



## Spa Owner's Manual



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# **SPARCO & *Eastgate Pools & Spas***

The [SPARCO Distribution Network](#) and Eastgate Pools & Spas are two great names in leisure home living. Since 1967, SPARCO member stores have been providing customers throughout the Eastern and Midwestern United States with quality pools, spas & hot tubs, patio furniture, grills, pool chemicals, and accessories. By working together, SPARCO members combine the buying power of over 50 stores with years of experience.

As a member of SPARCO, Eastgate Pools & Spas brings you the best products at extremely competitive pricing. Add in Eastgate's many years of experience and you have a winning combination.

So for the best in outdoor leisure products, trust Eastgate Pools & Spas and the SPARCO team.

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# A Warm Welcome!

**Ahhhhhhh....** There's nothing quite as relaxing and fun as soaking away the stresses of the day in your very own hot tub. Commonly referred to as 'spas', hot tubs are both fun and therapeutic. You are to be congratulated for providing yourself, your family, and your friends with the physical and mental benefits of hot water therapy. Everyone at Eastgate Pools & Spas would like to thank you for placing your confidence in us.

In order to help make ownership as easy as possible, we have put together this spa owner's manual. It is a reference guide for water chemistry, usage, and general maintenance issues. If at any time you have questions, give us a call or stop by the store. Plus, our professional service department is here every day except Sunday. Excluding major holidays, and are here all year round to provide you with trained, top-notch service should you need it.



## An Overview of This Booklet

In addition to this manual, our spa manufacturers provide owner's guides that explain specific features and controls of their respective products. Please refer to the manufacturer's guidebook for specific control and feature information.

While some spa maintenance issues are pretty much common to all spas, there are other issues which are specific to certain spa brands and models. This booklet will first examine general spa information such as water chemistry and safety. After these issues are covered, we will look at maintenance issues for models offered by Eastgate Pools & Spas.

# Spa Chemistry

## Spa Capacity

How many gallons of water does your spa hold? This seemingly simple question is extremely important when you consider that the most common spa models will hold anywhere from 150 to 550 gallons of water. A 400-gallon variance on a 20,000-gallon pool is hardly noticeable, but on a spa, it is significant.

To make life easy, we have assembled the chart shown below. This chart lists the gallonage for current models that we carry. Please keep in mind that these figures are very close, but not to the exact gallon. Your spa's actual gallons will depend on where the water level is kept. For your purpose, this chart is fine. If your spa model is not listed here, please contact us at 513-528-4141 and we will get you the information that you need.

## Spa Gallons by Model

<u>Model</u>	<u>Gallons*</u>
<b>M 300</b>	<b>250</b>
<b>M 500</b>	<b>250</b>
<b>M 520</b>	<b>300</b>
<b>M 600</b>	<b>350</b>
<b>M 600NL</b>	<b>350</b>
<b>M 700</b>	<b>425</b>
<b>M 700NL</b>	<b>425</b>
<b>M 800</b>	<b>475</b>
<b>M 800NL</b>	<b>475</b>
<b>M 10,000</b>	<b>515</b>
<b>M 10,500</b>	<b>300</b>
<b>Oahu 2</b>	<b>425</b>
<b>Maui 2</b>	<b>425</b>
<b>Bahama 2</b>	<b>350</b>
<b>LE 742</b>	<b>310</b>
<b>LE 850</b>	<b>375</b>
<b>LE 852</b>	<b>395</b>

**\*Gallons are approximate and will vary slightly based on how high the spa is filled. Gallon estimates are provided by the spa manufacturer.**

## Water Testing

While your spa's water capacity is important to know, it is also important to know what the chemical levels are for the spa water. Proper chemical levels in the spa helps to ensure that the water is clear, clean, and healthy.

To save time and money, there is nothing more important than testing your spa water. Regular testing helps insure that the water is of exceptional quality. Failure to test the spa on a regular basis will result in extra work and expenses for you. As an example, running your spa with a low pH can ruin the spa's heating element. (Heating elements damaged by improper water chemistry are not covered by your spa manufacturer's warranty.) This problem and others are a direct result of improper water chemistry, which is a consequence of infrequent water testing.

If water balance is so important, just how often should you test your spa? The answer to this question will vary depending on how often your spa is used. A spa's water balance changes dramatically with use. It's all about 'bather load', or more specifically, what goes into the water when you are in the spa. Consider that 4 people in a 400-gallon spa is nearly equivalent to having 250 people in an 18' x 36' inground swimming pool. As a person uses a spa, their body will naturally release body oils and perspiration into the water and this greatly affects the spa's water balance.

For home spas with average usage, testing the spa three times per week will normally suffice. When testing, always wait at least one hour after the spa has been used before taking the test.

To test the spa water, Eastgate Pools recommends the use of **SPARCO Pool & Spa Test Strips**. For the exact instructions on how to use the test strips, please refer to the package of test strips that you received with the spa.

## Chemical Levels

Once you understand how to use the test strips you may be wondering what it all means. What is the significance of the bromine, pH, and total alkalinity readings that you have obtained through testing? Are there any other chemical levels to worry about?

Let's take a look at the basics of spa water chemistry. Each of the important parameters will be looked at individually. We will also discuss their importance to each other. By keeping these chemical levels in the proper range, you will increase the life of your spa as well as your enjoyment of it.

## Balanced Water

When we talk about balanced water, we are talking about water that will neither corrode nor scale. Balanced water helps keep metal pipes and heating elements from corroding. Balanced water also helps prevent scale deposits from forming on spa surfaces, pipes, and on heater elements. These scale deposits reduce the spa equipment's efficiency.

The above description tells why balanced water is important, but it does not address what balanced water actually is. Water is said to be balanced when the pH, total alkalinity, and calcium hardness are within given ranges.

**pH** pH is a measure of whether something is acidic, basic, or neutral, and it is always measured on a scale of 0 to 14. Everything has a pH value associated with it. A pH of 7.0 is neutral, a pH under 7.0 is acidic, and a pH over 7.0 is basic.



Your spa's pH is important for many reasons, and as such, it cannot be neglected without problems occurring. On a spa, the pH should be kept in the following range:

## Recommended pH Range - 7.2 to 7.8

If the pH is not kept in the proper range, the spa owner may experience the following problems:

pH Level	Problem
pH Too Low	<ul style="list-style-type: none"> <li>•Corrodes surfaces and equipment</li> <li>•Irritates users' skin and eyes</li> </ul>
pH Too High	<ul style="list-style-type: none"> <li>•Scales surfaces and equipment</li> <li>•Contributes to cloudy water</li> <li>•Irritates users' skin and eyes</li> </ul>

The spa's pH is important and it is very easy to test for and adjust. Once you have tested the water and obtained your results, make any needed adjustments to the pH.

If the pH of the water tests low, you will use **WHITE RIVER LIQUID pH increase**. As per the manufacturer's directions, add this product while the pump is running. **WHITE RIVER LIQUID pH INCREASE** should be added one ounce at a time. After a minimum of thirty minutes to an hour, retest the pH and adjust further if needed.

If the pH of the water tests high, you will need to add **WHITE RIVER LIQUID pH decrease**. When adding this it is recommended that you mix one ounce of pH decrease to five gallons of water. This solution should then be added to the spa with water circulating. After a minimum of thirty minutes to an hour, retest the pH and adjust further if needed.

**TOTAL ALKALINITY:** No discussion of pH would be complete without looking at total alkalinity. In water, there are minerals which act as buffering agents. Total Alkalinity is the measurement of these alkaline materials. While this does not mean much to most of us, what is important is that these alkaline materials play a significant role in helping to maintain the spa's pH. These alkaline materials help prevent dramatic changes or fluctuation in the spa's pH. At proper total alkalinity levels, the pH will be more stable. This stabilizing is referred to as buffering the pH.

The total alkalinity on your spa should be kept at the following level:

## Total Alkalinity - 80 to 140 Parts Per Million

In the event that the total alkalinity is out of range, the following problems may occur:

Alkalinity Level	Problem
Alkalinity Too Low	<ul style="list-style-type: none"> <li>• pH is difficult to maintain - It drifts</li> <li>• Corrodes surfaces and equipment</li> <li>• Stains spa surfaces</li> </ul>
Alkalinity Too High	<ul style="list-style-type: none"> <li>• pH is difficult to adjust - It remains fixed</li> <li>• Scales equipment and surfaces</li> <li>• Makes water cloudy</li> <li>• Since pH stays high, sanitizer efficiency drops</li> </ul>

Spas with low total alkalinity levels need **White River pH Buffer** added to them. This product is a powder and is very easy to add. For the proper dosages, see the container's label, or use the chart below. (Note, 1 tablespoon pH Buffer equals 1/2 ounce.)

Gallons	10ppm	20ppm	30ppm	40ppm	50ppm	60ppm	70ppm	80ppm	90ppm	100ppm
100	1 1/2 tsp	1 tbs	1 1/2 tbs	2 tbs	2 1/2 tbs	3 tbs	3 1/2 tbs	1/4 cup	1/3 cup	1/3 cup
1000	1/3 cup	1/2 cup	1 cup	1 cup	1 1/2 cups	1 3/4 cups	2 cups	2 1/2 cups	2 3/4 cups	3 cups

High total alkalinity spas require the same chemical as is used on a spa with a high pH. (**WHITE RIVER LIQUID pH DECREASE**). When adjusting the total alkalinity with this product, follow the dosage and directions as spelled out in the pH section.

If you want to save your spa's equipment, and also save money on chemicals, then keeping the total alkalinity in range is a must. In the event the pH and total alkalinity both need to be adjusted, always adjust the total alkalinity first, since this acts as a buffer for the pH.

**CALCIUM HARDNESS:** Calcium hardness is a measure of dissolved calcium in the spa's water. While calcium hardness is important to water balance, it is not as frequently tested as pH and total alkalinity. In fact, most consumer test kits do not test calcium hardness. As such, periodically have your water tested by Eastgate Pools so that we can advise you as to what treatment, if any, is needed.

The calcium hardness should be kept in the following range:

## Calcium Hardness - 120 to 250 PPM

If the calcium hardness is out of range, the spa owner may see the following problems:

Hardness Level	Problem
Calcium Hardness Too Low	•Corrodes Spa Equipment
Calcium Hardness Too High	•Makes Water Cloudy •Scale may form on equipment and surfaces

Since calcium hardness will be tested at our store, any recommended action will be prescribed when we test the water. In general, spa water with low calcium hardness will need a calcium increaser, and spa water with a high calcium hardness level will need to have the water either changed or diluted with fresh water. It is also possible to control the calcium by using **White River Stain & Scale Remover**.

While **White River Stain & Scale Remover** will not remove the calcium from the water, it will help to keep the calcium from coming out of solution and depositing on the spa and its equipment. This is an optional product that can be very helpful in areas where water supply has naturally high calcium levels.

Unlike most items that dissolve in water, calcium is less soluble as the water temperature increases. What happens on spas is that the heating element will be the first place for the calcium to deposit due to its high temperature. If you see calcium deposits on the spa surface, you can almost be guaranteed that the heater will also be covered with deposits. The use of **White River Stain & Scale Remover** will help prevent this problem.

## Clean Water

While Balanced Water is determined by pH, total alkalinity, and calcium hardness, Clean Water is determined by the spa's sanitizer. When we talk about clean water, we are referring to more than just water that looks nice. We are referring to water that is safe for the users of the spa. Clean water is free of both visible debris as well as invisible debris like bacteria.

# Sanitization Options

**SPA FROG:** Many of our customers use *'The Frog'*. It allows the customer to sanitize the spa and oxidize organic waste with a minimum of effort, allowing you to enjoy the spa with less work. It is available as a floating system that you simply set out of the spa when you are using it. It relies on a Mineral chamber that lasts four full months and a bromine chamber that lasts between 3-4 weeks on average. The two components work together to give you clean water with minimal chemicals. Just follow the directions on the container for normal use, but use these simple steps to activate the system:

1. Fill spa and let water reach at least 95 degrees. **DO NOT ADD MINERAL ELIMINATOR.**
2. Add 1 ounce of #1 Disinfectant.
3. Wait 24 hours.
4. Set the blue chamber to #6 (simply rotate the unit and view the number printed on the side slot). Set the yellow chamber on #5.
5. After 24 hours, on spas over 250 gallons turn the yellow cartridge down to #3. On spas less than 250 gallons, turn to #1 or slightly less.
6. Shock 1-2 times weekly with #2 Oxidizer.
7. Test your water twice weekly and make sure all your levels are in balance.

If you have just had a party or there have been lots of people in your spa, add a second doze of #2 Oxidizer after it is over.

Remember that Eastgate Pools & Spas is happy to test your water any time you would like and it doesn't cost a thing. Just bring us a fresh sample of water (8-10 ounces minimum). We can answer any questions you might have.



**SIMPLE BLUE SIMPLE SPA.** Our number one choice for new spa sanitization, **Simple Blue** is a wonderful option for those that want to maximize spa enjoyment through better water quality. **Simple Blue** helps break down biofilms and wastes that rob you water of clarity and cleanliness. Water smells and feels softer, enhancing your spa experience.

**Simple Blue** consists of four primary components: **Simple Stick**, **Simple Spa**, **Spa Power Boost**, and **Spa Power Clean**. It's so *simple* to use! Just follow the direction on the package or print off this page:

*Initial Start Up:*

1. Balance water
2. Add **Mineral Remover**, IF needed.
3. Add **Simple Stick**.
4. Add **Spa Power Boost**
5. Add **Simple Spa**

*After Each Use:*

1. Add **Spa Power Clean**

*Weekly:*

1. Adjust water balance, if needed
2. Add **Simple Spa**
3. Add **Spa Power Boost**

*Monthly:*

1. Rinse spa filter(s).

*Every Four Months:*

1. Drain and rinse spa
2. Remove expired **Simple Stick** and dispose of it.
3. Clean filter(s) using **Simple Blue Filter Cleaner** tablets. Rinse and reinstall.
4. Refer to and follow *Initial Start Up* directions.

*Yearly:*

1. Clean the spa's plumbing using **Simple Spa Purge**.

## Specialized Chemistry Considerations

Even the best cared for and “balanced” spa will occasionally need a few other chemicals added to its water to keep everything in good shape. These other chemicals are commonly referred to as specialty chemicals. In this section we will look at some of the common ones and their usage. (Please, always read the manufacturer’s directions and warnings before using any chemical in your spa.)

### White River Foam Out

It is normal for spas to produce foam when the jets are running on high speed. This problem usually worsens the longer the water is in the spa. To remedy this problem, add a squirt of **White River Foam OUT** to the spa water. The bubbles will disappear for a short time while you use the spa. This product is not a permanent solution. Excessive foaming may indicate the need to drain and refill the spa.

### White River Spa Pizazz

Even with regular maintenance, spas can develop a water line. Some people call this line a “bath tub ring.” To help prevent this line and to help keep the filter clean, you should use **White River SPA PIZAZZ** on a regular basis. **SPA PIZAZZ** is a natural enzyme based product that naturally breaks down oils.

### White River Cover Cleaner

Of all the parts of the spa that experience the elements, none can top the spa’s cover for wear and tear. **White River Cover Cleaner** will not only keep your spa cover clean, but it will also help keep the vinyl soft, prolonging the life of your cover.

Eastgate Pools & Spas also offers a variety of spa scents and aroma therapies. Feel free to try these great products. Ask any sales associate for help in selecting the scent or therapy that is right for you.

### White River Calcium Hardness Increaser

If you have a water softener, bypass it when filling a spa. You need calcium, approximately 120 parts per million, in your spa. Soft water is difficult to keep in balance and the slightest amount of soap residue will cause massive foaming when a soft water condition exists. Calcium serves as a buffer and also minimizes this foaming. Many water sources have good calcium levels and come out of the tap near required levels, but if you need to fine tune the calcium level, use **White River Calcium Hardness Increaser**.

Eastgate Pools will be happy to analyze your water and help you determine your spa’s calcium level.

# Spa Covers

To keep the vinyl cover for your spa in good shape, clean and treat it on a regular basis. **White River Cover Cleaner** will not only remove dirt from the vinyl, but it also helps to keep the vinyl soft and pliable. The result is a cover that looks better and lasts longer

When moving the spa cover off of or onto the spa, never drag it across the decking or patio, as this dragging will wear holes in the cover. Also, when lifting the cover, do not lift it by its straps, as they could tear out.

If you do not have a mechanical cover lifter you should consider one. A lift not only makes it much easier to take a cover off and put it back on, it also helps prolong the cover's life by keeping it off the rough patio or deck. Eastgate Pools and Spas carries several cover lift models, including one that is hydraulically assisted, the perfect lift for single-spa users or those with physical limitations.

# Spa Safety

The time you spend in your spa should be relaxing and enjoyable. But like many other things in life, there are certain precautions that you must take to ensure the safety of everyone who uses the spa. The following list is intended to be a starting point for the safe use of your spa. It is in no ways meant to be an all inclusive list.

## **SMALL CHILDREN/PREGNANT WOMEN**

Under no circumstances should small children or pregnant women use a spa without prior consultation with their physician. Exposing children or pregnant women to the hot water in a spa can cause severe medical problems. (The general rule of thumb in determining “small children” is ten years of age. Since this figure can vary, you should consult your doctor.)

Another very important reason to supervise children’s use of a spa is the risk of drowning. When supervision is not possible, the spa’s hard cover should be locked down.

## **MEDICAL PROBLEMS**

Persons suffering from heart disease, diabetes, high or low blood pressure, or other health problems should not use a spa without consulting their doctor. Failure to follow his or her advice could result in accidental drowning in the spa.

## **ALCOHOL & DRUG CONCERNS**

Though Hollywood likes to portray a romantic couple in a spa drinking wine, in real life this is an extremely dangerous practice that can result in drowning. Likewise, narcotics and drugs that cause sleepiness, drowsiness, or raise/lower blood pressure can have the same effect.

## **RISK OF BURNS**

Before entering your spa, always check the water temperature with a reliable thermometer. You should never enter the spa if the water temperature exceeds 104°F.

## **OVER EXPOSURE**

All good things must come to an end. As relaxing as your spa is, you must avoid staying in it too long, especially if you are using the spa by yourself. Overexposure to hot water can cause nausea, dizziness, and fainting. To be safe, do not use the spa for more than 10 to 15 minutes per session unless you lower the water temperature. If at all possible, do not use the spa alone.

## **SLIPPERY WHEN WET**

The acrylic surface of your spa is more than beautiful. It can also be extremely slippery. Extreme caution must be used when entering and exiting the spa.

## **ELECTROCUTION**

In order to protect the users of your spa from electrocution, portable radios, T.V.s, and other electrical devices must be kept away from the spa’s water. Do not attempt to operate these devices while wet. All outlets around the spa should be G.F.C.I. protected.

# Filtration

Filters are one of the most important components of your spa and should be cleaned on a regular basis to insure maximum efficiency of the spa. This is very simple. Unscrew the filter(s) and hose them off under moderate pressure. When changing your water, we recommend a chemical cleaning using **Simple Blue Filter Cleaner**. Rinse your filter(s) and then soak them in a bucket, adding two **Simple Blue** tablets. Filters should soak for at least an hour before rinsing. Full instructions are printed on the container.

It is also recommended that you chemically clean the spa's plumbing lines once a year when performing a water change. Again, this is very easy when you use **Simple Blue Simple Purge**. It removes built up scale, calcium, and biofilms from the plumbing lines and the heater element. Your spa will work better and equipment will last longer. Follow the easy-to-use directions on the package for the complete process.

# Draining & Cleaning The Spa

## To drain and clean your spa, follow the guidelines listed below:

1. An hour or two before you plan to drain your spa, set the temperature all of the way down. This will allow the heating element to cool down.
2. Turn off power at the breaker.
3. If your spa has an external drain plug, follow manufacturer's directions and hook a garden hose to the drain. If you do not have an external drain, use a siphon or small drain pump.
4. Drain water to a convenient location. In most cases, water will do no damage to lawns.
5. Wipe the spa surface down using a soft rag and **SC 4000**. Do not use regular household cleaners to clean the spa's acrylic as they may damage the finish or cause excessive foaming. NEVER use anything with grit.
6. Rinse the spa down with clean water and drain the rinse water.
7. Remove remaining water from the spa. (A wet/dry vacuum works great for this job. Otherwise, scoop the remaining water out.)
8. Remove drain hose, close the line, and refill. Turn power back on at the breaker.
9. Check spa for water flow. **IMPORTANT! If water is not moving through your spa when the pumps are running, you may have an air lock. Continued operation in this situation will damage internal components of the spa, such as seal sets, motors, and heating elements.** Temporarily remove the filter(s) and turn on the pumps for a few sections. This will usually get rid of the airlock. If the problem persists, please call our service department for further guidance that can be rendered via the phone. They can be reached at 513-528-8878. Airlocks are common in spas so don't panic if you get one. It is a minor inconvenience that is usually very easy to dispose of.
10. Set the temperature and make sure you are on the desired heating mode.