

Spa Water Maintenance & Troubleshooting Guide

START-UP AND REFILL PROCEDURES

- Fill the spa with water through the filter compartment using the *CleanScreen®* pre-filter with the valve open halfway (45°) to remove unwanted contaminants and metals
- Install a *FreshWater_{Ag+}® silver ion purifier* into the filter standpipe with the gray filter cap
- Use *FreshWater 5-way Test Strips* to test for Total Alkalinity, pH, and sanitizer levels in spa water
- Balance Total Alkalinity (TA) to 40 - 120 ppm
If TA is too low, add *FreshWater pH/Alkalinity Up*
If TA is too high, add *FreshWater pH/Alkalinity Down*
- Balance Calcium Hardness (CH) to 50 - 150 ppm
If CH is too low (soft water), add a calcium hardness increaser
If CH is too high (hard water), use *Vanishing Act® Calcium Remover* to reduce hardness.
(*FreshWater Stain and Scale Defense* can also be added)
- Balance the pH to the recommended level between 7.2 – 7.6
If pH is too low, add *FreshWater pH/Alkalinity Up*
If pH is too high, add *FreshWater pH/Alkalinity Down*

PRIOR TO EACH USE

- Use *FreshWater 5-way Test Strips* to test for Total Alkalinity, pH, hardness and sanitizer levels in spa water and correct as needed
- Add one-half (1/2) teaspoon of *FreshWater Concentrated Chlorinating Granules* per 250 gallons or,
- Add one (1) tablespoon of *FreshWater Chlorine Free Oxidizer* (monopersulfate or MPS) per 250 gallons

ONCE A WEEK

- Add one and one half (1-1/2) teaspoons of *FreshWater Concentrated Chlorinating Granules* per 250 gallons or,
- Add three (3) tablespoons of *FreshWater Chlorine Free Oxidizer* (monopersulfate or MPS) per 250 gallons

ONCE A MONTH

- Clean your filters with *FreshWater Filter Cleaner*

EVERY FOUR MONTHS

- Drain and refill your spa
- Clean your filters with *FreshWater Filter Cleaner*
- Complete the start-up and refill procedures listed above
- Replace the *FreshWater_{Ag+}* silver ion purifier

AS NEEDED, IF WATER IS HAZY, CLOUDY OR HAS AN ODOR

- Add one and one half (1-1/2) teaspoons of *FreshWater Concentrated Chlorinating Granules* per 250 gallons.

IMPORTANT NOTES

- All chemicals must be added directly into the filter compartment with the jet pump on high speed for at least 10 minutes.
- Don't use bromine, sodium bromine or biguanides with the *FreshWater_{Ag+}* silver ion cartridge. These are active sanitizers and will chemically react with the silver ions to reduce their beneficial sanitizing effect.
- Don't use a water clarifier. Clarifiers will cause the spa water to become cloudy.

Contact your authorized Hot Spring® spa dealer to develop a regular water maintenance program using FreshWater watercare products to achieve, and maintain, perfect water in your spa.

FreshWater® Spa Water Maintenance Troubleshooting Guide

Should you experience any problem whatsoever with your water maintenance program do not hesitate to contact your authorized Hot Spring® Spa Dealer. Here are some tips to help you to diagnose and rectify some more common sources of trouble yourself, if you choose to do so.

PROBLEM	PROBABLE CAUSE	SOLUTION
Cloudy Water	<ul style="list-style-type: none"> • Dirty Filters • Excessive oils/organic matter • Improper Sanitation • Suspended particles/organic matter • Overused or old water 	<ul style="list-style-type: none"> • Clean filters with <i>FreshWater Instant Filter Cleaner</i> or <i>FreshWater Filter Cleaner</i> • Shock spa with sanitizer • Add sanitizer • Run jet pump(s) • Adjust pH and/or Alkalinity with <i>FreshWater pH/Alkalinity Up</i> or <i>FreshWater pH/Alkalinity Down</i> • Drain, clean and refill the spa
Water Odor	<ul style="list-style-type: none"> • Excessive organics in water • Improper sanitization • Low pH 	<ul style="list-style-type: none"> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i> • Add <i>FreshWater Concentrated Chlorinating Granules</i> • Adjust pH with <i>FreshWater pH/Alkalinity Up</i> to recommended range
Chlorine Odor	<ul style="list-style-type: none"> • Chloramine level too high • Low pH 	<ul style="list-style-type: none"> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i> • Adjust pH with <i>FreshWater pH/Alkalinity Up</i> to recommended range
Musty Odor	<ul style="list-style-type: none"> • Bacteria or algae growth 	<ul style="list-style-type: none"> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i> – if problem is visible or persistent, drain, clean, and refill the spa
Organic buildup/scum ring around spa	<ul style="list-style-type: none"> • Buildup of oils and dirt 	<ul style="list-style-type: none"> • Wipe off scum with clean rag – if severe, drain the spa, use <i>FreshWater Spa Shine</i> after cleaning to protect the spa shell, and refill the spa
Algae Growth	<ul style="list-style-type: none"> • Low sanitizer level • High pH 	<ul style="list-style-type: none"> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i>, and maintain sanitizer level • Adjust pH with <i>FreshWater pH/Alkalinity Down</i> to recommended range
Eye Irritation	<ul style="list-style-type: none"> • Low pH • Low sanitizer level (high chloramines) 	<ul style="list-style-type: none"> • Adjust pH with <i>FreshWater pH/Alkalinity Up</i> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i>, and maintain sanitizer level
Skin Irritation	<ul style="list-style-type: none"> • Unsanitary water • Free available chlorine level above 5 ppm 	<ul style="list-style-type: none"> • Shock spa with <i>FreshWater Concentrated Chlorinating Granules</i> and maintain sanitizer level • Allow free available chlorine level to drop below 5 ppm before spa use (add hydrogen peroxide)
Stains	<ul style="list-style-type: none"> • Total Alkalinity and/or pH too low • High iron or copper in source water 	<ul style="list-style-type: none"> • Adjust total Alkalinity and pH with <i>FreshWater pH/Alkalinity Up</i>. • Fill with <i>Clean Screen prefilter</i> and use <i>Vanishing Act</i> • Use <i>FreshWater Stain & Scale</i> to inhibit metals
Scale	<ul style="list-style-type: none"> • High calcium content in water • Total alkalinity and/or pH too high 	<ul style="list-style-type: none"> • Use <i>Vanishing Act</i> • Add <i>FreshWater Stain & Scale</i> • Balance the water using <i>FreshWater pH/Alkalinity Up</i> or <i>FreshWater pH Alkalinity Down</i> • If scale requires removal, drain the spa, scrub off the scale, clean spa shell with <i>FreshWater Spa Shine</i>, and refill the spa