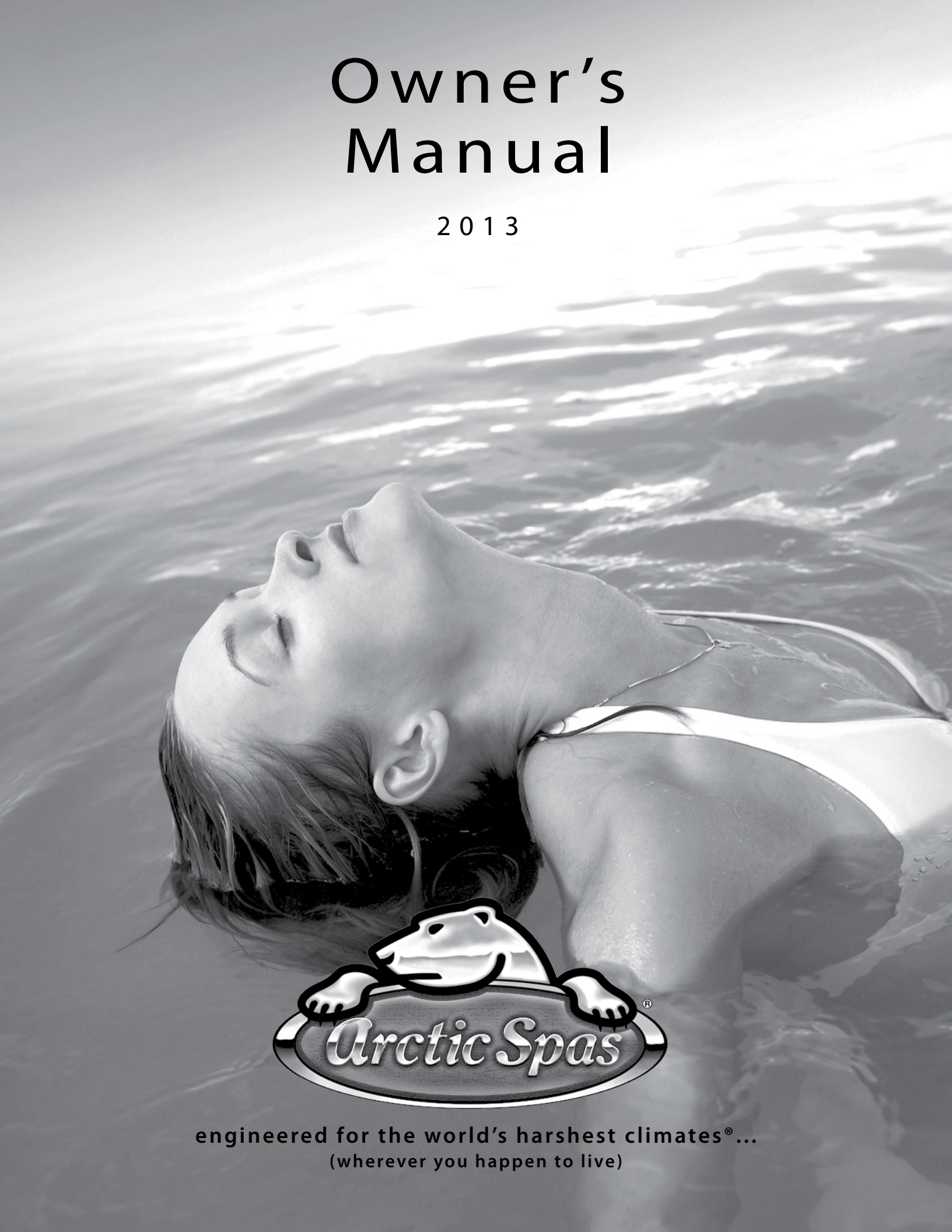
Owner's Manual

2013



Arctic Spas®

engineered for the world's harshest climates®...
(wherever you happen to live)

Congratulations!

Your choice of an Arctic Spa indicates that you are devoted to excellence. At Arctic Spas® we believe a good foundation is required to build a superior product, both in design and philosophy. Canadian built with the finest materials and advanced technology to withstand even the harshest of weather conditions, Arctic Spas® are made to perform... wherever you happen to live. To safely and effectively use your spa, we recommend that you take the time to read this manual before you hook-up and operate the spa. This guide will acquaint you with the operating features, hook-up procedures, and the maintenance and safety procedures, ensuring an enjoyable experience right from the start.

If you require additional information, please call your local Arctic Spas® dealer. A complete list of dealers and international Arctic Spas websites can be found on the internet at www.ArcticSpas.com.

IMPORTANT!

In most cities and counties, permits will be required for the installation of electrical circuits or the construction of exterior surfaces (decks and gazebos). In addition, some communities have adopted residential barrier codes which may require fencing and/or self-closing gates on the property to prevent unsupervised access to a pool or spa by children under 5 years of age. Your Arctic Spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers and as a result, is usually exempt from most barrier requirements. As a general practice, your local Building Department will inform you of any applicable barrier requirements at the time a permit is obtained for the installation of an electrical circuit. Your Arctic Spas Dealer can provide information on which permits may be required.

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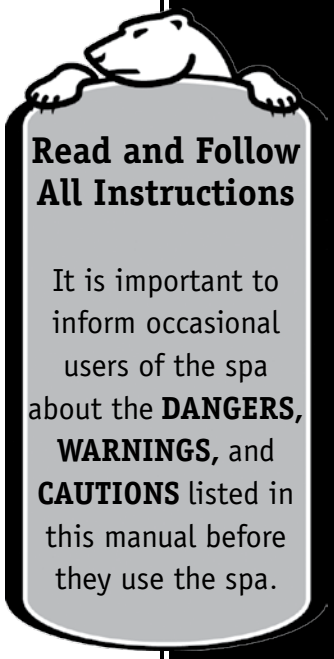


CAUTION!	***DANGER!***	***WARNING!***
Indicates a situation in which damage to equipment or material may occur.	Indicates risk of injury.	Indicates information of critical importance.

Important Safety Instructions:

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

When installing and using this electrical equipment, basic safety precautions should always be followed, including:

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

2) WARNING: A grounding wire connector is provided on this unit to connect a minimum No. 8 AWG solid copper conductor (USA) No. 6 AWG stranded (Canada) 8.4mm (Europe) between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.

3) DANGER: Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this hot tub unless they are supervised at all times. Use the hot tub straps, cover safety and clip tie downs to secure the cover when not in use. This will help to discourage unsupervised children from entering the hot tub. There is no representation that the cover, clip tie downs, or actual locks will prevent access to the hot tub.

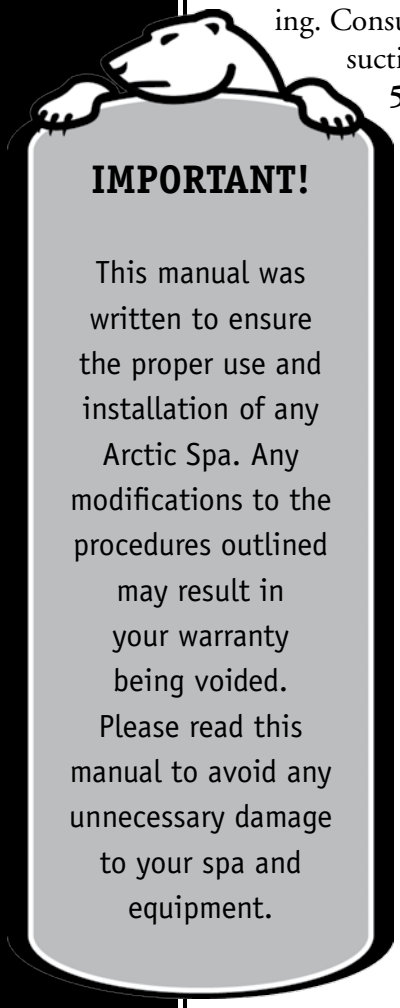
4) DANGER: Risk of Injury. The suction fittings in this hot tub are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the hot tub if the suction fittings are broken or missing. Consult your local dealer for assistance in choosing an appropriate replacement suction fitting.

5) DANGER: Risk of Electric Shock. Install at least 5 feet (1.5 m), from all metal surfaces. As an alternative, a hot tub may be installed within 5 feet (1.5 m) of metal surfaces if each metal surface is permanently connected (bonded) by a minimum No. 8 AWG solid copper conductor (US) No. 6 AWG stranded (Canada) 8.4 mm (Europe) attached to the wire connector on the qui potential bonding bar which is located on the side of the spa control pack.

6) DANGER: Risk of Electric Shock. Do not permit any electrical appliance, such as a light, telephone, radio, television, etc. within 5 feet (1.5 m) of a hot tub. All controls or devices accessible from the spa must be powered by a maximum of 12vdc. Do not permit any electrical appliances powered by 12 vdc or more within 1.5 m of the hot tub.

7) ELECTRICAL SUPPLY: The electrical supply for this product must include a suitable circuit breaker GFCI (north America) RCD (Europe) to open all ungrounded supply conductors. The disconnect must be readily accessible and visible to the hot tub occupant but installed at least 5 feet (1.5 m), from the hot tub water.

8) WARNING: To Reduce the Risk of Injury: a) The water in a hot tub should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when hot tub use exceeds 10 minutes.



IMPORTANT!

This manual was written to ensure the proper use and installation of any Arctic Spa. Any modifications to the procedures outlined may result in your warranty being voided. Please read this manual to avoid any unnecessary damage to your spa and equipment.

b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit hot tub water temperatures to 100ºF (38ºC). If pregnant, please consult your physician before using a hot tub.
c) The use of alcohol, drugs, or medication before or during hot tub use may lead to unconsciousness with the possibility of drowning.
d) Persons suffering from obesity or a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a hot tub.
e) Persons using medication should consult a physician before using a hot tub since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure, and circulation.

9)A bonding lug bar is provided on the side of your spa pack to accommodate grounding of entire spa. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub to these terminals with an insulated or bare copper conductor not smaller than No. 8 AWG solid (US) No. 6 AWG stranded (Canada) 8.4 mm (Europe).

SAVE THESE INSTRUCTIONS

WARNINGS!

WARNING: Children should not use hot tubs without adult supervision.

AVERTISSEMENT: Ne pas laisser les enfants utiliser une cuve de relaxation sans surveillance.

WARNING: Do not use hot tubs unless all suction guards are installed to prevent body and hair entrapment.

AVERTISSEMENT: Pour eviter que les cheveux ou une partie du corps Puissent étre aspires, ne pas utiliser une cuve de relaxation si esgrilles de prise d'aspiration ne sont pas toutes en place.

WARNING: People with infectious diseases should not use a hot tub.

AVERTISSEMENT: Les personnes atteintes de maladies infectieuses ne devraient pas utiliser une cuve de relaxation.

WARNING: To avoid injury, exercise care when entering or exiting the hot tub.

AVERTISSEMENT: Pour éviter des blessures, user de prudent en entrant dans une de cuve de relaxation et en sortant.

WARNING: Do not use drugs or alcohol before or during the use of a hot tub to avoid unconsciousness and possible drowning.

AVERTISSEMENT: Pour éviter l'évanouissement et la noyade éventuelle, ne prendre ni drogue ni alcool avant d'utiliser une cuve de relaxation ni quand on s'y trouve.

WARNING: Pregnant or possibly pregnant women should consult a physician before using a hot tub.

AVERTISSEMENT: Les femmes enceintes, que leur grossesse soit confirmée ou non, devraient consulter un médecin avant d'utiliser la cuve de relaxation.

WARNING: Water temperature in excess of 100ºF (38ºC) may be injurious to your health.

AVERTISSEMENT: Il peut être dangereux pour la santé de se plonger dans de l'eau a plus de 100ºF (38°C).

WARNING: Before entering the hot tub, measure the water temperature with an accurate thermometer.

AVERTISSEMENT: Avant d'utiliser une cuve de relaxation mesurer la température de l'eau à l'aide d'un ther momètre précis.

WARNING: Do not use a hot tub immediately following strenuous exercise.

AVERTISSEMENT: Ne pas utiliser une cuve de relaxation immédiatement après un exercice fatigant.

WARNING: Prolonged immersion in a hot tub may be injurious to your health.

AVERTISSEMENT: L'utilisation prolongée d'une cuve de relaxation peut être dangereuse pour la santé.

WARNING: Do not permit electric appliances (such as light, telephone, radio, television, etc.) within 5 feet (1.5m) of this hot tub.

AVERTISSEMENT: Ne pas placer d'appareil éléctrique (luminaire, téléphone, radio, téléviseur, etc.) à moins de 5 feet (1.5m) de cett cuve de relaxation.

CAUTION: Maintain water chemistry in accordance with manufacturer's instructions.

ATTENTION: La teneur de l'eau en matières dissoutes doit être conformé aux directives du fabricant.

WARNING: The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia in hot tubs.

AVERTISSEMENT: La consommation d'alcool ou de drogue augmente considérablement les risques d'hyperthermie mortelle dans une cuve de relaxation.

WARNING: People using medications and / or having an adverse medical history should consult a physician before using a spa or hot tub.

AVERTISSEMENT: Les personnes qui prennent des médicaments ou ont des problémes de santé devraient consulter un médecin avant d'utiliser une cuve de relaxation.

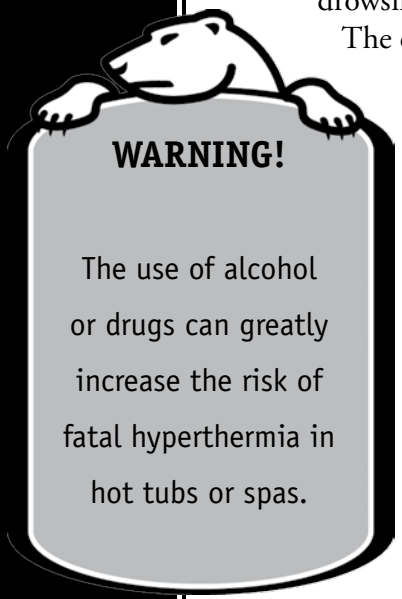
Hyperthermia

Prolonged immersion in hot water may induce hyperthermia.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 99ºF (37°C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body.

The effects of hyperthermia include:

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit hot tub;
- Physical inability to exit hot tub;
- Fetal damage in pregnant women; and
- Unconsciousness and danger of drowning.



SPA SPECIFICATIONS

	Outside Dimensions	Heights	Heater (Watts)	Water Capacity	Dry Weight	Electrical Requirements North America	Electrical Requirements Europe
Arctic Ocean	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Beauport	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Athabasca	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Hudson	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Juneau	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 60 Amp	1Ø x40Amp, 3Ø x16Amp, 3Ø x20Amp, 3Ø x25Amp
Kingfisher	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1609 Gallons 6090 Litres	1909 Lbs 866 Kg	240 Volt, 60 Amp	1Ø x40Amp, 3Ø x16Amp, 3Ø x20Amp, 3Ø x25Amp
Wolverine	171″ x 94.5″ 434 cm x 240 cm	50.5″ 128.5 cm	NA / Euro 5500/2x3600	1459 Gallons 5522 Litres	1909 Lbs 866 Kg	240 Volt, 60 Amp	1Ø x40Amp, 3Ø x16Amp, 3Ø x20Amp, 3Ø x25Amp
Cub	85 3/4″ x 85 3/4″ 217 cm x 217 cm	41″ 104 cm	NA / Euro 5500/2x3600	311 Gallons 1176 Litres	721 Lbs 327 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Fox	85 3/4″ x 68 3/4″ 217 cm x 174 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	233 Gallons 877 Litres	679 Lbs 308 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Frontier	85 3/4″ x 92 3/4″ 217 cm x 235 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	334 Gallons 1266 Litres	935 Lbs 424 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Glacier	85 3/4″ x 85 3/4″ 217 cm x 217cm	41″ 104 cm	NA / Euro 5500/2x3600	299 Gallons 1130 Litres	743 Lbs 337 Kg	240 Volt, 50 Amp	1 phase x 32Amp or 3 phase x 16Amp
Klondiker	92 3/4″ x 92 3/4″ 235 cm x 235 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	333 Gallons 1262 Litres	959 Lbs 435 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Norwegian	92 3/4″ x 92 3/4″ 235 cm x 235 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	602 Gallons 2280 Litres	1011 Lbs 458 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Summit	92 3/4″ x 92 3/4″ 235 cm x 235 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	372 Gallons 1408 Litres	968 Lbs 439 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Summit XL	92 3/4″ X 115 1/2″ 235cm x 293.37cm	38.75″ 98 cm	NA / Euro 5500/2x3600	647 Gallons 2,451 Litres	1212 Lbs 550 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)
Tundra	92 3/4″ x 92 3/4″ 235 cm x 235 cm	38.75″ 98 cm	NA / Euro 5500/2x3600	425 Gallons 1610 Litres	1011 Lbs 458 Kg	240 Volt, 50 Amp (Epic series require 60amp)	1Ø x32Amp, 3Ø x16Amp (Epic series require 1Ø x40A, 3Ø x-16Amp, 3Ø x20Amp, 3Ø x25Amp)

* North American Spas can run single phase 240 Volt, 40, 50 and 60 amp. low level programming should be set to reflect what power is supplied. When supplied power is less than required the spa pack will adjust operation to not exceed available power. This may result in inability to operate all devices at once.

** European spas can run single and three phase with 16,20,25,32 and 40amp. Low level programming should be set to reflect what power is supplied. When supplied power is less than required the spa pack will adjust accordingly to not exceed available power. This may result in inability to operate all devices at once.

Installation Instructions

Site Preparation

Please ensure the following:

- Always put your spa on a structurally sound, level surface. A filled spa can weigh a great deal. Make certain that the location you choose can support the weight of your filled spa.
- Locate your equipment compartment, which houses all of the electrical components, in a place where you will have easy access for periodic spa care and maintenance.
- Allow adequate access to all other doors for service.

Outdoor Ground Level Installation

No matter where you install your new spa, it's important that you have a solid foundation for support. If you are installing a spa with a wooden pedestal floor outdoors, we recommend you place patio stones underneath spaced out evenly. The stones should be at least two inches thick and twelve inches square (30 cm x 30 cm). Even with stones in place, the spa will possibly settle and become uneven, and may require re-leveling over time. If you are installing a spa with a Forever Floor® outdoors, you may set it on virtually any surface, as long as it is level.

Deck Installation

To be certain your deck can support your spa, you must know the deck's maximum load capacity. Consult a qualified building contractor or structural engineer. To find the weight of your spa, its contents and occupants, refer to the Spa Specification chart. This weight per square foot must not exceed the structure's rated capacity, or serious structural damage could result.

Your Arctic Spas® Dealer can help you with local information such as zoning regulations and building codes.

All Spas Require a Solid Level Base

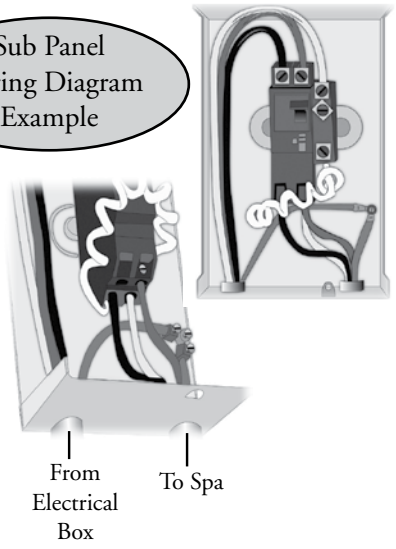
All Arctic Spas® models require a solid level base. The Arctic Ocean in particular, due to its weight and size, will require a solid, level base.

Electrical Specifications

WARNING!

All electrical hookups must be performed by a licensed electrician!

Sub Panel Wiring Diagram Example



IMPORTANT CONNECTIONS: ***(North American installation)***
Neutral of the GFCI must be connected to the neutral bus.
Neutral from the spa must be connected to the breaker.

The Eco-Pak spa pack allows you to use all the features of our free app, onSpa®, for your smartphone. onSpa® has a wide range of user guides and information that will be useful with any spa pack. For detailed instructions on how to use On Spa, download the app here http://www.arcticspas.com/support/downloads-manuals-brochures/ or go to www.ArcticSpas.com

Electrical Installation Instructions

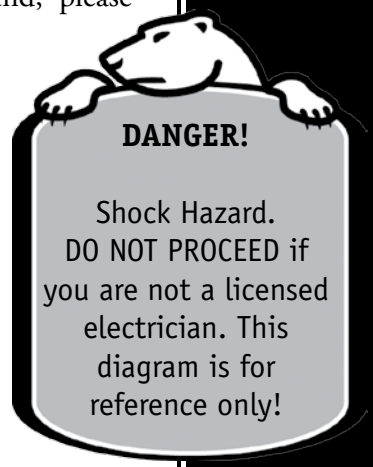
ARCTIC SPAS® MUST BE WIRED IN ACCORDANCE WITH ALL APPLICABLE LOCAL ELECTRICAL CODES. ALL ELECTRICAL WORK SHOULD BE DONE BY AN EXPERIENCED, LICENSED ELECTRICIAN AND APPROVED BY A LOCAL BUILDING/ELECTRICAL INSPECTION AUTHORITY.

The electrical supply must satisfy the requirements of the spa as marked on the certification label which is located adjacent to the spa controller (pack). If the ratings are not legible or cannot be found, please contact the factory for assistance. - DO NOT GUESS!

WARNING: Removing or bypassing any GFCI /RCD breaker will result in an unsafe spa and will void the spa's warranty.

IMPORTANT: Your Arctic Spa has been carefully engineered to provide maximum safety against electric shock. Remember, connecting the spa to an improperly wired circuit will negate many of its safety features.

Note to European customers:
8' Epic Series Electrical Requirements are 240 Volt, 40 AMP Single Phase or 2-20 AMP or 3-20 AMP or 3-16 AMP you have the choice of a 1, 2, or 3 phase power supply at 16, 20, 25, 32, 40, 50, & 60 amperages.



Startup Procedures

IMPORTANT:
Your Arctic Spa® has been thoroughly tested during the manufacturing process to ensure reliability and long-term customer satisfaction. Before filling the spa, wipe the spa shell clean with a soft rag.
The following instructions must be read and followed exactly to ensure a successful start-up or refill.

1) Ensure the electrical connections have been made in accordance with this manual.

2) Ensure all O-Rings have been installed into unions and unions have been tightened sufficiently.

3) Ensure all ball valves are open, and the drain has been closed.

4) Using a garden hose with a pre-filter, fill the spa with pre-filtered water to the bottom of the pillows (or approximately 6", 15 cm above the base of the floating weir).

5) Once the spa is filled to the proper level, turn the power to the spa on, by turning on the GFCI /RCD breaker in your panel.

6) The jet pump, heating system and all internal plumbing will achieve a partial prime as the spa is filled. To check the operation of the jet system and to remove any remaining air from the plumbing system, follow these steps:
a) All Models: Push the Pump 1 button a second time to turn the pump to high speed. Allow to run for 1 minute.
b) Signature, Ultra,Epic, and Legend series: Push Pump 2 button also. This pump runs at high speed only. Run for one minute.
c) Legend and Epic series: Push Pump 3 also. This pump runs at high speed only. Run for one minute. Once the jet system is fully operational (as indicated by strong, non-surging jets), priming of the spa is complete. Push each Pump button once to turn the pumps off.
d) Epic Series push pump #4 and #5 buttons once to turn on and run for one minute.

IMPORTANT: Weak or surging jets are an indication of a low water level, a clogged filter cartridge, or an improperly adjusted filter weir.

7) Adjust the chemicals and balance the water according to your dealer's instructions. A guideline is also included in this manual, under the Water Maintenance Section.

8) Set the temperature control to the desired temperature (between 100°F and 104°F (38°C and 40°C), then place the insulated cover on the spa and allow the water temperature to stabilize (approximately 16 hours). Make sure you secure the cover in place using the cover locks. Periodically check the spa water temperature.

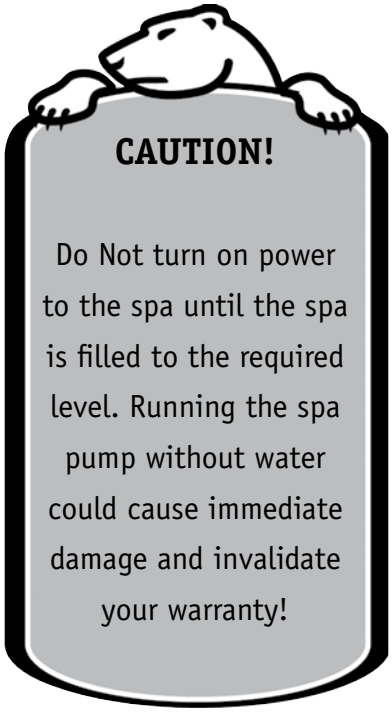
When the water temperature climbs above 85ºF (29ºC), proceed to the next step.

9) Test and Adjust Sanitizer level (Chlorine ideal 1 - 3 ppm or Bromine ideal 3 - 5 ppm).

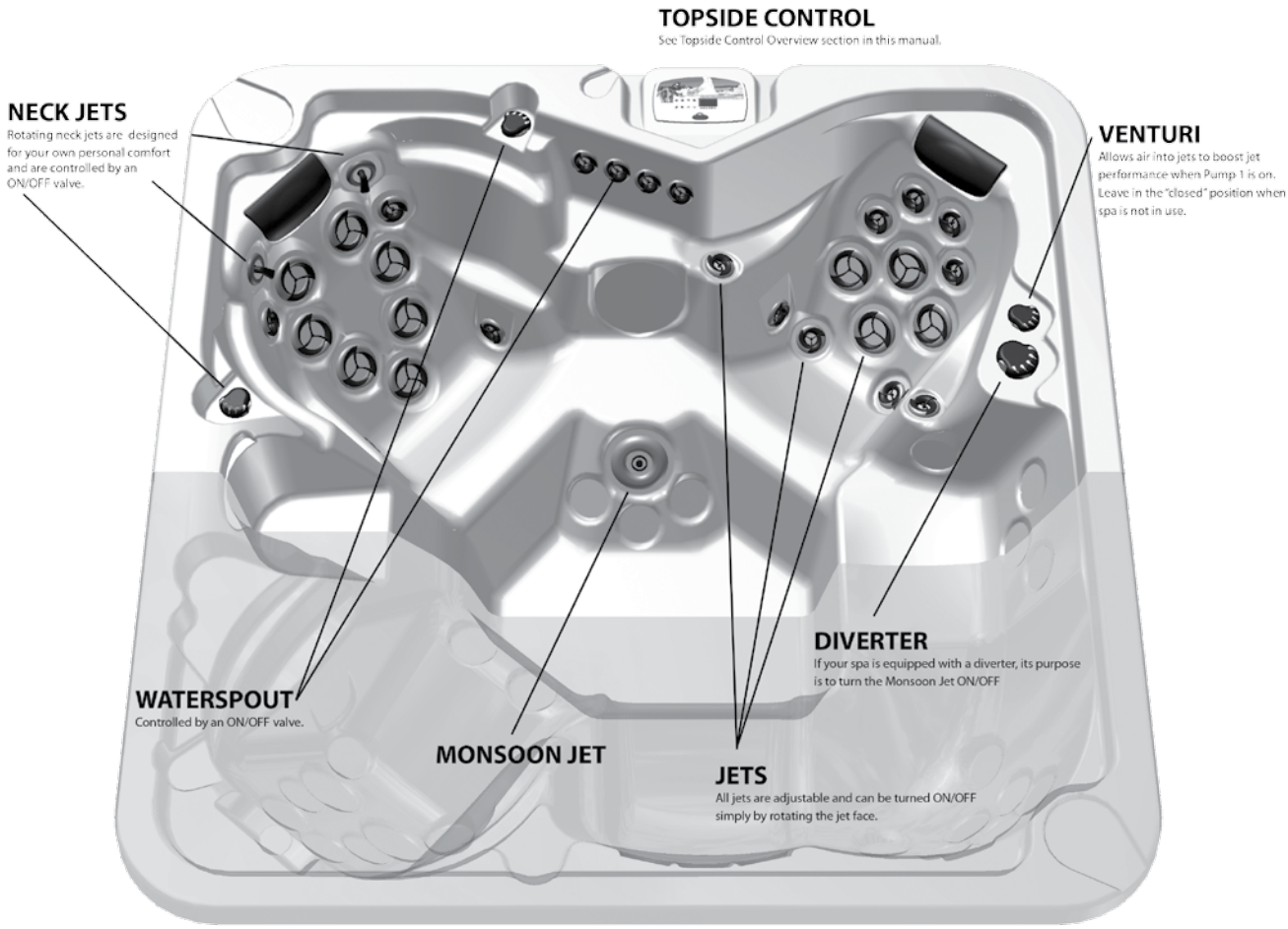
10) Rotate diverters to centre position and press "Pump 2" button on topside control panel for 5 seconds to activate the "Boost filtration system". When this system is enabled, "boo" is displayed on the screen. This will give 45 min of circulation and filtration to disperse the chemicals.

11) You can set the temperature (between 38°C and 40°C or 100°F to 104°F) by pressing the TEMP (^) and TEMP (v) buttons on the control panel. The spa will normally come up to temperature within 16 to 24 hours. Replace the spa cover while the temperature is reaching the set point.

IMPORTANT: For safety, you can lock your desired temperature setting. Refer to the Topside Control Panel section for details.



Spa Overview



Arctic Chiller

The arctic chiller has no Freon, compressors, pumps or refrigeration mechanics.

1. Remove one access panel and attach the chiller in its place.
2. Lower the temperature on your spa to the desired setting.

Note: Do not leave the cover off of the spa in direct sunlight, this can lead to heat distress and void your warranty.

Jet

Single Pulse

Five Inch (5”) Jets

The five-inch Hydro-massage jets give a wide circular massage. These jets are adjustable by turning the face of the jet clockwise for a stronger flow and counter-clockwise for a softer flow and eventually off.

Single Pulse

Neck Jet

Three Inch (3”) Jets

The Turbo Single jets give a wide circular massage. The 3-inch jets are designed for a thorough massage of the muscles in your upper back, shoulders and neck. These jets are adjustable by turning the face of the jet clockwise for a stronger flow and counter-clockwise for a softer flow and eventually off.

Monsoon Jet *(Certain models)*

The Monsoon Jet is a large hydro-massage jet designed to maximize massaging action on a specific area of the body. It is located in the lower part of the spa to allow easy access for massaging feet, legs, hips and lower back. The intensity of the Monsoon Jet can be altered using one of the Fusion™ Diverter (the location varies depending on spa model). Consult your local dealer regarding which diverter lever or just jump in and experiment for yourself.

Therapy Air Jets *(Optional)*

When the Therapy Air System is turned on (see spa control functions), soft air bubbles all around you for an exhilarating massage.

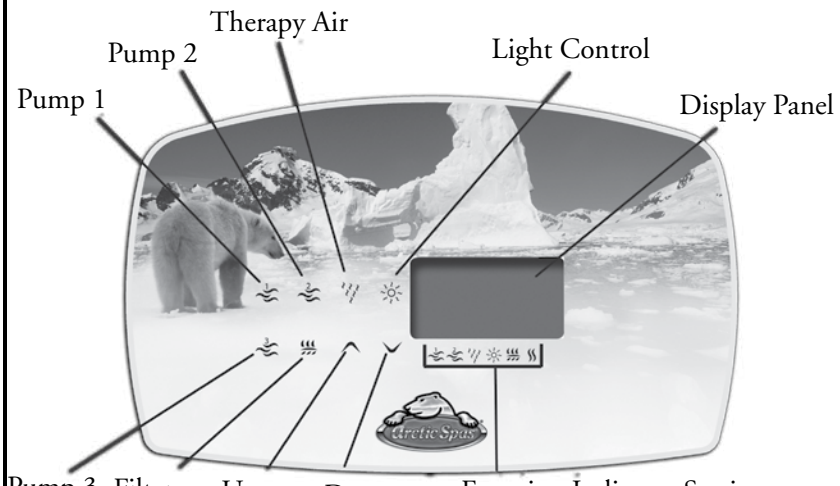
Topside Control Panel

Your spa control has been specifically designed so that by simply connecting the spa to a properly grounded source, and following the start-up procedures in this manual, the spa will automatically heat to the set temperature. Many other functions, such as filtration, safety checks and maintenance reminders have been automated so that your spa experience will be as carefree as possible.

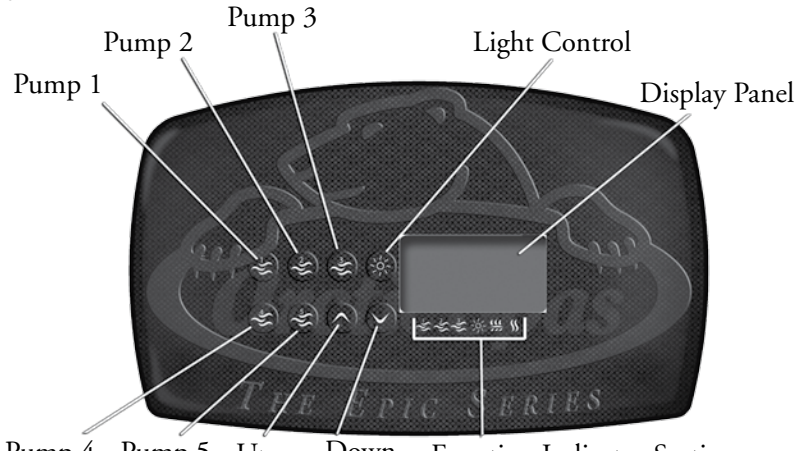
But you're in charge! The topside control (TSC) panel allows you to set the temperature, initiate the filtration cycle, control the lights, and activate or deactivate the pump(s) and blower. The TSC display responds to let you know you have pressed a button, and that the selected function has been performed.

Power-Up Detection

After a power-up, on the first 10 seconds the display will alternate between the software number and revision, the display will then blink until somebody presses a key. This feature lets you know that a power failure has occurred and all settings have returned to default.

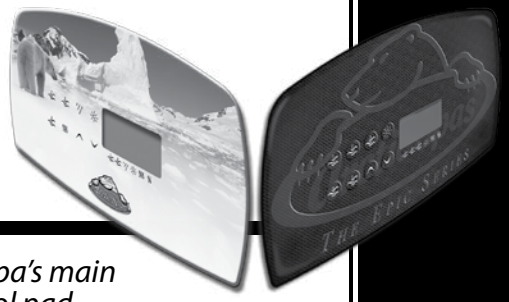


Function Indicator Section
A small inverted triangle over the symbol indicates that the corresponding function is active.



Function Indicator Section
A small inverted triangle over the symbol indicates that the corresponding function is active.

Quick Reference Guide



The Quick Reference Guide provides a quick overview of your spa's main functions and the operations accessible with your digital control pad.

Starting Pump 1:
Press **Pump 1** button to turn Pump 1 on at low speed. Press a second time to turn Pump 1 to high speed. A third time turns Pump 1 off. A built-in timer automatically turns Pump 1 off after 20 minutes, unless it has been manually deactivated.
The Pump 1 indicator lights up when Pump 1 is on at high speed. It flashes when Pump 1 is on at low speed.

Starting Pump 2:
Press **Pump 2** button to turn pump 2 on. A second time turns Pump 2 off. A built-in timer automatically turns Pump 2 off after 20 minutes, unless it has been manually deactivated.
The Pump 2 indicator lights up when Pump 2 is on at high speed.

Starting Pump 3:
Press **Pump 3** button to turn Pump 3 on. Press a second time to turn Pump 3 off. A built-in timer automatically turns Pump 3 off after 20 minutes, unless it has been manually deactivated.

Starting Pump 4 (Epic series only):
Press **Pump 4** button to turn Pump 4 on. Press a second time to turn Pump 4 off. A built-in timer automatically turns Pump 4 off after 20 minutes, unless it has been manually deactivated.

Starting Pump 5 (Epic series only):
Press **Pump 5** button to turn Pump 5 on. Press a second time to turn Pump 5 off. A built-in timer automatically turns Pump 5 off after 20 minutes, unless it has been manually deactivated.

Starting the blower:
Press the **Blower** button once to turn on the Therapy Air (TA) blower. A second time turns the TA blower off. A third time turns the SJ blower off.

Setting water temperature:
Use **Up** or **Down** arrow button to regulate water temperature. The temperature setting will be displayed for 5 seconds to confirm your new selection. Water temperature can be adjusted by 1° increments from 59 to 104°F (15 to 40°C).
The temperature symbol indicates the desired temperature, NOT the current water temperature.

Automatic water heater start:
When water temperature is 1°F (0.5°C) lower than the Set Point, the heater will automatically turn on & heat until the water temperature reaches 1°F (0.5°C) above the set point.
The Heater indicator lights up when the heater is on.

Temperature unit:
Press and hold the **light** button for 5 seconds to toggle between °F and °C.

Turning the light on:
Press **Light** button to turn light on. Press a second time to turn light off. A built-in timer automatically turns it off after 2 hours, unless it has been manually deactivated.
The Light indicator is displayed when the light is on.

Stereo (on stereo-equipped spas):
Any user function will turn the stereo on for 2 hours.

Waterfall
The waterfall will be operated by the pump nearest to it and will vary by spa model & series.
The waterfall can be turned on by holding the blower button (pump 3 on Epic series) for 3 seconds.

Standby mode:
Press and hold **Pump 3** button for 5 seconds to enter standby mode. The "stby" message is displayed and heating & filtering will be disabled for 30 minutes. Pressing any button will exit standby.
Note: If the system is turned down while the heater is on, Pump 1 will run for an additional 3 minutes.

Pad Lockout:
There are two modes you can choose from: Full or partial lock. Full lock means that all keypad functions are locked. Partial lock means that only the basic functions will remain accessible (pumps, blower, light).
Locking your digital control pad:
Press and hold **Pump 1** for 5 seconds. The display will show "LocP", with "P" representing partial lock. Release the button and the keypad will be in Partial lock mode. Keep button pressed down for 5 more seconds if you want to be in Full lock mode. The "LocF" message will then be displayed.
When control pad is locked, all automatic functions will run as usual. If a button is pressed down, a "LocP" or "LocF" message will be displayed for 1 second. To unlock the keypad, simply press and hold Pump 1 button again for 5 seconds.

Boost Mode:
Press and hold Pump 2 button for 5 seconds to enable Boost mode. In this mode, Pump 1 high speed and the ozonator will run for 45 minutes. When enabled, "boo" message is displayed. This mode is used to speed up filtration after intensive use of the spa or to help mix chemicals just added to the spa. Pressing any button will exit boost mode.

PROGRAMMING THE SETTINGS

During a filter cycle:
- Pump 2, Pump 3 (Pump 4 & Pump 5 on an epic series spa) and the blower run for 20 seconds, then
- Pump 1 runs at low speed for the programmed number of hours (see below), and
- The ozonator is turned on.

Press the Filter button (pump 5 on epics) to enter into your filtration options. Your display will show "Sett" and from here you will be able to choose your settings.

Press your Filter/Pump 5 button again to display your first option. This is your Ozone Cycle Duration (if equipped).

Use your arrow keys to select your Ozone Cycle Duration. You can select from 1 to 24 hours per day.

Press your Filter/Pump 5 button again. Your display will now show the settings for your Onzen system (if equipped).

Use your arrow keys to select your Onzen Cycle Duration. You can select from 1 to 24 hours per day.

Press your Filter/Pump 5 button again. Your display will now show the settings for your Filter Duration.

Use your arrow keys to select your Filter Duration in hours. You can select from 0 to 6 hours.

Press your Filter/Pump 5 button again. Your display will now show the settings for your Filter Cycle Frequency.

Use your arrow keys to select your Filter Cycle Frequency from 1 to 4 times per day.

Please note:
You will see the options that are applicable to your spa. If you have neither ozone nor onzen, you will proceed directly into setting your Filter Duration. Also, though an Epic topside is of a different design, the steps are as shown.
You can move backwards through the settings by pressing the Pump 3 button (Pump 4 on Epic series spas). The Pump 1 button will allow you to exit without saving any changes. When you get to the end of the options, press the filter key one last time to save changes and begin a filter cycle immediately. If you do not press the filter key again your changes will be saved and the filter cycle will begin when you have programmed it to do so.

45 Minute filter cycle time-out:
If you turn a pump, blower or light on during a filter cycle, the cycle will be interrupted and will only resume 45 minutes after you (or the system) have turned the last active output off.

TROUBLESHOOTING

	"HL" error message is displayed.	The system has shut the heater down because the temperature **at the heater** has reached 119°F (48°C). Do not enter the water! Remove spa cover and allow the water to cool down, then reset the breaker to reset the system.
	"HL" error message is flashing.	The system has shut down because the water temperature **in the spa** has reached 112°F (44°C). Only the **Smart Winter Mode** remains active. Do not enter the water! Remove spa cover and allow the water to cool down to 109°F (43°C). Call your dealer or service supplier if problem persists.
	"FLO" error message is displayed.	The system detects no water pressure while a pump is running. Check and open water valves. Check water level. Clean filter or replace. Call your dealer or service supplier if problem persists.
	"FLC" error message is displayed.	A problem has been detected with the pressure switch. Call your dealer or service supplier.
	"Prr" error message is displayed.	A problem has been detected with the temperature probe. Call your dealer or service supplier.
	4 dashes are displayed	The Processor has been damaged.... **Do Not Enter** the Water... this is usually caused by abnormal power fluctuations, call your dealer or service supplier.

*If activated in Low-level programming the lights will flash when there is an error code present

Spa Care and Maintenance

Your Arctic Spa® is manufactured from the highest quality, most durable materials available. Even so, the spa care and maintenance program you develop will ultimately determine how long your spa and its individual components will last. Regular maintenance following the advice in this section will help you to protect your investment.

IMPORTANT: Before performing any maintenance on your spa, make a visual inspection of the spa to get an understanding of what condition it may be in and if anything looks out of the ordinary. If any part appears to be damaged, loose or missing, do not proceed. Contact your Factory Authorized Dealer immediately.

Draining the Water

Detergent residues and dissolved solids from bathing suits and chemicals will gradually accumulate in your spa's water. Normally, in about three to four months the water will become difficult to balance and should be replaced. Showering without using soap prior to entering the spa or using only the rinse cycle when laundering your bathing suit will help to reduce detergent residue in the spa water. However, foam problems are more likely to be caused by a build up of organic pollutants in the spa, mostly from body oils. If you're using your spa frequently with a high bather load the water will need to be replaced more often. Spa water gradually loses quality because of build-ups of unfilterable pollutants.

IMPORTANT: Remember to change your water every three to four months.

To Drain Your Spa:

1. Shut off the GFCI /RCD breaker located in the sub panel or the quick disconnect.
2. Locate the main drain valve for the spa, on the outside of the cabinet to the right of the equipment compartment. Attach the male threaded end of a garden hose to the drain valve, and route the other end of the hose to an appropriate draining area. * If your hot tub has a synthetic cabinet, the drain valve is located behind one of the panels. You will need to remove the exterior panel to access the drain valve.
3. Open the valve by turning the large outside ring counterclockwise. The spa will drain by gravitational flow.

Note: All Arctic Spas® models will drain through the floor drain. Equipment such as the pump(s) and heater will drain. All models will leave a small amount of water in the foot well. Any water remaining in the plumbing or equipment after draining will only need to be removed if the spa is being winterized.

4. When empty, inspect the spa shell and clean as required.
5. Close the drain valve.
6. Refill the spa BEFORE restoring power.

IMPORTANT: With reusable filters, it is necessary to rinse the filter cartridges weekly. Every month, and each time the spa is drained for cleaning, clean the cartridges in filter cleaner. (With Arctic Spas disposable filters, simply replace the cartridge whenever the spa is drained, or about every three months).

Filtration System

The use of Clarifiers and Foam inhibitors is not recommended with disposable filters!

Arctic Spas® are equipped with balanced filtration, meaning that the filter cartridges are sized to meet the needs of the pump system. As with any water filtering system, the filter cartridge may become clogged, resulting in reduced water flow. It is important to maintain a clean, unobstructed filter system. We recommend that your filter cartridge be replaced with an Arctic Pure® disposable filter cartridge every three (3) months.

Filter Cartridge Removal and Installation

1. Put the spa in Standby mode using the on/off button on the topside control panel.
2. Remove the telescoping filter cylinder
3. Unscrew the filter cartridge and either clean the reusable filter or discard the disposable filter.
4. Re-thread the clean or new filter.
5. Replace the telescoping filter cylinder.

Care of Spa Pillows

The spa pillows used in many of the Arctic Spas® models will provide years of comfort if treated with care. They have been positioned above the water level to minimize the bleaching effects of chlorinated water and other spa water chemicals. To extend their life, whenever the spa shell is being cleaned, the spa pillows should be removed and cleaned. Body oils can be removed with a mild soap and water solution. ALWAYS rinse off the spa pillows thoroughly to remove any soap residue. The pillows can be conditioned with Arctic Pure® Cover Renew cleaner after cleaning. If the spa is not going to be used for a long period of time (that is, during a vacation or if the spa is being winterized), or when the spa water is being super-chlorinated, the spa pillows should be removed until the next use of the spa.

To remove and replace the spa pillows:

1. Pull the pillow directly upwards until it is fully extended. Next to the acrylic of the shell, there is a button that you press to allow you to pull the pillow upwards and out completely.
2. To reinstall the spa pillow, push the button and carefully insert pillow.

Care of the Spa Shell

Your Arctic Spa® has a fiberglass reinforced, Lucite® cast acrylic shell. Stains and dirt generally will not adhere to your spa's surface. A soft cloth or sponge should easily remove most dirt. Most household chemicals are harmful to your spa's shell. Sodium bicarbonate (baking soda) or vinegar can also be used for minor surface cleaning. Always thoroughly rinse off any spa shell cleaning agent with fresh water.

Service Notes:

1. Iron and copper in the water can stain the spa shell if allowed to go unchecked. Your Arctic Spas® Dealer stocks Arctic Pure® Best Defence to use if your spa water has a high concentration of dissolved minerals.

2. The use of alcohol or any household cleaners other than those listed to clean the spa shell surface is NOT recommended. DO NOT use any cleaning products containing abrasives or solvents since they may damage the shell surface. Damage to the shell by the use of harsh chemicals is not covered under the warranty.

MANUAL SAFETY COVER

Care of the Spa Cover

WARNING: The cover is a manual safety cover that meets or exceeds all prevailing requirements of ASTM Standards for spa safety covers when installed and used correctly as of the date of manufacture. Non-secured or improperly secured covers are a hazard. Open the cover to its fully open position before use. Be sure to inspect the cover for premature wear or deterioration. Over time, with use, there is a chance of normal cover wear and deterioration. To properly maintain your cover see directions below.

Vinyl Cover

The vinyl spa cover is an attractive, durable foam insulation product. Monthly cleaning and conditioning is recommended to maintain its beauty.

To clean and condition the vinyl cover:

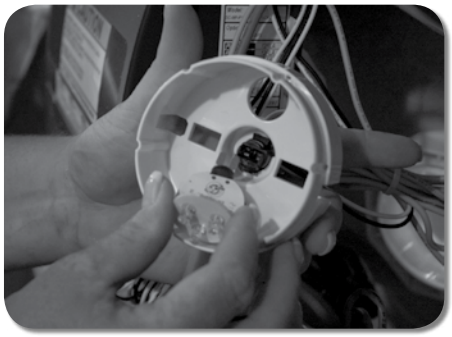
1. Remove the cover from the spa and gently lean it against a wall or fence.
2. With a garden hose, spray the cover to loosen and rinse away dirt or debris.
3. Using a large sponge and/or a soft bristle brush, and using a very mild soap solution or baking soda, scrub the vinyl top in a circular motion. Do not let the vinyl dry with a soap film on it before it can be rinsed clean.
4. Scrub the cover's perimeter and side flaps. Rinse clean with water.
5. Rinse off the underside of the cover with water only (use no soap), and wipe it clean with a dry rag.
6. To condition the cover after cleaning, apply a thin film of Arctic Pure® Cover Renew to the vinyl surface and buff.

Care of the Spa Cabinet

Cedar Cabinet: When properly cared for, the wood cabinet of your spa will maintain its beauty for many years. Your Arctic Spa cabinet has been specially treated with Olympic Maximum Wood Stain. Use this stain or a similar product on a regular basis to protect the wood of the cabinet and keep your spa looking great for years to come.

Forever Flex™ Cabinet: Wash with soap and water. (no harsh chemicals)

LED Light Replacement



All Arctic Spas® come equipped with two 12 volt multicolored underwater lights for night use. The Family Light Package option comes with five lights. Should you need to change any light, follow these simple steps:

1. Make sure the lighting is turned off, by checking the topside be sure the light icon is not showing.
2. Remove the screws securing the equipment access doors; remove the doors.
3. Locate the reflector, which is secured into the light housing. Carefully rotate the reflector counter-clockwise until it comes off the light housing.
4. Carefully disconnect any cables (note the location of the cable(s), as the LED assembly has two sockets) and remove the light assembly from its socket or slot.
5. Install the new LED assembly in its slot or socket, then reconnect the cables.
6. To reinstall the underwater light, rotate the lamp assembly clockwise onto the light housing until secure.

If your Ultimate Lights quit working call your closest authorized service provider.

Vacation Care Instructions

If you plan to be away from home for 7 - 14 days, follow these instructions to ensure that the water quality of your spa is maintained.

1. Adjust pH as needed.
2. Ensure you have sufficient sanitizer to last until you return.
3. Shock the spa with Arctic Pure® Boost or Refresh.
4. Lower the temperature.

Upon your return:

1. Shock the spa with Arctic Pure® Boost or Refresh.
2. Ensure you have sufficient sanitizer for regular use.
3. Return the temperature to its original setting. You can use your spa once the residual sanitizer level falls within the ideal range.

Note: If you will not be using your spa for more then 14 days and a neighbor, friend or an outside maintenance service is not available to check and balance the water chemistry, draining or winterizing (for winter only) the spa is recommended.

Winterizing Your Spa

If you plan to leave your spa unused for a long period of time in severely cold weather, you should drain the spa to avoid accidental freezing due to a power or equipment failure.
We recommend your local authorized dealer winterize your spa. Freezing can severely damage your spa. Improper winterizing of your spa can void your warranty.

Aquatremor®, Aquatemor® Deluxe or WetTunes® Stereo *(Optional)*

With the new Eco-Pak which has both Bluetooth® connectivity. All of your music can now stream from a Bluetooth-enabled device such as any Smartphone to your spa. To activate the stereo any button on the top side controller must be pressed. Power to the stereo will automatically stop after two hours from last time any button is pressed.

Water Maintenance

It's important to have clean water. Water maintenance is one of the least understood, but very important areas of spa ownership. Your dealer can guide you through the process of achieving and maintaining perfect water in your spa, given your local conditions. Your program will depend on your water's mineral content, how often you use your spa, and how many people use it. Here is our suggested step-by-step program:

General Information

There are three fundamental areas of water maintenance. They are (1) Water Filtration, (2) Water Sanitation, and (3) Chemical Balance/pH Control.

Although your spa's filter system is working several hours a day to remove particles from your water, it does not remove bacteria or viruses. Water sanitation is the responsibility of the spa owner. It can be achieved through the regular and periodic (daily, if necessary) addition of an approved sanitizer. The sanitizer will chemically control the bacteria and viruses present in the spa water. Bacteria and viruses can grow quickly in under sanitized spa water. The water's chemical balance and pH control are also the responsibility of the spa owner. You will have to add chemicals to maintain proper levels of Total Alkalinity (TA), Calcium Hardness (CH) and pH. Proper water balance and pH control will minimize scale buildup and corrosion of metals, extend the life of the spa, and allow the sanitizer to work at maximum efficiency.

For Onzen System: Please refer to your Onzen User Guide for direction in water maintenance.

Methods For Testing The Spa Water

Accurate water testing and analysis are an important part of effectively maintaining your spa water. To follow the Arctic Spas® recommended program, you must have the ability to test for:

- Total Alkalinity (TA)
- Calcium Hardness (CH)
- pH
- Sanitizer

Although reagent liquid test kits provide the highest level of accuracy, Test Strips are the most convenient testing method used by many spa owners. Keep in mind that test strips are susceptible to heat and moisture contamination, which will result in inaccurate readings. Very high sanitizer levels will also render test strips unreliable.

IMPORTANT: Always read and carefully follow the directions included with the Test Kit or Test Strips to ensure the accuracy of the test results.

Hints For Successful Water Testing

When using the reagent test kit:

- Always take water samples 30-45 cm (12" - 18") below the water surface.

- Rinse the test cells before and after each use.
- Do not dispose of test samples into the spa water.
- When adding drops of chemicals from the kit (the reagents) into the test block, hold the bottle vertically and add the drops slowly to be sure the correct quantity is used.
- The reagents should be replaced on a yearly basis to maintain the accuracy of the test results.

Basic Chemical Safety

When using chemicals, read the labels carefully and follow directions precisely. Though chemicals protect you and your spa when used correctly, they can be hazardous in concentrated form. Always observe the following guidelines:

- ALWAYS KEEP CHEMICALS OUT OF CHILDREN'S REACH.
- NEVER MIX CONCENTRATED CHEMICALS TOGETHER.
- ALWAYS THOROUGHLY RINSE ANY CONTAINER USED TO MIX CHEMICALS AFTER USE.
- ALWAYS RINSE OUT ANY EMPTY CHEMICAL STORAGE CONTAINER BEFORE DISPOSAL.
- Accurately measure the quantities specified. Do not overdose your spa. Amount required will vary depending on water condition, quantities to be used are only guidelines.
- Store chemicals in a cool, dry, well ventilated place.
- Always keep chemical containers closed when not in use.
- Don't inhale fumes or allow chemicals to come in contact with your eyes, nose, or mouth. Wash your hands immediately after use.
- Follow the emergency advice on the product label in case of accidental contact.
- Never smoke around chemicals. Some fumes can be flammable.
- Don't store any chemicals in the spa equipment compartment.

Adding Chemicals to the Spa

Most chemicals (does not include any slow dissolving chemicals) can be added directly to the spa while the pump(s) is running on high speed, for a minimum of 10 minutes.

IMPORTANT WHEN USING ARCTIC PURE® BOOST OR REFRESH TREATMENT

NOTE: After administering a super chlorination treatment or non-chlorine shock to your spa, leave the cover open for a minimum of 20 minutes to allow the oxidizer gas to vent. A high concentration of trapped oxidizer gas which may exist as a result of the shock treatment (not daily sanitation) may eventually cause discoloration or vinyl degradation to the bottom of the cover. This type of damage is considered chemical abuse and is not covered under warranty.

The Arctic Pure® Water Maintenance Program

Following the Arctic Pure® water maintenance program will save you time and frustration and ensure clear, clean spa water.

Remove Excess Minerals

Most tap water has minerals such as Calcium, Copper, Iron, Manganese and Sodium in it, and the

circulation of water can cause the erosion of metals from spa equipment which can present possible scaling and staining problems in your spa. Cases of source water with high minerals (such as some well water):

1. We recommend you add 3 1/2 tablespoons (48 grams) of Arctic Pure® Best Defense per 1000 litres (265 gallons) of water while filling your spa.
2. Also, as water evaporates from your spa and new water is added, the amount of dissolved minerals will increase. The spa water may eventually become "hard" (Calcium Hardness too high) enough to damage the heater by calcifying its surface. To protect against these problems add 1 tablespoon (14 grams) per 1000 litres (265 gallons) of Arctic Pure® Best Defense weekly.

Balance the Total Alkalinity (TA)

1. The recommended Total Alkalinity (TA) for your spa water is 80-120 ppm.
2. Total Alkalinity is a measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is referred to as the water's "pH buffer". In other words, it's a measure of the ability of the water to resist changes in pH level.
3. If the TA is too low, the pH level will fluctuate widely from high to low. Fluctuations in pH can cause corrosion or scaling of the spa components. Low TA can be corrected by adding Arctic Pure™ Perfect Balance.
4. If the Total Alkalinity is too high, the pH level will tend to be high and may be difficult to bring down. The pH can be lowered by using Arctic Pure® Adjust Down.
5. Once the TA is balanced, it normally remains stable, although some sanitizers, and the addition of more water with a high or low alkalinity will raise or lower the TA reading of the water.
6. When the Total Alkalinity is within the recommended range, proceed to the next step.

Balancing the pH

1. We recommended a pH range for your spa water of; 7.2-7.6.
2. The pH level is the measure of acidity and alkalinity. Values above 7 are alkaline; those below 7 are acidic. Maintaining the proper pH level is extremely important for:
   - Optimizing the effectiveness of the sanitizer.
   - Maintaining water that is comfortable for the user.
   - Preventing equipment deterioration.
   - Preventing cloudy or odorous water.
3. If the spa water's pH level is too low, the following may result:
   - The sanitizer will dissipate rapidly.
   - The water may become irritating to spa users.
   - The spa's equipment may corrode.

If the pH is too low, it can be increased by adding Arctic Pure® Adjust Up to the spa water.

4. If the pH level is too high, the following may result:
   - The sanitizer is less effective.
   - Scale will form on the spa shell surface and the equipment.
   - The water may become cloudy.

If the pH is too high, it can be decreased by adding Arctic Pure® Adjust Down to the spa water.

5. It is important to check the pH on a regular basis. The pH will be affected by the bather load, the addition of new water, the addition of various chemicals, and the type of sanitizer used.
6. When the pH is within the recommended range, proceed to the final step.

Calcium Hardness (CH)

1. Most spa manufacturers recommend a Calcium Hardness (CH) level for your spa of 150-200 ppm. However, we do not recommend adding calcium to your spa if your spa water is above 100 ppm, or if your incoming water has a very low level of calcium hardness.
2. Calcium Hardness is a measure of the total amount of dissolved calcium in the water. It is believed that calcium helps control the corrosive nature of water. Calcium has a tendency to precipitate (fall out of suspension) in high temperatures and high pH levels.

Warning: When calcium falls out of suspension it can collect on the heater and pump, and shorten their life.

3. Any natural corrosiveness in the water can be combatted by maintaining a slightly higher Total Alkalinity Level.

Sanitize the Spa

Sanitizer is extremely important for killing algae, bacteria and viruses, and preventing unwanted organisms from growing in the spa. At the same time, you don't want too high a sanitizer level, or it can irritate your skin, lungs and eyes.

1. Always maintain the sanitizer level in your spa at the recommended level for each type of sanitizer.
2. We recommend the following sanitizers:

Chlorine System:

- Arctic Pure® Chlorine Tablets
- Arctic Pure® Refresh
- Arctic Pure® Boost

Bromine System:

- Arctic Pure® Brominating Tablets
- Arctic Pure® Refresh
- Arctic Pure® Peak Boost

Important: Sanitizers are acidic and will decrease the Total Alkalinity. Regular testing and balancing of TA is extremely important with these products.

Important: Always remove the floating dispenser while the spa is in use. Remove dispensers with a plastic bucket (keeping submerged) and store out of reach of children until spa use has ended.

Using Chlorine System

CAUTION: The use of personal protective equipment (rubber/latex/vinyl gloves, eye protection) is recommended while handling the dispenser or the pucks.

Start-up:

1. Add pucks to floating dispenser and open to setting 4.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Add 1 tablespoon (14 grams) of Arctic Pure® Spa Boost per 1000 litres (265 gallons) of water.
4. Test the Chlorine level. Once the chlorine reads within the ideal range (1-3 ppm) turn tablet dispenser down to 1 - 2 (more or less according to bather load).
5. Start the Boost Filtration mode to circulate the chemicals and do not use spa for two hours after the mode ends.

Note: The above example is for a spa without an ozone system. If your spa is equipped with an ozone system please contact your dealer for proper Chlorine levels.

Weekly:

1. Add pucks to floating dispenser and reset the setting if necessary.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Wait at least one hour and add 1 tablespoon (14 grams) of Arctic Pure® Best Defence per 1000 litres (265 gallons) of water.

Important: Arctic Pure® Refresh significantly reduces pH and TA. One hour after adding Arctic Pure® Refresh test and adjust TA and pH as needed.

Bromine System:

Note: If you are planning to use your new spa right away, Peak Boost must be added first. Follow directions for adding Peak Boost from this page.

1. Fill floating dispenser with pucks and open to setting 7.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Add 2 1/2 tablespoons (35 grams) of Arctic Pure® Peak Boost per 1000 litres (265 gallons) of water, to establish a Bromide reserve.
4. Test the Bromine level. Once bromine reads within the ideal range (3-5 ppm) turn tablet dispenser down to 2 or 3 (more or less according to bather load).

Note: The above example is for a spa without an ozone system. If your spa is equipped with an ozone system please contact your dealer for proper Bromine levels.

Weekly

1. Twice a week test and adjust Total Alkalinity, pH and Chlorine or Bromine levels.

In extreme cases of source water with high minerals (such as some well water), add
1 tablespoon (14 grams) per 1000 litres (265 gallons) of Arctic Pure® Best Defence weekly.

Important: Arctic Pure® Refresh significantly reduces pH and TA. One hour after adding Arctic Pure® Refresh test and adjust TA and pH as needed.

The use of Clarifiers and Foam inhibitors is not recommended with Silver Sentinel Disposable filters!

IMPORTANT: Chemical doses given in this manual are for reference ONLY. ALWAYS refer to product label for instructions.

Common Spa Water Problems~Cause & Remedy

PROBLEM	POSSIBLE CAUSES
CLOUDY WATER	A. Poor Filtration B. Suspended particles C. Organic contaminants build up D. pH high E. Total alkalinity high F. Combined chlorine in the water G. High dissolved solids H. Hardness too high
COLOURED WATER	A. Dissolved metals from water source B. Low chlorine/bromine levels C. Fragrance
FOAMING	A. High concentration of oils and organics being agitated by the jets and/or Therapy Air
SCALE DEPOSITS	A. High Calcium level, high pH, high alkalinity
ODOR	A. High level of organic contaminants, combined with chlorine
EYE/SKIN IRRITATION	A. pH too low B. Combined chlorine due to high concentration of organic contaminants C. Allergic reaction to sanitizer D. Bacterial contamination
NO CHLORINE/ BROMINE READING	A. High concentration of contaminants using up sanitizers B. Test kit reagents ineffective

	SOLUTIONS
	A. Dirty filter, clean with Arctic Pure® Filter Restore (not with disposable filter). Increase Filter cycle. B. Add Arctic Pure® Easy Clear C. Shock treatment with Arctic Pure® Refresh D. Add Arctic Pure® Adjust Down until level reads 7.2-7.6 E. Add Arctic Pure® Adjust Down to adjust TA level to 100-130 ppm F. Shock treatment until combined chlorine is eliminated (see container instructions) G. Empty spa and refill H. Add Arctic Pure® Best Defence until level reads 100-280 ppm
	A. Use Arctic Pure® Best Defence and have your dealer check your water balance B. Add Arctic Pure® Boost treatment to raise chlorine levels and test chlorine levels or for Bromine system add Peak Boost & test Bromine levels C. Stop the use of fragrance
	A. Squirt Foam Dissolve™ on foam. Refer to pg 20 for more information. (not with disposable filter)
	A. Drain partially, add Arctic Pure® Best Defence, correct pH level to 7.2 - 7.6 and alkalinity to 100-130 ppm.
	A. Check pH and adjust as required. B. Shock with Arctic Pure® Refresh, add Boost or Peak Boost dependent on whether you have a chlorine or bromine system C. Dilution of water will reduce contaminants and odor. D. Check any ozone system is operational
	A. Add Arctic Pure® Adjust Up until level reads 7.2 - 7.6 ppm B. Add Arctic Pure® Refresh, add Boost or Peak Boost. C. Change from Bromine to Chlorine or vice versa. D. Drain and refill spa.
	A. Add sanitizers until levels are up to the recommended levels B. Replace test kits at least once a year C. Chlorine/Bromine level very high and is bleaching test reagent, Allow sanitizer levels to recede by opening cover and running jets.

Warranty

Spa Shell~Lifetime
Arctic Spas® warrants the spa shell to the customer against water loss due to structural failure for as long as the original customer shall own the spa.

Equipment & Plumbing~5 years
Arctic Spas® warrants the spa's electrical equipment components ~ specifically the pump(s) *(please refer to detailed pump warranty on the reverse under "Detailed Pump Warranty". Factory installed Peak I and Peak II, Therapy air system, RossExhaustTM, Ultimate Lighting controls, Heater and control system against malfunctions due to defects in materials and workmanship for a period of five years to the original customer from the date of delivery. This warranty includes all parts and on site labour necessary to repair the spa.

Other Components~5 years
Arctic Spas® warrants the fuses, lights (blue LED, northern lights), Ultimate lighting LEDs, WIFI, jet inserts**, topside control overlays, filter baskets and weir assemblies, diverter handles and caps, air control handles and caps, plastic cover clips, chrome trim to be free of defects in workmanship and materials for a period of five years to the original customer from the original date of delivery. Includes only parts necessary to repair, not labour.
**jet inserts (including Titanium) are not warranted against discolouration, rusting or fading.

Shell Surface~5 years
Arctic Spas® warrants the shell surface to the customer against water loss due to material failure including cracks, blisters, peeling and delaminating for a period of five years to the original customer from the original date of delivery. Includes parts and on site labour necessary to repair.

FLEX Cabinets~5 years
Arctic Spas® warrants FLEX Cabinet to be free from defects in materials and workmanship for a period of five years to the original customer from the original date of delivery. Includes only parts necessary to repair. Scratches – as well as fading and weathering from exposure to direct sunlight on FLEX Cabinet side panels are considered normal wear and tear, and are not covered by this warranty.

Cover~3 years
Arctic Spas® warrants the Castcore® cover against malfunctions due to defects in materials and workmanship for three years to the original customer from the original date of delivery. Includes parts necessary to repair. (Normal wear and tear is not included in this warranty, when used with a cover lifter seam damage will be considered normal wear and tear)

OnzenTM System ~ 2 years
Arctic Spas® warrants the factory installed OnzenTM natural salt water care system against malfunctions due to defects in materials and workmanship for two years from the original date of delivery to the original customer. This warranty includes parts and on site labor necessary. Spa water quality and other damages resulting from water imbalance are specifically excluded from this warranty . *See OnzenTM user guide for operating details.

Aquatremor® ~ 3 years
Arctic Spas® warrants the factory installed Aquatremor® Bluetooth sound system against malfunctions due to defects in materials and workmanship for three years to the original customer from the original date of delivery. Includes parts and on site labour necessary to repair. iPod® and waterproof case are manufacturer direct warranties. Aquatremor® Deluxe pop up speakers are warranted against defects in materials and workmanship for one year.

WetTunesTM ~1 year
Arctic Spas® warrants the factory installed WetTunesTM Bluetooth sound system against malfunctions due to defects in materials and workmanship for one year to the original customer from the original date of delivery. Includes parts and on site labour necessary to repair. iPod® and waterproof case are manufacturer direct warranties.

Forever Floor®~5 years
Arctic Spas® warrants the Forever Floor® against rotting and structural cracking for a period of five years to the original customer from the original date of delivery. Includes parts and on site labour necessary to repair.

Arctic Chiller~1 year
Arctic Spas® warrants the Arctic chiller against malfunctions due to defects in materials and workmanship for one year to the original customer from the original date of delivery. Includes parts necessary to repair.

Arctic Spas® extends this limited warranty solely to the original customer of any Arctic self-contained spa installed by an approved Arctic Spas® Dealer for five years from the date of original delivery or six years from the manufacturer's ship date, whichever comes first. For the purpose of this document, "customer" shall mean the original purchaser of the spa.

DETAILED PUMP WARRANTY
Pump(s) are warranted against material and component failure. The pump shaft seal is covered under warranty. Damage resulting from a neglected leaking shaft seal is not covered under warranty. This includes but is not limited to bearing seizure, end bell failure, start switch failure, impeller failure and capacitor failure. It is the responsibility of the customer to report shaft seal failure before further damage can occur. Any pump component failure determined to be the result of defective material will be replaced under warranty. Arctic Spas® reserves the right to replace pump components, rather than the complete pump assembly. Vibration noise associated with normal pump operation is excluded under this warranty.

PERFORMANCE
To obtain service in the event of a defect or malfunction covered by this Limited Warranty, notify your Arctic Spa dealer as soon as possible and use all reasonable means to protect the spa from further damage. Upon proof of purchase, Arctic Spas®' agent or its designated service representative will correct the defect subject to the terms and conditions continued in this Limited Warranty. Pre-Aproved claims must be executed within 60 days of Pre-approval, All existing claims expire upon expiration of warranty. *Please note that union connection leaks are considered to be user serviceable and are expressly excluded from the Limited Warranty. Damage resulting from union connection leaks are expressly excluded from the Limited Warranty. There will be no charge for on site labour to the customer for a period of five years from the date of original delivery or six years from manufacturer's ship date, whichever comes first. Specifically equipment, plumbing and shell surfaces against malfunctions due to any defect in the material and workmanship within the Limited Warranty. Travel costs are the responsibility of the customer. Service and/or travel costs are covered within the first 30 days of ownership to a maximum distance of 100KM from dealership or designated service outlet. If Arctic Spas® 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. Spa replacement is done only at the discretion of Arctic Spas®. Reasonable costs for the removal of the defective spa, and delivery and installation will be the responsibility of the spa customer. Freight will be paid to the nearest Arctic Spas® distribution centre.

CONDITIONS OF WARRANTIES
All warranties provided hereunder extend only to the original customer of the spa if purchased by an authorized Arctic spas dealer and originally installed within the boundaries of the country where it was originally purchased. All warranties hereunder terminate upon transfer of ownership of a spa from the original customer. This warranty only applies within the service area where the spa was originally installed. Your limited warranty does not include repair travel mileage or for shipping cost assessed by your Factory Authorized Dealer or service agents. All events covered by this Limited Warranty hereunder must be repaired by a Factory Authorized Dealer of Arctic Spas®. The warranties will not include any costs of repair incurred by a non-factory authorized agent. To obtain service, the customer must contact the Factory Authorized Dealer in his area. In the event that a spa or component thereof must be returned to Arctic Spas® distribution centre, all freight costs are the responsibility of the spa customer. In all cases Arctic Spas® has sole responsibility for determining the cause and nature of failure of the spa and Arctic Spas® determination with regard thereto shall be final.

EXCLUSIONS

All warranties hereunder are void if the spa has been subject to alterations (including after- market accessories), misuse or abuse or any repair of the spa has been attempted by anyone other than a Factory Authorized Dealer of Arctic Spas®. Alterations include but not limited to, any change to the components, replacement of components or addition of components without the written authorization from Arctic Spas®. Misuse includes careless handling of the spa, damages caused by improper and/or non-certified electrical hook- ups, failure to operate the spa in accordance with the instructions contained in the owner's manual provided with the spa, including incorrect start-up procedures or dry firing of the spa, any use of the spa or any of its components in an application for which it was not designed, and damage caused by improper chemical balance (including any damage to spa components caused by scale build up to due to poor water chemistry), ice in the spa, overheating the spa or spa water, damage to the spa surface by allowing undissolved sanitizing chemicals to lie on the surface or if our spa has been used for commercial purposes. Spa covers are not warranted against chemical burn or discolouration. Spa covers are not warranted against water absorption or any damage resulting from water absorption.. Any damage resulting from the mishandling of the spa cover in any way is not covered under warranty. Any damage caused by moving of the spa or improper installation (including insufficiently prepared or uneven ground) is considered abuse and any damage to the material or workmanship of the spa cabinetry and floor in shipping or handling are expressly excluded from the Limited Warranty.

Arctic Spas will not be responsible for power company issues or improper electrical installations, Damage and/or lack of performance resulting from high or low voltages outside operating parameters. Arctic Spas will not be responsible for software and product upgrades throughout the life of the spa.

Arctic Spas® expressly excludes warranty coverage on any of the following: Acts of nature including but not limited to damage resulting from lightning, storm, flooding, freezing, fire and any other acts of nature. Any spa installed in a commercial application. Any failure caused by improper cover use or or damage to the spa surface by leaving the spa outdoors without the hot tub cover in place. The heat created by leaving the spa in direct UV light without a cover may cause surface issues with the acrylic and may also cause plastic parts to warp, some fittings will leak or cease working as a result. These occurrences are not covered under warranty. The hot tub cover must be kept on the hot tub when not being used.

Scratches or micro-crazing in the spa shell reported after the day of installation are not covered under warranty. Micro-crazing is defined as an area of tiny shiny lines visible in areas on the surface of some thermoplastic sheets. This phenomena, although rare, is known to occur in many types of plastic sheet materials. The surfaces of thermoformed acrylic hot tubs are not immune to this possibility.

Damaged caused by unapproved sanitizers such as tri-chlor, acids, calcium hypochlorite, sodium hypochlorite, peroxides, any sanitizing chemical that may remain undissolved on the spa surface. **Any and all sanitation systems or chemicals used in your spa must be factory approved by Arctic Spas or your warranty is void.** You can check for a list of approved systems and chemicals at arcticspas.com. Installation of not factory approved salt systems will void the warranty related to pump seals, metal part, jets, etc. Damage caused by any item(s) attached to or installed onto the spa, including but not limited to gazebos, cover lifters and cedar accessories. Any options or additional components that are not factory installed are not covered under warranty. Any damage or failure due to improper preparation for winter storage is not covered under warranty. Damage to pillows reported beyond the day of delivery will not be covered under warranty. Pillows are to be removed from the spa when not in use. Onzen is the only factory approved salt system. Any damage resulting from the use of cover removing mechanisms is not covered under warranty. The Onzen cell is considered a user serviceable component, replacement will be the responsibility of the customer.

Arctic Spas® expressly excludes warranty coverage on splitting, fading or warping of the cedar cabinet beyond the date of delivery. Any damage resulting from handling of the cedar cabinet is excluded from this warranty. This warranty will not cover any labour for WIFI/Bluetooth connection assistance/issues, onSpa® App initial- ization & connection assistance/issues from a smartphone, or assistance with actually connecting any of these devices.

DISCLAIMERS

Arctic Spas® will not be liable for loss of use of the spa or other incidental or consequential costs, expenses or damages that may include but not limited to, the removal of a permanent sun deck, sunroom, gazebo, or other custom fixture, any crane costs associated with the removal of the spa for service or replacement. Arctic Spas® shall not be liable for costs arising from water, filter cartridges and chemical loss. Under no circumstances shall Arctic Spas® or any of its representatives be liable for any injury to any person or damage to any property, howsoever arising from the spa. Arctic Spas® warranties are limited to a maximum amount of moneys received by Arctic Spas® with respect to the sale of the spa.

ALL WARRANTIES

The warranties contained herein are all of the warranties provided by Arctic Spas® to the customer, and to the extent permitted by law. Warranty registration (within 30 days of delivery) is the responsibility of the customer and is a condition of warranty coverage. (Please refer to the instructions on the registration form provided with the spa or register at www.arcticspas.com) This Warranty is offered as an extra benefit and does not affect your statutory rights. All warranties herein require that any claim must be submitted to Arctic Spas® within ten days of the time the defect is discovered, and must be accompanied by the original customer's receipt confirming purchase of the spa, which shows the date of purchase. All warranty claims must be submitted within the warranty period. Failure to provide such notice and information invalidates all warranties provided hereunder. Arctic Spas® reserves the right to repair or replace components or materials at its option. In certain cases, photographs may be required for proper evaluation before warranty coverage is determined. In the event a customer is unable to either obtain parts or satisfactory service from a Factory Authorized Dealer of Arctic Spas®, notice should be given immediately to the service department of the agent where the spa was purchased and to Arctic Spas®.

Troubleshooting Spa Problems

1. **Nothing functions:** The GFCI Breaker has tripped or there is a power failure. Test GFCI Breaker. Turn breaker back on and see if spa powers up, if not contact your factory authorized dealer.

2. **Spa does not heat:** Check to see if the heat indicator is on or there are any error messages on the topside control panel. If the heat indicator is on and no error message appears contact your factory authorized dealer.

3. **Poor Jet Pressure:** First check to see that the jet(s) are turned on fully. Check your filter to see if it's clogged or dirty. Next, check to see if the jet(s) are obstructed or if the venturi air dial is turned on. Finally, check to see if the jet(s) are surging. If so, your pump is cavitating (sucking in air). This usually occurs when the water level is too low and can be solved by adding water to the spa. If the problem still persists, contact your factory authorized dealer.

4. **Light is not functioning:** Follow the LED replacement section.

5. **Spa comes on by itself:** This function is normal when heating and filtering. No action required.

6. **Spa doesn't drain completely:** The spa is drained by gravity. It will not always drain fully. It is not necessary to drain the spa in its entirety except when winterizing the spa. If you wish to remove the last little bit of water, we recommend you vacuum it out with a wet/dry vacuum.

Technical Support:

Instructional videos are available to assist you at http://www.arcticspas.com/support/

Important

This manual and its contents are subject to change without notice. Although Blue Falls Manufacturing has prepared this manual as accurately and precisely as possible, Blue Falls Manufacturing will not be liable for loss, injury or damages caused by improper servicing or by use of spa (improper or otherwise).

Arctic Spas® are Canadian built with the finest materials and advanced technology to withstand the harshest weather conditions. Performance and Reliability is the Arctic Spas® Customer Guarantee. If your spa cannot be repaired under our extensive warranty, Arctic Spas® will provide a replacement spa equal in value to the original purchase price of the defective spa. Our philosophy Guarantees you Customer Satisfaction. These are words we will stand behind in writing.

How to perform a software upgrade on your spa's Eco pack

1. You can find the latest software program at:
   www.arcticspas.ca or .com/support/downloads/
   This will be a Zip file, you must unzip or decompress the file.
2. Put the program on a USB stick
3. Make sure there is no other content in the USB stick
4. Plug the USB stick into the processor card
5. Reset the power
6. Green and yellow lights will start flashing, wait until the yellow light goes out and just solid green is there (takes 40 seconds or so) do not remove the usb stick during the upload process.
7. Unplug the USB stick then recycle the power
8. Green and Yellow lights flash again and spa boots up with the new software.

This link will take you to a youtube channel with instructional videos.
The title of the video you will watch is: How to upgrade software Global pack 2011.mov
www.youtube.com/user/globalspa

engineered for the world's harshest climates®...
(wherever you happen to live)

#11815