



SPA FROG[®] In-Line System Start-Up Procedures

1. Always drain and refill the spa at least every 4 months. Clean filter (s) monthly and replace filter cartridges every 1-2 years.
2. As with any water care system, it is critical that the spa water is balanced before start-up. Use your spa test strips to test water chemistry to maintain proper Ph & Alkalinity. If your fill water is high in metals, use either Spa Metal Gon or Stain & Scale Control to remove these minerals.

Standard industry guidelines for balancing the water are as follows:

pH:	7.2 - 7.8
Total Alkalinity:	60 - 120 ppm
Calcium Hardness:	150 - 300
Bromine:	1.0 - 2.0 ppm*

***NOTE:** Bromine levels are 1.0 - 2.0 ppm only when used with FROG minerals.

3. **VERY IMPORTANT!** Establish an initial residual of 1.0 – 2.0 ppm bromine or chlorine before using the cartridges. This can be done by using a ***Granular Brominating Concentrate*** product which typically contains 85% sodium dichlor (chlorine) and 15% sodium bromide **OR** by using a ***Chlorine Shock***. Use the appropriate bromine test strips or kit when testing for the 1.0-2.0 ppm initial residual.
DO NOT: Use a non-chlorine shock at start-up
DO NOT: Add anything through the In-Line System
4. Once the spa is filled, balanced and reaches the proper suggested operating temperature - the cartridges can be set and inserted into the system.
Mineral Cartridge:
Set at wide open - #6 in the setting window. No adjustments necessary.
Bromine Cartridge: (This will vary for every spa!)
 - a. Use the setting chart in the SPA FROG In-Line Operating Manual.

SPA FROG® In-Line System
Start-Up Procedures – page 2

- b. Test the water daily for the first week or so, adjust the cartridge 1 setting per day as needed to maintain a bromine level of 1-2 ppm. Once a steady usage pattern is established, there should be little need to adjust the bromine cartridge setting.
 - c. **IMPORTANT:** For the first 30 to 60 days or so, most new spa owners use their new spa a lot, so the Bromine setting may need to be higher than what is recommended in the owner's manual to maintain the 1-2 ppm. Shocking may also be more frequent during this time. If usage decreases or the bromine level is greater than 2 ppm, the setting should be lowered.
5. Once start-up is complete, follow the regular spa care guidelines found in the Instruction Manual.

NOTE: When a new spa owner develops a stable usage pattern (often when the spa is used half as much as in the first 30-60 days) the spa owner will lower their bromine setting to achieve the 1-2 ppm and will find they can shock only once a week.

6. Replace the bromine cartridge every 2-4 weeks. Replace the mineral cartridge every 4 months, or at every water change.