# ARUBA SPAS

# OWNERS MANUAL



ARUBA SPAS Box 2266 Station R Kelowna, BC V1X 4K6 1-800-609-2227

# INTRODUCTION

Dear Aruba Customer,

Thank you for purchasing an Aruba Spa. At Aruba Spas our philosophy is simple, build the best spa, back it with an excellent warranty and with comprehensive customer service. The 2004 Aruba Spa includes many features, which are designed to ensure that your spa is dependable and simple to operate. This manual will

guide you through the set-up, installation and startup of your new spa. It will explain how operate and care for vour spa. We believe reading this entire owner's manual is the simplest

way to ensure the full enjoyment of your new Aruba Spa. It is most important that you read and follow the safety instructions included in this manual. You should become familiar with all of the safety guidelines listed in this manual and make sure you follow them while using your spa.

At Aruba what we know

how to do best is build spas. We have learned that quality through simplicity is the best way to build a spa. We believe that knowing how your spa is built will make installing and operating it easier, so the first part of this manual explains how your spa is built. Please take the time to read this section of your owner's manual.

It is important that you keep this manual for reference

purposes. We have tried to make sure this manual includes all the information you will need about your spa.

If you have any further questions or need additional inform a t i o n

please call one of our customer service repre-sentatives at 1-800-609-2227. We are certain that you will find owning an Aruba Spa as relaxing as using it.

The highlighted terms are used throughout this manual to indicate facts that are particularly important for your safety, and for maintaining your spa in good working order.

#### **HAZARD**

Denotes risk of personal injury.

#### WARNING

Denotes a circumstance that could cause personal injury or a circumstance where damage to the spa's surface, structure or equipment could occur.

#### **IMPORTANT**

Denotes extremely important information.

# HOW YOUR ARUBA SPA IS BUILT

At Aruba, building spas is our passion. We believe that quality through simplicity is the best way to build a spa. Over the years we have refined our spa construction process to achieve the best results. We are proud of the results that we have achieved using the methods described below and hope that knowing how your spa is made will make installing and operating it easier.

The building process starts with the shell of the spa. At Aruba Spas we use the thickest acrylic sheet available. Using a thicker acrylic sheet is important because the spa shell is formed by placing a heated acrylic sheet over a vacuum-former, which molds it into the shape of the spa. As the acrylic sheet is formed it stretches and thins. Using a thicker acrylic sheet ensures a stronger and more durable surface.

Fiberglass backing is then applied to provide structural support for the acrylic shell. A triple bond system is used to ensure a complete bond is formed between the acrylic spa shell and the fiberglass structural support. A unique type of resin is applied as a skin coat to the outside surface of the spa shell. This skin coat is then backed by an additional layer of fiberglass reinforced resin. The skin coat forms a chemical bond between the acrylic spa shell and the fiberglass structural support. This triple bond system ensures the long lasting integrity of both the spa shell and spa surface.

After fiberglassing, the holes for the jets are precision drilled through the spa shell. The rough surface of the fiberglass backing around the holes is then machined and smoothed. We take this extra step in manufacturing to ensure the jets seat against a smooth surface for a tight fit and seal.

The plumbing system is then installed and lines are attached to each of the jets. A manifold is installed at each junction between the main plumbing line and the lines leading to the jets. Running a short line from the manifold directly beneath the jets provides the best water pressure and allows the jets to operate at their full capacity. Once the spa is plumbed it is water tested as part of our quality inspection process to ensure that there are no leaks.

The spa shell is then lowered into the framed cabinet or "spa skirt". At Aruba Spas we use this innovative process to ensure the structural integrity of our spas. Wooden supports

are then custom fitted by hand to the areas underneath the seats and stairs to provide additional strength to these areas. This process recognizes that every spa is not identical and ensures individual inspection and custom fitting of each spa.

The spa shell is then insulated with 2 LB closed cell foam. As Aruba Spas are made in Canada we know Canadian weather conditions. With this in mind we use enough insulation to get the maximum obtainable R factor from our insulating foam. The use of closed cell foam ensures that water cannot be absorbed into the insulation. The insulation also locks all supports into place and secures the spa to the spa frame.

The electronic operating system, which controls the heating, filtration and lighting systems is then installed and pre-tested in our factory. We have selected a well designed operating system that is easy to use and features a number of energy-saving options.

The final touch to the spa is the attractive spa skirt with removable corners and side panels fitted onto the frame to allow easy access to all plumbing. The spa skirt is made from solid tongue-in groove, red cedar and is designed to use shorter lengths of wood that may otherwise not have been utilized. We only use wood that has been harvested from select-cut forests using environmentally responsible techniques.

# **GETTING STARTED**

Your spa comes complete with the following items:

- Aruba Spa Owner's Manual
- 50 amp GFCI Breaker
- Instructional DVD/Video
- Tapered Grey Spa Cover with locks and Spa Cover Limited Warranty.
- Aqua Flo Flow-Master Owners Manual
- Aruba Spas Limited Warranty Registration
- Allen Key

Please check to make sure you have received all these items. In addition, if you have ordered any extra accessories please check to make sure that they have been included with your spa.

# TOOLS REQUIRED FOR INSTALLATION

- Voltmeter
- Ammeter
- Ohmmeter
- Screwdrivers (Phillips & flat head)
- 2 wire restrainers
- Wire cutters
- Wire strippers
- #6 AWG 3 wire (plus ground)

# ITEMS REQUIRED FOR THE INSTALLATION OF YOUR SPA

- At least four people are required at time of delivery to place your spa into position.
- 220 Volt Electrical Service
- An Electrician to do the electrical connection.
- 50 Amp GFCI circuit breaker (included with your spa, see page 8)
- An Allen Key to open and remove the access panel. (supplied by Aruba Spas)

# IMPORTANT SAFETY INSTRUCTIONS

- 1) Children should not use spas or hot tubs without adult supervision.
- 2) Do not use spas or hot tubs unless all suction guards are installed to prevent body hair entrapment.
- 3) People using medications and/or who have an adverse medical history should consult a

before physician using a spa or hot

- 4) People with infectious diseases should not use a spa or hot tub.
- 5) To avoid injury, exercise care when entering or leaving a spa or hot tub.
- 6) Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.
- 7) Pregnant or pospregnant sibly women should consult a physician before using a spa or hot tub.
- 8) Water temperature in excess of 40 degrees C (104 degrees F) may be injurious to your health.
- 9) Before entering a spa or hot tub, check the water temperature readout on the topside control.
- 10) Do not use a spa or hot tub immediately following strenuous exercise.

- 11) Prolonged immersion in a spa or hot tub may be injurious to you health.
- Do not permit electric appliances (such as light, telephone, radio, or television) within 1.5 meters (5 feet) of a spa or hot tub.
- 13) Maintain water chemistry in accordance with manufacture's instructions.

# WARNING

It is most important that you read these safety instructions before using your spa.

### HAZARD

The use of alcohol or drugs greatly increases the risk of hypothermia in spas.

#### HYPOTHERMIA

Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal temperature of 37 degrees C (98.6 degrees F). The symptoms of hypothermia include drowsiness, lethargy due to an increase in the internal temperature of the body. The effects hyperthermia include:

- Unawareness of impending heat
- · Failure to per-

ceive heat

- Failure to recognize the need to leave the spa
- Fetal damage in pregnant women
- Unconsciousness and danger of drowning

# POSITIONING YOUR SPA

Your spa is self-contained. You can place it on a deck, patio, in your yard, or indoors. Proper site location is an important element of the overall enjoyment of your new spa, so make sure you take enough time to properly plan out the positioning of your spa. The following information is provided to help you determine where to place your spa. If you have any questions or concerns about where to locate your spa, please contact our customer service department at 1-800-609-2227

### **IMPORTANT**

Check with your local building codes with regards to fencing and gate requirements. Your spa measures 84"x84"x34" the dry weight is 650 lbs, with water 4000 lbs.

# SPECIAL COLD WEATHER START UP PREPARATIONS

When installing your spa in cold weather, ( $0^{\circ}$ C,  $32^{\circ}$ F or colder) do the following before adding water:

- check to ensure that the knife valve moves up and down freely, leaving in the up position and leaving the gate valve in the open position.
- check the unions to ensure there is no frozen water blockage and retighten.

If either of these checks indicate that there may be some frozen water, then connect your garden hose to a hot water connection and begin your initial water fill with warm water following the start-up instructions on page 10. The warm water will thaw the residual frozen water and allow these parts to move freely. You could also place a space heater, with a thermostat, on the inside of the skirt, warming the cavity of the spa and thawing any residual water left in the pump and pipes.

### WARNING

Ensure power is off at the breaker

# **INDOOR INSTALLATION**

### **WARNING**

Do not permit electric appliances (such as light, telephone, radio, or television) within 1.5 meters (5 feet) of a spa or hot tub.

Before attempting to place the spa indoors check the door openings to ensure that they are large enough for the spa to fit through. In addition, you must have the structure checked for its loading capacity by an Engineer or competent Contractor. The minimum loading capacity required is 100 lbs per square foot. The spa should be placed in a well-ventilated area so that excess condensation can be removed from the area where the spa is located. Locate the spa so the equipment door is readily accessible for maintenance and service needs, and ensure you have an area with proper drainage.

You may also wish to think about the following considerations before installing your spa:

- location to facilitate adult supervision if children are using the spa
- location relative to trees (falling leaves and shade)
- · exposure to sunlight
- landscaping and night-time lighting
- view from your house
- wind direction
- storage area for maintenance equipment and chemicals
- adjustment of sprinklers so they do not hit spa or spa cabinet

### **IMPORTANT**

Building your spa into a deck or an enclosed room is the responsibility of the spa owner should it need to be removed for warranty work

### YARD INSTALLATION

Position your spa above ground in an area with good drainage, on a level surface that contacts the spa fully. The ideal base is a concrete pad, however compacted gravel, paving stones or railway ties may also be used. Locate the spa so the equipment door is readily accessible. The equipment has to be above grade and not subject to flooding. If using compacted gravel, it must be on a firm level base and it must be contained in a secure wood or concrete border so that the loose gravel cannot shift once the spa is in place.

### DECK INSTALLATION

Before placing your spa on a deck or other raised platform, you must have the structure checked for its loading capacity by an Engineer or competent contractor. The minimum load capacity is 100 lbs per square foot. Before placing the spa on the deck, you should place 1.5" high-density foam insulation under the spa. This helps insulate the spa and prevent the transmission of noise. At the same time providing the underside of the spa with extra insulation.

### WARNING

One must support the entire base of the spa, from the outside edges to the centre, to support its weight. Improper placement of your spa may void the warranty.

# **ELECTRICAL CONNECTION**

### WARNING

Electrical codes change from Province to Province. Check with your electrician for the electrical codes in your area.

A certified electrician must make all electrical connections to your spa, in accordance with all applicable electrical codes for your area. The spa's GFCI breaker must be sized in accordance to electrical requirements of the spa. The Full Load Amperage (FLA) is recorded on the spa's nameplate.

# **WARNING**

Failure to use a GFCI breaker for electrical connection to your spa could result in serious harm or death. No electrical power should be available near the spa without GFCI protection.

### ELECTRICAL CONNECTION ACCESS

To access Electrical connections:

Electrical connections are within the spa pack. There are 2 wire access locations, one on each side of the front panel. The electrical requirements are 220V with a neutral.

L2		$\Diamond$	$\bigcirc$
N	$\bigcirc$ —	$\Diamond$	$\Diamond$
GND	$\bigcirc$ —	$\Diamond$	$\Diamond$
L1	$\bigcirc$ —	$\bigcirc$	$\Diamond$

# **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read and follow all instructions.
- 2. A ground terminal is located on the power connection terminal block. To reduce the risk of electric shock this terminal must be connected to the grounding means provided in the electric supply service panel with a

continuous copper wire equivalent in size to the circuit conductors supplying this equipment or as required by local electrical codes.

All field installed metal components such as rails, ladders, drains or other similar hardware within 3 meters of the spa shall be bonded to the equipment grounding bus with copper conductors no smaller than #6 AWG wire.

Save these instructions.

# START-UP PREPARATIONS

Before performing the operations in this section, make sure you have read and understood all of the previous instructions set forth in this manual. Make sure the spa has been installed correctly, including electrical wiring connections as specified in the previous sections. The following procedures must be done in the order they are listed.

### **WARNING**

Unions must be hand tightened before filling the spa with water. Failure to do so may cause the unions to leak, which can damage the spa pack, and voids the warranty.

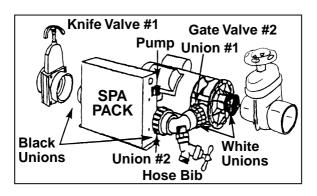
Things to check before turning on the power to the spa:

1. Make sure the spa is clean, and that there is no foreign material in the spa.

### WARNING

Do not run the pump until the spa is full of water. Running the spa pump without water could cause damage to the operating system and void the warranty.

2. Check all four unions (or six if you have a circulating system) and ensure that they are hand tight. There are two white unions on the pump: one on the inlet side and one on the discharge side. See equipment diagram.



There are also two black unions located on each end of the stainless steel heater barrel. The unions can come lose during shipping, and may need to be tightened. Do not over tighten the unions. If a union leaks after being hand tightened close the knife valves to stop the flow of water. Loosen the union that is leaking and inspect the O-ring for a possible crimp. Reinstall the O-ring and retighten the union.

3. To fill your spa, remove the wier basket, remove the filter and place garden hose directly in the filter canister. The spa holds 360 gallons (1620 litres) of water. You will notice that there is an indented wave in the spa. This is the water line. It is important that you maintain your water at this level.

NOTE: Wier basket can only be removed when the spa is not running.

# **INITIAL START-UP**

Before proceeding with the initial start-up, make sure you have completed the start-up preparations from the previous section. The following procedures must be done in the order they are listed.

### **HAZARD**

This system should be set to maintain a water temperature NO GREATER THAN 40° CELSIUS (104° F).

1. Make sure all of the jets are in the full open position, (refer to Hydrotherapy Jets, page 13).

2. The Electronic Operating System spa control has automatic functions that operate upon start-up and normal

operation to protect the system.

3. With the breaker in the "On" position check to see if water is circulating and pump is running. If not then you must turn the power off to prime the pump. To prime the pump turn union #1 slowly 1/2 to 1 turn to release air, being careful not to open too far. If you are sure that you have released the air lock, retighten the union and turn the power on. The pump must be primed every time the water is changed. Check to see if water is coming from all the jets.

### WARNING

Only turn union one turn counter clockwise.

- 4) Press the pump button on the control panel to test if the pump is changing from low to high-speed, (refer to Topside Control Component Identification, next page). You will be able to tell the difference between low and high-speed by the sound of the water moving through the spa's plumbing system. Press the pump button again to return the pump to low speed.
- 5) Once the water has reached the set temperature add chemicals to adjust the water balance (see Chemical Maintenance, page 19).
- 6) If you experience any problems with the procedures above contact an Aruba customer service representative.

7) After your spa is operational you must install the Spa Cover latches. The locks will already be attached to the end of the straps. Position the tie strap so it is fully extended, without stretching. Locate the 2 holes on the locking mechanism, marking them with a pen. Remove the locking mechanism from the strap and fasten to the spa.

### **HAZARD**

Never leave an uncovered spa unattended, and never leave a covered spa unlatched.

# SPA OPERATIONS GUIDE

Topside Control Component Identification



# **Topside Indicator Icons**

Pump **≈**Light **¾** Filter **∰** Heat **§** Temperature **↓** 

### Heat **↑** and Heat **↓** buttons

The spa's thermostat is to provide you with optimum control of the spa water temperature. This temperature set point can be adjusted from  $15^{\circ}$ C ( $40^{\circ}$ F) to  $40^{\circ}$ C ( $104^{\circ}$ F).

Note: if you have a blower button on the topside digital control pad then you will only have one button for heat up and heat down. By holding the heat button down for 3 seconds you can either heat up or heat down. Press the heat button again for 3 seconds to do the opposite. Pump button

Press Pump key to turn pump on(low speed). Press a second time to change the pump to high speed. A third time turns the pump off. A built-in timer automatically turns pump off after 20 minutes, unless it has been manually deactivated. The "Pump" indicator lights up when the pump is on.

# Light or LED

The control panel button designated "LIGHT" activates the spa light when pressed. The light turns off after a two-hour default.

The LED light (available on the Deluxe and Executive Aruba models) is activated by the light button. Pressing the light button once turns on the multi colour display. Pressing the light button off and then on will scroll through the colour display. Pressing the light button once again, off and on, will hold at a desired colour.

### Filter Cycle Programming

Proper filtration is an important key to maintaining the clarity of your spa's water. The filter system is designed for unsurpassed effectiveness at removing debris and suspended particles from the water while the water is circulating.

The system automatically performs two filter cycles per day, at 12-hour intervals. During a filter cycle, the pump is activated for a programmed number of hours.

Press and hold **Light** key for 5 seconds. The display will show a value that represents the filter cycle duration in hours.

Use **Up** or **Down** arrow key to change setting.

0 =no filtration

12 = continuous filtration

When the desired setting is displayed, press the Light key again. The filter cycle will start.

Note: after a power failure, the filter cycle duration will return to its default value (6 hours). In this case the first filter cycle will start 12 hours after power has been restored.

Note: also that to prevent excessive water temperature caused by too long filter cycles, the system will cancel a filter cycle after 3 hours if water temperature raises more than  $2 \, ^{\circ}F (1 \, ^{\circ}C)$  above set point. In this case, the "filter" indicator will flash.

### SETTING WATER TEMPERATURE

Using the heat up and heat down buttons, you can regulate the water temperature directly from the topside control pad. Press and hold the button to increase (or decrease) current temperature setting. The temperature setting will be displayed for 5 seconds to confirm your new selection. Water temperature can be adjusted by 10 increments from  $40^{\circ}$  to  $104^{\circ}$ F ( $15^{\circ}$  to  $40^{\circ}$ C).

### AIR CONTROLS

There are two air controls beside the topside control panel. By turning these controls you may adjust the amount of air going to the jets. When fully open you are getting the maximum amount of air for full hydrotherapy action. To reduce the amount of air coming out of the jets simply close the air controls.

#### **CELSIUS OR FAHRENHEIT**

To change from one to the other, it is a matter of changing a jumper pin position on the board inside the spa pack. The #2 jumper location, on the board, is to the left of the topside plug. There are 2 positions for each jumper on 3 pins. If the jumper is placed on the left and middle pins, temperature readings will be in fahrenheit. If the jumper is placed on the middle and right pins the temperature readings will be in celsius.

### SMART WINTER MODE

If your spa has gone into Smart Winter Mode the filter icon at the topside will flash. Smart Winter Mode will automatically start when the outside temperatures have dropped enough for the spa pack to reach 55° F. The pump will come on high speed for one (1) minute every two (2) hours to circulate the water. The Smart Winter Mode will run for 24 hours when activated. Smart Winter Modes will increase at the following temperatures at increased cycle times. See below:

55° - 1 minute every 2 hours

46° 1 minute every 1 hour

41° 1 minute every 30 minutes

37° and lower 1 minute every 15 minutes

These cycle times will continue for a 24 hour period minimum or until the breaker has been reset provided the ambient heat inside the pack has surpassed 55°.

*Note: if you have a circulation system the Smart Winter Mode will still activate when the ambient heat inside the pack has reached 55°.* 



Adjustable jets



Micro Directional

# **HYDROTHERAPY JETS**

Your spa is equipped with the following jets:

You can adjust the volume of water from these jets by turning the face plate counter clock wise to decrease the volume of water and clock wise to increase it. You can also change the direction of the water flow by pushing on the side of the small orifice in the centre of the trim kit.

### **WARNING:**

All jet trim kits must be properly seated or air flow may be restricted



Micro Swirl

You can adjust the volume of water from the micro swirl jets by turning the face plate 1/2 turn counter clockwise to decrease the volume of water and clock wise to increase it.

The micro-swirl jets on your spa are interchangeable. To remove either trim kit you must place a screwdriver between the face plate and the acrylic

spa surface then push with a gentle upwards motion and the trim kit will pop out of the jet body. To replace just place the trim kit into the jet body and gently push it into place. Be careful not to scratch the spa surface with the screwdriver and do not force the trim kit into or out of the jet body.



The cluster jets are small single orifice jets that are adjustable and can be removed.

Cluster Jets

The purpose of the ozone jet is to inject ozone into your spa. It is not to be used for hydrotherapy. If you do not have an ozonator water and air will still flow into the spa from this jet.



Ozone Jet

# **WARNING**

Do not block Ozone Jet at anytime. Blocking the Ozone Jet may result in damaging the ozonator and voiding the warranty.



Massage Jet



Swirl Jet

You can adjust the volume of water from both the swirl jets and the massage jets by turning the face plate counter clockwise to decrease the volume of water and clockwise to increase the volume of water.

The massage jet provides a wide pattern of massage with a high volume of water that flows in a large circular pattern for deep muscle massage. The swirl jets provide a similar circular pattern that is more focused to a smaller area. These jets working together in the same seating area provide you with a large volume of hydrotherapy massage.

### TROUBLE SHOOTING

This is a self-diagnostic control system. The system will automatically display flashing indicators if a problem is detected.

### No display at topside

- check that the topside is correctly plugged into spa pack
- the power is on
- if problem persists contact Smart Protect Warranty

### Display is flashing

A power failure must have occurred and the spa pack has returned to its default values. Press any key to stop the flashing and then reprogram the filter cycle.

# Pump has started up for 1 minute on several occasions and "Filter" indicator is flashing

This is a feature of the SMART WINTER MODE.

It protects your spa from the cold by turning the pump on for 1 minute several times a day to prevent water from freezing in the pipes.

### Water temperature is flashing

This indicates that the spa water temperature is over 112° F(44°C).

**DO NOT** enter the water! Remove spa cover and allow the water to cool down. The system will reset itself when the water temperature reaches 109°F(43°C) Call Smart Protect Warranty if the problem persists.

### **Ground Fault Interrupter Trips**

- Be sure that the neutral on the GFCI has been wired

properly in the main panel.

- Check if it does it only when heat turns on, if so check element by removing the power to the element terminal and turn the heat on. If it only faults when the element is connected with power, the element has a ground fault and must be replaced.

- This can be done by unplugging the pump, ozonator, or any other peripheral equipment as a process of elim-

ination to see where the fault may be.

#### A PROBLEM HAS BEEN DETECTED.

Do NOT enter the water!

Check and open knife valves.

Clean filter if necessary.

Check water level. Add water if needed.

Shut power off and power up your spa again to reset the system to default values. Reprogram your settings.

If 3 dots are still flashing, check high limit indicator light, located on the circuit board inside the spa pack.

(It is a very bright L.E.D. red light that is easy to see when the pack cover is removed).

If this light is on, your spa has overheated, please call Smart Protect Warranty.

If this light is not on, refer to adjusting the pressure switch below.

# PRESSURE SWITCH IMPORTANT

Pressure switch adjustments may be a normal part of maintenance of your spa.

Pressure switch adjustments are NOT covered by warranty. How to adjust the pressure switch if 3 dots are flashing

- turn the pump off by pushing the pump button and/or turning the heat down below the current temperature.
- locate the pressure switch inside the spa pack.
- unlock the adjusting dial by sliding the locking bar up away from the dial. (located on right side of the pressure switch).
- turn the dial clockwise (increasing psi) until 3 dots are gone

### **OZONATORS**

# (OPTIONAL ON THE BASIC ARUBA SPA AND THE DELUXE ARUBA SPA)

### **IMPORTANT**

It is necessary to use Chlorine or Bromine chemical treatment with an ozonator.

### **WARNING**

This system only accepts a 220v Ozonator.

Ozone is injected into the spa's water during the filtration cycle. The ozone is injected into the water to supplement chemical sanitizers, oxidize organics and control minerals. If during a filter cycle the pump is manually turned on, the ozonator will be suspended for 40 minutes after last pump or blower times out or is turned off. After the suspension period or duration of the filtration cycle the ozonator will remain off until the start of the next filter cycle.

Note: If you have the circulation system then the ozonator will run continuously.

# **WARNING**

Do not block Ozone Jet at anytime. Blocking the Ozone Jet may result in damaging the Ozonator and voiding the warranty.

# **10** JET BLOWER SYSTEM

# OPTIONAL PURCHASE ON THE DELUXE ARUBA SPA STANDARD OPTION ON THE EXECUTIVE AURBA SPA

The blower system is operated by a 1.5 HP motor. When the blower is activated at the topside control panel, water is aerated through the blower jets creating small bubbles. Only air passes through these jets. When you begin your start up, ensure that the blower motor has not shifted and is plugged into the spa pack tightly. The blower will turn on every filter cycle, for 1 minute, to purge the lines.

### CIRCULATION PUMP

### OPTIONAL PURCHASE ON THE DELUXE ARUBA SPA STANDARD OPTION ON THE EXECUTIVE ARUBA SPA

The circulation system is operated by a 1/15HP motor that draws about 1 amp. You can not operate the circulation system from the topside control as it is pre-programmed to run 24 hours a day. The circulation system efficiently circulates the spa water through the filtration system, as well as purging water from the lines for one (1) minute every 12 hours on high speed of the main pump.

When you start up your spa ensure that both knife valves on either side of your circulation pump are in the open position (up). Loosen the union to release any air, then re-tighten. Ensure that the cord to the circulation pump is plugged into the spa pack tightly.

# **AQUA PURE WATER SYSTEM**

# OPTIONAL PURCHASE ON THE BASIC ARUBA SPA AND THE DELUXE ARUBA SPA

#### STANDARD OPTION ON THE EXECUTIVE ARUBA SPA

The Aqua Pure Water System is an automatic bromine generator that is virtually maintenance free.

Sodium bromide is added to the spa water. Once it is dissolved, it circulates through the plumbing to reach the electrodes which convert it to free bromine before reverting back to sodium bromide (it is a perpetual cycle). Additional sodium bromide is only added when the water level declines due to splash out, or when spa is drained/filled.

- Fill spa with water up to the water line
- Make sure the DECREASE/INCREASE dial on the face of the Aqua Pure Water System is turned to the OFF position.
- Balance your alkalinity
- Balance your pH
- Make sure that the spa's pump is turned on to low or high speed
- Add 4 1/2 bottles of TRU BLU sodium bromide evenly over the surface of the water, shaking each bottle well first to break up any lumps

# **AQUA PURE WATER SYSTEM** (cont'd)

- Turn the "DECREASE/INCREASE" dial to the right until the LED display (to the left of the dial) reads "10". This will initiate the buildup of a bromine bank.

- Monitor the bromine level until it is within the range indicated on the test strip. Once the desired level has been achieved, turn the "INCREASE/DECREASE" dial until the LED display reads "5". This is a good starting point to set your bromine production level. The appropriate setting for your Aqua Pure Water System will depend on how often you use your spa. A spa with a higher-than-average bather load will require a higher setting. This will allow the Aqua Pure Water System to produce more bromine to maintain the level required.

Note: It can take several days for the bromine level to stabilize because the water that you put into your spa contains impurities that need to be neutralized, thereby using up the initial bromine that is generated. You can expedite this process by shocking the water with a non-chlorine product.

# CHEMICAL MAINTENANCE

Your spa comes with a cartridge filter system. Filtering of the water helps to maintain water cleanliness and clarity. While the filter traps most solid materials, it is still necessary to add a sanitizer such as bromine or chlorine to the water to control bacteria, algae and to oxidize any organic materials in the water. This section will explain how to use bromine to maintain clean, clear and odor-free water. When purchasing from your local retailer, it is recommended that you bring a sample of your water for analysis and guidance on which chemicals you may require.

Chemicals and test strips can be purchased directly from Aruba Spas by calling us at 1-800-609-2227.

### **IMPORTANT**

You must use either chlorine or bromine based chemicals. You may change from chlorine to bromine without emptying the tub. If you are changing from bromine to chlorine you then must empty the tub and start with fresh water. Never mix chlorine with bromine out of the water.

### **IMPORTANT**

For initial start up procedures when using bromine or chlorine sanitizers please refer to page (24)

### **IMPORTANT**

If you have an Aqua Pure Water System please refer to page (21 and 22) for start up procedures

# INITIAL START UP PROCEDURES

(dosages are for 360 gallons (1620 litres) of water)

1. Use your test strips or test kit to test your fill water for total alkalinity to determine any water balance adjustments necessary. Total alkalinity is the key to water balance. Balance alkalinity first and then the PH.

### WARNING

Make sure you dilute all chemicals with spa water before adding them to the spa. Adding full strength chemicals to the spa may damage the spa surface and will void the warranty.

- 2. When filling your spa with water, add STAIN & SCALE to protect your spa against staining and scale formation on the spa walls and on the heater element.
- 3. You must balance your water so that it is neither alkaline (scale forming) nor acidic (corrosive). Balanced spa water should be between 7.4 7.6 on the pH scale, with total alkalinity in the range of 125 150 ppm. Use pH INCREASE or pH DECREASE as needed to adjust the pH. Add alkalinity increaser to raise total alkalinity.

### **WARNING**

Improper chemical maintenance can damage the spa surface and/or equipment, and will void the warranty.

4. Once your water has reached the set temperature, add your choice of sanitizer, bromine or chlorine. The importance of maintaining an adequate level of sanitizer in your spa can not be overemphasized. Warm water presents a fertile environment for the growth of bacteria and viruses. This growth is prevented when adequate sanitizer levels are continuously maintained.

# WATER MAINTENANCE SCHEDULE Weekly

- 1. Sanitizer check to ensure sanitizer level is at the right range. Add sanitizer when necessary.
- 2. Add a sequestering agent to prevent scaling and staining.
- 3. Add a clarifier to spa water. This will quickly clean and brighten hazy, cloudy water caused by microcontaminants in the water that are too small for the filter to remove.

# WARNING

Sanitizers such as Sodium
Tri-chlor type chlorine (tablets/sticks), calcium hypochlorite, sodium hypochlorite, or any chemical that may remain undissolved on the spa surface will damage your spa and will void the warranty

4. If you are using bromine or chlorine tablets, it is also recommended to add a shock treatment on a fresh fill and weekly thereafter. If the spa has had high use during the week, an additional shock treatment would be required.

\*Note: When adding a shock treatment, please insure the spa cover is left off the spa at least 30 minutes, to allow the "gassing off" process. It also saves wear and tear on your spa cover.

5. You may occasionally need to use a small amount of ANTI FOAM to reduce foaming and sudsing should it occur. Soap residue will cause foaming - rinse out bathing suits well.

### **CONDUCTING PROPER WATER TESTS**

- 1. Total alkalinity is the key to water balance. Always adjust total alkalinity first, and then pH.
- 2. Water should be circulating before you take your sample. If the pump has been off, turn it on for a few minutes. If you are using a test kit rinse the sample vial 2 or 3 times with the spa water before you take your sample. Sample the water from 46 cm (18") below the water surface. If you are using test strips they should be immersed to a depth of 46 cm (18") and then swirled three times. Follow the manufacturers directions carefully when performing your water test with either the test strips or the test kit.

3. The ideal range for proper water maintenance is as follows:

BROMINE 3.0 - 5.0 ppm

CHLORINE 1.0 - 3.0 ppm

pH 7.4 - 7.6 ppm

ALKALINITY 125 - 150 ppm

- 4. Bromine (or Chlorine) levels need to be tested daily.
- 5. pH levels need to tested daily.

### **IMPORTANT**

If your bromine (or chlorine) reading is above 6.0 you may obtain a false result when testing for pH. In this case, lower the chlorine or bromine before performing any other tests.

- 6. The water in your spa should be hard (bypass water softener). If you suspect you have soft water, you may need a calcium increaser. Check with your local spa store.
- 7. Alkalinity levels need to be tested weekly.
- 8. Water testing should be done at home using test strips or an accurate test kit, or by taking your water to a spa or pool retail outlet and having them test your water sample (you should expect to pay a nominal fee for this service).

# CHEMICAL TABLE OF EQUIVALENTS CHART

15 ml = 1 TBS

4 TBS = 1/4 cup

15 g = 1 TBS

# PROBLEMS ASSOCIATED WITH IMPROPER WATER BALANCE

### Low pH:

- causes rapid sanitizer loss.
- causes eye irritation and itchy skin.
- · corrodes equipment

Solution: add pH increaser (pH up) to raise the pH levels.

# High pH:

- · forms scale.
- · clouds water.
- reduces sanitizer efficiency.

**Solution:** add pH decreaser (pH down) to lower the pH levels.

### Low Sanitizer Levels:

• allows growth of bacteria and viruses in spa water.

**Solution:** refer to Chemical Maintenance, Initial Start Up Procedures, page 19.

### Causes of pH change:

- · adding water.
- · rain.
- bather load.
- · adding chemicals.
- dust.
- algae.

# CARE FOR YOUR SPA DRAINING YOUR SPA

Drain and re-fill the spa as indicated below:

Average Use: Every 60 - 90 days

Heavy Use: Every 30 days

After Parties: Drain

Aqua Pure Water System: Every 12 months

Before draining your spa you may add whirl-o-clean to the warm water and start the pump for about 30 minutes. This will help in eliminating grease and oils in the plumbing and jets.

### WARNING

Do not leave your spa exposed to direct sunlight when there is no water in the spa. Exposure to direct sunlight could damage the spa shell and void your warranty.

# To drain the spa:

- 1. Turn off all power to your spa.
- 2. Attach a hose to the hose bib located inside the skirt beside the pack and gravity drain by the siphon method.
- 3. Clean the surface (see "Spa Surface" later in this section).
- 4. Refill the spa. Follow the initial start-up procedures to reprime the spa.

Make sure you replace your filter cartridge at least once every six months.

### FILTER CLEANING

- 1. Your spa is equipped with a top access filter. To access the filter cartridge, remove the skimmer basket and filter cartridge. Do not remove when the pump is running.
- 2. Once a week remove filter, just hose it off well and replace it. Every 4-6 weeks properly clean your filter in a filter cleaner solution. Soak 4-6 hours (or overnight), rinse well and let dry before replacing it.
- 3. Once cleaned, re-install filter cartridge and skimmer basket.
- 4. How often the cartridge filter needs to be cleaned depends largely upon how many bathers are using the hot tub. With average use we recommend cleaning the cartridge filters approximately every 4-6 weeks. However, more frequent or greater numbers of people may require more frequent cleaning.



### **IMPORTANT**

Be sure to thoroughly rinse the filter cartridge to thoroughly remove any cleaning agents. If this is not accomplished, foaming of the water may occur during the filter cycle of the hot tub.

### **SPA SURFACE**

Your spa has a very high quality acrylic surface. Stains and dirt will generally not adhere to the surface. Do not use household products for cleaning the spa surface. Be careful of detergents as they may contain phosphates that may contaminate the water and will cause foam build-up. Also, many cleaning agents contain abrasives which will scratch the surface, and therefore must not be used. After cleaning, be sure to rinse the surface with water to ensure all excess

cleaning solution is properly diluted and removed. This will avoid unnecessary reaction of skin irritations from chemical contact to the body. Follow product recommendations. You may also wish to periodically polish the acrylic surface with spa polish (Gel Gloss).

### WARNING

When cleaning the spa surface use only acrylic cleaners.

### **WARNING**

Do not use caustic solutions as they may damage the spa shell surface and void the warranty.

### **CABINET**

When properly cared for the Cedar cabinet of your spa will maintain its good looks for many years. All woods react to the elements differently by expanding and contracting, so make sure you re-stain the wood every 10 to 12 months with an oil based stain to thoroughly protect the wood. Clear wood finish can be used as a good wood sealing agent. The wood must be properly maintained.

### **COVER**

With safety and convenience in mind the spa cover has been designed with child safety latches and a slope designed to create a natural run-off for rain water. Please ensure the use of spa straps and latches to secure the cover when not in use. This will help to discourage unsupervised children from entering the spa and keep the spa cover secure in high-wind conditions.

DO NOT allow snow to build up on the cover as it is not intended to bear weight. Weight on the cover may cause the edges of the cover to curl, or progressively warp and bow the cover, or in extreme cases cause the foam inserts to break. To avoid this keep all weightbearing objects off of the cover. Water and snow must be swept off to keep them from accumulating or puddling on the cover. Should puddling occur, unzip the vinyl, remove the foam insert, turn it over and reinsert it.

The cover is not a safety cover. Do not stand, sit or lie on it or permit any heavy weight to rest on it. This will damage the cover and void the warranty.

The thermal cover should be cleaned regularly. As often as is necessary wash the cover with a mild soap and rinse with clean water. All vinyls contain plasticizers which must be maintained to prevent drying out, cracking, flaking and deterioration. These plasticizers migrate out and escape naturally through time. Sun and cold speed up this process. Application of a vinyl cleaner and conditioner at least once a month will retard this deterioration.

### **IMPORTANT**

Fading and discolouration of the spa cover will occur naturally with extended exposure to the sun.

The vinyls used in your spa cover are marine treated, but will deteriorate faster when exposed to high levels of chlorine, bromine, ozone or other active chemicals. Each time Chemicals are added, remove the cover completely and place it far enough away so that splashing will not reach the cover.

The cover handles and tie downs are double reinforced with thick vinyl coated rip-stop PVC material. However, mistreatment by sudden jarring motions can damage them. To prevent damage any handling of the cover must be done in a gentle manner.

Do not use solvents, petroleum based products, abrasive cleaners or strong detergents. Do not use products that contain silicone or alcohol. Use of these products will damage the cover and void the warranty.

# SPECIAL COLD WEATHER INSTRUCTIONS

Your spa is designed for year round use and winter operation. Winter is also perhaps the most enjoyable season for spa use. We also recommend continuous operation throughout the winter months because it is very difficult to get water out of all of the plumbing lines. If for some reason you must close down your spa in the winter we recommend you winterize it as follows:

1. Drain your spa completely. You may tip your spa on edge and use a wet vacuum or blower to evacuate as much water as possible from the spa. The idea is to get all the water out of the plumbing lines and equipment.

### **WARNING**

Any damage caused to the spa by freezing, once it has been drained for the winter, is not covered by warranty.

- 2. Once the spa is completely drained, open the hose bib and loosen the unions to allow the water to expend freely within the system. Also, remove the drain plug on the bottom of the pump. This should prevent any ice from expanding and damaging drain pipe and fittings. The key is to eliminate any sealed areas in the system that may contain water. Your local pool and spa retailer may provide this service at a nominal fee.
- 3. If you receive a heavy snowfall during the winter, you may want to build a temporary cover over the top of your spa. This can be done with 1/2'' sheets of plywood supported by  $2' \times 4'$  cross members.

During cold weather your spa should be checked on daily to ensure it is operating properly. If your spa should shut down during cold weather, all precautions must be taken to ensure your spa does not freeze. IF FREEZE DAMAGE OCCURS IT IS NOT COVERED UNDER WARRANTY

# WARRANTY INFORMATION

We are pleased to announce that Aruba Spas has an excellent warranty program. Make sure you return the Warranty Registration Card that comes with your spa.

If you encounter a problem with your spa please take the following steps.

### **IMPORTANT**

Smart Protect Warranty certificate is on page 30. Please make sure you read this document carefully. It is important to understand this warranty and its exclusions.

For warranty service contact a Smart Protect Warranty service agent at 1-877--877-2087

- 1. Refer to the Trouble Shooting guides on page 18 and 36. Use these guides to determine what may be wrong with your spa. This is important information to give the service technician. In addition, checking the guides will help you to determine if you need to call for warranty assistance.
- 2. If you need assistance in trouble shooting call Smart Protect Warranty at 1-877-877-2087

# Smart Protect

<del>an an an an an an an an an an an</del> an

LIMITED

# WARRANTY

RIDGEWOOD ENTERPRISES LTD., the manufacturers of ARUBA SPAS extends this limited warranty solely to the original purchaser of any ARUBA brand spa manufactured after January 1, 2003.

# FIVE YEAR LIMITED SHELL STRUCTURE and SURFACE

Smart Protect Warranty, warrants the spa against water loss due to defects in the spa shell for a period of five years from the original date of purchase. Smart Protect Warranty warrants the interior surface of the spa against blistering, cracking, or delaminating for a period of five years from the original date of purchase.

### **FIVE YEAR LIMITED NO LEAK**

Smart Protect Warranywarrants the spa against loss of water due to defects in the fittings and plumbing lines for a period of five years from the original date of purchase.

# **ONE YEAR LIMITED SKIRT**

Smart Protect Warranty warrants the wood cabinet against defects in workmanship and materials (excluding skirt finish) for one year from the original date of purchase.

### TWO YEAR LIMITED SPA PACK AND PUMP

Smart Protect Warranty warrants the spa pack and pump against mechanical or electrical breakdown: parts and labour, for a period of two years from the original date of purchase.

### THREE YEAR LIMITED HEATER BARRELL

Smart Protect Warranty warrants the heater element against failure: labour coverage for a period of two years and parts coverage for a period of three years from the original date of purchase.

# TWO YEAR LIMITED L.E.D. LIGHT

Smart Protect Warranty warrants the L.E.D. light against failure: parts coverage for a period of two years from the original date of purchase.



920 Leathead Rd Kelowna, BC V1X 2J8 1-877-877-2087

**REGISTRATION**: To validate this warranty, the original purchaser must complete the warranty registration card and mail it to Smart Protect Warranty within 30 days of delivery of the spa.

PERFORMANCE: In the event of any defect covered by this Limited Warranty, Smart Protect Warranty or its authorized agent will correct such defect subject to the terms and conditions contained in this Limited Warranty. There will be no charge for parts or labor to repair the spa, although you may be assessed reasonable repairman travel mileage charges if the spa is located outside your service agent's area. If SMART PROTECT WARRANTY determines that repair of the covered defect is not feasible, we reserve the right to instead provide a replacement spa equal in value to the original purchase price of the defective spa. Removal of the defective spa and delivery and installations of the replacement spa will be the responsibility of the spa owner. To obtain service for any defect covered by this Limited Warranty, notify SMART PROTECT WARRANTY PROGRAM within 30 days of its occurrence and use all reasonable means to protect the spa from further damage.

EXCLUSIONS: This Limited Warranty is void if the ARUBA SPA has been subjected to alteration, neglect, misuse or abuse, freeze damage due to neglect; If any repairs have been attempted by anyone other than Smart Protect Warranty or its authorized agent; or if the failure is caused by accident, acts of God, or other causes beyond the control of Smart Protect Warranty. Neglect, misuse and abuse include any installation, operation, improper water balance or maintenance of the spa other than in accordance with the owner's manual. This Limited Warranty does not provide coverage for demonstrator, used, repurchased or reconditioned spas, spa kits, unplumbed spas, or factory seconds and/or any ARUBA SPA used for commercial use. This Limited Warranty does not provide coverage for filter cartridges, jet trim kits, fuses, pump seals, O-rings, gaskets, and light bulbs, or any item attached to, or installed on, the spa after the date of manufacture. OZONATORS AQUA PURE WATER SYSTEM AND SPA INSULATED COVERS ARE EXCLUDED FROM THIS LIMITED WARRANTY, ALTHOUGH THEY ARE COVERED BY SEPARATE WARRANTIES BY THEIR MANUFACTURES.

SERVICE CHARGES: All service calls will be subject to an \$80.00 (eighty dollars) charge. If the service work performed is covered by this Limited Warranty, the charges will be refunded. If the service work performed is not covered by this Limited Warranty, the service charges will apply. Service or warranty work performed outside the city limits from where the spa was purchased will be subjected to mileage charges and related expenses.

**LIMITATIONS:** This Limited Warranty takes the place of all other warranties, express or implied, in fact or at law, including implied warranties of merchantability and fitness for a particular purpose. All warranty service must be performed by ARUBA SPAS or its authorized agents, No agent, dealer, distributor, service company or other party is authorized to change, modify or extend the terms of the Limited Warranty in any manner whatsoever.

**DISCLAIMERS:** Smart Protect Warranty and its authorized agents shall not be liable for any injury, loss, or other damage, whether incidental or consequential, airing out of any defect covered by this Limited Warranty, including without limitation, loss of use of the spa and cost of removal of defective product, even if Smart Protect Warranty has been advised of the possibilities of such damage. The liability of Smart Protect Warranty under this Limited Warranty, if any, shall not exceed the original amount paid for the defective product. Coverage under this Limited Warranty shall commence as of the original date of purchase and the duration of such coverage shall not extend for any reason whatsoever beyond the stated time periods. These disclaimers shall be equally applicable to any service provided by Smart Protect Warranty or its authorized agents.

LEGAL RIGHTS: This Limited Warranty gives you specific legal rights. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, therefore the above limitations may not apply to you.

# TROUBLE SHOOTING GUIDE

# **PROBLEM • DIAGNOSIS • ACTION**

<b>P</b> :	Spa won't turn on
D:	No power in spa
<b>A1:</b>	Check Breaker
A2:	Check Fuses

# P: Spa comes on by itself

**D:** Normal function of heating and filtering

**A:** No action required

# P: Pump shuts down unexpectedly while in use

**D:** Default timer of 20 minutes in the electronic operating system

**A:** Reactivate by touching desired button

# P: Spa does not heat

**D:** Temperature setting is too low

A: Turn up thermostat

# P: Poor jet action

**D:** Dirty filter

A: Clean filter

D: Air lock in pumpA: Loosen end pump union to release air

**D:** Water level too low

A: Fill spa

# P: Spa light is out

**D:** Burned out bulb

A: Replace bulb

(The Light housing is located behind the spa pack, and there is no need to drain the spa to change the light bulb.)

Motor shuts down while in use **P**: D: Protective device has shut down motor to protect from overheating The automatic device will reset the A: motor when it cools down P: GFCI shuts down frequently Faulty GFCI D: A: Call electrician D: Heater element has failed A: Call Smart Protect Warranty D: Ozonator/Blower has failed

P: Abnormal water usage

D: Excessive evaporation

**A:** Use spa cover when not in use, lower thermostat setting

Replace Ozonator/Blower

**D:** Leak in plumbing

**A**:

**A1:** Tighten unions (see #2, START-UP PREPARATIONS)

**A2:** Call Smart Protect Warranty

P: Water not clean

D: Filter dirty or cloggedA: Clean or replace filter

D: Clogged/blocked safety suctionA: Clean safety suction or skimmer

**D:** Poor water chemistry

**A:** Test and correct

D: High content of solids in water

A: Drain and refill spa

P: Eye or skin irritation

D: pH is too highA: Test and correct

P: pH is too low

**A:** Test and correct

P: Formation of chloramines

The formation of chloramines is chlorine combining with nitrogen from body wastes, oils etc. - causes familiar chlorine odour

**A:** Correct by adding shock

P: Foaming of water

**D:** High concentration of oils and organics being agitated by jets

A: Add antifoam

D: Soft water

A: Test and correct

P: Scale deposits

**D:** High calcium level, high pH, high alkalinity

A: Test and correct

P: Water leaks or drips in equipment

D: "O" ring or seals drying out

A: Lubricate "O" rings or replace

P: Filter often has air in it

D: Water level is too low

A: Add water to appropriate level

# **WEEKLY MAINTENANCE SCHEDULE**

DATE	Clean Filter	Shock Treatment	Water Clarifier	Check Chemical Balance	General Maintenance

# ARUBA SPAS

A Division Of Ridgewood Enterprises Ltd. 920 Leathead Road, Kelowna, BC V1X 2J8

Aruba Spas reserves the right to make changes in specifications without notice



