



HOT TUB WATER BALANCING GUIDE

How to get
your hot tub
relaxation
ready!

BEFORE YOU BALANCE

STEP 1 TEST YOUR FILL WATER FOR HARDNESS

Take a sample of the water you plan to use to fill your hot tub to your dealer and check for hardness. If over 250 ppm, don't use that water to fill your hot tub!

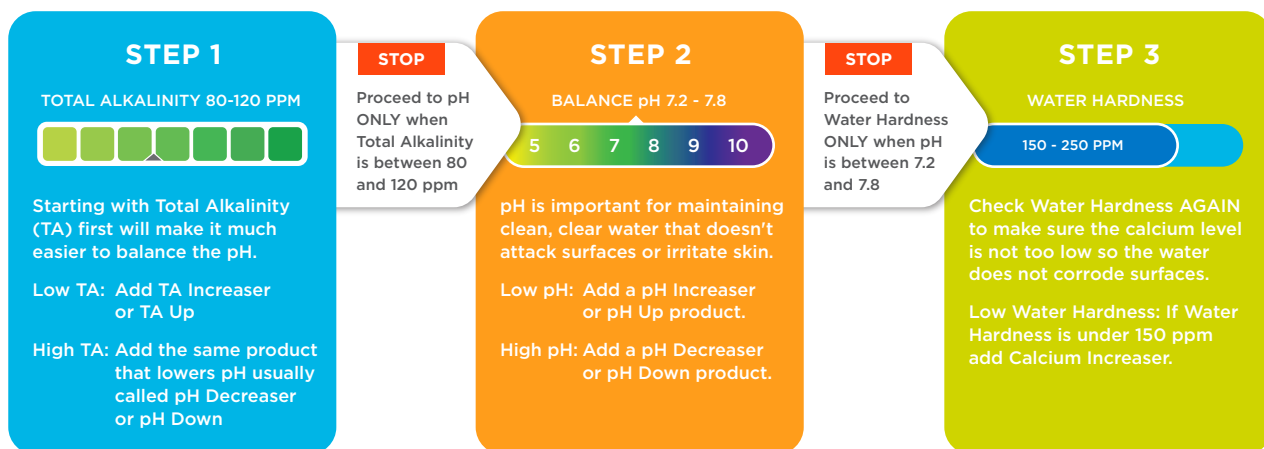
A simple hose filter from your local dealer can solve your issue.

STEP 2 TEST FOR METALS

After the hot tub is filled, take a sample of that water to your dealer to check for metals. If it tests high in metals, use a metal out product.

4 TIPS FOR SUCCESSFUL WEEKLY WATER BALANCING

- 1 ALWAYS BALANCE IN ORDER WITH STEP 1: TOTAL ALKALINITY, THEN STEP 2: PH, AND THEN STEP 3: RECHECK WATER HARDNESS.



- 2 ADD ADJUSTMENT CHEMICALS IN SMALL INCREMENTS (FOLLOW LABEL DIRECTIONS CAREFULLY).
- 3 WAIT 6 HOURS BETWEEN ADJUSTMENTS SO YOUR ADJUSTMENT CHEMICAL HAS TIME TO WORK.
- 4 IF BALANCING TAKES LONGER THAN 2 DAYS, ADD A CHLORINE SHOCK TO MAINTAIN SANITIZER LEVELS.

When Total Alkalinity is 80-120 ppm, pH is 7.2-7.8
and Water Hardness is 150-250 ppm, your water is balanced.



TROUBLESHOOTING TIPS FOR FLOATING OR IN-LINE SYSTEMS



Hot tub owners tell us the FROG®@ease® System is the easiest water care system they have ever used. The key is to maintain water balance and make sure you replace the FROG @ease SmartChlor® cartridge when empty. (Approximately every 3-4 weeks.)

Here are a few tips should you experience one of these issues.

CLOUDY WATER / UNDER CHLORINATION

1 CHECK YOUR WATER BALANCE

- a. If your pH or TA is off, SmartChlor will not be as effective.

Most Often: The free chlorine residual is low when the pH is too high.

- Add "pH Down" to bring the pH into the Ideal Range of 7.2 to 7.8.
- The free chlorine residual will then come back up to 0.5 after the pH adjustment has been made.

WATER BALANCE GUIDELINES

pH: 7.2-7.8
Total Alkalinity: 80-120 ppm
Calcium Hardness: 150-250
Total Dissolved Solids: <1500
Free Chlorine: 0.5-1.0 ppm

NOTE: Free Chlorine levels are reduced up to 75%* when using FROG minerals.

2 CHECK TO SEE IF YOUR FROG @ease SMARTCHLOR CARTRIDGE IS EMPTY

- a. In some circumstances, the system may not completely flip over. Pull it out of the hot tub and drain all the water. Then put it back in. If it immediately flips over it's empty.
- b. You can also shake it slightly to feel if there is any SmartChlor residual left inside.

3 MAKE SURE YOUR MINERALS HAVE NOT BEEN USED FOR MORE THAN 4 MONTHS

- a. When you hear minerals left inside the blue cartridge, it is because one of the minerals does not completely dissolve. The mineral that does the bacteria fighting however only lasts 4 months so you must replace the minerals at that time.
- b. We suggest making a note on your calendar for the replacement date of the minerals and be sure to replace every time you drain and refill the hot tub. Calendar stickers come in the convenient system package.

HIGH COMBINED CHLORINE LEVELS

- 1 **THIS IS NORMAL!** With the FROG @ease self-regulating process, there is a chlorine reserve that converts to free chlorine automatically when needed.

- 2 When testing SmartChlor with a standard test strip you will see the total chlorine is higher than the free chlorine. The total is the SmartChlor reserve that is inactive. When the hot tub needs more free chlorine to kill bacteria, it pulls from the reserve. Therefore no shocking is required when the total reading is different than the free reading.

- 3 To prevent confusion, always use FROG @ease Test Strips. A 30-count bottle comes with every FROG @ease Floating and In-Line Sanitizing System.

* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a hot tub.