

SPA USER GUIDE

Congratulations!

You have just purchased one of the finest spas available. No other spa can deliver on its promises like NashCan Spas. The information contained in this guide will assist you with maintaining beautifully clear and properly balanced water.

A properly balanced spa will assure you of years of uninterrupted bathing pleasure. Proper chemical balancing according to these instructions will also protect the warranty on your investment. We at NashCan Spas are here to help you get the most life and enjoyment from your spa.

Let's Begin

There are a few **very important things to know** before using your spa:

1. **Do not fill the spa with softened water.** The salt contained in the water could harm your heater and void your warranty. Bypass the softener when filling.
2. When filling your spa, **place the hose into the skimmer** (filter) so as to prevent a problem called an "airlock." This problem is talked about more later on.
3. Fill your spa **until the water covers the highest jet.** Turn the power on and begin warming the water with the built-in heater.

As soon as the power is turned on, the spa will perform several self-check diagnostics. As a result several different messages will appear in the display. This is normal. The characters [PRM] and [---] will appear and cycle back and forth between each other. After thirty seconds to one minute the main pump will come on automatically. When this occurs, verify that water is flowing from the jets.

4. **If the pump comes on, but no water is coming out of the jets, or if you don't hear the pump come on at all, you probably have an "airlock".**

To Fix An Airlock

1. Turn off the power to the spa.
2. Locate the union (nut) at one of two places:
 - a. the front of the main pump (pump 1), OR
 - b. either side of the heater element
3. Slowly and carefully loosen the union by a quarter to a half turn until you can hear a hissing sound. The hissing noise is the air escaping from the piping.
4. After the hissing stops (you may still hear a gurgling noise) tighten the nut back up using your fingers only. **Never use tools to tighten plastic fittings.**
5. Turn the power back on to determine if the problem has been resolved. If the problem persists, repeat steps 1 through 4 but loosen a different union. Should there still be a problem, please feel free to call us!

Water Chemistry

It is a good idea to get your water tested professionally the first time you are filling your tub, but you can certainly balance the water yourself. You will need to purchase the following items to properly test and balance your water yourself. All of these things will be available at the nearest swimming pool and hot tub dealer or online.

1. **Test strips** for pH, alkalinity, and either chlorine or bromine (whichever you choose to use).
2. **Chlorine or bromine** tablets (1 to 2kg).
3. **Stain and Scale Preventer** (750ml to 1L). This chemical is used to keep minerals and metals in the water from attaching to your spa shell, heater, pillows, and jets.
4. **Alkalinity Increaser** sometimes called Buffer (750g to 1kg). This chemical allows you to balance your pH much more easily when used properly.
5. **Clarifier** (750ml to 1L). This chemical causes impurities in the water to collect together for ease of removal by your filter.
6. **Granular Chlorine**, usually referred to as **Shock** (50g to 1kg). This product quickly sanitizes your water and creates a good chlorine base.

Once you have these items you're ready to balance your water. Following the instructions on the bottle of test strips, remove one strip, dip it quickly into the water and hold it horizontally. *Do not shake it!* After allowing the test strip to fully change colours (5-10 seconds), compare the strip to the side of the bottle for the appropriate colour comparison tabs. The pH tab will show an orange to red colour, the alkalinity will show a green colour, and the chlorine/bromine will show either a purple colour or a yellow colour (depending on the strips you purchase). Take note of the number that corresponds with the colour your strip most closely matches.

Once you have your readings, you can start to adjust the water. Each spa model will have a different volume of water that it holds. Consult with your spa manual to determine the volume. You will need to consult the side of the bottles on each chemical in order to determine how much of that chemical to add based on your readings.

Balancing Your Spa Water – Example

Let's say your spa has a capacity of 1500L, the pH was 7.3, Alkalinity was 60 ppm, and your chlorine/bromine was near zero.

The first thing to adjust would be the alkalinity. The recommended range for alkalinity is from 80-120 ppm so you would need to raise the alkalinity by 20 ppm. If the bottle said you needed to add 50g of Alkalinity Increaser to raise the reading by 10 ppm per 1000L of water, you would add 150 g. ($50 \times 2 \times 1.5$).

For the other two test spots on the strip, you would perform similar calculations in order to find out how much of each of the other two chemicals would be required. The labels on the bottles will tell you how much to add.

Add chemicals to your spa in the following order (after testing the water of course).

1. Stain and Scale Preventer
2. Clarifier
3. Adjust alkalinity if necessary
4. Shock the water with the granular chlorine
5. Leave the hardcover half open for fifteen minutes. This will help prolong the life and protect the beauty of the vinyl cover
6. It may be necessary to adjust pH as well. It is important to balance alkalinity before pH, as the alkalinity has a direct effect on adjusting pH.

In addition to the products listed above, there are several other items that are convenient that you will most likely want to purchase. A floating automatic chlorine/bromine dispenser is one of these items. Without a dispenser, you can add 3-4 chlorine/bromine tablets per week directly into the skimmer, but the dispenser allows you better control of how quickly these tablets are used up. If you have an ozonator (automatic ozone generating device) installed in your spa, as a result of the natural pH of the ozone gas being used to help sanitize your water, the pH of your spa water will frequently rise to a level which is too high. You can purchase a chemical to decrease your pH the same place you purchase your other chemicals.

Cloudy Water Or Excessive Foaming

Cloudy or excessively foaming water is caused by the build up of contaminants in the water such as detergent residues from bathing suits, personal care products, and perspiration. Our recommended method of dealing with this problem is simple and assists you with removing the causes from the water as opposed to covering them up.

1. Add four times the normal dose of Clarifier
2. Turn on all jets on high speed with all of the air controls open.
3. Hand skim off the resultant foam using a spa water skimmer, a leaf net, or cheese cloth.
4. Remove filter, clean and replace it as soon as possible (An extra, clean filter is very handy for this situation)
5. Add double the usual amount of Shock. Water should clear within twenty-four hours
6. Leave your hardcover open for fifteen minutes.
7. Do not use your spa until the sanitizer level drops below ten ppm on the test strip.

Important Notes

1. **Have your water tested regularly** (once every 6 weeks or so) by professionally trained water analysts. The test is free! Your manufacturer warranty on the spa could be voided if a heater or pump seal failure is attributed to improper water chemistry. If this were to happen you could be required to pay for the replacement parts and labour. A heater alone could cost from \$150.00 to \$350.00. It definitely pays to maintain your spa water correctly as prescribed by our Water Analysis Specialists. This warning is contained within all Spa Manufacturers' warranties. Chemicals in the water must be maintained within Manufacturer guidelines. This will also ensure you of a pleasant and uninterrupted bathing experience.
2. **Consider purchasing a spare filter.** It will make water changes and water maintenance much quicker and more convenient. If the filters are cleaned and rotated often they will also last longer than if they are constantly allowed to get too dirty.
3. **Filters should be cleaned at least every three weeks** with our recommended filter cleaning solution. If you notice a decline in the power of the spa's jets or if error messages such as FLO appear these are indicators that the filter may require cleaning.
4. **Ensure that your spa is installed or situated in such a manner that the internal access panel is accessible.** Should your spa ever require servicing, neither we nor the manufacturer can be responsible for extra costs to gain access to the spa in order to make the necessary adjustments or repairs. You may be charged for any out of the ordinary labour required to gain reasonable access to the trouble area.

Thank You

It is our most sincere desire that our business relationship with you be a long and happy one. We know that you will soon agree with us that you have purchased the finest spa made today. We are also sure that it will meet every expectation you have had for this investment. We at NashCan Spas are always here to serve you and we strive to maintain the trust that you have placed in us. Thank You!*****