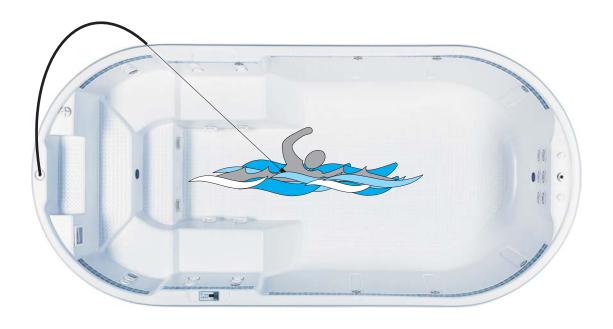
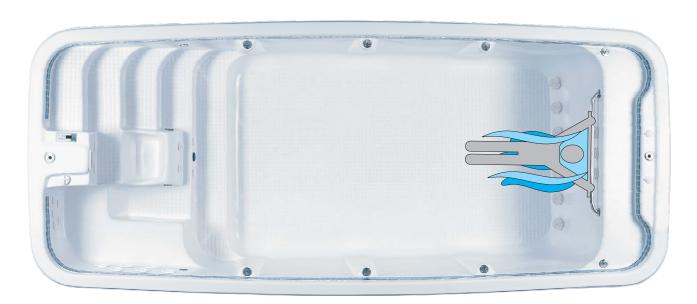
2002 Owner's Manual







# **Table of Contents**

Important Safety Instructions	
READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY	
DO'S AND DON'T'S	!
Do's	!
Don't's	!
DANGER SIGN	
AQUATIC FITNESS SYSTEM FEATURES	6
HydroTherapy Jets	6
Swim Jets	6
HydroSport™ Aquatic Fitness Gear	6
Rowing Seat	7
Swim Tether Mounts	7
Built-in OptiMounts	7
Multiple Training Stations	
Aquatic Fitness System Equipment Pack	8
Dimension One Filtration System	
Using Your Aquatic Fitness System	
Before you Start	10
Using Top Side Control	
Programming the Filtration Cycle	I
Start-Up Procedures	
WATER TESTING:	
TOTAL ALKALINITY:	
pH CONTROL:	
CHLORINE (SODIUM DICHLORO-S-TRIAZINETRIONE):	[ !
SHOCK TREATMENT (POTASSIUM MONOPERSULFATE):	I !
SUPER CHLORINATION:	
ENZYME:	
WATER CLARIFIERS:	
SEQUESTERANTS	
FOAM REMOVER:	
Care For Your Aquatic Fitness System	
Draining Your Aquatic Fitness System	
Filter Cleaning	
Light Bulb Replacement	
Care for the Aquatic Fitness System Surface	
Care for the Aquatic Fitness System (Optional) Wood Cabinet	
Care for the Aquatic Fitness System (Optional) Synthetic Wood Surface	[9
Care for the Aquatic Fitness System Cover	
Special Cold Weather Instructions	
WARRANTY SERVICE INFORMATION	2
CLOSSARY OF TERMS	27

TROUBLESHOOTING GUIDE	27
HEATING SYSTEM	27
ELECTRICAL SYSTEM	
Water System	28
3 FLASHING LIGHTS	28

2002 Owner's Manual

### **Important Safety Instructions**

#### READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

The following basic safety precautions should always be followed when you have installed, and are using, this electrical (and gas, in some models) equipment:



**Safeguard All Children At All Times.** Never permit children to use this **Aquatic Fitness System** without adult supervision. Always ensure that there is a responsible adult who is competent in the operation of the **Aquatic Fitness System** accompanying any child who may use this **Aquatic Fitness System**. Always ensure that children are closely supervised at all times in the vicinity of the **Aquatic Fitness System**.



<u>Risk of Accidental Drowning</u>. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this **Aquatic Fitness System** unless they are supervised at all times.



<u>Risk of Accidental Drowning</u>. Never Enter, Use, Swim or Exercise alone in the **Aquatic Fitness System**. Never allow anyone to enter, use, swim or exercise in the **Aquatic Fitness System** unsupervised.



Risk of Serious Injury of Death. Diving or Jumping Into the Aquatic Fitness System is Forbidden. Serious injury, paralysis or death can occur if user jumps of dives into the Aquatic Fitness System. The Aquatic Fitness System is not designed for jumping of diving. Extreme caution must be exercised to prevent anyone from jumping or diving into the Aquatic Fitness System.



Risk of Serious Injury or Death. Do not remove the "No Jumping / No Diving Appliqués from the Aquatic Fitness System!



Risk of Serious Injury or Death. Do not walk, stand or sit on the top rail of the Aquatic Fitness System. Serious injury, paralysis or death can occur is user falls from the top rail of the Aquatic Fitness System to the ground or into the Aquatic Fitness System.

2002 Owner's Manual



**Risk of Serious Injury or Death.** To prevent hair or body entrapment, never operate or use the **Aquatic Fitness System** if any of the suction fittings is broken or missing. The suction fittings of this **Aquatic Fitness System** are sized to match the specific water flow created by the circulation and jet pumps. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting. Should the need arise to replace any suction fittings or the pump(s), be sure that any work if performed by an authorized **Aquatic Fitness System** service agent and that flow rates are compatible.



**Risk of Electric Shock**. Do not permit any electrical appliance, such as a light, telephone, radio, television, etc., within 5 feet (1.5m) of the **Aquatic Fitness System**.



**Risk of Electric Shock.** Install at least 5 FEET (1.5m) from all metal surfaces. As an alternative, an **Aquatic Fitness System** may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4mm²) solid copper conductor attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment can.



**Risk of Electric Shock.** The electrical supply for this **Aquatic Fitness System** must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 680-42 of the National Electrical Code, ANSI/NFPA 70-1993. The disconnect must be readily accessible and visible to the **Aquatic Fitness System** occupants from the **Aquatic Fitness System** or the surrounding area, but it must be installed at least 5 feet (1.5m) from the spa water.



**To Reduce the Risk of Injury**. Do not exercise in water temperature above 90°F. Recommended water temperature for hydrotherapy is higher than the recommended temperature for aquatic exercise.



To Reduce the Risk of Injury. The water in an Aquatic Fitness System should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended when using the Aquatic Fitness System for exercise, swimming, when total use will exceed 10 minutes, or anytime young children are present in the Aquatic Fitness System.



<u>To Reduce the Risk of Injury.</u> Prolonged immersion in an **Aquatic Fitness System** may be injurious to your health



<u>To Reduce the Risk of Injury.</u> Always consult with a physician prior to beginning any exercise regimen utilizing the **Aquatic Fitness System**. Do not overexert yourself. Take frequent breaks.

2002 Owner's Manual



To Reduce the Risk of Injury. Always wear shatterproof swim goggles when using HydroSport resistance exercise or rowing equipment. Improper use of HydroSport equipment or use of aged or worn equipment could result in an eye injury if protective eyewear is not used. Every HydroSport equipment package includes protective eyewear. If your protective eyewear is missing or defective, do not use the HydroSport equipment until you have replaced the protective eyewear with similar shatterproof swim goggles.



<u>To Reduce the Risk of Injury.</u> Do not use an **Aquatic Fitness System** immediately following strenuous exercise.



**To Reduce the Risk of Injury.** Excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or possibly pregnant women should limit spa water temperatures to 100°F (38°C). It is recommended that a physician be consulted before using an **Aquatic Fitness System** if you are or possibly could be pregnant.



To Reduce the Risk of Injury. Before entering an Aquatic Fitness System the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices may vary as much as +- 5°F (2°C).



<u>To Reduce the Risk of Injury.</u> The use of alcohol, drugs or medication before or during **Aquatic Fitness System** use may lead to unconsciousness with the possibility of drowning.



<u>To Reduce the Risk of Injury.</u> Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using an **Aquatic Fitness System**.



<u>To Reduce the Risk of Injury.</u> Persons using medication should consult a physician before using an **Aquatic Fitness System** because some medications may induce drowsiness, while other medications may affect heart rate, blood pressure, and circulation.



<u>To Reduce the Risk of Injury.</u> People with infectious diseases should not use **Aquatic Fitness System**.

2002 Owner's Manual



<u>To Reduce the Risk of Injury.</u> Wet surfaces can be slippery. To avoid injury exercise care when entering or exiting the **Aquatic Fitness System**.



<u>To Reduce the Risk of Injury.</u> Maintain water chemistry in accordance with manufacturer's instructions. Proper chemical maintenance of **Aquatic Fitness System** water is necessary to maintain safe water and prevent possible damage to **Aquatic Fitness System** components.



To Reduce the Risk of Injury. Use the Aquatic Fitness System straps and clip tie downs to secure the cover when not in use. This will help to discourage unsupervised children from entering the Aquatic Fitness System and keep the Aquatic Fitness System cover secure in high wind conditions. There is no representation that the cover, clip tie downs or actual locks will prevent access to the Aquatic Fitness System.



Never attempt to change the light without draining the water completely below the light fitting.



WARNING: **To Reduce the Risk of Injury.** 

**HYPERTHERMIA** – Prolonged immersion in hot water may induce hypothermia. A description of the causes, symptoms and effects of hypothermia are as follows:

- a. Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F or 37°C. The symptoms of hypothermia include drowsiness, lethargy and an increase in the internal temperature of the body. The effects of hypothermia include:
  - i. Unawareness of impending hazard;
  - ii. Failure to perceive heat;
  - iii. Failure to recognize the need to exit the Aquatic Fitness System;
  - iv. Physical inability to exit the **Aquatic Fitness System**;
  - v. Fetal damage in pregnant women, and
  - vi. Unconsciousness and danger of drowning.



WARNING: The use of alcohol or drugs can greatly increase the risk of fatal hypothermia in an **Aquatic Fitness System**.

2002 Owner's Manual

#### DO'S AND DON'T'S

#### Do's

- DO read all operating instructions.
- **DO** read, understand and follow all Safety, Danger and Warning instructions before use.
- **DO** test water temperature with your hand before entering to be sure that it is comfortable.
- DO keep the Aquatic Fitness System cover closed when the Aquatic Fitness System is not in use. This is also the key to economical Aquatic Fitness System operation.

#### Don't's

- DON'T allow horseplay or unsupervised use of your Aquatic Fitness System.
- DON'T block the equipment compartment vents. Blockage may cause damage to the Aquatic Fitness System equipment and will void the warranty.
- DON'T block or sit on the filter recess area.
- **DON"T** allow anyone to tamper or play with any of the safety or suction fittings of your **Aquatic Fitness System**.

#### **DANGER SIGN**

Every **Aquatic Fitness System** has been provided with a warning sign, which outlines safety precautions. Read and familiarize yourself with all warnings listed on this sign and install the sign in a conspicuous place accessible to all who use your **Aquatic Fitness System**.

This sign **must** be permanently placed in a location that is visible to the **Aquatic Fitness System** user. Replacement signs may be obtained from:

#### Dimension One Spas, Inc.

2611 Business Park Drive Vista, CA 92083 (760) 727-7727

Be sure to use your **Serial Number** whenever contacting your dealer or Dimension One Spas Inc. The **Serial Number** can be found on the bottom of the frame, beneath the skirt paneling, directly below the Top Side Control.



2002 Owner's Manual

## **Aquatic Fitness System Features**

Congratulations! You have purchased the finest Aquatic Fitness System available. Take the time to read these instructions carefully. When installed and maintained properly your Aquatic Fitness System will provide many years of enjoyable, trouble-free operation. If you have any questions, please contact your local authorized Aquatic Fitness System dealer.

#### **HydroTherapy Jets**

Special adjustable HydroTherapy Jets are included so you can relax and enjoy the pleasures of a spa within your **Aquatic Fitness System**.

#### **Swim Jets**

Special high volume swim jets are included for your swimming pleasure and can also be used to change the dynamics of your exercise programs.

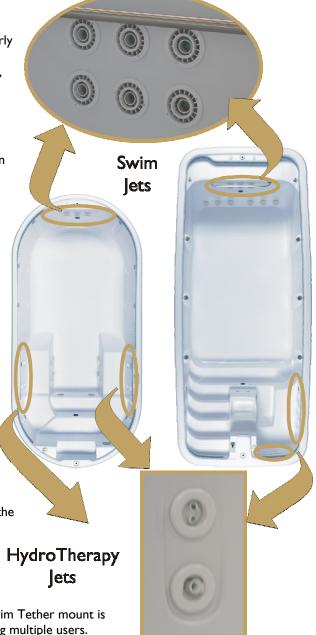
### HydroSport™ Aquatic Fitness Gear

The **HydroSport™** Swim System is included with the **Aquatic Fitness System**. This Swim System includes the Swim Tether and six high-volume Swim Jets. Some models also include a Swim Kick Bar.

You may also add the optional **HydroSport™** equipment and increase the benefits of therapeutic value of the jets with exercise.

The **Aquatic Fitness System** is designed to provide you with a wide range of aquatic exercise using additional components of the optional **HydroSport™** Aquatic Fitness Gear, such as the Rowing System, HydroTherapy Bars, and the Aquatic Fitness Bar.

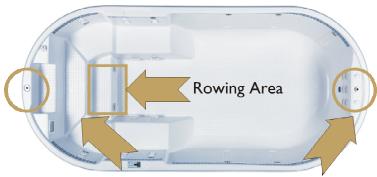
Because swimming and exercising must to be done in pairs for safety reasons, the **Aquatic Fitness System** is designed to accommodate an additional person for some exercises. Many of the **HydroSport** Aquatic Fitness Gear components may be used simultaneously. For example, a Swim Tether mount is located at both ends for your convenience in accommodating multiple users.



2002 Owner's Manual

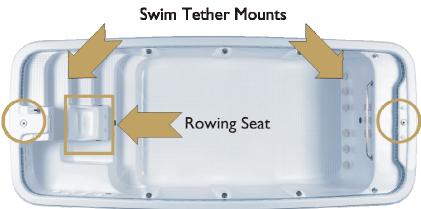
### **Rowing Seat**

Additionally, a rowing seat is designed into some models of the **Aquatic Fitness System** for use with the **HydroSport**<sup>TM</sup> Rowing System.



#### **Swim Tether Mounts**

Swim Tether Mounts are located at each end of the **Aquatic Fitness System**, so that you can use the optional Rowing System while your partner swims with the Swim Tether at the other end.



#### **Built-in OptiMounts**



Multiple OptiMount locations are installed to provide easy installation of the **HydroSport™** Aquatic Fitness Gear components.

#### **Multiple Training Stations**

Your **Aquatic Fitness System** is equipped with special OptiMounts to accommodate different **HydroSport™** exercise stations. Using the **HydroSport™** Aquatic Fitness Gear, you and your exercise partner(s) can rotate from station to station.

Details on using the included **HydroSport™** Swim System are in the accompanying **HydroSport™** Owner's Manual.

2002 Owner's Manual

#### **Aquatic Fitness System Equipment Pack**

The **Aquatic Fitness System** Equipment Pack contains all of the equipment required to provide you with a safe and pleasurable swimming or aquatic exercise experience. The equipment may be located under the skirt panels or in a remote location and contains the following components:

#### **Equipment Control System**

The electronic control system that governs all of the functions of your **Aquatic Fitness System** utilizes an advanced microprocessor and solid-state electronic switches to activate all user and maintenance options. A backlit, highly reliable liquid crystal display gives you a complete update of the **Aquatic Fitness System** status at any time of the day or night. Temperature setting, as well as control of lights, jets, filtration, and time of day display, are all instantly available from, and controllable at, the topside control panel.

#### Heater

An I Ikw 230v thermostatically controlled electric heater equipped with a high-limit temperature safety shut-off switch. The high-limit switch automatically shuts the heater when the temperature reaches I 18°F. It will automatically reset itself when the temperature within the heater assembly drops several degrees below the shut-off temperature of I 18°F. If the high-limit safety switch trips repeatedly, contact your authorized **Aquatic Fitness System** Dealer.



Depending on your particular installation, you may have elected to utilize a remotely installed gas heater to heat your **Aquatic Fitness System** water. Please review the applicable gas heater manufacturer's owner's manual for operating instructions.

#### **Shutoff Valves**

Valves located within the **Aquatic Fitness System**'s internal plumbing, which are used by service personnel to shut off water flow to the heater and pumps. All valves must be completely open during normal operations.

#### **Gravity Drain Valve**

Used to drain your **Aquatic Fitness System**.

#### **Primary Pump**

Produces water flow through the heater, filter, sanitation system and the main jets in the **Aquatic Fitness System**. The primary pump will operate automatically during filtration and heat cycles. This pump can also me operated manually by depressing the "jets" button on the topside control panel which will allow you to choose between two speeds

- Low speed for efficient water circulation during heating and filtration modes, and for gentle jet resistance or massage
- High speed for maximum jet action.

2002 Owner's Manual

#### **Swim Jet Pumps**

Produce water flow through the swim jets. The swim jet pumps are high-speed pumps only. The second and third pump buttons control these pumps.

#### **Air Volume Controls**

Regulate the amount of air that mixes with the water in the swim jets to create more volume in the swim flume. The more air you add to the jets, the stronger the current becomes. You may want to begin your swim training on the lowest setting and gradually work your way up to more volume.

#### **Dimension One Filtration System**



**Warning** - do not attempt opening filter while pumps are in operation!

#### **Servicing Filter Element**

Before you start, be sure to read the Filter Manufacturer's owner's manual that came with your system.

To clean or replace the filter element, shut off power to the **Aquatic Fitness System**, loosen the lock-ring, remove the filter cover and pull the filter element from the filter housing. Depending upon use, you may simply rinse the filter element with a garden hose, or you may be required to soak the element in Filter Cleaner Solution. Replace any worn or damaged filter elements. It is always good practice to have a spare filter element, so that you can perform filter maintenance at your convenience.



It is imperative that you read and become familiar with the Clean and clear filter system. Please read and follow the instructions in the attached Filter Manufacturer's owner's manual.

2002 Owner's Manual

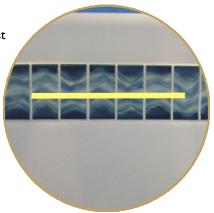
### **Using Your Aquatic Fitness System**

### **Before you Start**

To complete the installation of your **Aquatic Fitness System** you must add water. Your dealer cannot complete safety checks, test equipment operation, or conduct initial training until you have added water. The **Aquatic Fitness System** should be filled until the water level is approximately two inches above the bottom of the tile line.



DO NOT ATTEMPT TO USE YOUR **Aquatic Fitness System** UNTIL YOUR DEALER HAS COMPLETED ALL REQUIRED TESTS.

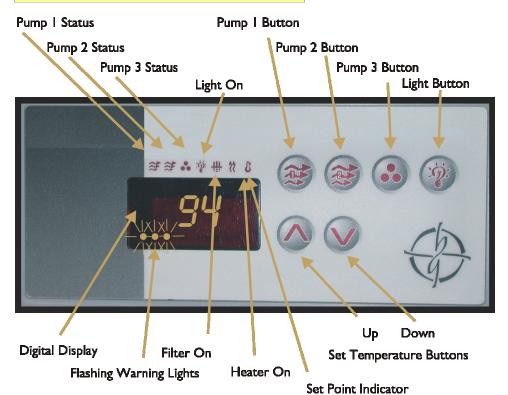


When your dealer has completed required testing and determined the **Aquatic Fitness System** is ready for your use, he will show you how to operate the Top Side Control and change the filter.

#### **Using Top Side Control**

The Top Side Control is used to monitor and manage your **Aquatic Fitness System**.

Pump I = Low, High, Off (HydroTherapy/Swim)
Pump 2 = On, Off (Swim Only)
Pump 3 = On, Off (Swim Only)



2002 Owner's Manual

**Pump I Button:** Press the button once to turn on Pump I to Low Speed. A second press will turn it to High Speed. A third press will turn the pump off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump I Arrow Indicator will appear on the display while the pump is running.



If the filter icon appears, a filtration cycle has begun and you will not be able to turn the pump off

**Pump 2 Button:** Press the key once to turn on Pump 2. A second press will turn it off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump 2 Arrow Indicator will appear on the display while the pump is running.

**Pump 3 Button:** Press the button once to turn on Pump 3. A second press will turn it off. A built-in timer will shut the pump off after 20 minutes of operation unless done so manually. The Pump 3 Arrow Indicator will appear on the display while the pump is running.

**Light Button:** Press this button to turn on the **Aquatic Fitness System** light; a second press will turn the light off. The Light Arrow Indicator will appear while the light is on. Some **Aquatic Fitness System** models have two lights controlled by this switch.

**Temperature Set Button:** Press the Up Arrow button to increase the desired temperature. Press the down arrow key to decrease the temperature. The temperature can be adjusted in 1°F increments from 59°F to 104°F (5°C to 40°). The new setting will remain on the display for 5 seconds as a confirmation.

**Set Point Arrow Indicator:** While you are adjusting the temperature, the Set Point Arrow Indicator will appear to let you know this is the desired temperature and not the actual temperature. After 5 seconds the display will return to the current temperature reading. When the temperature drops to 1°F below the set temperature, the heater will turn on until the temperature is 1°F above the set temperature.



The heater icon will appear while the heater is on and flash when there is a call for heat and the heater has not yet been activated.

**Flashing Warning Lights:** Three (3) Flashing Warning Lights will appear when problems have been identified. Refer to the Troubleshooting Guide for more information on what they mean and how to resolve the problem

#### **Programming the Filtration Cycle**

The filter cycle occurs twice a day (every 12 hours) and the duration is user programmable. Press and hold the light Key for approximately 5 seconds to display the current duration. Use the Temperature Set Keys to either decrease or increase the duration. The duration can be set from "0" (no filtration) to "12" (24 hours a day). Press the Light Key to save the new setting and to start the filtration cycle. The Filter Indicator will illuminate on the display under the filter icon during the active cycle.

To prevent overheating of the water, the filtration cycle will be suspended any time the temperature reaches 2°F above the set temperature. If the water cools to 1°F above the set temperature while the filtration cycle is still active (filter indicator flashing), the filtration cycle will reactivate. The filtration cycle will be suspended if the user enters the water and activates a pump motor manually. This is to prevent unnecessary operation of the ozonator. The cycle will be suspended for 40 minutes beyond the last manual activation of any accessory. The filter indicator will flash on the display while the filter cycle is suspended.

2002 Owner's Manual

#### **Start-Up Procedures**

- Test source water for Calcium (Hardness), Total Dissolved Solids (TDS) and metals (i.e. Iron, Copper, and Manganese). Consult with an authorized Dimension One Spas Dealer if you need assistance testing your source water. Knowing these three water conditions is important to properly balancing your Aquatic Fitness System water. Properly balanced water can greatly prolong the longevity of your Aquatic Fitness System's equipment and make it easier to maintain healthy clean clear water. The following three source water conditions typically only need to be tested once, however, you should retest if you move or your source water changes.
  - a) Calcium level should be between 200 and 400 ppm (parts per million). If it is not, use Dimension One Spas -- Liquid Hardness Increaser (Calcium Chloride) to raise the Calcium level accordingly. If Calcium is above 400 ppm Total Alkalinity may be lowered below 80 ppm to offset the presence of excess Calcium - refer to: "Langlier Saturation Index".

(Acceptable Range is 200 - 400 ppm)

b) TDS should be above 300 ppm. Example: If your Calcium is 200 ppm and TDS is only 200 then you may add Sodium Chloride (common table salt) to raise TDS to the 300 ppm (minimum ppm). I oz. of Sodium Chloride per 100 gallons of water will raise TDS by approx. 63 ppm.

(Acceptable range is 300 - 2000 ppm)

- c) If metals are present add recommended dosage of Dimension One Spas -- **Sequestrant**, while water is being added to the **Aquatic Fitness System**.
- 2) Test Total Alkalinity (TA) and pH using the Dimension One Spas Spa Test Strips (available in the Dimension One Spas -- Starter Kits). With the jets turned off, dip the Dimension One Spas Spa Test Strips 12-18 inches into the water and swirl three times for an accurate reading (if you are using a different brand of test strips be sure to follow the procedures as detailed on their container). TA should read between 80 120 ppm, and pH should read between 7.2 7.8. Please use the following guidelines should you need to make adjustments:
  - a) Water Condition: **Total Alkalinity above 120 ppm**Add 4 ounces of Dimension One Spas -- **pH/Alkalinity Decreaser** (Sodium Bisulfate), with the jets turned off, into the center of the **Aquatic Fitness System**. Wait I minute, and then turn jets on high speed for at least 5 minutes. Turn jets off, retest and repeat procedure until the TA reads close to 80 ppm.



When Total Alkalinity is above 120 ppm the pH will change slower than the Total Alkalinity.

2002 Owner's Manual

b) Water Condition: Total Alkalinity below 80 ppm Add 4 ounces of Dimension One Spas -- pH/Alkalinity Increaser (Sodium Hydrogen Carbonate) with the jets turned on high speed. Continue running jets on high speed for at least 5 minutes. Turn jets off, retest and repeat procedure until the TA reads close to 80 ppm.



When Total Alkalinity is below 80 ppm the pH will change faster than the Total Alkalinity.

- Water Condition: **pH above 7.8**First, test and adjust Total Alkalinity per the above instructions then test and balance the pH. Add I ounce of Dimension One Spas -- **pH/Alkalinity Decreaser** with the jets turned to high speed. Continue running jets on high for at least 5 minutes. Turn jets off, retest and repeat procedure until the pH reads between 7.2 7.8.
- d) Water Condition: pH below 7.2 First, test and adjust Total Alkalinity per the above instructions then test and balance the pH. Add I ounce of Dimension One Spas -- pH/Alkalinity Increaser with the jets turned to high speed. Continue running jets on high for at least 5 minutes. Turn jets off, retest and repeat procedure until the pH reads between 7.2 – 7.8.



Two tablespoons are approximately equal to one ounce and three teaspoons are approximately equal to one tablespoon.

- 3) Add Sanitizer.
  - a) If using Chlorine, add the 2oz. packet of Chlorine included with the Aquatic Fitness System's owner's kit. Run jets on high for at least 5 minutes. Monitor Chlorine level with Dimension One Spas -- Spa Test Strips (available in Dimension One Spas -- Chlorine Spa Starter Kit) and maintain a residual of I 3 ppm.
- 4) After day one, shock the water with 2oz. of Dimension One Spas -- **Shock Treatment** (Potassium Monopersulfate) with jets running on high speed. Continue running jets on high speed for at least 5 minutes.
- 5) After day two, add Dimension One Spas -- **Enzyme Formula** to reduce water line build-up normally associated with body oils. Run jets on high speed for at least 5 minutes.

2002 Owner's Manual

#### **WATER TESTING:**

We recommend testing **Aquatic Fitness System** water twice a week with Dimension One Spas -- **Spa Test Strips.** These are available from an authorized Dimension One Spas Dealer.



Adjust total alkalinity first, when TA is in the proper range, adjust the PH, then check and adjust the sanitizer level.

#### **TOTAL ALKALINITY:**

Total Alkalinity is a measurement of the water's ability to resist changes in pH. TA (Total Alkalinity) affects and buffers the pH of the water. With TA above I20 ppm, pH becomes difficult to adjust. With TA below 80 ppm, pH becomes unstable and is more difficult to keep in the ideal range. Proper TA levels also allow other chemicals to perform optimally.



Follow directions in the Start-Up procedures section for adding Decreaser and Increaser.

#### pH CONTROL:

All bodies of water have pH (potential Hydrogen), which is a measurement of the Hydrogen ion concentration in the water. A pH reading of 7.0 is considered neutral, a lower reading is considered "acidic" and a higher reading is considered "basic". The proper pH for spa water is between 7.2 – 7.8. High pH (above 7.8) can reduce sanitizer efficiency, cloud the water, promote scale formation on surfaces and equipment, and interfere with filter operations. When pH is too high, add Dimension One Spas -- pH/Alkalinity Decreaser. Low pH (below 7.2) is equally damaging and can cause equipment corrosion, water that is irritating, and rapid sanitizer dissipation. When pH is too low, add Dimension One Spas -- pH/Alkalinity Increaser.



Follow directions in the Start-Up procedures section for adding Decreaser and Increaser.

2002 Owner's Manual

#### **CHLORINE (SODIUM DICHLORO-S-TRIAZINETRIONE):**

Chlorine can be used as a water sanitizer for **Aquatic Fitness Systems**. However, it is pH sensitive. To be effective, a **Aquatic Fitness System's** pH range must be maintained between 7.2 – 7.8. pH levels above 7.8 reduce Chlorine's efficiency and pH levels below 7.2 causes Chlorine to dissipate rapidly.

The best Chlorine for **Aquatic Fitness Systems** is granular "Di-Chlor" (Sodium Dichloro-s-triazinetrione), such as Dimension One Spas – **Concentrated Chlorine Granules**. It dissolves quickly in moving water and has a pH of 6. Be sure to add Chlorine while the jets are running and let the jets run on high speed for at least 5 minutes.

Use Dimension One Spas – **Spa Test Strips** to maintain a reading of I – 3 ppm of Chlorine. If the reading is below I ppm, the level should be raised before the **Aquatic Fitness System** is used. If the reading is above 3 ppm, it should be allowed to drop to the proper range before use. Read the instructions on the Dimension One Spas – **Concentrated Chlorine Granules** container carefully, or consult with an authorized Dimension One Spas Dealer if having difficulty adjusting the Chlorine level.



Shocking Chlorine sanitized **Aquatic Fitness System** water at least once a week will help keep water clean, clear, and odor free by reducing the build-up of "Chloramines".



Never use Trichloro or Calcium Hypochlorite.

#### SHOCK TREATMENT (POTASSIUM MONOPERSULFATE):

Even with regular sanitization, "shocking" with non-chlorine Dimension One Spas – **Shock Treatment** is still necessary. "Shocking" with non-Chlorine, Dimension One Spas – **Shock Treatment** is recommended over "shocking" with Chlorine (also known as "super chlorination") because it does not add additional sanitizer to the water. "Shocking" quickly oxidizes contaminants and burns out body waste such as perspiration, hair spray, lotions, etc. that cannot be removed by the filter. This waste build-up reduces the power of the sanitizer making the water dull and irritating to the eyes and skin. This waste build-up may also produce an unpleasant odor. "Shocking" is also effective in reducing Chloramines. Follow the instructions listed on the label of Chloramines.

Helpful guidelines for shock treatment:

- 1. If using **Aquatic Fitness System** 1 3 times a week shock the **Aquatic Fitness System** with loz. per 100 gallons once per week.
- 2. If using **Aquatic Fitness System** 4 6 times a week shock the spa with loz. per 100 gallons twice per week.



To maximize the effectiveness of shocking with non-chlorine Dimension One Spas -- **Shock Treatment** we recommend shocking at least 24 hours ahead of, or 24 hours after adding any other chemicals.

2002 Owner's Manual

#### **SUPER CHLORINATION:**

Super chlorination also quickly oxidizes the contaminants and burns out body waste such as perspiration, hair spray, lotions, etc. that cannot be removed by the filter. This waste build-up reduces the power of the sanitizer making the water dull and irritating to the eyes and skin. This waste build-up may also produce an unpleasant odor. When this occurs, "Free – Chlorine" has become "Chloramine" which is ineffective for sanitizing. Super chlorinating can eliminate this. Raising the Chlorine level to 10x (ten times) the "Combined Chlorine/Chloramine" ppm level (existing Total Chlorine minus Free Chlorine) for at least 24 hours will act as an adequate treatment.



Do not use the **Aquatic Fitness System** until the Chlorine level of the water has dissipated to I-3 ppm. We also recommend waiting until the water's Chlorine level has returned to I-3 ppm before adding any other chemicals as this will help maximize their effectiveness.

#### **ENZYME:**

Some wastes (such as body oils) may not be filtered and can result in water lines and other aesthetically undesirable accumulations in the water. Using Dimension One Spas – **Enzyme Formula** whenever filling the **Aquatic Fitness System**, and weekly thereafter, will help reduce these build-ups. This mild enzyme is a derivative of plants and is an effective alternative to stronger water clarification chemicals. It uses natural enzymatic processes to "digest" excess waste in the water.



Water lines can be a result of oils present in the water supply. We recommend checking the filter 24 hours after filling. If the filter is discolored, remove and rinse.

#### **WATER CLARIFIERS:**

Use a Polymer based clarifier that is Ozone compatible. Be careful to follow dosage instructions. Using more than the recommended dose may cause the water to turn milky.



To clear most cloudy water situations, test and adjust for proper TA/pH levels and shock with approximately 4oz. of Dimension One Spas -- **Shock Treatment**, and/or 2oz. of Dimension One Spas -- **Concentrated Chlorine Granules**.

2002 Owner's Manual

#### **SEQUESTERANTS**

#### (AGENTS FOR CONTROLLING STAINS AND SCALE):

A weekly dose of Dimension One Spas -- **Sequestrant** should help minimize staining caused by metals, and scale caused by excessive Calcium (over 500 ppm). Dimension One Spas -- **Sequestrant** should be added to the water upon initial fill or whenever changing the water. This will suspend metals and Calcium in the water and increase the life of the equipment.



Another option for reducing metals present in source water is to use Dimension One Spas -- Spa Water Pre-filter Conditioner. This two-stage filter/conditioner effectively reduces metals (activated charcoal filter) and kills bacteria (Vision) found in source water. It is effective for approximately 3200 gallons of water and can also be used whenever topping off the Aquatic Fitness System's water level.

#### **FOAM REMOVER:**

Soap residue from a bather's body, hair, and swimsuit combined with rapid circulation of hot water may eventually cause foaming in an **Aquatic Fitness System**. Dimension One Spas -- **Foam Remover** will suppress foam but cannot remove soap from the water. When foaming occurs, add a small amount of Dimension One Spas -- **Foam Remover** to the base of foam area. Use only the amount necessary to remove the foam. If foam remains a problem, change the water.



Excessive foaming can be an indication that water Hardness is below 200 ppm. Test and, if necessary, raise Hardness with Dimension One Spas -- **Liquid Hardness Increaser**. Rinsing swimsuits thoroughly with fresh water after laundering will also help reduce foaming by minimizing the introduction of laundry detergents into the water.

2002 Owner's Manual

### **Care For Your Aquatic Fitness System**

#### **Draining Your Aquatic Fitness System**

Your Aquatic Fitness System is drained by way of a gravity drain that you connect to a garden hose.



You may purchase an optional submersible pump from your **Aquatic Fitness System** dealer or <a href="https://www.dlspas.com">www.dlspas.com</a> to provide quicker drainage.

Do not drain water onto your lawn or plants unless all of the bromine or chlorine has dissipated from the **Aquatic Fitness System** water. The sanitizer in your **Aquatic Fitness System** water will dissipate quickly by leaving the **Aquatic Fitness System** cover off and exposing the water to direct sunlight. Drain and replace your **Aquatic Fitness System** water every three months. For heavy **Aquatic Fitness System** use, you may wish to change the water more frequently.

#### Filter Cleaning

Always turn off the power to the **Aquatic Fitness System** before cleaning the filter elements. It is recommended that filters be cleaned every month as preventative maintenance. Clean the cartridge with a high-pressure garden hose. Every other cleaning, soak the cartridge in a filter cleaning solution, then rinse it thoroughly, and reinstall. After cleaning, run the pump for a few minutes at high speed, then return to the heating mode.



Be sure to follow the instructions in the Filter Manufacturer's manual when changing or cleaning your **Aquatic Fitness System** filter.

### **Light Bulb Replacement**

All **Aquatic Fitness Systems** are equipped with a 12-volt light(s) using a GE912 bulb. To change the bulb, turn the power off and drain the **Aquatic Fitness System** below the level of the light. Using the special tool provided in the owner's manual packet, unscrew the cover for the light housing. Remove the old bulb and install the new bulb. Screw the cover for the light housing back into the female receptacle. Check to ensure proper operation of the new bulb before refilling the **Aquatic Fitness System**.



Never attempt to change the light without draining the water completely below the light fitting.

You may use the same process to replace the GE912 bulb with Dimension One Spas' LED multicolor long-life light kit. See your authorized **Aquatic Fitness System** dealer for details or visit our Virtual Showroom <a href="https://www.dlspas.com">www.dlspas.com</a>

2002 Owner's Manual



- Do not attempt to remove the light housing cover without the special tool. If you are not able to locate it, contact an **Aquatic Fitness System** Service Representative to have one sent.
- Be sure the O-ring is not damaged and is properly in place when replacing the lens.
   Contact an Aquatic Fitness System Service Representative if a replacement O-ring is needed.

### Care for the Aquatic Fitness System Surface

The **Aquatic Fitness System** comes with a very high quality finish. Stains and dirt will generally not adhere to the surface. It is recommended that the entire shell surface be cleaned with Water Line Cleaner. You may also use ph/Alkalinity Increaser or mild cleaners like "Soft Scrub." Be sure to thoroughly rinse the shell. After cleaning, you will want to restore the **Aquatic Fitness System**'s shell to its original luster by using Poli-Gloss.



Do not use "409" type cleaners, Citrus cleaners or other caustic solutions as they may damage the **Aquatic Fitness System** shell surface and void the warranty. If you are using baking soda to clean your **Aquatic Fitness System** shell, be careful not to get it on any surrounding wood decking, as it may bleach or stain wood.

#### Care for the Aquatic Fitness System (Optional) Wood Cabinet

When properly cared for, the optional wood cabinet of your **Aquatic Fitness System** will maintain its beauty for many years. All woods react differently to the elements by expanding and contracting. To protect your wood finish, re-stain it every 3-6 months with Redwood or Coastal Gray Stain, which serves as a good sealing agent for the wood. Please note that the cabinet is not warranted against reaction to natural weather conditions. The wood must be properly maintained.



Should your **Aquatic Fitness System** cabinet require re-conditioning, try Wood Refurbishing Kit.

#### Care for the Aquatic Fitness System (Optional) Synthetic Wood Surface

This surface is unaffected by most substances, and will not absorb moisture. To maintain the original finish, clean with soap and water. No sealing or painting is required.



Please note that the cabinet is not warranted against reaction to natural weather conditions.

2002 Owner's Manual

#### Care for the Aquatic Fitness System Cover

The thermal cover for your Aquatic Fitness System is an extremely durable foam insulated product. See the manufacturer's literature for proper cleaning instructions. When the Aquatic Fitness System is not in use, it is recommended that the cover tie downs always be utilized to discourage unsupervised children and minimize heat loss. Small locks are also available for the cover tie downs. In either case, these locking methods are not considered adequate to keep unauthorized people from entering the Aquatic Fitness System.

#### **Special Cold Weather Instructions**

Since your Aquatic Fitness System is foam insulated and has automatic freeze protection, Winter can be one of the best times of the year to enjoy the warmth of your Aquatic Fitness System. Because it is very difficult to get all the water out of the plumbing lines, we do not recommend draining your Aquatic Fitness System for the winter. However, if you must shut down your Aquatic Fitness System during the winter, we recommend you winterize it as follows:

- If you decide to drain the Aquatic Fitness System, drain it as completely as possible. Use a wetvac and a high-pressure blower to evacuate as much water as possible. It is important to get as much water out of the plumbing lines and equipment as possible.
- When the Aquatic Fitness System is completely drained, leave the hose bib open and open all of the pump drain valves located on the bottom front side of each pump. Also, loosen all pump unions and fittings to allow air and water to expand freely within the system. This will help prevent waterfreezing expansion from damaging pipes and fittings. The key is to eliminate any sealed areas in the systems that may contain water.
- As an additional precaution against freezing, you may purchase non-toxic swimming pool anti-freeze solution from your Authorized Aquatic Fitness System dealer. Instructions on its use are available from your Aquatic Fitness System dealer.
- If you receive heavy snowfall during winter months, you may want to build a cover cap for the Aquatic Fitness System cover. This can be done with 3/4" thick plywood and a few supporting 2" x 4" cross members.



Your **Aquatic Fitness System** is equipped with automatic freeze protection. However, power outages can cause your Aquatic Fitness System equipment system to freeze quickly. During freezing conditions, check your Aquatic Fitness System frequently to ensure proper operation. Always check your Aquatic Fitness System after any power failure to ensure that it is operational. Draining and not operating your Aquatic Fitness System disables this feature.

For additional information about winterizing your Aquatic Fitness System, contact your local Aquatic Fitness System dealer.

2002 Owner's Manual

### WARRANTY SERVICE INFORMATION

Your **Aquatic Fitness System** warranty gives you specific coverage. Be sure to read the enclosed warranty sheet carefully.

The warranty does not cover problems arising from misuse, abuse or neglect, and it does not cover problems caused by improper installation or "perceived" problems caused by failure to read the **Aquatic Fitness System** owner's manual. A service charge will be made if a service call is made for any of the following:

- Equipment failure due to improper/inadequate electrical service. All systems require dedicated circuits as described in this manual. Low voltage can cause equipment failure and seriously shorten equipment life. It is the owner's responsibility to ensure proper electrical service is available.
- 2) Failure of **Aquatic Fitness System** to reach desired temperature because the set temperature is not turned up high enough. Maximum thermostat setting is approximately 104°F.
- 3) Burned out Aquatic Fitness System light. Bulbs are not covered.
- 4) Aquatic Fitness System water chemistry is the responsibility of the Aquatic Fitness System owner. Cloudy, dirty or chemically unbalanced water and cleaning of the Aquatic Fitness System filter are also the responsibility of the Aquatic Fitness System owner.
- 5) Aquatic Fitness System shell or equipment damage caused by improper water maintenance. Serious damage can be caused if your hot tub water is not maintained carefully and correctly.
- 6) Poor jet action because the jet selector valve is in the middle position. For full performance, turn the jet selector valve to either the full clockwise or full counterclockwise position.



**WARNING:** Do not block air intakes located on the front left corner underneath the **Aquatic Fitness System** and under the equipment access panel. Resulting malfunctions are not covered under warranty.

# **Aquatic Fitness System** 2002 Owner's Manual

# **Glossary of Terms**

Term	Definition
Air Relief Valve	Used for purging air from the filter system whenever servicing the filter, during initial startup, and whenever you drain and fill the <b>Aquatic Fitness System</b> .
Air Volume Controls	Increase or decrease the amount of air drawn through the jets. The intensity of jet action is varied by adjusting the amount of air mixed with the water forced through the jets. More air produces a more vigorous massage. Since air bubbles tend to cool the <b>Aquatic Fitness System</b> , the air controls should be closed while the <b>Aquatic Fitness System</b> is heating.
Top Side Control	Used to monitor and manage temperature, pumps for jets, light, system clock, automatic filtration cycles, and other advanced functions. A backlit, highly reliable liquid crystal display gives you a complete update of the <b>Aquatic Fitness System</b> status at any time of the day or night.
Bleeder Valve	A small valve used to relieve or expel air from the <b>Aquatic Fitness System</b> 's plumbing or pump.
Circulation Pump	A pump that circulates the water in the <b>Aquatic Fitness System</b> continuously.
Diverter Valve	Allows you to select either the therapy jets or swim jets with pump number I, simply turn the valve to the desired position.
Dry Firing	Turning the heater element on when there is no water in the heater.
Equipment Access Panel	Provides access to your <b>Aquatic Fitness System</b> 's equipment for a qualified service technician.
Equipment Control System	The electronic control system that governs all of the electrically operated components of your <b>Aquatic Fitness System</b> utilizes an advanced microprocessor and solid-state electronic switches to activate all user and maintenance options.
Filter Cartridge	Your <b>Aquatic Fitness System</b> 's filters have been designed so that you may repeatedly clean and maintain the filter cartridge as needed. The cartridge is constructed of woven polyester rather than paper to ensure long life and proper filtration.
Filter Housing	The filter canister that houses the filter cartridge. It encloses your <b>Aquatic Fitness System</b> 's cartridge filter element. This filter cartridge removes dirt, oil and fine particles from your <b>Aquatic Fitness System</b> 's water. The lock ring holding the filter cover in place and the air relief valve in the filter cover must be on and closed when the <b>Aquatic Fitness System</b> is running. DO NOT OVER-TIGHTEN THE LOCK RING OR THE AIR RELIEF VALVE. Also do not open filter housing while the <b>Aquatic Fitness System</b> is running as the filter is under pressure.

# **Aquatic Fitness System**Glossary of Terms

Term (Cont.)	Definition
Gfci-Ground Fault Circuit Interrupter	A type of Circuit Breaker that automatically disconnects power to the <b>Aquatic Fitness System</b> when there is an electrical power leakage to ground.
Gravity Drain Valve	Used to drain your <b>Aquatic Fitness System</b> .
Halogens	Free chlorine, bromine or iodine ions that are very strong oxidizers used to sanitize water.
Heater	An I Ikw 230v thermostatically controlled electric heater equipped with a high-limit temperature safety shut-off switch. If the high-limit switch trips, it can be reset by pressing button on the Top Side Control, but only when the temperature within the heater assembly drops to I I 0°F. If the high-limit safety switch trips repeatedly, contact your authorized <b>Aquatic Fitness System</b> Dealer.
Jets	Return the water into the <b>Aquatic Fitness System</b> from the equipment. The HydroTherapy Jets produce a turbulent flow of water mixed with air to provide a concentrated body massage. The Swim Jets produce a high volume flow to provide a rapid current for swimming.
Light	Illuminates the <b>Aquatic Fitness System</b> vessel.
Load Sharing	When the circuit breaker size is smaller than the total power needed to operate both the heater and the jet pump at the same time, load sharing automatically turns off the heater when a jet pump is turned onto high speed.
Lock-Ring	Mechanism that affixes filter cover to filter housing. To remove cover, turn lock-ring counter-clockwise until it disengages with filter housing. When replacing the filter cover, turn lock-wring clockwise to firmly secure the cover.
Ozone Generator	A specialized ultraviolet light that changes oxygen into ozone for use in the water sanitation process.
Pressure Switch	Safety device(s) that sends a signal to the electronic control system that there is adequate water flow to turn the heater on.
Primary Pump	Produces water flow through the heater, filter, sanitation system and the main jets in the <b>Aquatic Fitness System</b> . The primary pump will operate automatically during filtration and heat cycles. This pump can also me operated manually by depressing the "jets" button on the topside control panel which will allow you to choose between two speeds  • Low speed for efficient water circulation during heating and filtration modes, and for gentle jet resistance or
	massage action.
	High speed for maximum jet action.

# **Aquatic Fitness System**Glossary of Terms

Term (Cont.)	Definition
Pump Union	A removable fitting that connects the pump to the <b>Aquatic Fitness System</b> 's plumbing.
Selector Valve	Located on the top edge of the <b>Aquatic Fitness System</b> , it diverts jet power from one area of the <b>Aquatic Fitness System</b> to another.
Serial Number	Please use the serial number in communication with your dealer.
Servicing Filter Element	To clean or replace the filter element, shut off power to the <b>Aquatic Fitness System</b> , loosen the lock-ring, remove the filter cover and pull the filter element from the filter housing. Depending upon use, you may simply rinse the filter element with a garden hose, or you may be required to soak the element in Filter Cleaner Solution. Replace any worn or damaged filter elements. It is always good practice to have a spare filter element, so that you can perform cleaning at your convenience.
Skimmer Door	Removes floating debris from the water surface. This inlet provides a water return path to your <b>Aquatic Fitness System</b> 's equipment and flow through the filter element.
Slice Valves / Shutoff Valves	Valves located within the <b>Aquatic Fitness System</b> 's internal plumbing, which are used by service personnel to shut off water flow to the heater and pumps. All valves must be completely open during normal operations.
Suction Fitting	Fitting located in the footwell of the <b>Aquatic Fitness System</b> where water is pulled from the <b>Aquatic Fitness System</b> to the jet pump.
Swim Jet Pumps	Produce water flow through the swim jets. The swim jet pumps are single speed pumps that operate on high speed. The second and third pump buttons control the booster pumps.
Temperature Sensor	Measures the temperature of the water inside the <b>Aquatic Fitness System</b> . This temperature sensor is used to control the <b>Aquatic Fitness System</b> heater and the temperature is displayed on the <b>Aquatic Fitness System</b> side control panel.
Unions	Connects the <b>Aquatic Fitness System</b> plumbing to the equipment. The unions allow a service technician to remove equipment without cutting plumbing.
Venturi	A device used to inject air into the water.
Water Return Fittings	In addition to the skimmer, the water return fittings provide water inlets to your <b>Aquatic Fitness System</b> 's equipment. DANGER – Never Block Or Remove Any Of The Water Return Fittings.
Weir Skimmer	A floating water referencing device that skims debris from the surface of the water.

# **Aquatic Fitness System**Glossary of Terms

# Aquatic Fitness System Troubleshooting Guide

# **Troubleshooting Guide**

## **Heating System**

Symptom	Problem	Corrective Action	
Does not heat	I. Temperature setting is too low	I. Turn up the thermostat	
	2. Dirty filter	2. Clean filter	
	3. Flow switch out of adjustment	3. Call for service	
Too hot	Temperature setting is to high	I. Turn down the thermostat	
	2. High limit tripped	2. Call for service	
Flashing temperature of 34°F or 134°F appears on the display	Possible temperature sensor failure	Call for service	

# **Electrical System**

Symptom	Problem	Corrective Action
Will not turn on - in any mode	No power	Check circuit breaker and/or GFCI
Turns on by itself	Normal automatic daily power filtration, or anti-freeze cycle	No action required
Light is out	Burned out bulb	Replace bulb
Pump shuts down unexpectedly while in use	Automatic 30-minute timer has shut pump off	Push JETS pad again to start another     30-minute cycle
	Motor over-heated and automatic protective device has shut down pump(s)	If pump(s) will not restart when JETS pad is pushed, call for service  Make sure that the equipment panel vent area is not blocked. Vent blockage can cause serious damage to your equipment.
3 flashing LEDs appear on the Top Side Control	Possible sensor errors	Check water level     Clean filter  If problem persists:      I. Turn off power     2. Restart the system  If problem persists:  Call for service

# **Aquatic Fitness System** Troubleshooting Guide

## Water System

Symptom	Problem	Corrective Action	
Pulsating jets	Water level too low	Fill with water to 1" to 2" above bottom of the tile line	
No Jet Action, or action is poor	HydroTherapy Jets closed	I. Open Jets	
	2. Diverter Valve turned	Turn the Diverter Valve clockwise or counter clockwise	
	3. Dirty Filter	3. Clean Filter	
	4. Air lock	Loosen pump union to allow air to escape	
	5. Gate valve closed	5. Open gate valve	

# 3 Flashing Lights

Symptom	Problem	Corrective Action	
### # 8   X X /   X X /	High Temperature Protection: If the water temperature exceeds I 12°F at the Temperature Sensor, the heater and all other outputs will shut off.	If the temperature fails to drop, or the heater or other outputs fail to stop as indicated, call the dealer.	
	If the water temperature exceeds 119°F at the Hi-Limit Sensor, only the heater will be shut off. All other outputs will continue to operate.  After the water has cooled down, power to the Aquatic Fitness System must be cycled on, then off, to reset the system.	If the temperature does not seem to be elevated, the error indication may have been caused by poor water flow or electrical line interference (thunder storms, voltage surges, etc.) Simply reset and monitor the system.	
<b>59</b>	Smart Winter Mode: If the system detects conditions below 59°F, the system will automatically activate the Smart Winter Mode for a period of 24 hours. In this mode, if a pump has not been powered up in the last two hours, the system will turn it on for one minute to prevent freezing. The Filter Mode Light	No action necessary, unless the water temperature continues to drop and the systems fails to activate. If this happens, you should manually activate the heater and pumps, if freezing could be a problem, then call the dealer for service.	
/  A A	indicator will flash while the pump is running in this mode.  If the spa water temperature drops below 49°F, the pump and heater will be turned on for a period of 2 minutes, or until the water reaches 50°F. All functions (except the alarms) will be disabled while the freeze protection is active.	If you notice your pumps coming on every 2 hours, this is most likely the cause. This will continue for a 24-hour period. This is normal and is the Systems protection against freezing.	
IXIXI IXIXI	Temperature Sensors:  If 33°F appears constantly on the display, or if the temperature displayed greatly differs from the actual temperature of the water, your temperature sensor may be in need of service.	Call the dealer for service.	

# **Aquatic Fitness System** Troubleshooting Guide

Symptom (Cont)	Problem	Corrective Action	
	Pressure or Flow Switch Activated: A pressure or flow switch has been installed to monitor the system. If 3 lights are flashing in the bottom of your display, and no pump(s) is operating, turn the pump(s) on. If the 3 flashing lights disappear, this indicates that the pressure or flow switch was activated although there was no water flow.	Call your dealer for service.	
	Pressure or Flow Switch Not Activated:  If 3 lights are flashing in the bottom of your display, and a pump(s) is operating, turn the pump(s) off. If the 3 flashing lights disappear, this indicates that the pressure or flow switch was not activated although there was water flow.	Call your dealer for service.  A dirty filter limiting the water flow will also cause this error message to appear.  When the pump is turned on, there is a 7-second delay before the system will start to auto check the pressure or flow switch.	

# **Aquatic Fitness System** Troubleshooting Guide