



Mineral Hot Tub Disinfectant Operation Manual

FROG® Filter Mate®:

Fits in most filters.

Handles hot tubs up to 600 gallons.

Lasts 4 months.

Easy to set reminder dial.

Use with bromine or chlorine.

Ver la versión en español de este manual en frogproducts.com

Step 1: Prepare the Hot Tub

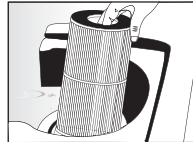
1.



Fill hot tub with fresh water.

If using source water that is high in iron or other metals, see your dealer before filling the hot tub. It may require the use of a metal control product.

2.



Clean or replace filter cartridge when dirty.

(Follow manufacturer's instructions).

3.

Balance water by following STEPS a – d in order.

IMPORTANT: Always follow printed instructions on the balancing chemical packages. Add balancing chemicals in small increments one at a time with the jets on and wait 6 hours before testing again and adding any additional balancing chemicals.

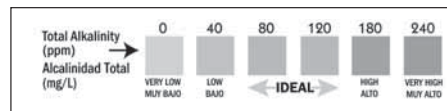
Water Balance Guidelines

| | |
|-------------------------|---------------|
| pH: | 7.2 - 7.8 |
| Total Alkalinity: | 80 - 120 ppm |
| Hardness: | 150 - 250 ppm |
| Total Dissolved Solids: | <1500 |
| Cyanuric Acid: | 0 - 50 ppm |

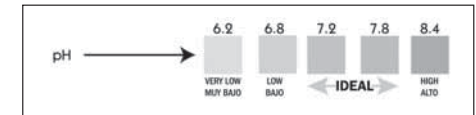
a. Take a water sample from the hot tub and dip a FROG Test Strip into it.



b. Look at the **Total Alkalinity** reading first. Adjustments should be made to bring the Total Alkalinity in the **range of 80 – 120 ppm** prior to making any adjustments to pH even if it throws pH off further.



c. After Total Alkalinity is in range, **test for pH**. It should be **between 7.2 and 7.8**. If higher or lower, add a pH adjuster.



d. Lastly **test for Hardness**. It should be **between 150 and 250 ppm**. If higher, partially drain the hot tub (about 6 inches) and fill with water low in calcium. If lower, add Calcium Increaser.

If balancing takes longer than 2 days shock the water and maintain a chlorine level while continuing balancing.

4.



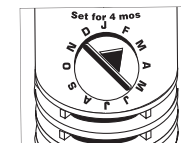
Shock hot tub to establish a chlorine residual of 1.0 - 2.0 ppm with an EPA approved hot tub shock. For best results use FROG Jump Start® start-up hot tub shock packet that quickly dissolves with an effervescent action – one packet per 600 gallons (Follow manufacturer's directions).

5.

Heat water to the manufacturer's recommended temperature.

Step 2: Put the System to Work

1.



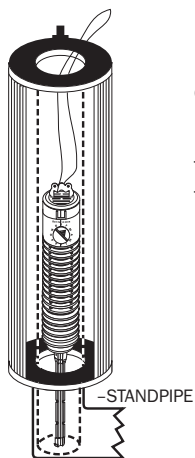
Set reminder dial on FROG Filter Mate to 4 months from month of installation. Turn dial by hand or with a coin if needed.

Step 2: Put the System to Work continued . . .

- 2.** Place FROG Filter Mate in one of the following locations in hot tub:

(If unit is too tall, cut rod at hash marks to shorten.)

A. Majority of Hot Tubs



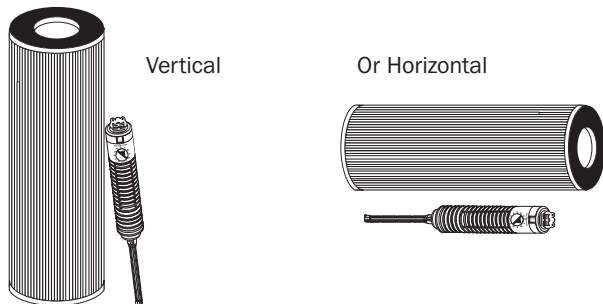
Insert FROG Filter Mate inside filter cartridge core.

Do not allow FROG Filter Mate to sit too low in the filter. If blocking water flow, install in filter well.

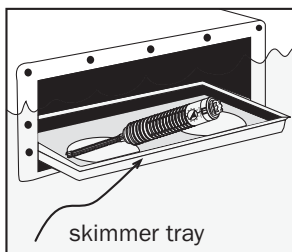
If FROG Filter Mate is inside a standpipe, attach a string to the FROG head handle for easy removal.

B. High Flow Hot Tubs

On skimmer filters with 2.5 HP or larger pump motors, place FROG Filter Mate in filter well outside the filter cartridge.



C. Small Cartridge or Other Hot Tubs



Place FROG Filter Mate in skimmer tray.

Step 3: Routine Hot Tub Care

1.



Drain and refill hot tub as directed by your hot tub manufacturer. Whenever you drain and refill, make sure to replace your FROG Filter Mate.

2.



Run filtration system as recommended by your hot tub manufacturer.

3.



Regularly test water for pH, Total Alkalinity and bromine or chlorine levels.

Maintain at least a 1.0 ppm bromine or chlorine level at all times.

Note: Bromine or chlorine levels are lower only when used with FROG minerals.

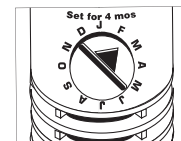
4.



Shock the hot tub with FROG Maintain®, a non-chlorine shock once a week or as needed.

Additional shocking may be required if the hot tub is under heavy use.

5.



FROG Filter Mate must be replaced every 4 months. After four months of use or when draining and refilling the hot tub with fresh water, discard the FROG Filter Mate in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals are effective up to four months. Non-refillable container. Do not reuse or refill this product. Do not attempt to reuse the product once removed from the hot tub.

Replace FROG Filter Mate after 4 months or when draining and refilling hot tub with fresh water.

Troubleshooting Most issues are caused by improper water balance or sanitizer levels.

If water is cloudy:



1. Check water balance. Ensure pH, Total Alkalinity and Hardness are correct.

2. Make sure your bromine or chlorine levels are at least 1.0 - 2.0 ppm.



3. Make sure your FROG Filter Mate is not older than 4 months as it will be ineffective and more bromine or chlorine will be required to maintain the hot tub until you replace the minerals.



4. Shock the hot tub with FROG Maintain, a non-chlorine shock to regain clarity.

Learn more at frogproducts.com



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EPA Est. No.: 071209-AZ-001

E05211022R3 20-48-0138