Balancing Your Water

12 quick tips that will make your spa easy to maintain

1. PH is always on the way up and this is your biggest problem. A half ounce of Muriatic acid weekly corrects this problem.
2. Test and adjust sanitizers weekly.
3. Shock at least once a month.
4. Shower off before bathing to reduce impurities and soap.
5. Heavy use or bather load will require more frequent treatment and water changes.
6. Clean your filter at least once a month.
7. If you don't have pool or spa shock, a cup of Clorox bleach is a good substitution. It is chemically the same thing as chlorine shock.
8. Almost 100 percent of all spas will require only these treatments.
9. All you need is shock, bromine or chlorine, muriatic acid, test strips and an anti-foam agent. If you are buying water clarifiers or deodorizers, or any other spa treatments, you are likely wasting your money. The chemical companies have in many cases repackaged and re-name these common chemicals in order to fool the uninformed consumer.
10. You should never need PH up in your spa. This can be very damaging and common baking soda will do just fine at a fraction of the cost. In the unlikely event that you over do an acid treatment, either change the water or used baking soda to reverse the Ph.
11. If you are using an automatic chlorine or bromine generator, it is very important to use the correct salt and levels of salt. Chlorine generators use standard pool salt or potassium Chloride and bromine generator must use bromide salt and not refined bromine or tablets. Bromide salt is usually not available at pool supply stores and frequently spa users are sold refined bromine at these stores.
12. PH, .. PH, I cannot over stress the importance of maintaining the correct PH. Nothing with be correct without the correct PH of 7.2 to 7.6.

More detailed water treatment solutions

Maintaining good water quality is the most important maintenance and safety procedure required for a healthy and well-functioning spa. Clean water should look and smell clean. If the water is cloudy or has an odor, treatment or a water change may be required. Because spas are relatively small in comparison to pools, the water quality can rapidly change with a single bathing. Don't be discouraged if you encounter rapid changes in sanitation and PH

levels. This is common. It is a good idea to check your PH every week for the first month you own your spa. After that you should be comfortable with maintaining your water and can go to a monthly schedule if you have a moderate to low bather load.

Here's more info on "How To" maintain your water:

Always check and balance your PH first before adjusting sanitizers! You will get false sanitizer readings if the PH is out of the correct range.

PH /Alkalinity level, PH should always be between 7.2 and 7.6 with all water treatment methods. Prolonged PH imbalance is the major cause of equipment failure--low PH can damage equipment by being corrosive, high PH can clog equipment with minerals and calcium deposits.

You can adjust your PH by using PH up or PH down solution from your chemical supplier. Other products on hand that work equally as well, are muriatic acid and baking soda. Muriatic acid will drive down the PH. (***use caution, this product will burn your skin and eyes and should be used in very small amounts,*** *one half* ounce, and then retest after 20 minutes). To adjust PH up, use baking soda. It is very safe and inexpensive and a small amount goes a long way. Use one third cup to raise 20 Parts per million, per 500 gallons and always retest after adjusting. If you over do it with one product, you will have to use the other product to compensate. A slightly low PH reading will correct itself in a day or so and is not a problem due to the natural tendency for PH to creep up over time. A high reading on the other hand will undermine any attempts to keep healthy swimming water.

Sanitizing keeps algae, bacteria and viruses from growing in hot tub and spa water. It is not safe to use a spa that has unreadable sanitizer levels. Sanitizers commonly used for hot tubs and spas are bromine and salt systems. There are also non-chlorine sanitizer systems available for people who are allergic or have reactions to chlorine. Bromine and chlorine are in the chemical family known as halogens. They are oxidizers--they burn up anything organic they come in contact with. They have a tendency to combine with nitrogen and ammonias which are by products of bathers and this reduces their effect. To compensate for this you can add shock to your spa as needed. More about this later. Ozone is a gas produced by a piece of equipment called an OZONATOR. Ozone is an oxidizer like chlorine and it's powerful too, but it has no residual effect in your water. It reduces your need for chlorine or bromine but when using ozone to treat your spa you still need some chlorine-based SANITIZER to have complete protection! In bromine treated spas, ozone does a great job of keeping bromine away from nitrogen and ammonia.

Bromine is the most common sanitizer used in spas today. It is very similar to chlorine but works more efficiently than chlorine at the higher temperatures over 100 degrees commonly experienced in spas.

If you want to manually add bromine, a bromine floater is used to dispense bromine into the water. Do not drop the tablets directly into the spa or into the filter. This will result in high levels of bromine and will drive PH down, making the water corrosive. The bromine can also damage the spa acrylic surface if it comes in direct contact for a prolonged period of time. Another problem with bromine tablets is that there are a large percentage of inert ingredients in them, which can leave residue in your spa. The other down side to the floating dispenser is that they are not very consistent in dispensing the bromine. They have a great variation of output based on their location in the spa and water flow and the degree of tablet size as they dissolve over time. This inconsistency tends to over sanitize the water and has the greatest potential for damaging the spa equipment and heating elements.

A better alternative is an automatic bromine generating system. Bromide salt, which is 99% pure, is added to the water at every change. The amount varies on the size of the spa, but roughly 2 lbs per 100 gallons of water. The generator automatically converts the salt to bromine on demand until the next water change. The salt chlorine generator works the same way but converts standard salt to chlorine. A common misunderstanding of these systems is that the salts, either sodium chloride or bromide salt, are the sanitizers. This is untrue. They are simply used to make the chorine or bromine, which are the actual sanitizing oxidizers. The other misunderstanding is that the salts are used up over time. This is not the case, the salt will only need replacing or added to if the water is changed or losses from splashing. The salt does not evaporate with the waterA common mistake with the automatic systems is that people forget to add salt when they change the water. The automatic bromine and chorine systems will reduce overall spa cost and equipment failure, but only when the salt levels are maintained correctly.

Shocking is a temporary increase in the chlorine or bromine levels to kill off resistant bacteria and to free combined chlorine that has become ineffective due to combining with ammonia in the water. The quickest way to raise sanitizer levels is to shock with a chlorine based shock. This is not harmful even in a spa treated with bromine. You can purchase a bag of pool shock, and sprinkle about one tablespoon into your spa with the jets running (A little more or less depending on the size of your spa and your water condition). Remember that small bag treats 10,000 to 15,000 gallons so only use a little. If you put too much in you can always dissipate the chlorine by running your spa and aerating it with the cover off. If it looks crummy or you've ignored it for awhile, shock will immediately correct most sanitizing problems that a lack of attention may have generated for example, algae, cloudy water, and musty locker room smell! A weekly shock treatment may be the only chlorine you'll have to add! Many spa owners shock their spa before or after they use it with a table spoon of pool shock. This is very effective, but it is important to leave the cover open for about 20 minutes

afterwards to allow the chorine to dissipate. I also need to mention that for people that are using the automatic bromine salt system, shocking with a chlorine based shock will result in a chemical reaction that turns the water yellow for about 25 minutes. This is temporary and should not be a concern. The effects of the shock are not diminished.

Lowering your chlorine, Oops, you meant to sprinkle it in but a big clump fell out. Don't despair! Just turn on your spa with the cover off and run it for awhile with the jets on and the blower on as well. Turbulence, sunlight and heat all decrease chlorine levels. If it's slightly high don't worry--it will dissipate fairly quickly.

Change the spa water as frequently as you feel is necessary or at least every 90 days for manually treated spas and up to 6 months for automatic salt or bromine systems. Even if the water looks and appears fine, it will be easier to maintain if it is changed out on a 90 day or more frequent schedule. More often is recommended with heavy use, (spa parties and teenagers!). With continuous regular use, the water will become hard or mineralized from sweat and water treatment over time. You may have more trouble balancing your PH or notice the water is cloudy or foamy more often. Changing the water will start the spa out fresh.

Just remember, if you are suddenly having a hard time getting the chemicals to line up right - just drain it. Starting over is sometimes the best thing you can do!

As we use the spa, it builds up with TOTAL DISSOLVED SOLIDS that are too small to be filtered but can cause cloudy water and a lot of foam. If this is happening a fresh fill will help the situation. If bromine smell is catching in your throat and the water from your jets looks like smoke - drain it. Shocking will help but not for long. ***Caution: Always turn your heater thermostat all the way down and turn the spa off at the breaker when draining.*** You always want to turn the heater on LAST after you power back up and only when you are sure the pump is primed and pumping!

Clean Your Filter monthly to keep it effective. Your filter should last 1 or 2 years if you clean it regularly. Your water will also stay cleaner and be easier to balance. To clean, remove your filter and hose out any loose dirt and debris, (You will not be able to remove the filter if the spa is running). Then immerse it in a bucket filled with water and a cup of bleach for half an hour or so. Remember to turn off the spa at the breaker while you have the filter out and do not use the spa until it is replaced. You can also purchase commercial filter cleaning solutions, but the bleach will do the trick and will not hurt your spa or filter.

Foam Isn't Fun because it tells us our spa is not balanced. Foam can come from a lot of sources such as a dirty filter, soap from bathing suits, even too much hair products, (a big problem with girls). The best way to control it is with an anti-foaming agent. A tiny amount added when the spa foams up will clear it up. If foam is a constant problem, it may be time to drain your spa and clean your filter. Foaming is usually an indication of high PH or low sanitizer levels. If your water tests properly, then the cause of the foam is from soap from bathing suits and hair products. If the condition is not too bad, you can use the skim method to remove the soap and impurities from the water. First, balance the PH, and shock the spa. Then turn the jets and blower on to generate as much foam as possible. Using a pool net and pole proceed to remove the foam as it builds up over the next 15 minutes or so. You will see a gradual decrease in foam as you continue to skim.

Test strips eliminate your guess work!

Testing is your most important task because you can't tell just by looking! You've got to know for sure if you have enough sanitizer OR if your PH is low. Water balance is essential or your water will eat up your equipment. With test strips you just dip and compare colors it couldn't be easier! 3, in one strips, give you bromine or chlorine residual, pH and total alkalinity readings. With those three tests you will know all you need, in most cases, to create the safe, clear, sparkling water you desire! There are also more advanced test kits available. Kits are available that test for calcium hardness, the presence of metals, the presence of sequestering agents and many different factors, but the big three are right here! We recommend you test your water every week for the first month, then if you feel comfortable and have your water balanced once a month it should be fine.

Most tap water is correctly balanced and if you do not have any issues with your household water, then changing the water is usually the best and cheapest solution if balancing has become a problem. Even if you are paying for city water, trying various pool and spa chemical treatments can be very expensive and are not always effective. Keep it simple and stay focused on the PH and the sanitizer levels. And you will see most all other issues go away.