

# Start Up Guide - Core Series

***Orca  
Grizzly  
Aurora  
Husky  
Ellesmere***

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**The purpose of this guide is to provide you with a quick setup. For more detailed instructions on setting filtration cycles, on/off features etc, Additional Core Series information can be found on pages 54 - 68 of the owner's manual.**

**Visit: [www.ArcticHotTubs.com/resources/](http://www.ArcticHotTubs.com/resources/)  
Password: arctichottubs**

## Step 1: Filling your new Arctic Spa

1. Fill your spa with a garden hose put the hose in your filter canister. **(img 1.1)**
2. Once the water level has reached the bottom of the headrest, turn off the water and remove the hose from the spa. **(img 1.2)**



(img 1.1)



(img 1.2)

## Step 2: Installing the filter

1. Your new Arctic Spa comes with a Silver Sentinel filter. **(img 2.1)**
2. To install the filter locate the filter weir **(img 2.2)** and remove from spa by simply lifting out. Insert the filter into canister while pushing down until it stops. Thread filter clockwise until filter no longer floats up. Reinstall the filter weir over top of the filter.



(img 2.1)



(img 2.2)

**NOTE: Filter weir will float. When pump turns on filter weir will drop below water level and skim the surface**

## Step 3: Power ON

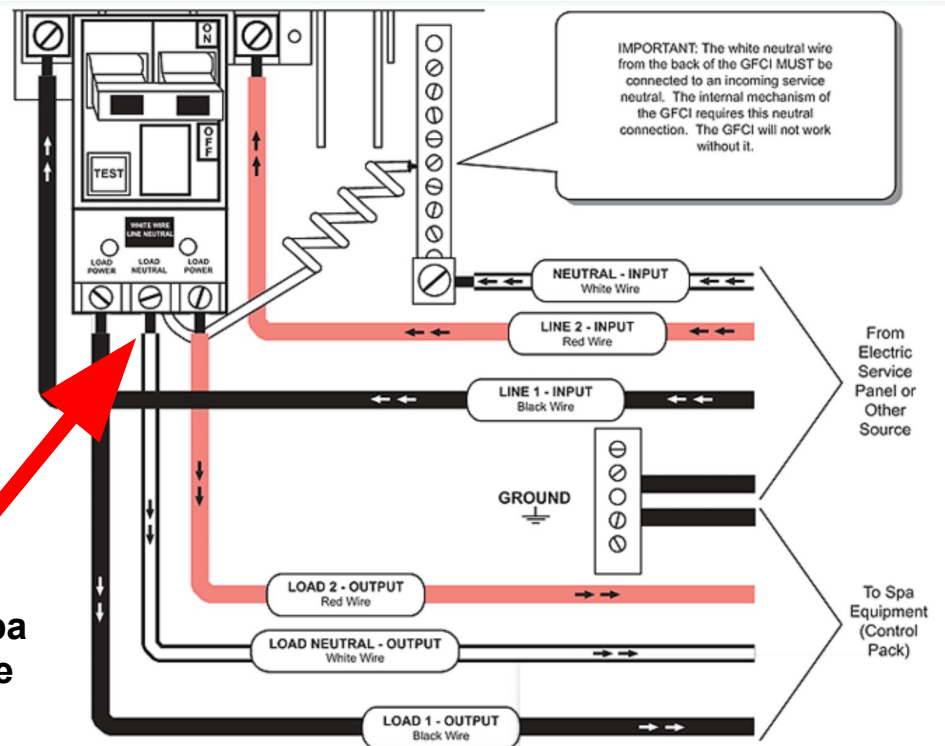
Now that your spa is full, filters are in place, ORP probe is uncovered and the protective grate is installed (Spa Boy option only), you are ready to turn the power on to your spa.

1. Ensure your breaker inside your main panel is turned on.
2. Locate your outside breaker box (**img 4.1**) and flip to the on position.
3. The topside display will light up, start loading the software and start heating. Depending on the temperature of the water going into the spa it may enter freeze protect mode. Pumps will cycle on and off periodically.



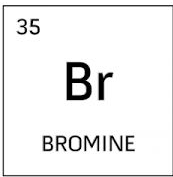
(img 4.1)

**NOTE:** If your breaker trips on the initial start up, verify that the spa is wired correctly. The most common mistake made is putting the output neutral wire in the wrong place. From the diagram below (**img 4.2**) you can see the output neutral must be connected directly to the GFCI and not the neutral bar.



Neutral wire going to spa must be attached to the GFCI

(img 4.2)



# Bromine Start Up & Maintenance

Before you attempt to balance the water, the water temperature must first reach a minimum temperature of 85°F (29°C)

## Step 1: Establish Correct Water Chemistry

1. Add the initial dose of **ULTRA SPA** (200 gm/1000L). Turn pumps on wait 30 mins
2. Add the initial dose of **BEST DEFENCE** (2 oz/ 1000L). Turn pumps on wait 30 mins
3. Test & adjust alkalinity. Use Bromine test strips provided. Alkalinity should be between 80-100 ppm  
**\*\*note If Alkalinity is low, raise with PERFECT BALANCE.. Do not lower total Alkalinity.**
4. Test & adjust pH. Use Chlorine test strips provided. pH should be between 7.2 - 7.6  
**\*\*If ph is high (over 7.6) adjust with ADJUST DOWN to lower.**
5. With pump(s) operating add 20 gm/1000 L of **PEAK BOOST** to bather free water
6. Fill floating Dispenser with **BROMINE TABS** and fill to desired level. Level 3-4 is recommended to start

Maintenance	Frequency	Dosage
*Available Oxidizer	After each use	**Oxidize organics by adding 1 cap of oxidizer directly to the water with pumps running. Heavy bather loads, 3 or more will require an additional cap Leave cover open for 20 mins. Close when complete
BEST DEFENCE	Weekly	Add 2 oz/1000 L directly to water with the pumps running
ULTRA SPA	Weekly	Add 20 gm/1000 L directly to water with the pumps running
PEAK BOOST	Weekly To be used if bromine extremely low	**Add 1 cap directly into the water with pumps running. Leave cover open for 30 mins. Close when complete <b>DO NOT ENTER SPA for a minimum 8 hours after adding PEAK BOOST. Retest water to ensure bromine levels have returned to safe levels</b>
FILTER(S)	Based on usage	Ideally filters should last for 3-4 months. This will vary based on usage, bather loads and additional factors
ZORBIE	Based on usage	Ideally a Zorbie lasts 3-4 months. This will vary based on usage, bather loads and additional factors. <b>DO NOT RING OUT/SQUEEZE</b>
WATER	4-6 months	The frequency within which you drain your spa will vary.



# Chlorine Start Up & Maintenance

Before you attempt to balance the water, the water temperature must first reach a minimum temperature of 85°F (29°C)

## Step 1: Establish Correct Water Chemistry

1. Add the initial dose of ULTRA SPA (200 gm/1000L). Turn pumps on wait 30 mins
2. Add the initial dose of BEST DEFENCE (2 oz/ 1000L). Turn pumps on wait 30 mins
3. Test & adjust alkalinity. Use Chlorine test strips provided. Alkalinity should be between 80-100 ppm  
**\*\*note If Alkalinity is low, raise with PERFECT BALANCE.. Do not lower total Alkalinity.**
4. Test & adjust pH. Use Chlorine test strips provided. pH should be between 7.2 - 7.6  
**\*\*If ph is high (over 7.6) adjust with ADJUST DOWN to lower.**
5. With pump(s) operating add 20 gm/1000 L of **BOOST** to bather free water
6. Fill floating Dispenser with **CHLORINE TABS** and fill to desired level. Level 3-4 is recommended to start

Maintenance	Frequency	Dosage
PERFECT BALANCE	As needed	Test & adjust alkalinity. Use chlorine test strips provided. Alkalinity should be between 80-100 ppm
ADJUST DOWN	As needed	Test & adjust pH. Use Chlorine test strips provided. pH should be between 7.2 - 7.6
ADJUST UP	As needed	Test & adjust pH. Use Bromine test strips provided. pH should be between 7.2 - 7.6
*Available Oxidizer	After each use	**Oxidize organics by adding 1 cap of oxidizer directly to the water with pumps running. Heavy bather loads, 3 or more will require an additional cap Leave cover open for 20 mins. Close when complete
ULTRA SPA	Weekly	Add 20 gm/1000 L directly to water with the pumps running
BOOST	Weekly To be used if chlorine extremely low	**Add 1 cap directly into the water with pumps running. Leave cover open for 30 mins. Close when complete <b>DO NOT ENTER SPA for a minimum 8 hours after adding BOOST. Retest water to ensure chlorine levels have returned to safe levels</b>
FILTER(S) & ZORBIE	Based on usage	Ideally filters & Zorbie should last for 3-4 months. This will vary based on usage, bather loads and additional factors. DO NOT RINSE OR RING OUT FILTER(S) & ZORBIE



# Onzen™ Saltwater Startup

**Before you attempt to balance the water, the water temperature must first reach a minimum temperature of 85°F (29°C)**

## Step 1: Establish Correct Water Chemistry

Balancing the water correctly before usage will make the water easier to maintain. Remember when adding any chemical to have the lid open and run all the pumps to ensure good mixture.

1. Add the initial dose of **BEST DEFENCE(2oz/1000L)** Run the pumps for a cycle
2. **Using Aquachek yellow test strips to test and adjust alkalinity before ph. Perfect balance to raise/Adjust down to lower.**  
Once Alkalinity is in range Test & adjust pH. pH should be between 7.2 and 7.6 at this stage getting the ph as close to the lower limit will be beneficial as Step 2, adding the salt will increase ph.

## Step 2: Mixing & Adding the Salt \*\* Salt will cause pH to rise

1. Dissolve 1/3 of the required recommended salt dosage in a pail of hot water. **Refer to Salt Dosage Chart on pg 8.**
2. Add mixture into the spa with pump(s) running. This will allow the salt to mix thoroughly throughout the spa.
3. After 30 mins, re-test pH and adjust accordingly if necessary. To lower pH, add 1 cap of **Salt Water Balance** in 15 minute increments, checking between each dose. **AWP add 2 caps at a time.**  
\*\* If pH goes low do not adjust. pH will rise on its own.
4. Repeat steps 1-3 until all salt has been added.
5. Program Onzen settings using your topside. See next page (**Programming Onzen Settings**)



# Onzen™ Salt Dosage & Maintenance

<i>Spa Model</i>	<i>Volume</i>	<i>Recommended Salt Dosage</i>
Orca	1514 L	3.4kg
Grizzly	1420 L	3.1 kg
Aurora	1193 L	2.6 kg
Husky	1030 L	2.3 kg
Ellesmere	871 L	1.9 kg

The potential maintenance of your salt water system will vary depending on factors such as bather load, usage, water quality etc. There is no one specific set of guidelines to follow. Your maintenance program will be as unique as you and your spa.

<b>Maintenance</b>	<b>Frequency</b>	<b>Dosage</b>
SALT WATER BALANCE	As needed	To lower pH, add 1 cap of <b>Salt Water Balance</b> in 15 minute increments. <b>** If pH goes low do not adjust. pH will rise on its own.</b>
PERFECT BALANCE	As needed	Test & adjust alkalinity. Use chlorine test strips provided. Alkalinity should be between 80-100 ppm
BEST DEFENCE	Weekly	Add 2 oz/1000 L directly to water with the pumps running
ENZYME DESCUMMER	Weekly	Add 60ml per 1000L. directly to water with the pumps running.
*Available Oxidizer	Based on usage	- If chlorine level is low or after heavy bather load add 1 cap of oxidizer to aid system in recovering.
FILTERS	Based on usage	Silver Sentinel Filters including the rescue bag should be replaced every 3-4 months. .
ZORBIE	Based on usage	Ideally a Zorbie lasts 3-4 months. This will vary based on usage, bather loads and additional factors. DO NOT RING OUT/SQUEEZE
WATER	4-6 months	The frequency within which you drain your spa will vary.

# Adjusting pH - Salt Water

Understanding how to properly adjust pH in your salt water spa or AWP is important in ensuring clean, safe, balanced water. Unlike traditional chemical systems your salt water system uses a pH neutral product. No matter how much salt you add to the water the pH levels will remain the same until the generating unit turns on to “charge” the elements resulting in chlorine.

During the charging process both the Salt (NaCl) and water (H<sub>2</sub>O) are subject to electrolysis breaking down the elements. The results are Na (Sodium) making the water soft and Cl (Chlorine) keeping you and the components safe.

An additional element being charged and left in the water is H (Hydrogen). With this hydrogen being left in the water the pH levels in salt water units will always climb or be high. The only way pH is low in a salt water unit is if it is manually lowered using product.

The more the system runs the higher the pH will climb. pH (Potential Hydrogen) can be very stubborn to lower and you have to be aggressive and fast in lowering pH. The product to do this is called **Salt Water Balance**.

## **ADJUSTING pH (\*\*AWP double the recommended dose)**

*If your pH is high add 1 cap checking every 15 minutes. Repeat the process until pH is within range.*





# Programming Onzen™ Settings

The amount of time your Onzen™ system will need to operate will vary based on many different factors. Usage, bather load, time spent in spa and water chemistry are the most common. It is recommended that you set your start time when you will not be using the tub. Then Duration 1 hour Frequency 2 times a day. This can be increased or decreased based on your need for sanitizer. If its never enough increase the duration if its to much decrease until you find the number that works for you.



## Setting Onzen Cycle Start Time

The display will show oSxx, "xx" representing the starting hour of the cycle. Use the arrow keys to adjust the hours. Use the Light key to jump to the next parameter, filter duration (Fd).



## Setting Onzen Cycle Duration

The display will show odxx "xx" representing the duration in hours of the onzen cycle. Use the Arrow keys to adjust the duration. Use the light key to jump to the next parameter, filter or purge frequency (FF).



## Setting Onzen Cycle Frequency

The display will show oFxx, "xx" representing the number of cycles per day. Use the arrow keys to adjust the frequency. Use the Light key to jump to the next parameter, economy mode (EP).