# MINERAL PURIFICATION (DICHLOR & MPS) SHOCK SYSTEMS (2017)

### **FILLING HOT TUB**

Fill Hot tub, with the filter removed and the hose in the filter can hole (to prevent air-lock) to the proper level with drinkable tap water. WE DO NOT RECOMMEND USING SOFT WATER TO FILL YOUR SPA. Make sure that tub drain plug and pump freeze plugs are in.

#### **PUMP PRIMING**

Turn on breaker to hot tub and turn on pumps. If for some reason the pumps do not run (jets do not produce any flow) turn the pump on for 10 seconds and then off again for up to 10 or 12 cycles. If this does not prime the pump (eliminate air-lock) you should refer to your owner's manual or call Take a Break Spas (801-489-6005). **Note:** You may need to loosen the plastic nut couplers on either side of the primary pump - then turn pumps on - to eliminate air-lock.

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## PART #1 - Mineral & Scale Control

## **METAL GON (or SEQUA SOL)**

Add "Metal Gon" (one bottle - 16oz at water change- every 3-4 months) OR "Stain & Scale Control" (1 oz per 300 gallons per week) OR "Sequa Sol" (as directed based on volume) to the entire body of spa water.

#### THEN ADD

#### **DEFENDER** - Leisure Time

Add 1 oz. per week (for up to 400 gallons) for regular "Stain and Scale" control.

OR

"Stain & Scale Control" - Spa Essentials (1 oz per 300 gallons per week) to the entire body of spa water.

## PART #2 – Water Balance

## PH/ALKILINITY (Test Strips)

Take a test strip and dip at least 12" down into water and hold for a second or two. Immediately remove without shaking off water and compare strip to the guide on the bottle and pay attention to the PH reading on the strip. Use "Spa Up" or "Spa Down" as recommended to adjust the PH level. Note: The PH level will take approximately 1-2 weeks to stabilize (check every few days & adjust accordingly) using as little "Spa Up" or "Spa Down" as possible (do not over-treat water), be patient. Adjusting the PH will usually adjust the Alkalinity over time. If it does not then Alkalinity Increaser may be required. NOTE: Improper pH levels will cause pillow, jet, cover erosion and discoloration of plastics which will VOID WARRANTY.

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## PART #3 - Sanitizer

### **DICHLOR SANITIZER - SHOCK EXTRA**

With a mineral sanitizer you should add 1 1/2 oz of Spa Essentials — "Spa Shock Extra" or Omni "Multi-Shock" per 250 gallons at start up. Add 1 cap (using the lid of the product container - 2oz) of the 'Spa Shock Extra" weekly or to get a good clean smell from your water and wait 20 minutes before covering the spa. If there is reason to believe that bacteria is present (due to water cloudiness or odor) and then wait 10-15 minutes before covering the spa.

### **AND**

### **MPS SANITIZER - SHOCK OXIDIZER**

For non-active chlorine sanitizing with a mineral sanitizer you should add One (1) Teaspoon of Spa Essentials "Spa Oxidizer (MPS) OR Leisure Time "Renew" per 250 gallons **after each soak** and wait 10-15 minutes before covering the spa.

- Set or check filter cycles (days, times and duration) to keep up with your spa demand and usage
- Clean filters regularly (with Filter Cleaner weekly to monthly as needed)
- Treat spa cover regularly with 303 Protectant to protect against UV light fading.
- Drain and re-fill your hot tub every 3-4 months follow re-fill procedures previously noted

PROBLEM	POSSIBLE CAUSES	SOLUTIONS		
Cloudy water	Filter problems	Clean filter cartridge and inspect for integrity issues.		
	Microscopic particles or high TDS (>2000)	Rinse off before using the hot tub to remove oils, lotions and hair shampoo/conditioners. Add BRIGHT AND CLEAR to remove particles through filter.		
	High Alkalinity (80-120ppm) High pH level	Test pH and Alkalinity and lower if necessary with SPA DOWN.		
Skin and/or eye irritation	Low pH (7.2-7.6)	Raise Ph level with SPA UP to eliminate acidic water (itching).		
Algae growth	Low sanitizer levels	Shock your spas water with your sanitizer (Renew, Chlorine or Bromine). Brush the spa walls. Run the filter for a 24-hour period to increase distribution of sanitizer and add Spa Algaecide.		
Excessive foam	Buildup of body oils or cosmetics.	Rinse off before using the hot tub to remove oils, lotions and hair shampoo/conditioners. Use FOAM DOWN to temporarily break up the contaminants and then to help the filter remove them. If a oily water line is present the spa should be wiped out and the filter cleaned with FILTER CLEANER An oil absorbing sponge such as SCUMBUG can help in preventing this.		
	Laundry Detergent	Run an extra rinse cycle on the washing machine or re-rinse well by hand.		
	Excess organic contaminants	Some organic matter will cause foamy water, FOAM DOWN will temporarily break up the contaminants, then use BRIGHT AND CLEAR to help the filter remove them. It may necessary to drain and refill spa.		
	Low or High Calcium Hardness (150-400ppm)	Test water with a TOTAL HARDNESS TEST KIT and if necessary increase. If high, change the water.		
Oily water line	Body oils, dirt, soaps	Scum line may be able to be removed with paper towel. Alternating weekly between BRIGHT AND CLEAR and ENZYME along with frequent filter cleanings usually eliminates this problem.		
Scaley Waterline	High ph and/or Alkalinity	Lower pH and Alkalinity levels with SPA DOWN or Alkalinity Decreaser specifically to decrease hard water (scale) build-up.		
Stains	High Mineral Content	Sequester mineral content with METAL GON and consistent use of STAIN & SCALE CONTROL OR DEFENDER products. One may also use a mineral sanitizer stick.		
Unstable pH	Low total alkalinity levels	Test total alkalinity levels with an accurate TEST STRIP OR KIT and if necessary increase with SPA UP.		
pH resistant to changing	High total alkalinity levels	Test total alkalinity levels with an accurate TEST STRIP OR KIT and if necessary decrease with SPA DOWN.		