot water for long periods can harm your fetus. Measure water temperature before entering. 1. Do not enter spa if water is hotter than 100°F (38°C). 2. Do not stay in spa for longer than 10 minutes.

AUDIO COMPONENT WARNINGS

Spas equipped with the Audio system should follow these guidelines for safety:

1. **CAUTION** - Risk of Electrical Shock - Do not leave compartment door open.
2. **CAUTION** - Risk of Electrical Shock - Replace components only with identical components.
3. Do not operate the audio controls while inside the spa.
4. **WARNING - Prevent Electrocution** - Do not connect any auxiliary components (for example cable, additional speakers, headphones, additional audio/video components, etc.) to the system.
5. These units are not provided with an outdoor antennae; when provided, it should be installed in accordance with Article 810 of the National Electrical Code, ANSI/NFPA 70.
6. Do not service this product yourself as opening or removing covers may expose you to dangerous voltage or other risk of injury. Refer all servicing to qualified service personnel.

IMPORTANT SAFETY INSTRUCTIONS

7. When the power supply connections or power supply cord(s) are damaged: if water is entering the audio/video compartment or any electrical equipment compartment area; if the protective shields or barriers are showing signs of deterioration; or if there are signs of other potential damage to the unit, turn off the unit and refer serviceing to qualified service personnel.

8. This unit should be subjected to periodic routine maintenance (for example, once every 3 months) to make sure that the unit is operating properly.

KEEP THESE SAFETY INSTRUCTIONS IN A CONVENIENT AND READILY ACCESSIBLE LOCATION!!

ELECTRICAL REQUIREMENTS AND INSTALLATION

The following information is provided for hooking up electrical supply to your new spa. A qualified, licensed, electrician must perform this work. Failure to follow these instructions will terminate all warranty coverage and can cause serious injury or death.

Your spa is preset at the factory to run on 240V 60Hz with a 48A input. This feature gives you the most performance out of your spa. This will require a 240V, 60-amp Class A GFCI protected service.

Codes and Compliance

North American 60 Hz	240V/40A*	240V/50A**	240V60A***
Voltage	240VAC	240VAC	240VAC
Max Current Draw	32A	40A	48A
Number of Wires	4	4	4
Circuit Breaker	40A*	50A**	60A***

* In this configuration, the heater will not operate while either jets pump is running or when the blower is running.

** In this configuration, the heater will not operate while both jet pumps are running.

*** In this configuration the heater will operate while both jets pumps and the blower are running.

All of the electrical wiring methods and materials used to complete the electrical installation of the control system must be in accordance with the National Electrical Code or the Canadian Electric Code, as well as any local electrical codes in effect at the time of installation.

The selection of electrical materials required to accomplish this installation and the installation of the control system must be accomplished by, or be under the direct supervision of, a qualified electrician.

The control is classified as a “continuous duty appliance” and is intended primarily for installation at a single family dwelling. The installation recommendations and instructions contained in this manual are directed solely toward these issues.

GFCI Requirements

A Ground-Fault Circuit Interrupter (GFCI) is required to be installed in the electrical supply circuit connected to these products.

GFCI's are ultra-sensitive switching devices, providing the ultimate in safety. The most common style of GFCI also provides high-current protection as a circuit breaker.

One of the two configurations of GFCI's, as shown, will be required for your installation, depending upon the options selected.

Electrical Disconnect

An electrical disconnect (sometimes referred to as a "local disconnect") is installed apart from the main service panel. The electrical disconnect must be installed where readily accessible and within sight of the spa, but at least 5' (1.5 meters) from the inside wall of the spa.

The disconnect must open all ungrounded conductors of the electrical supply connected to the spa.

If the main panel meets the sight-line and distance criteria, a GFCI circuit breaker installed in that panel may be used as the disconnect, as shown in Option A.

A new sub-panel must be installed to meet the sight-line requirements. Two possible arrangements exist (shown below).

1. The GFCI circuit breaker may be installed in the main panel, and a suitable switch, circuit breaker or other disconnecting device installed in the sub-panel (Option A).

2. The GFCI circuit breaker may be installed in the sub-panel, and a suitably rated circuit breaker (non-GFCI) installed in the main panel (Option B)

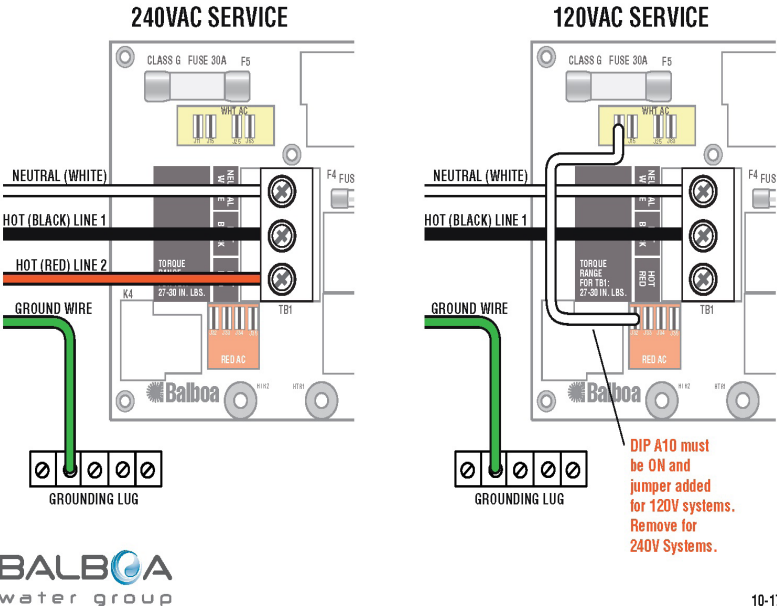


Service Disconnect
Option A



Service Disconnect
Option B

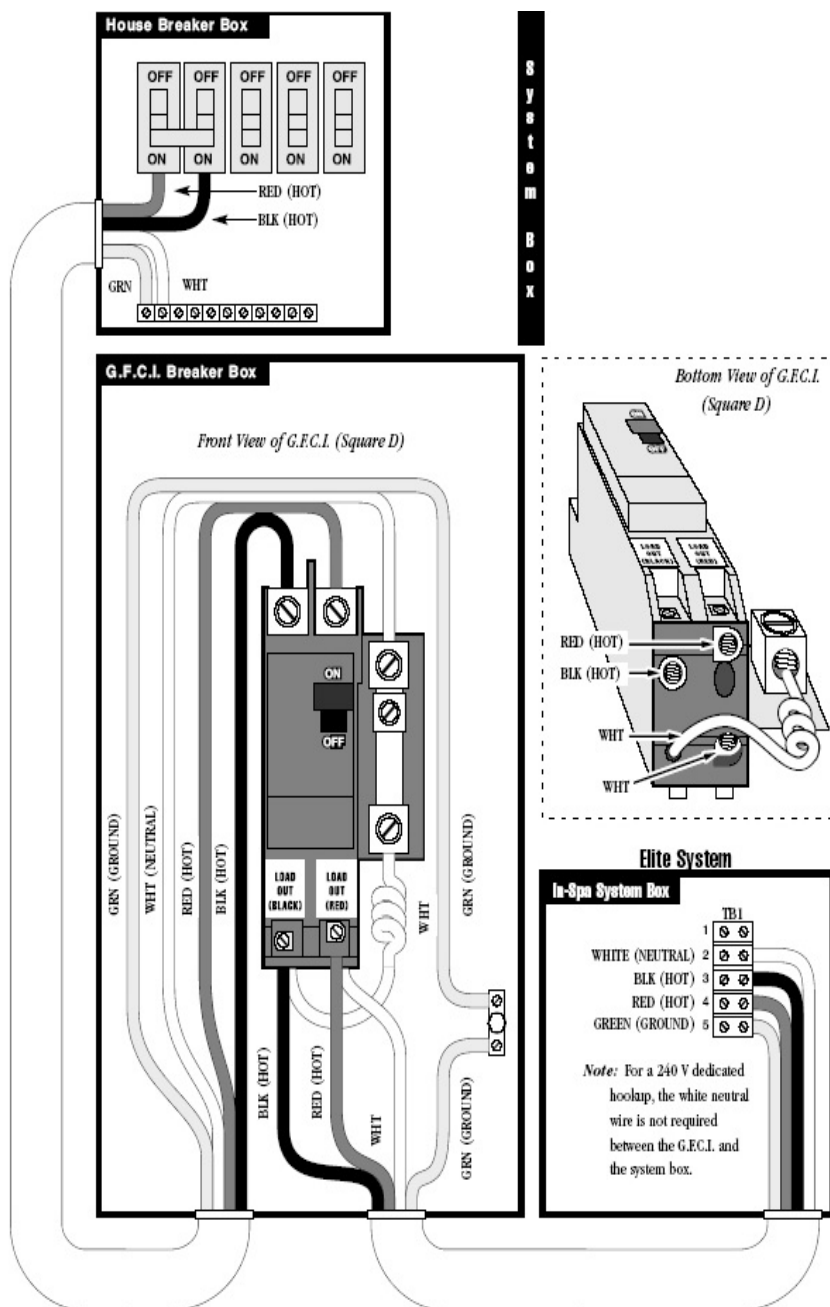
60 Hz TROPIC SEAS TERMINAL OPTIONS



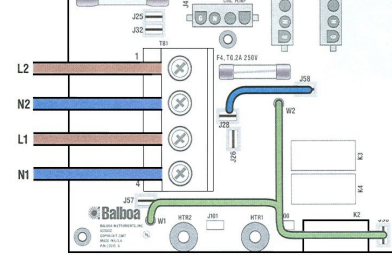
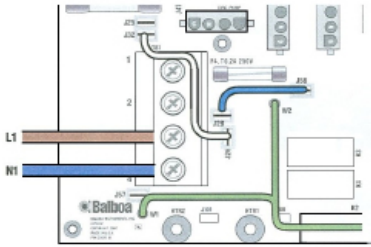
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Connect each color to its respective terminal block location. The Ground (green) wire must be connected to the grounding terminal which is outside of the System box. The Grounding wire must first enter the system box and then access the grounding terminal via a hole on the side of the box adjacent to the grounding terminal as shown in the picture above.

60 Hz TROPIC SEAS GFCI WIRING SCHEMATIC



50 Hz TROPIC SEAS SINGLE/DUAL/THREE PHASE



Single Service, TN and TT Electrical Systems

(1 X 16 Amp or 1 X 32 Amp)

3 Wires (1 Line + 1 Neutral + 1 Protective Earth)

Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked. This option is configured and shipped as the default. *All equipment (pumps, blower and heater) runs on service line L1*

Dual Service, TN and TT Electrical Systems (2 x 16 Amp)

5 Wires (2 Lines + 2 Neutrals + 1 Protective Earth)

Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked.

The heater runs on service line L1, while all other equipment, such as pumps and blowers, run on service line L2

Completely remove the white wire from J26 and J32.

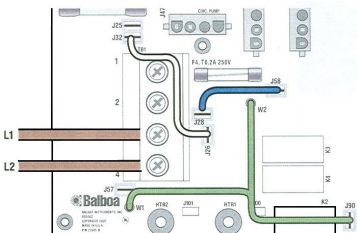
Note: J32 and J25 are electrically identical. The white wire may be attached to either terminal before removal.

3 Phase Service, IT Electrical System (No Neutral)

Line - Line voltage is 230VAC

4 Wires (3 Lines + 1 Protective Earth)

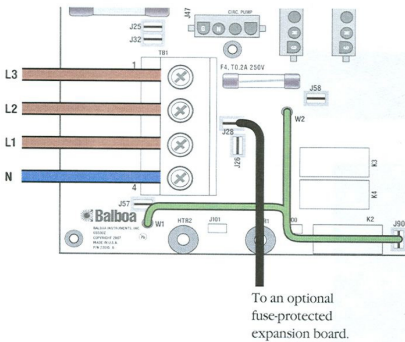
Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked. *All equipment (pumps, blower and heater) runs on service line L1 with L2 acting as the return.*



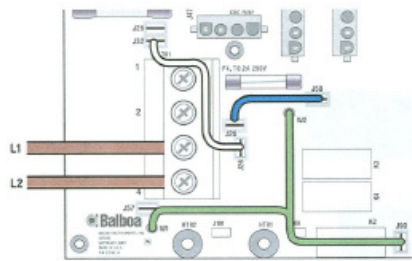
L3

Line 3 Cap (Insulated end Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked. *All equipment (pumps, blower and heater) runs on service line L1 with L2 acting as the return.*

50 Hz TROPIC SEAS SINGLE/DUAL/THREE PHASE



3-Phase Service



Single Service

3-Phase Service, TN and TT Electrical Systems

(2 x 16 Amp)

5 Wires (3 Lines + 1 Neutral + 1 Protective Earth)

Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked.

IMPORTANT - Service **MUST** include a neutral wire, with a line neutral voltage of 230VAC.

The heater runs on service line L1.

All main-board equipment run on service line L3

Additional equipment, such as expansion boards, run on service line L2

Completely remove the white wire from J26 and J32, or J25

Completely remove the blue wire from J28 and J58. If an expansion

Single Service, IT Electrical System (No Neutral)

Line - Line voltage is 230VAC (1 X 16 Amp or 1 X 32 Amp)

3 Wires (2 Lines + 1 Protective Earth)

Protective Earth wire (Green / Yellow) must be connected to system ground terminal as marked.

All equipment (pumps, blower and heater) runs on service line L1 with L2 acting as the return.

Systems using only 1 DIP switch (A10) for heat disable:

For 1 x 16 Amp Service:

DIP Switch A 10 must be ON.

SPA START-UP

Please read each step of the Start-up section prior to doing the step.

SELECTING A LOCATION

In preparation for installing your new spa, you should ensure that your chosen location meets some minimum guidelines:

1) Place your spa on a surface that is large enough for the entire spa to fit. Consider the space needed to easily access equipment compartments and circuit breakers. Remember, all electronics must be kept dry.

2) The spa must be on a solid, level foundation. Recommended: 4- inch cement slab that has cured for at least 72 hours. Your warranty will be voided if the spa is not properly installed. Structural damage due to an improper foundation is not covered under warranty.

3) To avoid potential water damage to the skirt and frame, your spa should be placed on a site where it will not be in the way of water sprinklers.

4) OUTDOOR SPAS: Consider building codes, electrical and plumbing codes, desired proximity to house, wind and sun exposure, location of trees (falling leaves, shade), dressing area, landscaping and lighting when selecting a location.

5) INDOOR SPAS: Floor surface must have traction to prevent slipping when wet. A floor drain is optimum. As room humidity will increase because of the spa, provide ample ventilation to prevent dry rot, mildew and mold. Use materials that will withstand humidity. There may be a need for cross-ventilation fans and/or dehumidifiers. The spa chemicals may corrode some household metals. Provide ample room if servicing should be needed. Strong foundational support is vital, particularly if a second-story site is selected.

6) Ensure the equipment compartment is in a location where it will not be damaged by water drainage. Cover the equipment compartment with a heavy screen if rodents are a problem. Damage due to rodents is not covered under warranty.

7) Have the spa deck installed by a knowledgeable contractor to ensure proper support.

8). If the spa is placed on the ground, even for a short period of time, it must be supported by stones that are at least 2 inches thick and 12 inches square. A solid foundation is recommended as soon as possible.

INSPECTION

You will want to inspect your spa, prior to filling it up with water. Look for and remove any debris in the spa tub and in the filter. Verify that pump plugs are installed on the pumps and the pump unions are tight.

FILLING THE SPA WITH WATER

NOTE: DO NOT fill your spa with hot water straight out of your water heater or tap. This water may be as hot as 180° F and will cause damage to the surface and plumbing of the spa. This will void your warranty. Level the spa before filling.

- 1) Prepare to fill the tub by removing all debris.
- 2) Remove the filters from your spa (see Removing, Installing and Cleaning Filters, page 19)
- 3) Insert the hose in the area where the filter was located as shown in the picture below.
- 4) Fill the spa to the bottom of the pillows or about 6-8 inches from the top of the spa Note: DO NOT OVER-FILL YOUR TUB!
- 5) With the front panel off, verify there are no leaks at the pump union. Note: Pump unions can become loose during shipping. Verify that there are no leaks during filling of the spa.



SPA START-UP

TESTING THE GFCI BREAKER

NOTE: The electrical service panel for your spa should be equipped with a GFCI breaker. To avoid the risk of electrical shock, perform the following safety test before each use of your spa.

- 1) Make sure the power is turned on at the electrical service panel.
- 2) Turn on the GFCI breaker.
- 3) Press the test button. If the breaker turns off, reset the breaker. Breaker is working properly. If the breaker does not turn off contact your electrician.

DANGER: RISK OF ELECTRICAL SHOCK

If the GFCI breaker fails to operate as described, there is a possibility of an electric shock if the spa is used. Shut off the power at the main electrical service panel until the source of the problem has been identified and corrected by a licensed electrician or qualified spa technician.

BP SERIES CONTROL OPERATIONS

TOPSIDE DISPLAY TROPIC SEAS

When your spa is first actuated, it will go into Priming mode which is indicated by “Pr”. This Priming mode will last for 5 minutes and then the spa will begin to heat and maintain the water temperature in the Standard Mode.



1 PUMP TOPSIDE



2 PUMP TOPSIDE



3 PUMP TOPSIDE

OPERATION OF TROPIC SEAS

WARNING: To avoid self activation of pump after using the spa, do not begin cleaning or wiping down the spa until water has completely drained.

NOTE: Do not start pump until the water level sensor is submerged.

MAIN MENUS

Navigating the entire menu structure is done with 2 or 3 buttons on the control panel. The Warm/Cool buttons are

indicated by a Warm/Cool buttons.



The LIGHT Button  is used to choose the various menus and navigate each section.

Typical use of the Warm/Cool buttons

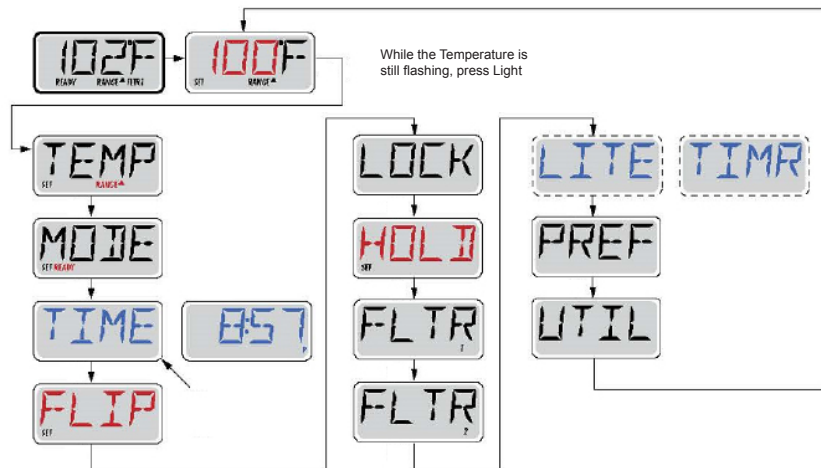


allow changing the Set temperature while the numbers are flashing in the LCD.

Pressing the LIGHT button  while the numbers are flashing will enter the menus.

OPERATION OF TROPIC SEAS

The menus can be exited with certain button presses. Simply waiting for several seconds will return the panel operation to normal.



Example of various menus include:

FILL IT UP

PREPARATION AND FILLING

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

After turning the power on at the main power panel, the top-side panel display will go through specific sequences. These sequences are normal and display a variety of information regarding the configuration of the hot tub control

PRIMING MODE – M019*



This mode will last for 4-5 minutes or you can manually exit the priming mode after the pump(s) have primed.

Regardless of whether the priming mode ends automatically or you manually exit the priming mode, the system will automatically return to normal heating and filtering at the end of the priming mode. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump(s) can be

OPERATION OF TROPIC SEAS

without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump(s) can

be energized by pushing the “Jets” button.



If the spa has a Circ Pump, it can be activated by pressing the

“Light” button during Priming Mode.



PRIMING THE PUMPS

As soon as the above display appears on the panel, push the “Jet” button once to start Pump 1 in low-speed and then again to switch to high-speed. Also, push the Pump 2 or “Aux” button, if you have a 2nd pump, to turn it on. The pumps will now be running in high-speed to facilitate priming. If the pumps have not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process.

NOTE: Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump(s) will not prime, shut off the power to the spa and call for service.

Important: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

EXITING PRIMING MODE

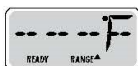
You can manually exit Priming Mode by pressing the

Warm/Cool buttons.

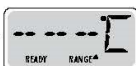


Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes.

Be sure that the pump(s) have been primed by this time. Once the system has exited Priming Mode, the top-side panel will momentarily display the set temperature but the display will not show the temperature yet, as shown below. This is because the system requires approximately 1 minute of water flow.



or



OPERATION OF TROPIC SEAS

SPA BEHAVIOR

PUMPS

Press the “Jets” button



once to turn pump 1 on or off, and to shift between low- and high-speeds if equipped.

If left running, the pump will turn off after a time-out period. The pump 1 low-speed will time out after 30 minutes. The high-speed will time out after 15 minutes.

CIRCULATION PUMP MODES

If the system is equipped with a circulation pump, it will be configured to work in one of three different ways:

1. The circulation pump operates continuously (24 hours) with the exception of turning off for 30 minutes at a time when the water temperature reaches 3°F (1.5°C) above the set temperature (most likely to happen in very hot climates).
2. The circulation pump stays on continuously, regardless of water temperature.
3. A programmable circulation pump will come on when the system is checking temperature (polling), during filter cycles, during freeze conditions, or when another pump is on.

The specific Circulation Mode that is used has been determined by the Manufacturer and cannot be changed in the field.

FILTRATION AND OZONE

On circulation systems, the ozone will run with the circulation pump. The system is factory-programmed with one filter cycle that will run in the evening (assuming the time-of-day is properly set) when energy rates are often lower.

The filter time and duration are programmable. A second filter cycle can be enabled as needed. At the start of each filter cycle, Pump 2 will run briefly to purge its plumbing to maintain good water quality.

OPERATION OF TROPIC SEAS

FREEZE PROTECTION

In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch. See your dealer for details.

CLEAN-UP CYCLE (OPTIONAL)

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

TEMPERATURE AND TEMP RANGE

ADJUSTING THE SET TEMPERATURE

When using the panel for Temperature control, press

Up (Warm)/or Down (Cool)



will cause the temperature to flash.

Pressing a Up (Warm)/Down (Cool) buttons



again will adjust the set temperature in the direction indicated on the button. When the LCD stops flashing, the spa will heat to the new set temperature when required.

If the panel has a single temperature button, pressing the button will cause the temperature to flash. Pressing the button again will cause the temperature to change in one direction (e.g. UP). After allowing the display to stop flashing, pressing the Warm/Cool Buttons will cause the temperature to flash and the next press will change the temperature in the opposite direction (e.g. DOWN).

Warm/Cool buttons will cause display to be flashing.

A) Press Warm/Cool buttons



repeat till desired temp



B) Press Light Button to Set

OPERATION OF TROPIC SEAS

MODE-READY AND REST

READY Mode will circulate water every 1/2 hour, using Pump 1 Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as “polling.”

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

CIRCULATION MODE

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

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

A) Warm/Cool buttons   till display is flashing.

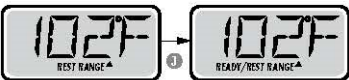
B) Press Light Button  until Mode appears.

C) Press Warm/Cool Buttons   to toggle between Ready and Rest.

D) Press Light Button  to set.

READY-IN-REST MODE

READY/REST appears in the display, if the spa is in Rest Mode and Jets button is pressed. It is assumed that the spa is being used and will heat to set temperature. While Pump 1 High can be turned on and off, Pump 1 Low will run until set temperature is reached, or 1 hour has passed. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by entering the Mode Menu and changing the Mode.



OPERATION OF TROPIC SEAS

SHOW AND SET TIME OF DAY

Setting the time-of-day can be important for determining filtration times

and other background features. When in the TIME menu,



SET TIME will flash on the display if no time-of-day is set in the memory. 24-hour time display can be set under the PREF menu.

A) Warm/Cool buttons till display is flashing



B) Press Light button until Time appears



C) Press Warm/Cool buttons settings hours.



to toggle time

D) Press Light button to set hours



E) Press Warm/Cool buttons minutes.



to toggle time

F) Press Light button to set minutes.



NOTE: If power is interrupted to the system, Time-of-Day is not stored. The system will still operate and all other user settings will be stored. If filter cycles are required to run at a particular time of day, resetting the clock will return the filter times to the actual programmed periods.

When the system starts up, it defaults to 12:00 Noon, so another way to get filter times back to normal is to start up the spa at noon on any given day. SET TIME will still flash in the TIME Menu until the time is actually set, but since the spa started at noon, the filter cycles will run as programmed.

FLIP (INVERT DISPLAY)

A) Warm/Cool buttons



till display is flashing

B) Press Light Button



till "FLIP" appears



C) Press Warm/Cool buttons



D) Press Light Button to set.



OPERATION OF TROPIC SEAS

ADJUSTING FILTRATION

MAIN FILTRATION

Filter cycles are set using a start time and a duration. Start time is indicated by an "A" or "P" in the bottom right corner of the display. Duration has no "A" or "P" indication. Each setting can be adjusted in 15-minute increments. The panel calculates the end time and displays it automatically.

A) Press Warm/Cool buttons till display is flashing



till display is flashing

B) Press Light button till FLTR appears



C) Press Warm/Cool buttons BEGN appears



D) Press Warm/Cool buttons 8:00 appears



E) Use Warm/Cool buttons to toggle time HRS



F) Use Light button to switch to minutes



G) Use Warm/Cool buttons 15 min. increments.



toggle minutes in

H) Use Light to Set



I) Run Hrs appears on display

J) Use Warm/Cool buttons hour increments



adjust Hrs in 1

K) Use Light button to set



L) Use Warm/Cool buttons 15 min. increments.



to adjust minutes in

M) Use Warm/Cool buttons to set



GENERAL MESSAGES

PRIMING MODE - M019



Each time the spa is powered up, it will enter Priming Mode. The purpose of Priming Mode is to allow the user to run each pump and manually verify that the pumps are primed (air is purged) and water is flowing. This typically requires observing the output of each pump separately, and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but you can exit it earlier by pressing any Temp button. The heater is not allowed to run during Priming Mode.

NOTE: If your spa has a circulation pump, it will turn on with Jets in Priming Mode. The circulation pump will run by itself when Priming Mode is exited.

WATER TEMPERATURE IS UNKNOWN



After the pump has been running for 1 minute, the temperature will be displayed.

TOO COLD - FREEZE PROTECTION



A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and all pumps are activated. All pumps are ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens.

In some cases, pumps may turn on and off and the heater may operate during Freeze Protection. This is an operational message, not an error indication.

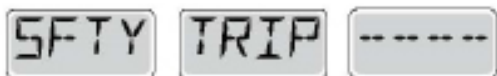
WATER IS TOO HOT (OHS) - M029



One of the water temp sensors has detected spa water temp 110°F (43.3°C) and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (42.2°C). Check for extended pump operation or high ambient temp.

GENERAL MESSAGES

SAFETY TRIP - PUMP SUCTION BLOCKAGE - M033



The Safety Trip error message indicates that the vacuum switch has closed. This occurs when there has been a suction problem or a possible entrapment situation avoided. (**NOTE:** not all spas have this feature.)

HEATER RELATED MESSAGES

HEATER FLOW IS REDUCED (HFL) - M016



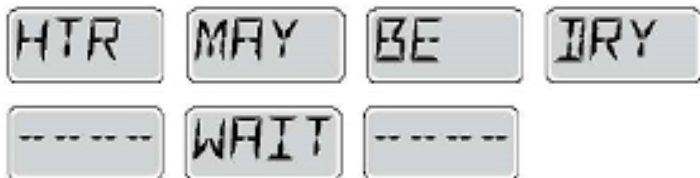
There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 min. See "Flow Related Checks".

HEATER FLOW IS REDUCED (LF) - M017



There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See "Flow Related Checks". After the problem has been resolved, you must press any button to reset and begin heater start up.

HEATER MAY BE DRY (DR) - M028



Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. See "Flow Related Checks".

HEATER RELATED MESSAGES

HEATER IS DRY - M027



There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must press any button to reset and restart heater start up. See “Flow Related Checks” below.

HEATER IS TOO HOT (OHH) - M030



One of the water temp sensors has detected 118°F (47.8°C) in the heater and the spa is shut down. You must press any button to reset when water is below 108°F (42.2°C). See “Flow Related Checks” below.

A RESET MESSAGE MAY APPEAR WITH OTHER MESSAGES



Some errors may require power to be removed and restored.

FLOW - RELATED CHECKS

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime.

On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

SENSOR RELATED MESSAGES

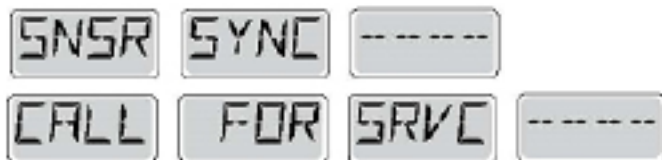
SENSOR BALANCE IS POOR - M015



The temperature sensors MAY be out of sync by 2°F or 3°F. Call for Service.

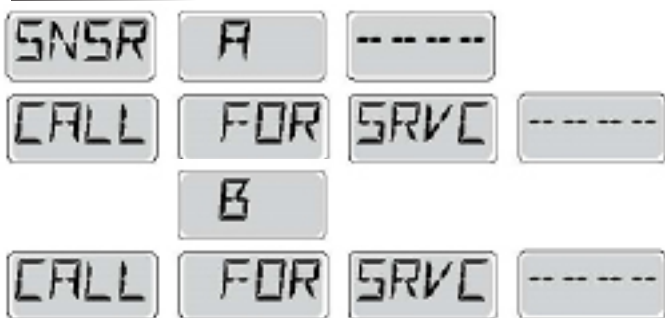
SENSOR RELATED MESSAGES

SENSOR BALANCE IS POOR - M026



The temperature sensors ARE out of sync. The Sensor Balance is Poor fault has been established for at least 1 hour. Call for Service.

SENSOR FAILURE- SENSOR A: M031, SENSOR B:M32



A temperature sensor or sensor circuit has failed. Call for Service

MISCELLANEOUS MESSAGES

NO COMMUNICATIONS



The control panel is not receiving communication from the System. Call for Service.

PRE-PRODUCTION SOFTWARE



The Control System is operating with test software. Call for Service.

°F OR °C IS REPLACED BY °T



SYSTEM RELATED MESSAGES

MEMORY FAILURE -CHECKSUM ERROR - M022



At Power-Up, the system has failed the Program Checksum Test. This indicates a problem with the firmware (operation program) and requires a service call.

MEMORY WARNING - PERSISTENT MEMORY RESET - M021



Appears after any system setup change. Contact your dealer or service organization if this message appears on more than one power-up, or if it appears after the system has been running normally for a period of time.

MEMORY FAILURE - CLOCK ERROR - M020 - NOT APPLICABLE ON THE BP1500



Contact your dealer or service organization.

CONFIGURATION ERROR - SPA WILL NOT START UP



Contact your dealer or service organization.

GFCI FAILURE SYSTEM COULD NOT TEST/TRIP THE GFCI - M036



NORTH AMERICA ONLY. May indicate an unsafe installation. Contact your dealer or service organization.

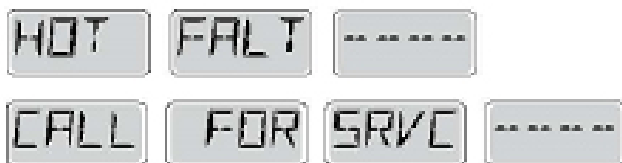
SYSTEM RELATED MESSAGES

A PUMP APPEARS TO BE STUCK ON - M034



Water may be overheated. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.

A PUMP APPEARS TO HAVE BEEN STUCK ON WHEN SPA WAS LAST POWERED- M035



POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.

REMINDER MESSAGES

GENERAL MAINTENANCE HELPS

Reminder Messages can be suppressed by using the PREF Menu. Reminder Messages can be chosen individually by the Manufacturer. They may be disabled entirely, or there may be a limited number of reminders on a specific model.

The frequency of each reminder (i.e. 7 days) can be specified by the Manufacturer. Press a Temperature button to reset a displayed reminder message.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 7 DAYS



Alternates with temperature or normal display.

Check pH with a test kit and adjust pH with the appropriate chemicals

REMINDER MESSAGES

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 7 DAYS

CHEK CHEM

Alternates with temperature or normal display.

Check sanitizer level and other water chemistry with a test kit and adjust with the appropriate chemicals.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 30 DAYS

CLN FLTR

Alternates with temperature or normal display

Clean the filter media as instructed by the manufacturer.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 30 DAYS

TEST GFCI

Alternates with temperature or normal display.

The Ground/Fault/Circuit/Interrupter (GFCI) or Residual Current Device (RCD) is an important safety device and must be tested on a regular basis to verify its reliability.

Every user should be trained to safely test the GFCI or RCD associated with the hot tub installation. A GFCI or RCD will have a TEST and RESET button on it that allows a user to verify proper function.

WARNING:

If freezing conditions exist, a GFCI or RCD should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI or RCD on a regular basis.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 90 DAYS

CHNG WATR

Alternates with temperature or normal display.

Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.

REMINDER MESSAGES

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 180 DAYS



Alternates with temperature or normal display.

Vinyl covers should be cleaned and conditioned for maximum life.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 180 DAYS



Alternates with temperature or normal display

Wood skirting and furniture should be cleaned and conditioned per the manufacturers instructions for maximum life.

APPEARS ON A REGULAR SCHEDULE, E.G. EVERY 365 DAYS



Alternates with temperature or normal display

Filters should be replaced occasionally to maintain proper spa function and sanitary conditions.

Alternates with temperature or normal display as needed.

Install new mineral cartridge



MAINTAINING YOUR SPA

PILLOW CARE

Clean the pillows with soapy water and a soft cloth when needed. Use a vinyl conditioner once a month.

JET CARE

We recommend that you clean your jets when you drain your spa.

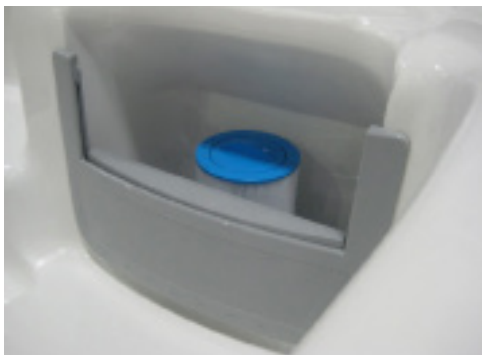
- 1) Spray jet inserts with a mixture of 1 part vinegar to two parts warm water and let soak for 10-15 minutes. Periodically rotate the spinner nozzle to break up residue in the jets.
- 2) Soak jet inserts in a mixture of 1 part vinegar to two parts warm water for 2-3 hours. Periodically rotate the spinner nozzle to break up residue in the jets.



REMOVING, INSTALLING AND CLEANING FILTERS

- 1) Turn off all power to your spa and remove the filter lid by lifting it out towards you.
- 2) Turn the filter counterclockwise and remove it from the filter well.
- 3) Dispose of the used filter.
- 4) Place the new filter into position and turn clockwise to fasten. DO NOT over-tighten.
- 5) We recommend the use of a quality filter soak product. Please contact your dealer to purchase all your spa care products.

WARNING: Power to your spa must be turned off prior to removing your filters. The suction at the filter is extremely strong and can cause injury if there is no filter. **NEVER** run your spa without the filters properly installed. Injury to person and damage to the equipment can occur. Any damage to equipment due to this circumstance will not be covered under warranty.



WINTERIZING YOUR SPA

It is not recommended that you drain your spa completely during freezing conditions. We recommend that you leave your spa full of water with the power on to keep the tub from freezing. If you decide to drain your spa during freezing conditions, contact your dealer for help. Contact your dealer before refilling a drained spa in freezing temperature.

WARNING: Damage to your spa caused by freezing is **NOT** covered under warranty. Please contact your local dealer to assist you in winterizing your spa.

SPA CABINET CARE

Your spa comes standard with a KingWood, or faux wood, cabinet. This cabinet requires no maintenance. You may wish to clean the cabinet with mild soap and water from time to time. If you elected to purchase your spa with a wood cabinet, this cabinet is stained and sealed with an oil based acrylic stain. The stain is formulated especially for spa cabinet and deck applications and is resistant to ultraviolet light damage caused by sun rays. It is also resistant to fungus and insect damage.

MAINTAINING YOUR SPA

SPA CABINET CARE

Your Tropical Seas dealer carries this type of stain for your convenience, so call your dealer when you're ready to re-stain your cabinet. You should re-stain your wood cabinet at least once a year, or more frequently depending on your environmental conditions.

- 1) Gently wash the cabinet with mild soap and water and allow to dry completely.
- 2) Moisten a rag with the stain you have purchased from your dealer.
- 3) Apply the stain on the entire cabinet surface, wiping off any excess stain as you are applying.
- 4) Allow stain to dry for a minimum of 24 hours before getting the cabinet wet.

NOTE: Do not apply any solid type finish such as shellac or varnish. After weathering, these types of finishes will crack and/or turn yellow. To refinish the wood, you will need to completely strip the finish before applying the new one. Use only the stain recommended by your dealer for refinishing your spa.

CLEANING YOUR SPA INTERIOR

It is important to clean the interior of your spa every time it is drained to help preserve the sheen of your spa's surface. However, it is important that you do not use any abrasive cleaners or strong chemicals. Your Tropical Seas authorized dealer will be able to supply you with the proper cleaning solution for your spa. After cleaning, make sure all residues are removed prior to filling the spa. This will help prevent sudsing and improper chemical balance.

COVER CARE

Cleaning of your spa cover is an important part of routine maintenance. Dirt acts as an abrasive to the vinyl topcoat, and can also cause wear to folds, seams, and stitching. Mildew growing on damp, dirty vinyl will begin to actually root in the fabric, accelerating failure. Follow this simple routine for cleaning, prior to application of vinyl protectant:

- 1) Rinse with cool water using a garden hose.

2) Spray with a gentle, non-foaming cleaner and wipe clean. Never use laundry detergent, abrasives, alcohols, dish soaps or harsh cleaners. These can actually remove some of the topcoat and cause premature vinyl failure.

3) For stubborn dirt, use a non-abrasive sponge.

4) Rinse again thoroughly with water and allow to dry.

5) Repeat monthly, or as needed.

Your vinyl cover is affected by the UV in sunlight. Periodic treatment with a liquid protectant will extend the life of your spa. The wrong kind of protectant can be more harmful than no protectant at all. Keep any product away from your spa that is labeled “flammable,” that contains any type of oil, or that leaves a waxy coating on your cover (do not use armor-all on the cover).

Never stand or sit on the cover and never drag it over abrasive surfaces. Lift cover only by the handles provided.

NOTE: Your cover will hold up to 145 pounds. The covers are not intended to be walked on, but a child or pet stepping on the cover won't break it.

CHEMICAL TREATMENT OF WATER

Water from your tap is fine for showers, bathing and drinking. However, in a contained recirculating system such as in a spa, water must be treated with chemicals. The main purpose of chemical treatment is to keep the water sanitary and to maintain a specific balance of the water. Proper balance ensures that the water will not cause irritation to the users or harm the spa's components. Chemical treatment does have its limitations. When water evaporates, chemical residues are left behind.

As the levels of the residues combine with other types of residue, such as body oil and detergents, your water becomes increasingly difficult to maintain. Because of this residual effect, at some point it becomes easier and more cost-effective to drain, clean and refill your spa with new water. We recommend that the water be changed at least every six months. At this time you should also clean or replace your filters. If your spa has a frequent and/or heavy bather load, it may be necessary to drain and fill your spa more often.

WARNING: Spa damage due to improper chemicals is not covered under warranty.

CRYSTAL AOP

INSTALLATION AND OPERATION MANUAL

How the Crystal AOP Works:

Artesian Spas Crystal AOP combines its patented Hybrid lamp with cutting edge Germicidal UV sterilization in one compact system, to generate Ozone and Advanced Oxidation Processing (AOP).

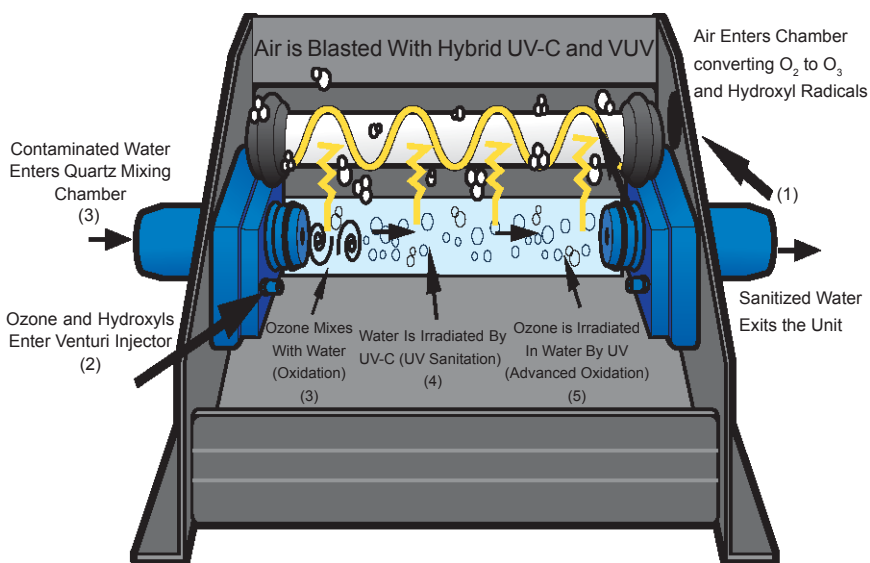
(1) Air enters unit where the Hybrid lamp converts it to Ozone (O_3) and Hydroxyl Radicals ($OH\cdot$).

(2) Water enters unit through the Dynamic Venturi Injector drawing Ozone and Hydroxyl Radicals from the Hybrid lamp chamber.

(3) Static mixer combines water, ozone, and hydroxyls in a scrambled flow.

(4) Water is irradiated by Germicidal UV which converts Ozone to Hydroxyl Radicals through Advanced Oxidation Processing (AOP).

(5) Contaminants are destroyed by intense Germicidal UV, Ozone, and Hydroxyl Radicals, using up all the Ozone and adding ORP to the Water



CRYSTAL AOP

PREPARING FOR INSTALLATION

1. For best results, drain the spa and fill with fresh water. If not, refer to chart for recommended levels.
2. Check for and correct all leaks in the plumbing.
3. Check electrical system. Verify voltage is the same as prescribed on the side of the Crystal AOP.
4. Check filters. Clean or replace as necessary.
5. Balance the pH.
6. Shock the spa. The use of Calcium Hypochlorite is recommended.
7. Crystal AOP contains an ozonator, injector, and check valve. Remove any vacuum source (such as an injector) already installed on the spa.

pH	7.2-7.6
Alkalinity	80-120 ppm
TDS	<1,000
Cyanuric Acid	30-70 ppm
Free Chlorine	0.5-1.5 ppm
Calcium Hardness	60-400 ppm
Metals	0 ppm
Nitrates/Phosphates	< 30 ppm

TROPIC SEAS SPAS WARRANTY

This section is a description of your warranty. Here you will find descriptions of what is covered under your Tropic Seas Spa warranty and what can void your warranty. **PLEASE READ THE WARRANTY THOROUGHLY.** Please take a moment to register your warranty. You can register on line at <http://www.tropicseasspas.com>, click on owner login or you mail in the warranty registration card attached to this manual. For warranty outside USA and Canada, please refer to your countries Tropic Seas Spas Distributor.

LIFETIME STRUCTURE WARRANTY

Tropic Seas Spas carry a lifetime structure warranty. The structure is defined as the fiberglass vessel below the exposed material finish. The manufacturer warrants the spa against loss of water due to a defect in the spa structure. In the event of a defect in the material and/or workmanship, the spa structure will be repaired or replaced at the discretion of the manufacturer. **THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.**

If the spa structure is defective and must be replaced, it will be returned to the factory. The original, installed equipment (this includes the frame, skirt, and all equipment) will be reinstalled. If new equipment is desired, there will be additional charges to the customer. If the frame and/or skirt of the spa have been badly damaged, there will be additional charges to the spa owner for repairs or replacement. When a spa needs to be returned to the factory for repair, the cost of one way freight to the company will be at the spa owner's expense. The manufacturer will not pay for removal, installation, cranes, construction, de-construction, or any other cost associated with access, egress, or ingress, of the spa at the customer's home. The manufacturer reserves the right to an on-site inspection by its authorized representative. In the unlikely event a shell or spa must be replaced, all warranties (shell, surface, electrical and plumbing) date back to the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first.

TROPIC SEAS SPAS WARRANTY

THREE YEAR SURFACE WARRANTY

The spa surface is described as the exposed acrylic material finish. The manufacturer warrants the spa surface to be free from defects in the material and workmanship, such as blistering, cracking, or de-laminating, this does not cover micro-crazing, under normal use and maintenance for a period of three years from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first.

THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.

The spa must be set on a level solid surface that is sufficient to support the entire length and width of the spa. Standard building practices must be followed. Damage caused by failure to have a leveled and supported foundation under the spa is not covered under warranty. The manufacturer does not warrant problems associated with prolonged exposure to the sun and/or use of any sanitization or ozone system not approved by the manufacturer.

Damage to the spa surface caused by leaving the spa uncovered and empty of water with direct sunlight exposure will terminate this warranty. Any alteration to any system, electrical, plumbing, or mechanical, or over use of chemicals, or any other problems caused by external source are not covered under warranty. Other exclusions may apply.

Normally problems associated with material and workmanship can and will be repaired. If the spa surface is repaired, the repair is limited to the affected area only, and there is no guarantee against discoloration or fading. The decision to repair will be made by the manufacturer and its field representative after a review of the facts, pictures, or any other data presented by the dealer or customer. In all cases, pictures of the affected area and foundation of the spa must be provided before any decisions to repair or replace can be made. In the unlikely event a shell or spa must be replaced, all warranties (shell, surface, electrical and plumbing) date back to the original date of installation. If it is determined that the surface is to be replaced, the same conditions and terms as outlined in the shell warranty will apply.

THREE YEAR ELECTRICAL WARRANTY

(i.e., pumps, equipment packs, heaters, topside, etc.)

The MANUFACTURER warrants all electrical equipment to be free from defect in material and workmanship for three-years from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first. **THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL CONSUMER AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.**

The stereo, speakers, L.E.D. lighting, and Ozone are not included in this warranty but are covered under a separate warranty. Damage caused by acts of nature, poor water chemistry, and/or improper maintenance will not be covered under this warranty. Alterations or replacements of components installed in the spa that are not purchased and/or approved by the MANUFACTURER, including incorrect wiring, will terminate the complete spa warranty.

THREE YEAR PLUMBING WARRANTY

The plumbing is described as all piping, jet bodies, valve bodies and air controls. The manufacturer warrants all plumbing for a period of three years from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first.

THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.

Jet internals, valve handles, and other such items are regular maintenance items. They are covered for the item only; labor is not covered for these items. Damage caused by acts of nature, poor water chemistry, and/or improper maintenance will not be covered under this warranty.

ONE YEAR CABINET WARRANTY

The spa cabinet is described as the outer material encasing the spa structure. The manufacturer warrants it to be free from defects in material and/or workmanship from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first. **THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.**

TROPIC SEAS SPAS WARRANTY

Damage caused by acts of nature, poor water chemistry, and/or improper maintenance will not be covered under this warranty.

OTHER ITEMS NOT COVERED IN THIS WARRANTY

Some items are not covered in this warranty. These items either have a different warranty, or are warranted through the manufacturer of that item.

STEREO AND STEREO COMPONENTS

The stereo and stereo components, including speakers, sub-woofer, stereo power supply, wire harness and remote control are covered for 30 days from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first. Please note: Warranty coverage for both parts and labor is covered for 30 days only. Parts, not labor, will be covered for one year from date of installation. This warranty does not cover damage to a stereo or stereo component from abuse, poor reception, or damage caused by putting a wet CD into the stereo. If a stereo is replaced under this warranty, the manufacturer reserves the right to replace the unit with another like unit, but not necessarily the same stereo manufacturer. No spa will be replaced for a failed stereo. The stereo does not affect the performance of the spa. NOTE: For all operating instructions see the stereo manufacturer's owner's manual included with the spa.

OZONATOR

The ozonator is covered for one year from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first.

SPA COVER

The spa cover manufacturer warrants the spa cover skin for one year from the original start date of the warranty. The warranty period starts either the day of delivery to the customer or eighteen (18) month from the date of manufacturing, whichever date comes first. Do not return the spa cover to the manufacturer. This will delay the replacement or repair of the cover. The spa manufacturer is not responsible for lost covers.

LIGHTING

The lighting is guaranteed to work upon delivery. There is no warranty covering the lighting.

PERFORMANCE

In the event of any defect covered by this LIMITED warranty, a May Manufacturing LLC, authorized agent will correct such defect within the terms and conditions contained herein. There will be no charge for parts or labor within the above terms. However, travel charges that occur will not be covered under terms and conditions by the warranty. If it is determined by May Manufacturing LLC that the repair of the product is not feasible, a replacement spa equal to the value of the original purchase price will be provided. Cost for removal of the defective spa and delivery and installation of the replacement spa is the responsibility of the homeowner and will not under any circumstances be covered by May Manufacturing LLC.

LIMITATIONS

This warranty is void if this Tropic Seas Spa has been subjected to alteration, misuse, or repairs have been performed by anyone other than an authorized agent of May Manufacturing LLC. Misuse or abuse is defined as: use of the spa in a nonresidential application, water temperature outside the range of 32 degrees F to 110 degrees F, damage caused by clogged or dirty filter cartridges, damage to the spa from an absence of a hard cover, damage to components from improper pH, use of any type of acid, or from chemical imbalance. ACTS OF NATURE are not covered under this warranty.

Note: Warranty on 50Hz spas excludes labor.
(OUTSIDE US AND CANADA)

DISCLAIMER

May Manufacturing LLC, or its agent shall not be liable for any injury, cost or other damage, whether incidental or consequential, arising out of any defect covered by the LIMITED WARRANTY. The liability of May Manufacturing LLC under this LIMITED WARRANTY shall not exceed the original amount paid for the spa.

LEGAL REMEDIES

This LIMITED WARRANTY gives specific rights, and other rights that may apply and will vary from state to state.

TROPIC SEAS SPAS WARRANTY

WHAT IS NOT COVERED UNDER YOUR WARRANTY

The following is a general overview of non-warranty items and work. This is not an all-inclusive list.

Diagnosis of Spa Problems

Fuses

Light Bulbs of Any Kind

Removing a Spa from a Structure

Pillows

Filters

Chemical Misuse / Damage

Filter Lids

Any Part not Purchased from Artesian Spas

Jet Inserts

Valve Handles

Pump Seals

Draining and filling the Spa

Acts of Nature

Travel Charges

Cabinet Screws

Incorrect Wiring

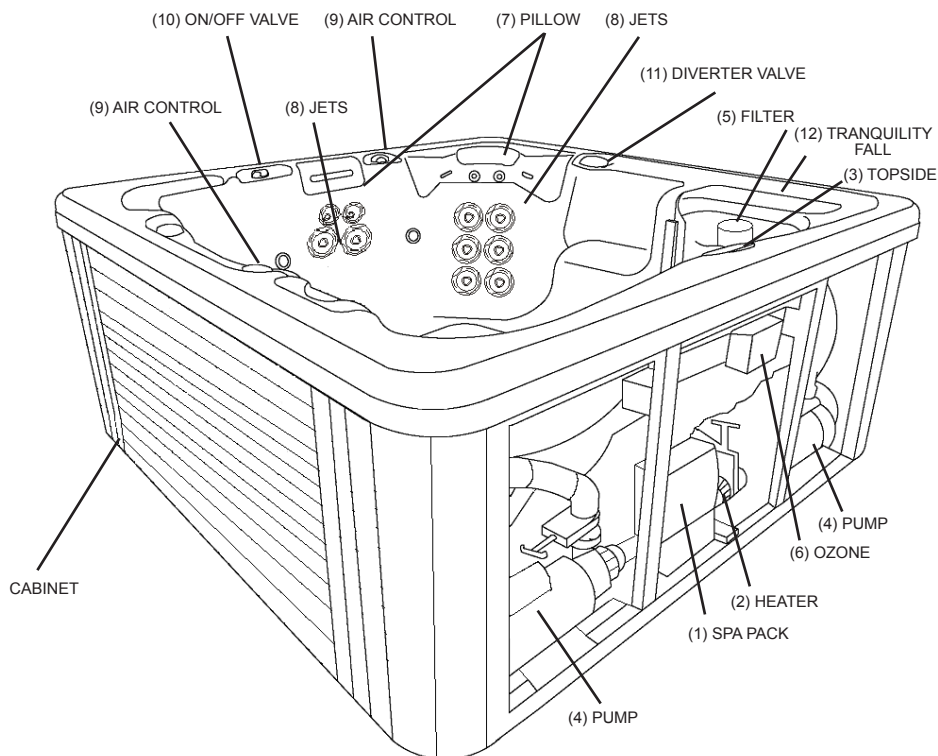
Shipping Charges

THIS WARRANTY IS GIVEN ONLY TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.

Any alteration of the spa that has not been pre-authorized by the manufacturer will void all warranties. If the manufacturer approves an alteration, verify that this alteration is covered under warranty. Damage caused by moving a spa that is blocked in or that has been recessed, along with additional charges for labor, is not covered by this warranty.

TROPIC SEAS SPAS PARTS LIST & DIAGRAM

ITEM#	PART #	DESCRIPTION	ITEM#	PART #	DESCRIPTION
(1)	33-1501-08 33-1502-08	SPA PACK, MBP501 2P SPA PACK, MBP501 3P	(7)	26-0602-85 26-1304-85	PILLOW, LOUNGE W PILLOW, NECK, CHARCOAL
(2)	OP24-0216-08	HEATER	(8)	03-3205-52 03-3206-52 03-3311-52 03-3312-52 03-3404-52 03-3507-52	2" DIRECT SS/GRAPHITE JET 2.75" DIRECT SS/GRAPHITE JET 3" DIRECT SS/GRAPHITE JET 3" ROTO SS/GRAPHITE JET 4.5" DIRECT SS/GRAPHITE JET 5" ROTO SS/GRAPHITE JET
(3)	33-1506-08 OP11-1504-08 OP11-1505-08 OP11-1506-08	TP600C TOPSIDE 1-PUMP OVERLAY 2-PUMP OVERLAY 3-PUMP OVERLAY	(9)	01-0019-52	AIR CONTROL
(4)	21-0111-81 21-0049-81 21-0048-81 21-0025-81 21-0015-81	6.0 HP 1-SPEED PUMP 4.8 HP 2-SPEED PUMP 4.8 HP 1-SPEED PUMP 3.0 HP 1-SPEED PUMP HI-FLO CIRCULATION PUMP	(10)	08-0011-52	1" ON/OFF VALVE
(5)	06-0006-12 06-0055-12 06-0050-48 OP96-0017-00P	BLUE FILTER PURPLE FILTER FILTER CAP NATURE 2	(11)	08-0012-52	2" DIVERter VALVE
(6)	25-0012-51	OZONE	STEREO ITEMS	33-0254-16 33-0001-17 33-0074-82 33-0090-98 33-0085-56	AQUATIC AV LOCKER BLUETOOTH STEREO SONY CD STEREO POWER SUPPLY GRAY SPEAKER



Place
Stamp
Here

Please do not send products or
other correspondence to the
address below.

MAY MANUFACTURING, LLC
Attn: Customer Care Department
4720 N. Lamb Blvd.
Las Vegas, NV 89115

SPA & WARRANTY REGISTRATION

Activate Product Warranty & Download Owner's Manuals

Please activate your warranty and register your spa by mailing in this reply card, or go online at www.TropicSeasSpas.com and click on owner login.

(Serial # is required below and can be located on the bottom kick plate of the spa, or can be found within the cabinet next to the equipment on a white placard attached to the frame.)

Name _____

Address _____

City _____ State _____ Zip _____

Phone Number _____

Date of Installation _____ Spa Serial Number (required) _____

Spa Model _____

Your Dealers Name and Location _____

Optional Questions:

What other spa brands did you consider buying? _____

How many people are in your household? _____

What is your age bracket? 25-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 61-70 ☐ 71+ ☐

What is your reason for purchasing a spa? ☐ Health Benefits ☐ Stress ☐ Relief ☐ Relaxation

Other: _____



4720 N. Lamb Blvd.
Las Vegas, Nevada 89115
www.TropicSeasSpas.com