



Part # (11-0096-11)

**This manual covers your new
2009 TidalFit**



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Congratulations...

Congratulations on the purchase of your new TidalFit. We know you will enjoy your TidalFit. Not only will your TidalFit be a physical workout, but also it will be relaxing and fun. We believe this will be an indispensable part of a healthy lifestyle. The TidalFit lifestyle is one that encourages health and well-being.

Owning a TidalFit brings some responsibility. With proper care, your TidalFit will provide years of enjoyment and therapy for your family and friends. Please take time to read and understand all of the instructions provided before you install your TidalFit exercise pool. This owner's manual is meant to be a supplement to the training you should receive from your dealer when you purchase and start up your TidalFit for the first time.

Please remember your TidalFit is a powerful piece of electrical equipment. It is extremely important that you have it properly installed to ensure safe use. This manual explains safety precautions, installation instructions, and operating and maintenance procedures. If you have any questions regarding this manual, please call your competent dealer, who will be happy to further assist you.

Before you do anything else, make sure you register your new TidalFit exercise pool.

For your future reference and convenience, please record the Serial and Model number along with the installation date in the spaces provided below. **STORE THIS MANUAL WHERE YOU CAN EASILY FIND IT WHEN NEEDED.** The serial and model numbers are mounted on the base of the equipment enclosure area, as shown below.

Spa Serial Number _____

Spa Model Number _____

Spa Installation Date _____

Dealer Name, Address, and Telephone Number

Diagram of Where to Find Serial Number



Serial Number Information

SAFETY WARNINGS

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

PLEASE, be a responsible TidalFit owner. When installing and using this pool, always adhere to basic safety precautions. Be sure to list emergency telephone numbers at the telephone nearest the pool, including physician, hospital, ambulance, police, and the fire department. Be certain to explain safety precautions to all new or occasional users of your pool. Remember, they may not be aware of the possible risks associated with the pool water temperature.

Have at least one family member learn CPR (cardiopulmonary resuscitation). **IT COULD SAVE A LIFE!**

1. READ AND FOLLOW ALL INSTRUCTIONS!

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

3. 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.

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.

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

SAFETY WARNINGS cont...

8. WARNING - To reduce the risk of injury:

a) The water in a pool 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 pool 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 pool water temperatures to 38°C (100°F).

c) Before entering pool, 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 pool 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 pool.

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

AUDIO COMPONENT WARNINGS

If pool is equipped with Audio system you 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 pool.







4. **WARNING - Prevent Electrocutation** - 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.

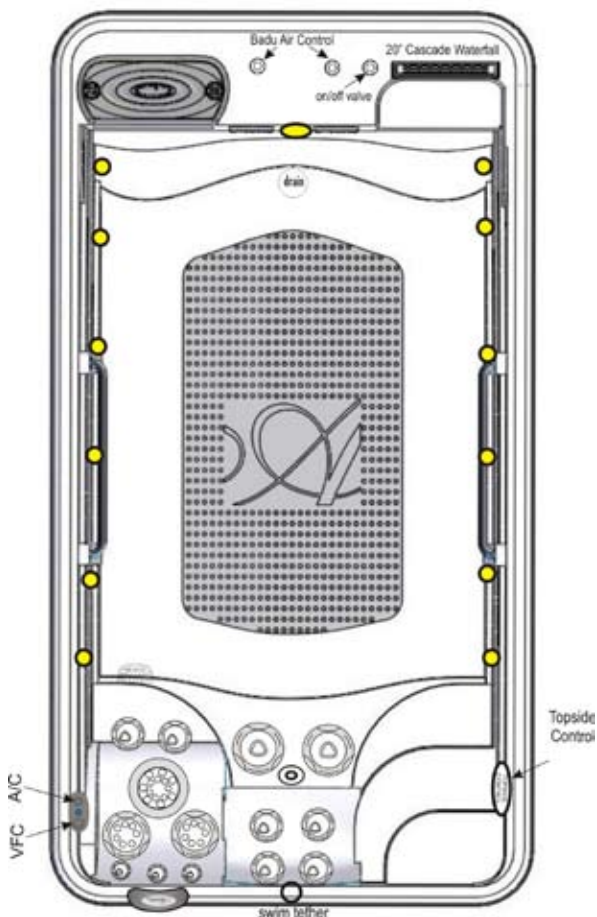
KEEP THESE SAFETY INSTRUCTIONS IN A CONVENIENT AND READILY ACCESSIBLE LOCATION!!

LINE DRAWING KEY

Name of Component	Symbol for Component
5" Helix MSSG W / ESC	
5" Helix Direct W / ESC	
3" Helix Roto W /ESC	
2" Helix Direct	
7" Jumbo Storm Massage W / ESC	
Ozone Jet	

Line Drawing may not be exact model of your particular spa.
 Certain options may be shown that are not included on your spa.

CONFIGURATION AND WATER CAPACITY



TidalFit

Volume	1715 gal	7554 l
Weight (dry/filled)	2000 / 16,303 lbs	907 / 7,395 kg
Dimensions	168x91x52in	427x231x132 cm
Control	CE SWIM SPA	CE SWIM SPA
Heater	4kW in.THERM	4kW in.THERM
Circulation System	Hi-Flo Standard	Hi-Flo Standard
Ozone	CD	CD
Cartridge Filter	2	2
Disposable Filter	1	1
Cascade	Standard	Standard

ELECTRICAL REQUIREMENTS AND INSTALLATION

The following information is provided for hooking up electrical supply to your new pool. 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 60Hz pool is preset at the factory to run on 240V with a 48 amp input. This feature gives you the most performance out of your pool. This will require a 240V, 60-amp GFCI

Your export 50Hz pool is preset out of factory to run 230V-240V 3 wires 30 amp max input. This product must always be connected to residual current device (RCD) having a trip current of not more than 30 mA.

ELECTRICAL WIRING

WARNING: Your pool must be wired by a certified electrician and according to these instructions. Failure to do so will terminate all warranties and all listings from the independent listing facility.

- 1) The TidalFit requires a 240 VAC dedicated system. The pool must be hard wired to the power supply, with no plug-in connections, extension cords, or sharing of service.
- 2) The pool requires that you run 6 (10 mm²) or 8 (8.4 mm²) AWG copper wire, depending on the GFCI size. Do Not Use Aluminum Wire.
- 3) The power supply must have a suitable Ground Fault Circuit Interrupter (GFCI), according to Section 422-20 of the National Electrical Code, ANSI/NFPA 70-7987 or other national installation requirement with a residual current device (RCD) having a trip current of not more than 30 mA. This could be used as the shut-off switch, which must be installed in plain view of the pool. This electrical service must be readily accessible to the pool occupants, but must not be within 5 feet of the pool.
- 4) Use only non-metallic conduit and fittings when installing power to the spa.
- 5) After your pool has been positioned, route lines through the knockout on the left or right front corner of the pool.
- 6) Connect the power to the pool.

Basic System Features and Functions

Main Board Power Requirements (60Hz)

- 240VAC, 48A, Class A GFCI-protected service (Circuit Breaker rating = 60A max.)
- 4 wires (hot, hot, neutral, ground)

Auxiliary Heater Power Requirements (60 Hz)

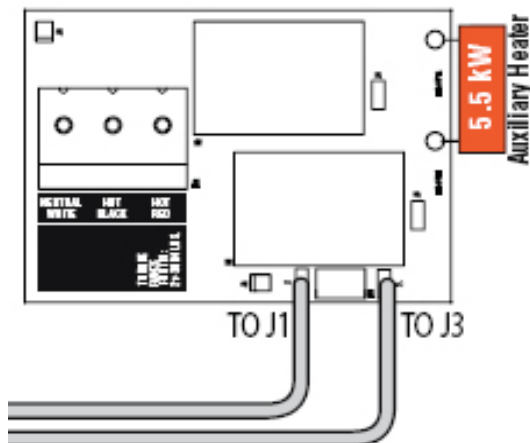
- 240VAC, 60Hz, 24A, Class A GFCI-protected service (Circuit Breaker rating = 30A max.)
- 4 wires (hot, hot, neutral, ground.)

Main Board Power Requirements (50Hz)

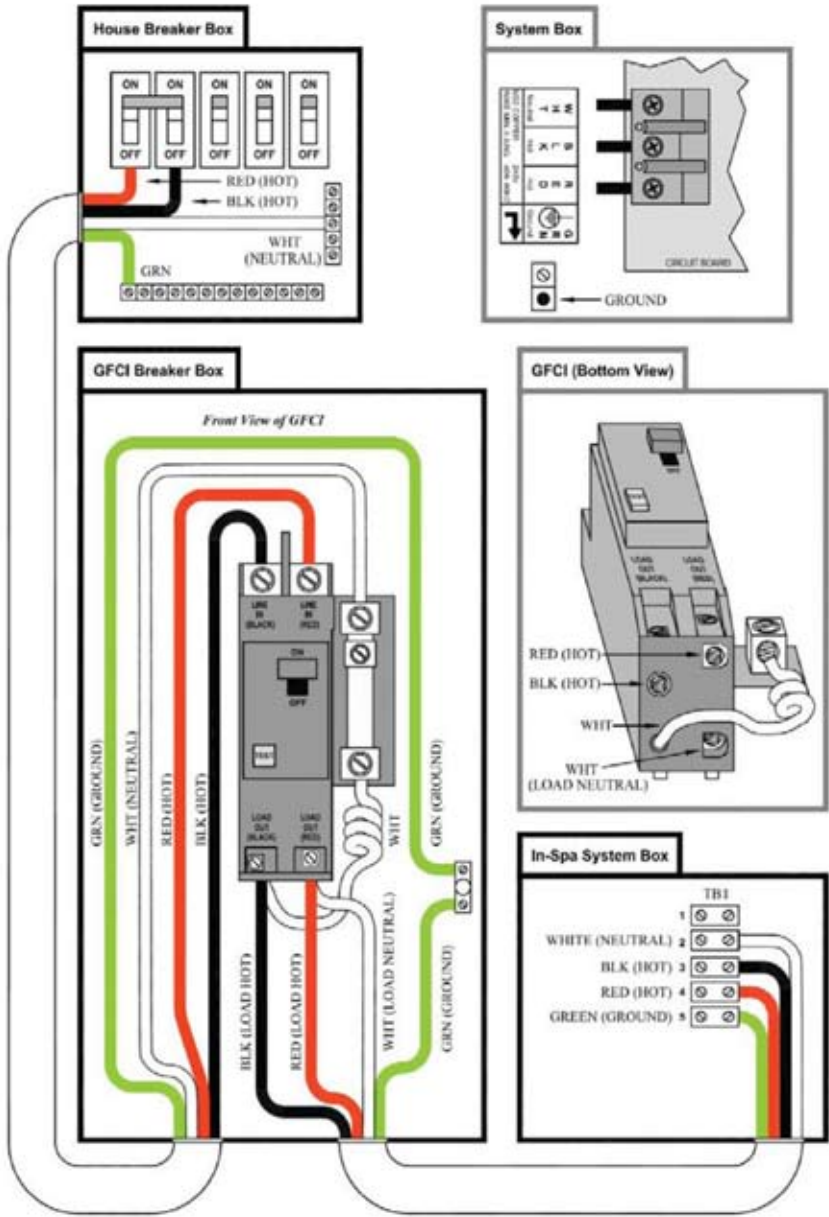
- Single Service {3 wires (line, neutral, ground)}
- 230VAC, 50Hz, 1 -, 16A/32A, (Circuit Breaker rating = 20A/40A max.)
- Dual Service {5 wires (line 1, neutral 1, line 2, neutral 2, ground)}.
- 230 VAC,, 50Hz, 1 -, 2x 16A, Circuit Breaker rating = 20 max each service.)
- 3-Phase Service [5 wires (line 1, line 2, line 3, neutral, ground)]
- 400VAC, 50Hz, 3N -, 16A, (Circuit Breaker rating = 20A max each phase line.)
- IMPORTANT - Service must include a neutral wire, with a line to neutral voltage of 230VAC.

Auxiliary Heater Board Power Requirements

- Single service {3 wires (line, neutral, ground)}
- 230VAC, 50Hz, 1 -, 24A, (Circuit Breaker rating = 30A max.)



60Hz GFCI WIRING DIAGRAM

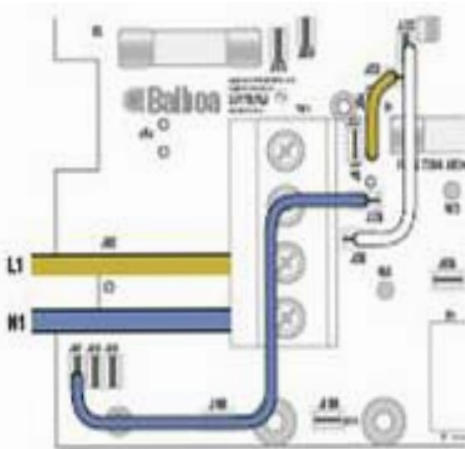


Pack Terminal Block from GFCI **MUST BE DONE BY A CERTIFIED ELECTRICIAN**

- 1) The black and red wires from the main electrical box* must be connected to the input lugs in the GFCI.
- 2) The white wire from the main electrical box* must be connected to the dedicated neutral bar inside the GFCI box.
- 3) The green or copper wire from the main electrical box* must be connected to a separate dedicated ground bar inside the GFCI box.
- 4) The red and white wires from the pool connect to the GFCI breaker output terminals.
- 5) The white wire from the pool must connect to the center load terminal ON THE GFCI BREAKER, usually behind the white pig-tail on the breaker itself
- 6) The white pig-tail from the GFCI breaker must connect to the dedicated ground bus inside the GFCI breaker box.
- 7) The green or copper wire from the pool must connect to the dedicated ground bus inside the GFCI box.

*Main electrical box refers to the house distribution panel and not the GFCI

50Hz Electrical Service Configuration Options



For DIP Switch Configured System

Single Service (1 x 16 Amp or 1 x 32 Amp)

This option is configured and shipped as the default.

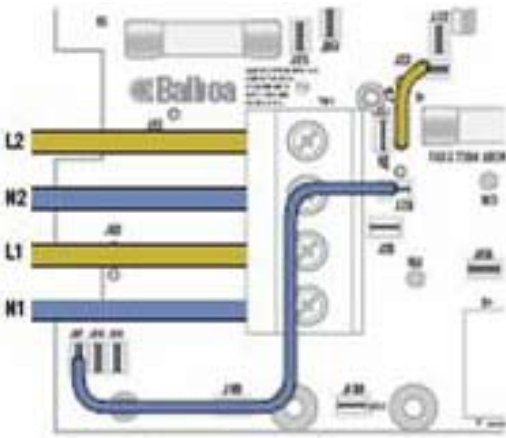
For 1 x 32 Amp Service:

DIP Switch A2 can be ON

For 1 x 16 Amp Service.

DIP Switch A2 must be OFF

50Hz Electrical Service Configuration Options cont'd..

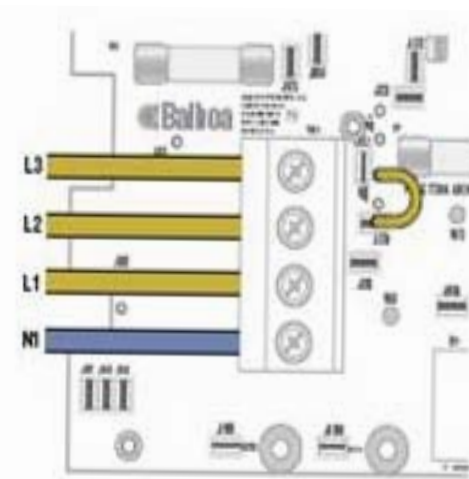


Dual Service Option (2 x 16 Amp)

Completely remove the white wire from J26 and J32.

Note: J32 and J23 are electrically identical. The white wire may be attached to either terminal before removal.

DIP Switch A2 must be ON.



3 Phase Service Option

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

Completely remove the white wire from J 26 and J 32

Note: J32 and J23 are electrically identical. The white wire may be attached to either of these terminals before removal.

Completely remove the blue wire from J28 and J57.

Note: J57, J58 and J59 are electrically identical. The blue wire may be attached to any of these terminals before removal.

Move the brown wire from J23 or J32 to J28.

DIP Switch A2 must be ON

DIP Switch A2 must be ON.

Move black wire from J27 to J53.

TidalFit 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 TidalFit, you should ensure that your chosen location meets some minimum guidelines:

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

2) The TidalFit must be on a solid, level foundation. Recommended: 4 inches of cement slab that has cured for at least 72 hours. Your warranty will be voided if the TidalFit 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 TidalFit should be placed on a site where it will not be in the way of water sprinklers.

(4) OUTDOOR POOL: 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 POOL: 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 pool deck installed by a knowledgeable contractor to ensure proper support.

8). If the TidalFit 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 TidalFit, prior to filling it up with water. Look for and remove any debris in the pool tub and in the filter. Verify that pump plugs are installed on the pumps and the pump unions are tight.

FILLING THE TidalFit WITH WATER

NOTE: DO NOT fill your TidalFit 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 pool. This will void your warranty. Level the pool before filling.

- 1) Prepare to fill the tub by removing all debris.
- 2) Remove the filters from your pool (see Removing, Installing and Cleaning Filters, page 35.)
- 3) Place your garden hose in the center of the filter .
- 4) Fill the tub from the circulation pump line until water level is above the foot-well.

Note: This will purge all the air out of the circulation pump. An air lock can cause damage to the circulation pump and is not covered under warranty.

- 5) Once the water level is filled over the foot-well, you can pull the hose out of the filter line and continue filling the pool from the filter well.
- 6) Fill the pool to the bottom of the pillows. **Note: DO NOT OVER-FILL YOUR POOL!**
- 7) 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 pool.**
- 8) Reinstall the circulation pump screen and all filters.

TURNING THE POWER ON

Turn the power to the pool on at the main circuit breaker. Verify that your pool has no error codes. Verify that there is good water circulation in the pool. The pumps will come on in cycles, for 1 minute each cycle.

VERIFYING WATER CIRCULATION

- 1) Open all the jets.
- 2) Press the Pump 1 key to turn the pumps on or off.
- 3) Make sure each seat has water flow. Note: On certain pools there is a diverter valve. Verify where the diverter valve is located.

TESTING THE GFCI BREAKER

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

- 1) Make sure the power is turned on at the electrical service panel.
- 2) Turn on the GFCI breaker. If the breaker stays on, it is functioning properly.

DANGER: RISK OF ELECTRICAL SHOCK

If the GFCI breaker fails to operate as described, there is a possibility of an electrical shock if the TidalFit 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 pool technician.

Tidal Fit START-UP cont...

TESTING THE GFCI BREAKER cont...

NOTE: When power is turned on, your pool is automatically programmed to start circulating water through the circulation pump. Each pump and/or blower will come on consecutively for approximately 1 minute to automatically purge the system. Adjust your temperature by pressing the up button on your touch pad until the desired temperature is displayed. This setting will allow your pool to heat to the set temperature.

CAUTION: *If water is not noticeably coming from your pool jets during the automatic purge, turn on the high speed pump. If water is still not coming from the jets, the pump needs to be manually primed, following the steps below.*

PRIMING THE PUMP

- 1) Turn off power at electrical service panel.

- 2) Locate and loosen one of the pump plugs on each pump by turning it counterclockwise one half of one turn.

- 3) Allow air to escape from fittings. When a steady stream of water flows from the pump plug, close it by turning it clockwise until tight.

- 4) Turn on power at electrical service panel.

- 5) Check once more to make sure that water is flowing from the jets during auto purge. If so, continue. If no water is coming from your spa jets, please call your Artesian dealer for further assistance.

WATER PREPARATION

NOTE: Before putting your new pool into operation, understand that preparing your new water is an important part of maintenance. Failure to properly prepare your water can result in substantially decreasing the life of the components and may void your warranty in severe cases. Your Artesian dealer should have a start-up and maintenance kit available for you when you receive your pool.

ML700 PANEL USER GUIDE



Initial Start-up

When your pool is first actuated, it will go into Priming mode (after displaying some configuration information). **Please 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 pool will begin to heat and maintain the water temperature in the Standard mode. You can exit Priming mode early by pressing “Warm” or “Cool”.



Icon Legend

Heat Icon - Indicates different stages of heating.



Jets Icon - Spins fast on high speed; spins slow On low speed



Blower Icon - Biggest in highest speed; smallest In lowest speed.





Time







When time hasn't been programmed, the **"TIME"** icon flashes to set the time, press "Time" then "Mode/Prog." Use the "Warm" and "Cool" buttons to adjust time. See previous page for more detailed instructions. (*Time settings on EL1000 and some EL2000 systems are not preserved in the event of power loss; time will have to be reprogrammed upon each power up.*)


Setting the Time

Once the pool has been properly connected the first time (every power up on the EL1000 and some EL2000 systems), notice the **"TIME"** icon appearing on the screen.

Press  Then  Select the hour by pressing  Or  (Each press changes the time by 1 minute)

Press  to enter Mode/prog Select minutes by pressing  Or  (Each press changes the time by 1 minute)

Press  to Exit the time setting procedure and enter the optional filter cycle programming. (Exits programming on EL1000 and some EL2000 systems).

Press  to exit programming.

Temp Set (80°F - 104°F / 26.0°C - 40.0°C)

The last measured temperature is constantly displayed on the LCD. Your pool's set temperature range may vary from range shown above depending on your manufacturer's settings

Note that the last measured spa temperature displayed is current only when the pump has been running for at least 1 minute.

Warm/Cool



Press the "Warm" or "Cool" button once to display the set temperature. Each time either button is pressed again, the set temperature will increase or decrease depending on which button is pressed. After three seconds, the LCD will automatically display the last measured spa temperature.



Mode/Prog

This button is used to switch between Standard, Economy, and Sleep modes. Press "Mode/Prog" to enter mode programming, press "Cool" to cycle through to desired mode (LCD flashes until confirmed), then press "Mode/Prog" to confirm selection.

Standard Mode maintains the desired temperature. Note that the last measured pool temperature displayed is current only when the pump has been running for at least 1 minute. The "**STANDARD**" icon will display until the mode is changed.

Economy Mode heats the pool to set temperature only during filter cycles. The "**ECONOMY**" icon will display until mode is changed. Pressing "Jets 1" while in Economy Mode puts the pool in **Standard-In-Economy mode**, which operates the same as Standard Mode, then reverts to Economy Mode automatically after 1 hour. Both the "**STANDARD**" and "**ECONOMY**" icons display in this mode. During this time, a press of the "Mode/Prog" button will revert to Economy Mode immediately.

Sleep mode heats the spa to within 20°F (11°C) of the set temperature only during filter cycles. The "**SLEEP**" icon will display until mode is changed.

Standby Mode

Pressing "Warm" or "Cool" then "Jets 2" will turn off all pool functions temporarily. This is helpful when changing a filter. Pressing any button resets the pool. On some systems the "Jets 1" button will control the ...

pump in Standby Mode (“Drain Mode”). In this case, press any other button to exit. System will revert to previous mode after 1 hour.

Jets 1



Press the “Jets 1” 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 timeout period. The pump 1 low speed timeout on some systems may be as long as 4 hours.

On non-circ systems, the low speed of pump 1 runs when the blower or any other pump is on. It may also activate for at least 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically, it cannot be deactivated from the panel; however, the high speed may be started.

Jets 2



(optional on some systems)

Press the “Jets 2” button once to turn pump 2 on or off, and to shift between low and high speeds if it is a two-speed pump. If left running, the pump will turn off after a timeout period.

Invert

Press the “Warm” or “Cool” button, then “Blower” to change the numbers in the display to read upside down. Repeat sequence to return the display to it’s normal right- side-up display.

Note: If your system does not have a “Blower” button, use “Jets 3” instead.

Preset Filter Cycles

On all systems, the pump and the ozone generator will run during filtration. At the start of each filter cycle, the blower will run briefly on its highest speed to purge the air channels. The lowest speed of any other pumps and the mister will also run briefly. On some circ systems, pump 1 may also run for the duration of the filter.

(The following is specific to all systems that are programmed according time.)

There are two filter cycles per day. The start/end times of each cycle are programmable. To program set time as instructed above, then press “Mode/Prog” to advance to the next setting (or to exit after the last setting). Default filter cycles can vary from system to system. A common

default is 8:00 AM to 10:00 AM and 8:00PM to 10:00 PM. Press “Time” then “Mode/Prog” to step through the filter settings to see how they are currently set.

Each filter cycle automatically operates the pump for the duration of the filter cycle. The filter 1 “F1 ●” icon will light when filter 1 is running. The filter 2 “F2 ●” icon will light when filter 2 is running.

(The following is specific to EL2000 and EI1000 systems that are programmed according to duration rather than time.)

The first filter cycle (“day”) begins 6 minutes after the spa is powered up. The second filter cycle (“night”) begins 12 hours later. Filter duration is programmable for 1-12 hours (“F 1”-“F12”). The default filter duration can vary from system to system. To program, press “Warm” or “Cool,” then “Jets 1.” Press “Warm” or “Cool” to select the filter duration. Press “Jets1” to select the number of filter cycles. The display will show “dn” (both “day” and “night” cycles; “d” (day cycle only); or “n” (night cycle only). Press “Warm” or “Cool” to adjust, then press “Jets 1” to exit the programming mode. For continuous filtration, use “F 12” and “dn”.

Note: EL 1000 and some EL2000 are capable of being programmed by time rather than by duration (see Preset Filter Cycles section). On EL 2000 and EL1000 systems with duration programming only, the spa powers up at 12:54, thus the first filter cycles begins 6 minutes later at 1:00. If you would like your spa to begin filtering at another time, you may change the clock to align with your preferred filter time, rather than the actual time of day.

Optional Filter Cycle Programming

You are not required to set filter cycles; however, it is an option available to you. To change the filter cycle settings;

Press “Time” “Mode/Prog” “Mode/Prog” “Mode/Prog” within 3 seconds. You will see the “PROGRAM,” “FILTER 1” and “START TIME” icons appear on the display.

Press “Warm” or “Cool” to choose the filter start time hour. Enter the hour by pressing “Mode/Prog”. Press “Warm” or “Cool” to choose the filter start time minutes. Each press changes the start time by 5 minutes.

Enter the minutes by pressing “Mode/Prog”.

Press “Mode/Prog” to see the “PROGRAM,” “FILTER 1 and “END TIME” icons. Adjust the time as done above.

Press “Mode/Prog” to see the “PROGRAM,” “FILTER 2” and “START TIME” icons. Proceed as above.

Press “Mode/Prog” will enter the new filter cycle times into the system and display the current water temperature.

Pressing “Time” at any time during this programming sequence will save the values entered up to that point and exit programming.

If you would like to select continuous filtration, set the filter 1 start and end times to be the exact same time. In this case, the filter 2 start time only controls when the second purge happens. Filter 2 end time will be unavailable.

Light

Some systems are equipped with both a spa light and a fiber optic light; however, only one can be accessed by this panel. (Larger panels may be purchased so that both the spa light and fiber optic light can be utilized.) Depending upon how your spa is equipped and configured, the “Light” button will operate in one of three ways:

- 1.) Press the “Light” button to turn the spa light on and off.

Freeze Protection

If the temperature sensors within the heater detect a low enough temperature, then the pump(s) automatically activate to provide freeze protection. The pump(s) and blower will run either continuously or periodically depending on conditions.

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.

Locking the Panel

Press “Time” “Jets 1” then “Warm” within 3 seconds. When locked, the PL “PL ● ” light will light. All buttons are frozen except the “Time”: button. To unlock the panel, press “Time” “Jets 1” then “Cool.”

Locking the Set Temperature

Press “Warm” or “Cool” then “Time” “Jets 1”. And “Warm” within 3 seconds to activate the lock. The TL “TL ● ” light will light when the set temperature is locked.

On some systems, locking the set temperature also locks out Mode changes.

To unlock the set temperature, press “Warm” or “Cool” then “Time,” Jets 1” and “Cool”

Diagnostic Messages

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 EL8000 and EL 5000 systems. EL1000 and some EL2000 systems reset the time of day on each power-up. Pool settings are preserved on all systems

OHH

“Overheat” - The pool has shutdown. 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 pool does not reset, shut off the power to the pool and call your dealer or service organization

OHS

“Overheat” - The pool has shutdown. One of the sensors has detected that the pool water is 110°F (approximately 43.3°C).

- **DO NOT ENTER THE WATER.** Remove the pool cover and allow water to cool. At 107°F (approximately 41.7°C), the pool should automatically reset. If pool does not reset, shut off the power to the pool and call your dealer or service organization

ICE

“Ice” - Potential freeze condition detected.

- No action required. The pumps and the blower will automatically activate regardless of pool status.

SrA

Pool is shutdown. 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).

Diagnostic Messages cont...

5nb

Pool is shutdown. 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).

5n5

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 pool is shut down.

- If the problem persists, contact your dealer or service organization.

HFL

A substantial difference between the temperatures sensors was detected. This could indicate a flow problem.

- Check water level in pool. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.

LF

Persistent low flow problems. (Displays on the fifth occurrence of the “HFL” message within 24 hours.) Heater is shutdown, but other spa functions continue to run normally.

- Follow action required for “HFL” message. Heating capacity of the pool will not reset automatically, you may press any button to reset.

dr

Inadequate water detected in heater.

- Check water level in pool. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.

dr4

Inadequate water detected in heater, (Displays on third occurrence of “dr” message.) Pool is shutdown.

Diagnostic Messages cont...

- Follow action required for “**dr**” message. Pool will not automatically reset; you may press any button to reset.

Pr

When your pool 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 pool will begin to heat and maintain the water temperature in the Standard mode..

--F or
--E

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 pool temperature, either switch to Standard mode or turn Jets1 on for at least a minute.

Sby

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.

pHL

pH is low.

- Add pH increaser according to manufacturer's instructions.

pHH

pH is high.

- Add pH reducer according to manufacturer's instructions.

Diagnostic Messages cont...

SAL

Sanitizer is low.

- Add sanitizer according to manufacturer's instructions.

SAH

Sanitizer is high.

- Remove pool cover and allow sanitizer to dissipate.

drn

The pump is on during Standby Mode to assist in draining the pool.

- Press "Jets 1" to turn off the pump when water has drained (or power off the pool.).

rtC

Hardware failure.

- Contact your dealer or service organization.

PSt

Hardware failure.

- Contact your dealer or service organization if message appears on more than one power up.

CrC

Firmware install problem.

- Contact your dealer or service organization if message appears on more than one power up.

CFE

Configuration error. Pool cannot start up

- Contact your dealer or service organization.

GF 1

Pool could not trip GFCI.

- Contact your dealer or service organization . Continued operation may be unsafe.

StU

A pump appears to be stuck on, causing the water temperature to creep up, possibly to hazardous levels.

Diagnostic Messages cont...

- **POWER DOWN POOL IMMEDIATELY. DO NOT ENTER THE WATER.** contact your dealer or service organization.

HOL

A pump appears to have been stuck on the last time spa was powered.

- **POWER DOWN POOL IMMEDIATELY. DO NOT ENTER THE WATER.** Contact your dealer or service organization.

Periodic Reminder Messages...(Press the "Mode" button to reset a displayed reminder.*)

rPH

Every 7 days.

- Test and adjust pH chemical levels per manufacturer's instructions.

rSA

Every 7 days.

- Test and adjust sanitizer chemical levels per manufacturer's instructions.

rCL

Every 30 days

- Remove, clean, and reinstall filter per manufacturer's instructions.

rG

Every 30 days

- Test and reset GFCI per manufacturer's instructions.

rDr

Every 90 days

- Drain and refill pool per manufacturer's instructions.

rCO

Every 180 days

- Clean and condition cover per manufacturer's instructions.

rTr

Every 180 days

- Clean and condition wood per manufacturer's instructions

Periodic Reminder Messages cont...

FC4

Every 365 days.

- Install new filter.

FCR

As needed.

- Install new Mineral cartridge

* User can suppress all reminders in User Preferences.

**All of these Periodic Messages can be disabled individually by the pool manufacturer.

***Any of these frequencies may be changed by the pool manufacturer.

Note: The GFCI section does not apply on EL systems used outside the United States. This GFCI section does not apply to GL Systems.

GFCI Protection

Your pool may be equipped with a GFCI Protection feature. If your pool does not have this feature enabled, the GFCI Trip Test must occur to allow proper pool function.

Within 1 to 7 days after startup, the pool will trip the GFCI to test it. (The number of days is factory programmed.) The GFCI must be reset once it has been tripped. After passing the GFCI Trip Test, subsequent GFCI trips will indicate a ground default or other unsafe condition requiring the power to the pool to be shut off.

Warning: The owner should test and reset the GFCI on a regular basis to verify it's function

GFCI Trip Test Procedure

The installer can cause the GFCI Trip Test to occur sooner by initiating it with the following button sequence.

Press “Warm”, then “Jets 1”, then “Light.” (Each press must be within 3 seconds of the previous press.) Press the “Warm” button repeatedly until “**9FC**” is displayed. Press “Jets 1” to select it. Press the “Warm” button until “**9t.n**” is displayed. Press “Jets 1” to initiate the GFCI Trip Test.

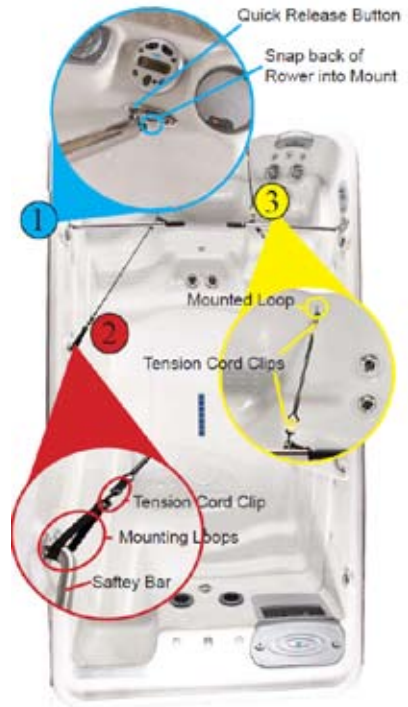
The GFCI should trip within several seconds and the pool should shut down. If it does not, shut down the power and manually verify that a GFCI breaker is installed and that the circuit and pool are wired correctly. Verify the function of the GFCI with it’s own test button. Restore power to the pool and repeat the GFCI Trip Test.

Once the GFCI is tripped by the test, reset the GFCI and the pool will operate normally from that point. You can verify a successful test by navigating to the “**9FC**” item as described above, pressing “Jets 1” and then pressing the “Warm” button until you see “**9SP**”. The code signifies GFCI Status - Passed.

The system will exit this menu in 30 seconds if no buttons are pressed.

Rowing Exercise

- 1** Install Rowers
Press the quick release button.
Snap the back of the rowing bar into the mount.
- 2** Install First Set of Tension Cords
Use the mounting loops as a slip knots around each safety bar.
Clip tension cord to mounting loop.
Clip tension cord to rowing bar.
- 3** Install Second Set of Tension Cords
Choose a desired pair of the varying length tension cords.
Clip the tension cord to the mounted loop.
Clip the tension cord to the row bar.



The tension cords are varying sizes to compensate for different levels of tension.

Rowing

Sit in the rowing seat and grasp the rower handles, to begin your rowing exercise.



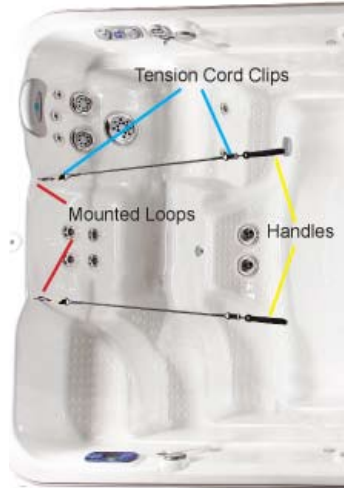
Double check the Rowers, making sure that each clip, cord and rower is mounted securely.



Upper Body Workouts

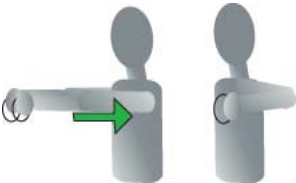
1

Install Tension Cords
Choose a desired pair of the varying length tension cords.
Clip the tension cords to the mounted loops.
Attach handles to the tension cords.



Chest Press
Standing upright and facing away from the cords, position your hands and elbows at

your sides, chest level. Keeping your elbows at chest level, push until your arms are outstretched in front of you.



Shoulder Pull
Stand upright holding the cords in front of you with a little bit of tension. Start with arms and hands at chest level and outstretched in front of you. Pull arms to your sides, keeping your elbows at chest level.

Back Pull
Stand upright holding the cords in front of you with a little bit of tension. Start with arms at chest height and outstretched in front of you. Bend your arms, and pull your elbows diagonally to your waist.

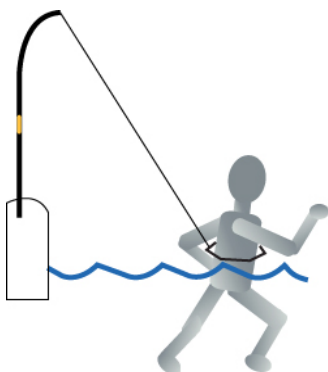


Tricep Pull
Sitting in the seat and facing away from the cords, position your elbows chest level, and hands eye level. Keeping your elbows parallel to your shoulders, pull until your arms are outstretched in front of you.

Treadmill with SuperSwim

- 1** Install Super Swim Pole
Attach the two poles together by matching up the brass attachments and twisting until tightened.
Place bottom of the pole into the attachment on the lip of the pool, above the rowing seat. Adjust nylon rope to desired length.

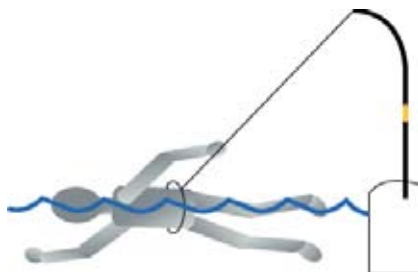
- 2** Install Waist Band
Pull the stainless steel clip along the waist band to adjust belt's diameter.
Strap waist belt attachment to your waist by buckling the smaller clip into the larger, angled clip.



Treadmill
Run in place, utilizing water resistance.

Advanced Swimming with SuperSwim

- 2** Install Waist Band
Strap waist belt attachment to your waist by clipping the smaller clip into the larger angled clip.



Swimming with Added Resistance
Practice advanced swimming techniques and swim at a faster rate with the waist attachment.



For more information on the installation and use of the SuperSwim, please refer to the DVD.

MAINTAINING YOUR TidalFit

DRAINING YOUR TidalFit

Your TidalFit needs to be drained, cleaned, waxed, and refilled about every six months. More frequent water changes may be necessary if bather load is heavy. A hose bib has been provided below the left side of your front access panel, to assist you in draining your pool.

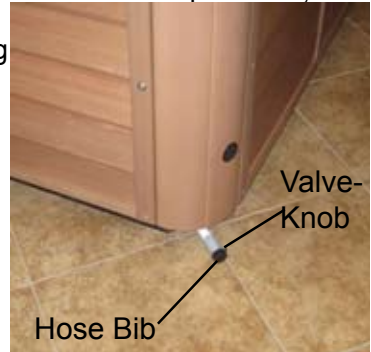
1) Turn off the power to your pool. If you fail to turn the power off, vital components could be damaged. Do not leave an empty pool exposed for long periods of time in hot, sunny weather.

2) Attach your garden hose to the hose bib.

3) Place the other end of the hose in an area that will accept the water capacity of your pool.

4) Open the hose bib by turning the valve knob counter clockwise to the full stop position.

5) Check the garden hose end to see if water is flowing. If water is not flowing, check the hose for kinks. Also check to see if valve is in the full open position.



CAUTION: The chemical content and temperature of the water will cause damage to certain vegetation. We do not recommend that you drain your pool onto plants or lawns. If you choose to do this, please remove your pool cover and allow pool to cool for a minimum of 24 hours with the pool turned off.

PILLOW CARE

Remove and clean the pillows with soapy water and a soft cloth when needed. Use a vinyl conditioner once a month. Remove pillows when doing chemical shock treatment.

JET CARE

We recommend that you clean your jets when you drain your pool. However, if you do need to clean your jets in between this can be accomplished with a full pool.

- 1) To remove the jet inserts turn the jet counterclockwise to the off position until it stops. Continue to turn the jet past the stop point to loosen it from the pool. The insert will now pull out.



- 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.

- 4) Rinse the jet inserts under warm water.

- 5) To reinstall the jets insert jet into jet body and turn clockwise until fully seated then tug to make sure it is seated properly. You can then continue to turn clockwise until it stops.



NOTE: A jet with stainless steel escutcheons can be slippery. You can use a soft cloth or jar-opening pad to assist in removing and installing the jet.

MAINTAINING YOUR TidalFit cont...

REMOVING, INSTALLING AND CLEANING FILTERS

These are the steps needed to successfully replace your filters. You should replace your disposable pool filters and clean your non-disposable filters every four months.

- 1) Turn off all power to your pool 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) To replace, set screen back into its place turn clockwise to fasten. DO NOT over-tighten.
- 5) Place the new filter into position and turn clockwise to fasten. DO NOT over-tighten.
- 6) Follow the directions 1) and 2) for the pleated filter cartridge. You then rinse the filter with a garden hose and soak the filter in a mixture of one pint of filter cleaner with 2.5 gallons of water for at least 12 hours. The filter must be completely submerged. You then follow the directions 4) and 5) to replace the filter.

WARNING: Power to your pool 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 pool 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 TidalFit

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

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

REPLACING THE LIGHT BULB

- 1) Turn off the power at the main electrical service panel.
- 2) Remove front access panel.
- 3) Locate and remove the reflector by turning it counterclockwise until free from wall fitting.
- 4) Remove the bulb from the holder.
- 5) Replace with new bulb. Your dealer has these bulbs in stock.
- 6) Replace the reflector by screwing it clockwise back onto the wall fitting.
- 7) Replace the front panel.
- 8) Turn power on at the main electrical service panel.

NOTE: The pool light bulb is not covered under warranty.

MAINTAINING YOUR TidalFit cont...

TidalFit CABINET CARE

Your pool comes standard with a PermaWood, 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 TidalFit with a wood cabinet, this cabinet is stained and sealed with an oil based acrylic stain. The stain is formulated especially for pool cabinet and deck applications and is resistant to ultraviolet light damage caused by sun rays. It is also resistant to fungus and insect damage. Your 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 pool.

CLEANING YOUR Tidal Fit INTERIOR

It is important to clean the interior of your pool every time it is drained to help preserve the sheen of your pool's surface. However, it is important that you do not use any abrasive cleaners or strong chemicals. Your authorized dealer will be able to supply you with the proper solution for your pool..

After cleaning, make sure all residues are removed prior to filling the pool. This will help prevent sudsing and improper chemical balance.

COVER CARE

Cleaning of your pool 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 pool cover. The wrong kind of protectant can be more harmful than no protectant at all. Keep any product away from your pool that is labeled “flammable,” that contains any type of oil, or that leaves a waxy coating on your cover.

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

MAINTAINING YOUR TidalFit cont...

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 pool, 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 pool 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 pool has a frequent and/or heavy bather load, it may be necessary to drain and fill your pool more often. Refer to the section titled "Draining your pool for instructions (page 33).

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

WATER CHEMISTRY

CAUTION: The chemicals used to maintain the pH balance of the water and to sanitize the water can be dangerous. Always follow these basic guidelines when handling the chemicals:

1. Always read and follow the directions on the label, unless directed otherwise.
2. Never mix different chemicals.
3. Do not exceed the recommended amounts of chemicals—follow the directions on the label.
4. Keep all chemicals out of the reach of children and pets.
5. Keep containers closed tightly when not in use.
6. Never add water to the chemicals—always add the chemicals to the water as directed.
7. Always store chemicals in a cool, dry place.

WATER TREATMENT GLOSSARY

1 - Total Alkalinity: Total Alkalinity measures the water's ability to resist fluctuations in the pH level. It is measured in ppm (parts per million) ranging from 0 - 400 or up. The optimum range for your pool water is between 80 and 140. This can easily be measured with 3- or 5-way test strips. With low alkalinity the pH level will be prone to dramatic fluctuations. With high alkalinity the pH becomes increasingly difficult to adjust.

2 - pH (*potential hydrogen*): The pH is used as a measurement of the active acidity, the concentration of active hydrogen molecules in the water. pH is measured on a scale from 1 to 14, the lower numbers indicating a greater concentration of active hydrogen. While 7, halfway between base and acid is neutral, the optimum level of acidity for a pool is between 7.2 and 7.8.

WATER CHEMISTRY cont...

WATER TREATMENT GLOSSARY cont...

The effects of low PH can be rapid sanitizer loss, eye and skin irritation, expedited corrosion of metals, as well as staining throughout the pool. High PH can result in cloudy water, low sanitizer efficiency, as well as eye and skin irritation.

3 - Parts per Million (PPM): The term “parts per million” will be used frequently in the world of water care. The term simply means exactly what it says: the coexistence of any one unlike item with a larger number of “like” items.

4 - Sanitizers: Sanitizers are used to destroy bacteria and other germs in the water. Only 2 sanitizers are used in spas, chlorine (Sodium Dichlor) and Bromine (Hydrotech or Lonza). Without the use of a mineral system or an enzyme, the preferred level of sanitizer is between 2 and 3 ppm.

5 - Total Dissolved Solids (TDS): TDS is simply the measure of the total amount of matter dissolved in the water. When this level becomes too high, action is advised.

6 - Calcium Hardness: The measure of the amount of calcium dissolved in the water as expressed in PPM. Hard water, or water with calcium levels over 250 PPM can cause scale formation on the surface of the spa or the components of the spa.

7 - Total Chlorine: Total Chlorine is the sum of the free and combined chlorines in the water. Often, water will contain a higher level of total chlorine than available chlorine. If this is the case in your water, you may use a non-chlorine shock (typically potassium monopersulfate) to free up the remainder of total chlorine.

8 - Ozone: Ozone is a gas molecule that can be generated by an Ozonator, which is composed of three atoms of oxygen and used to oxidize the water. Ozone is very useful for regenerating bromine from bromide ions. It also acts as a supplement when used in conjunction with a sanitizer and may reduce the level of sanitizer required. You may read more about ozone later in this section of your owner’s manual.

9 - Organic Matter: These are carbon-derived substances typically generated by living organisms. In a pool, they are most frequently introduced into the water by bathers. Enzyme products such as Spa Perfect by Natural Chemistry are most effective at eliminating organic matter from your body of water.

10 - Microorganisms: This term refers to tiny, living organisms such as bacteria, protozoa, or algae.

11 - Sequestering: This term defines the action taken to remedy high levels of metals or calcium in the water. By forming a complex that envelops materials in the water, commonly hardness ions, a sequestering chemical prevents the ions from reacting to one another, thus forming complex structures or solids.

12 - Shocking: Shocking is the act of hyper-chlorinating or hyper-oxidizing the water. This can be accomplished with a myriad of shock treatments, but is most commonly accomplished with Sodium Dichlor or Potassium Monopersulfate. The former raises the sanitizer level to at least 8 PPM, and the latter burns off chloramines or bromines. The use of P.S., or non-chlorine shock is advantageous because you can bathe only 15 minutes after treatment; however, oxidizing the water will not kill the bacteria unless there is sufficient total chlorine to free up used chlorine to actively sanitize.

13 - Bather Load: You may be asked by your pool professional what the average bather load is, meaning, how many people enter the pool on a daily or weekly basis.

14 - Alternative Sanitizers A group of products that sanitize pool, spa and hot tub water, by means other than the application of chemicals to the water. Includes such products as ultraviolet sanitizing systems, mineral purifiers, ionizers and ozonators.

15 - Bactericide: A chemical that kills bacteria. The most common bactericides are: chlorine, bromine, biguanide, ozone and silver. Most algacides, other than copper, exhibit some bactericidal properties.

16 - Balanced Water: Pool or spa water that is within the accepted water analysis parameters for: pH, sanitizer, total alkalinity, calcium hardness, chlorine stabilizer (chlorine pools only) and minerals. The balancing, of the pool or spa water, helps to eliminate water chemistry problems.

WATER TREATMENT GLOSSARY cont...

17 - Chloramines: Irritating, odorous forms of combined chlorine, formed by the reaction of chlorine with nitrogen containing waste products. Chloramines are ineffective as a pool or spa sanitizer. High levels of chloramines can cause the problems of “Red Eyes” or “Stinging Eyes.” Usually requires a shock treatment to lower or destroy the combined chlorine level.

18 - Corona Discharge: A method for producing ozone, by utilizing high voltage arcing to convert oxygen (O₂) into ozone (O₃). Refer to the listing for Ozone for more information.

19 - Enzymes: Organic agents that hasten the natural breakdown (digestion) or decomposition of oily wastes and organic residues in pools and spas.

20 - Hard Water: The term used to describe water that is high in calcium or magnesium. High levels, usually over 400 PPM, can lead to clarity and scaling problems, if not treated. Source of the calcium can be natural or can be contributed by chemicals such as calcium hypochlorite.

21 - Ions: The electrically charged state that an element assumes in true solution. In the ionic state, ions are chemically reactive. Some ions, such as, copper, silver and zinc, are used as sanitizers in mineral purifiers and/or ionizers.

22 - Ionizers: Equipment that sanitizes pool and spa water by providing a low level source of copper and silver ions, as the water passes over charged electrodes. Copper ions can provide algaecidal control. Silver ions can provide bactericidal control. Other types of devices (mineral purifiers) work by an erosion principle and utilize copper, silver or zinc ions. Spa ionizers often lack the copper element because the need for algae control is not as acute as in a pool.

23 - Mineral Purifier: A type of device that releases copper, silver or zinc ions into the water at very low levels. In this ionic state, these minerals can function in the sanitizer role and help control algae and bacteria in pool and spa water. Mineral Purifiers work on the principle of erosion and do not require electrical components. Most include some type of replaceable cartridge, that contains the copper, silver or zinc materials.

24 - Biguanide: The generic name for a non-chlorine, non-bromine, sanitizer that utilizes the polymer PHMB (polyhexamethylene biguanide). It is used to totally eliminate the use of chlorine or bromine.

25 - Biofilm: A slippery coating of microorganisms that can develop in poorly sanitized pools and spas.

26 - Brominator: Feeding devices used to introduce bromine into pools or spas. Most automatic types can be plumbed inline. Others are simple floating varieties. All are intended to make the application of bromine easier and more consistent.

27 - Calcium Carbonate: Crystalline deposits (scale) that can form on all under water surfaces, if the water is excessively high in calcium hardness. High pH and high total alkalinity can worsen the problem.

28 - Oxidation: The chemical reaction by which organic matter is “burned” or destroyed, by the action of chlorine, bromine, ozone, hydrogen peroxide or non-chlorine shock. Oxidation may cause minerals such as iron, manganese and copper to form discoloring stains and precipitates, if not treated properly.

29 - Ozonator: A device for producing Ozone (O₃), by either a UV (ultraviolet) light source or by electrical arcing (corona discharge). Used for oxidizing and sanitizing purposes in both pools and spas.

30 - Ozone (O₃): Typically produced by an Ozonator installed in a pool or spa. Ozone (O₃) is a form of oxygen (O₂) and is a powerful oxidizing agent. It is used to destroy organic waste and by-products and help in the control of algae and bacteria. Ozone is not a stand alone sanitizer and requires the supplementation of chlorine, bromine, minerals, or ionization.

31 - Soft Water: Water that is low in calcium and magnesium hardness. Such water can prove to be corrosive to masonry surfaces and underwater metal parts. The calcium hardness level can be raised, to the optimum range of 150-200 PPM, by the addition of appropriate amounts of a calcium hardness increaser (calcium hardness).

SPA CHEMICALS GLOSSARY

1 - Alkalinity Up: The total alkalinity of your pool water should be between 80-140 PPM. A proper alkalinity will help buffer your pool water against sudden changes in pH. Every 2.5 tablespoons of Alkalinity Up will raise your alkalinity by 10 PPM in a pool holding 500 gallons of water.

2 - Bromine Tablets: These slow-dissolving tablets work especially well in the hot water of your pool. Keep a base of tablets inside of an in-spa floater/feeder in order to maintain between 2 and 5 PPM. Add 2 tablets per 100 gallons of water and adjust the floater's opening to regulate the PPM level.

3 - Foam Gone: Foam in pools is typically caused by residue from soap, shampoo, and cleansers. A small amount of Foam Gone will dissipate the foam and will not affect the water balance. Most foam removers are compatible with all sanitation programs.

4 - Liquid Filter Cleaner: Regular use of Filter Cleaner will greatly increase the life and performance of your filters by cutting away grease, body oils, scale, and lotions. Clean filters also contribute to better water circulation and superior pool performance, because dirty filters can substantially impede water flow. Keeping your filters clean with filter cleaner will also help keep your water filtered and clear. This is accomplished by mixing one pint of filter cleaner with 2.5 gallons of water and submerging the filters in the mixture for at least 12 hours.

5 - Dichlor Granular: This concentrated, stabilized, and quick-dissolving chlorine granular is simple to use in your spa as a sanitizing shock treatment. The downside to Dichlor is that it will not sustain a PPM base for long in hot water. However, as a rule of thumb, if you treat your water after bathing with half a capful of Dichlor, you will maintain clear and comfortable water, providing your pH is controlled and your filters cleaned. Dichlor dissolves quickly and leaves no residue.

6 - pH Down: If your pH level remains high, you can struggle with scaling, cloudy water, rapid sanitizer loss, and possible skin and eye irritation. pH Down can be purchased from your dealer in either liquid or solid granular form. Please see your dealer for recommended dosage.

7 - pH Up: The effects of low pH can be rapid sanitizer loss, eye and skin irritation, expedited corrosion of metals, as well as staining throughout the spa. pH up can be purchased from your dealer in either liquid or solid granular form. Please see your dealer for recommended dosage.

8 - Metal Protect or Remover: Also called stain and scale defense, metal protect inhibits staining and scaling in your spa. It will also prevent calcium build-up on the surfaces of your spa. Regular use will help protect your spa surface as well as your plumbing, your pumps, and even your heater.

9 - Spa Shock: Non-chlorine spa shock contains Potassium Monopersulfate and is an oxidizer that works well with mineral, chlorine and bromine systems. Regular use of spa shock can substantially reduce the need for sanitizing by up to 50% and will continually remove inorganics from the water. Best of all, you can bath in only 15 minutes after application.

10 - Ascorbic Acid: Vitamin "C." Can be used as an acidic reducing agent in the removal of difficult metallic stains from underwater surfaces. Oxalic acid can be used in a similar manner.

MAINTAINING THE PROPER pH BALANCE

The pH factor is a measure of the relative acidity or alkalinity in the water. It is measured on a scale of 1 to 14. Pure water has a value of 7, which is neutral. Any value above 7 is alkaline, and any value below 7 is acidic. You should maintain a slightly alkaline pH level, between 7.2 and 7.8, in the pool. Severe problems can occur when the pH balance is not maintained within this range. If the pH level exceeds 7.8, dissolved minerals can build up and clog the plumbing in the spa jet unit. If the pH level falls below 7.2, the acid level in the water will begin to corrode the metal parts in the spa jet unit. Also, the sanitation agents in the water will not be effective if the pH level is not properly maintained. Damage caused by improper pH levels is not covered under the warranty. To maintain the proper pH level, you should test the pH of the water regularly. To test the water, purchase a pH test kit at a pool and spa supplier. The pH reading should be between 7.2 and 7.8. If the level is too low, add a pH increaser (usually soda ash). If the level is too high, add a pH reducer (usually sodium bisulfate). Test the water again after five minutes. See the instructions with your pH test kit for additional information about testing and adjusting the pH.

TidalFit Warranty

This section is a description of your warranty. Here you will find descriptions of what is covered under your Tidal Fit warranty and what can void your warranty. **PLEASE READ THE WARRANTY THOROUGHLY.** For warranty outside USA and Canada, please refer to your countries Artisan Distributor.

Lifetime Structure Warranty

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

If the TidalFit 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 TidalFit has been badly damaged, there will be additional charges to the TidalFit owner for repairs or replacement. When a TidalFit needs to be returned to the factory for repair, the cost of one way freight to the company will be at the TidalFit 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 TidalFit 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 TidalFit must be replaced, all warranties (shell, surface, electrical and plumbing) date back to the original date of delivery

Seven-Year Surface Warranty

The TidalFit surface is described as the exposed material finish. The manufacturer warrants the TidalFit surface to be free from defects in the material and workmanship, such as blistering, cracking, or delaminating, under normal use and maintenance for a period of seven years from the original date of delivery. **THIS WARRANTY IS ONLY GIVEN TO**

OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES. The TidalFit must be set on a level solid surface that is sufficient to support the entire length and width. Standard building practices must be followed. Damage caused by failure to have a leveled and supported foundation under the TidalFit 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 TidalFit surface caused by leaving it uncovered and empty of water with direct sunlight exposure will terminate this warranty. Any alteration to any system, either 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 TidalFit 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 TidalFit must be provided before any decisions to repair or replace can be made. In the unlikely event a shell or TidalFit 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.

Five-Year Electrical Warranty

The Electrical is defined as the electrical items (i.e. pumps, equipment packs, heater, topside control, etc). The manufacturer warrants all electrical equipment to be free from defect and workmanship for five years from date of delivery. ***THIS WARRANTY IS ONLY GIVEN TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.*** The stereo, speakers, stereo power supply, L.E.D. lighting, light bulbs, fuses, and Ozone are not included in this warranty, but are covered under a separate warranty. Damage caused by weather, poor water chemistry, and/or improper maintenance will not be covered under this warranty. Alterations or replacements of components installed in the TidalFit that are not purchased and/or approved by the manufacturer including incorrect wiring, will terminate the Tidal Fit warranty.

WARRANTY cont ...

Five 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 five years from the date of delivery. ***THIS WARRANTY IS ONLY GIVEN 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 weather, poor water chemistry, and/or improper maintenance will not be covered under this warranty.

Cabinet Warranty

The TidalFit cabinet is described as the outer material encasing the TidalFit structure. The manufacturer warrants it to be free from defects in material and/or workmanship from the date of delivery. ***THIS WARRANTY IS ONLY GIVEN TO THE ORIGINAL OWNER, AND TERMINATES UPON TRANSFER OF OWNERSHIP. COMMERCIAL APPLICATIONS ARE EXCLUDED FROM THIS AND ALL WARRANTIES.*** This warranty does not cover normal darkening, staining, or aging. The TidalFit cabinet requires care and maintenance by the consumer. Damage caused by weather, poor water chemistry, and/or improper maintenance will not be covered under this warranty.

Two-Year Warranty on PermaWood Cabinets

PermaWood cabinets are covered under this warranty for a two-year period.

One-Year Warranty on Red Wood Cabinets

Wood cabinets are covered for a one year period. A coat of stain should be applied regularly to the cabinet to keep the wood in proper condition.

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, power supply, wire harness, and remote control are covered for 30 days from the date of delivery. 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.

Ozonator

The ozonator is covered for one year from the date of delivery.

TidalFit Cover

The cover manufacturer for TidalFit warrants the cover for one year. Do not return the TidalFit cover to the manufacturer. This will delay the replacement or repair of the cover. The TidalFit manufacturer is not responsible for lost covers.

L.E.D. Lighting

The L.E.D. lighting is guaranteed to work upon delivery. There is no warranty covering the L.E.D, 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 pool equal to the value of the original purchase price will be provided. Cost for removal of the defective TidalFit and delivery and installation of the replacement is the responsibility of the homeowner and will not under any circumstances be covered by May Manufacturing LLC.

WARRANTY cont...

Limitations

This warranty is void if the TidalFit 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 TidalFit in a nonresidential application, water temperature outside the range of 32° F to 110° F, damage caused by clogged or dirty filter cartridges, damage to the TidalFit 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.

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 pool.

Legal Remedies

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

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 TidalFit Problems

Fuses

Light Bulbs of Any Kind

Removing TidalFit from a Structure

Pillows

Filters

Chemical Misuse / Damage

Filter Lids

Any Part not Purchased from your dealer

Jet Inserts

Valve Handles

Pump Seals

Draining and filling the TidalFit

Acts of Nature

Travel Charges

Cabinet Screws

Incorrect Wiring

Shipping Charges

Any alteration of the TidalFit 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 pool that is blocked in or that has been recessed, along with additional charges for labor, is not covered by this warranty.

INTERIOR SPA DIAGRAM



Place
Stamp
Here

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

ARTESIAN SPAS
Attn: Customer Care Department
4720 N. Lamb Blvd.
Las Vegas, NV 89115

Mr

Ms.

Name _____

Address _____

City _____ State _____ Zip _____

Phone Number _____

Date of Installation _____ Spa Serial Number _____

Spa Model _____

Your Dealers Name and Location _____

What other spa brands did you consider buying? _____

Optional Questions

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: _____