Salt System Startup Guide 1 2 3 4 5 6 7 TEST FILL VATER FILL SPA ADD SALT BALANCE SANITIZE FILL SOFTEN SET SALT SYSTEM WATER SALT SYSTEM OUTPUT LEVEL

TEST FILL WATER

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• Power must always be OFF when spa is empty.

Before filling your spa, take a sample of your fill water to your local dealer for testing to determine if your water contains high levels of metals, phosphates, and/or calcium. If high levels are detected, your dealer can recommend additional products to help bring your fill water into balance. Starting with balanced water is key to the success of clean, long-lasting water with the FreshWater® Salt System.

& MONITOR

Metals - Using well water or have high metal content in your water? Iron and manganese should be below 0.5 ppm and copper should be below 0.2 ppm. If metals are present in the water, they must be removed before startup of the FreshWater Salt System. It is strongly recommended to fill your spa using the FreshWater Clean Screen® Pre-Filter.

Phosphates - It is important to test for phosphates in your fill water using the provided phosphate test kit. Phosphates contribute to algae growth and will reduce the effectiveness of your salt system. Reference the table in Step 4 for recommended phosphate ranges.

• If you have used liquid products to remove metals from your spa water, you must clean your filters and wait 24 hours after treatment before turning the salt system on or adding any chlorine.

FILL SPA

Before adding water, remove plug and insert your salt system cartridge. Using your garden hose, fill your spa through the filter compartment until the water level reaches one inch (2.5 cm) above the highest jet.

• If your fill water contains high levels of metal or calcium, use the FreshWater[®] Clean Screen[®] Pre-Filter and/or On The Go[®] as required.



Once the spa is filled with water, turn the power on (see spa Owner's Manual for specific instructions based on the voltage of your hot tub). Set the temperature to your desired level (at least 95 degrees Fahrenheit) and turn off the salt system by setting the output level to zero (recommended). Check your jet systems by pushing the jets icon on the control panel home screen. When you've confirmed that the jets are fully operational, adjust your diverter valves to middle position and leave the jets on for adding salt.

• It's normal for the water care icon on the control panel and diagnostic logo light (if equipped) to flash during this step if you choose not to turn your salt system off.

ADD SALT

To find the correct water capacity of your spa model, check the chart in your spa Owner's Manual.

Make sure spa jets are on before adding salt. To avoid over salting the water, start out by adding half the recommended amount of salt noted on the chart to the right, using the scoop provided in your kit. Pour the salt into the filter compartment, one cup at a time, with the jets running. Allow five minutes for the salt to dissolve.

Use FreshWater Salt Test Strips to verify the salt level is around 1,750 ppm. Continue to add salt, one cup at a time, as needed to reach the target level. Be careful to not exceed the recommended target of 1,750 ppm.

| Spa Capacity | | Salt | Output |
|--------------|--------|--------|---------|
| Gallons | Liters | Cups | Setting |
| 200 | 760 | 4 1⁄2 | Level 5 |
| 250 | 950 | 5 3⁄4 | Level 5 |
| 300 | 1,140 | 7 | Level 6 |
| 350 | 1,330 | 8 | Level 6 |
| 400 | 1,520 | 9 1⁄4 | Level 6 |
| 450 | 1,710 | 10 1⁄4 | Level 6 |
| 500 | 1,900 | 11 1⁄2 | Level 7 |
| 550 | 2,090 | 12 1⁄2 | Level 7 |
| 600 | 2,280 | 13 ¾ | Level 7 |



BALANCE WATER

Test your water using a FreshWater® test strip. Using the chart to the right, review pH and alkalinity levels to determine if your water is within the salt system's parameters and adjust as needed. Make note of the calcium hardness level as this will be addressed in Step 6. Refer to your spa Owner's Manual for detailed instructions on how to bring pH and alkalinity levels into balance. Once the water has been balanced, retest the water using the appropriate FreshWater test strip. Repeat the process until the water is balanced.

| Salt System Paramaters | Target | OK Range | |
|---------------------------|-----------|-----------|-----------|
| | | Minimum | Maximum |
| Salt | 1,750 ppm | 1,500 ppm | 2,000 ppm |
| Hardness | 50 ppm | 25 ppm | 75 ppm |
| Alkalinity | 80 ppm | 40 ppm | 120 ppm |
| pН | 7.4 | 7.2 | 7.8 |
| Chlorine | 4 ppm | 3 ppm | 5 ppm |
| Phosphates | < 150 ppb | 0 ppb | 300 ppb |

SANITIZE FILL WATER

With all jets on and the diverter valves turned to the middle position, add chlorine to the filter compartment (refer to the product label for instructions). Run jets for five minutes and measure the chlorine with a new FreshWater 5-Way Test Strip. Your target chlorine level is 5 ppm. If your level is less than 5 ppm repeat the chlorination process. Wait five minutes then test again. Repeat until the target level of 5 ppm is reached.

• If using liquid chlorine - DO NOT USE splash-free or scented bleach of any kind.

• This chlorination step is very important for a successful startup. Skipping this step can prevent the system from establishing a chlorine residual.

SOFTEN WATER

• Include this step if you did not use a calcium remover during the fill process in Step 2.

Hard water can damage your hot tub equipment and may hinder the effectiveness of the salt system, so it's important to make sure your water is soft. Your target calcium level is 50 ppm. Use the following guidelines if your calcium hardness is over 75 ppm:

- 75-150 ppm Use the Vanishing Act[®] pillow provided in your start up kit (refer to Owner's Manual for instructions)
- 150-300 ppm Use the Vanishing Act XL or an On The Go[®] portable water softener (available at your local dealer)
- Over 300 ppm Use an On The Go portable water softener during fill process

After 24 hours, test spa water with a FreshWater 5-Way Test Strip. If calcium hardness level still reads above 75 ppm, repeat the process until you get close to 50 ppm. Discard Vanishing Act in your normal trash after recommended amount of time and before continuing to next step.





SET SALT SYSTEM OUTPUT LEVEL & MONITOR

• The following steps are typically performed 24 hours after Steps 1-6 have been addressed.

Access the water care menu on your control panel. Set the salt system output to the recommended level indicated in the chart to the right.

Using a FreshWater® 5-Way Test Strip, check the water to ensure a residual chlorine level of at least 3 ppm has been maintained over the past 24 hours. If the chlorine level has dropped below 3 ppm, repeat the chlorination process

to achieve 5 ppm and press the Boost button. Check the chlorine level again in 24 hours, and continue the chlorination and Boost process each day until the salt system can independently maintain the target 3 ppm chlorine residual.

Over the next few days, continue to test your water using a FreshWater 5-Way Test Strip and adjust the salt system output level as needed.

• The salt system cleans the water before it produces a chlorine residual that is visible on a test strip. If there is not a measurable amount of chlorine in the spa water after 24 hours, this is an indication that the salt system is still cleaning the water. If there are contaminants in the water, or you use the spa often initially, it may take the salt system a few days to clean the spa water and keep up with your chlorine demand. Use Boost to generate additional chlorine during this process. This is perfectly normal and does not mean that your Freshwater Salt System is not working.

TIPS TO GET THE BEST PERFORMANCE FROM YOUR FRESHWATER SALT SYSTEM

The FreshWater Salt System makes spa ownership simple and easy by reducing the amount of time required to care for your spa water. It is important to note that maintaining balanced and sanitized spa water is ultimately the responsibility of the spa owner. Here are some helpful tips:

- **10-Day checkup**: Every 10 days, the water care icon on the control panel will flash as a reminder to check your spa by testing and balancing your spa water and confirming your output level. The 10-day timer will reset any time you adjust your output level. If you do not perform the 10-day maintenance routine, the system will default to Low Output Mode (level 3 after 15 days and level 1 after 20 days).
- **Test and balance spa water** to keep calcium, pH and alkalinity levels within the recommended ranges.

- Test for chlorine regularly and adjust the salt system output level up or down to maintain 3 to 5 ppm. It is recommended to adjust the output level or use Boost before supplemental chlorine is added.
- The system is compatible with chlorine, MPS, and silver. It is NOT compatible with bromine or BaquaSpa® (biguanide). Never add scented oils to your spa.
- Please see your FreshWater Salt System Owner's Manual for detailed instructions and other best practices.

| Salt System Output Level | | |
|--------------------------|--------------------------|--|
| Level 0 | System Off | |
| Level 1-4 | Vacation/Low Output | |
| Level 5-7 | Normal Use (Recommended) | |
| Level 8-9 | High Use | |
| Level 10 | Maximum Output | |
| Boost | Level 10 for 24 Hours | |

