

**MOUNTING**

- (1) Using the thumb screws at the base of the bracket, fasten the Aqua-Minder to the edge of the chemical drum that it will be feeding diluted chemical into. The U-channel at the base of the bracket can be omitted by removing the two flat head screws. This configuration will allow for attachment of the Aqua-Minder to a flat surface (i.e. the top of a Foam Clean reservoir). Use appropriate hardware if mounting the Aqua-Minder this way.
- (2) Based on the amount of diluted chemical you wish to maintain in the chemical drum, adjust the chain to the appropriate length and hang the float from the end of the chain. Approximately 3/4 of the float will be submerged in the diluted chemical. Sand can be removed from the float if necessary to adjust the buoyancy.

**CHANGING MIXING RATES**

The unit is shipped with a 4 GPM (black) venturi tube installed. A 1 GPM (white) venturi tube is included in the accessory kit, and may help to reduce foaming (if such condition should occur) or if using very low water pressure.

If switching to the 1 GPM flow rate is desired, remove the venturi body and remove the 4 GPM tube by inserting a pen through the small end of the venturi, then force the tube out by applying pressure. Replace with 1 GPM venturi tube (be sure new venturi tube seats all the way into the venturi body) and put the venturi body back on the unit.

**SETUP**

- (1) Choose a metering tip (see chart at right) that is closest to your requirements and screw into port on venturi body.
- (2) Insert the footvalve into one end of the 1/4" ID vinyl suction tubing, then slide the ceramic weight over the tubing so that the weight rests on the footvalve.
- (3) Push the other end of the suction tubing over the metering tip on the venturi body and secure it with the tie wrap provided. Drop the tubing into the chemical container.
- (4) Push the 1/2" ID discharge tubing over the output opening at the bottom of the venturi body. Make sure the flow restrictor inside the tube is closest to the venturi body.

TIP COLOR	1 GPM (OPTIONAL)		4 GPM (STANDARD)	
	OZ/GAL	RATIO	OZ/GAL	RATIO
NO INSERT	28	3.6:1	25	4.3:1
WHITE	22	4.8:1	20	5.4:1
YELLOW	18	6.1:1	18	6.1:1
PINK	16	7.0:1	16	7.0:1
GREEN	15	7.8:1	12	12:1
BLACK	14	8.5:1	10	15:1
BROWN	12	10:1	7	20:1
GRAY	8	15:1	5	31:1
BLUE	6	20:1	4	42:1
RED	3	42:1	3	63:1
PEACH	2.5	50:1	2	72:1
LT BLUE	2.0	63:1	1.5	101:1
PURPLE	1.75	74:1	1	127:1
LT GREEN	1.5	84:1	0.75	170:1
ORANGE	1	127:1	0.50	255:1
LT BROWN	0.5	255:1	0.25	511:1

NOTE: This chart is based on chemical viscosity of water (CPS = 1.0) and should only be used as a guide. Actual ratio and flow rate may vary due to product viscosity, flow pressure, and tubing distance.

**OPERATION**

- (1) Let the float hang in the empty container.
- (2) Turn water on to the unit and allow the system to begin mixing chemical. As the diluted mixture reaches the float, the unit will stop feeding. The system will now automatically maintain this level of mixed chemical.



**CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (MSDS) of chemical mfrs.**



**CAUTION: Turn off water to system before adjusting the chain length, changing the dilution ratio, or when changing or cleaning the drum.**



**CAUTION: When installing any equipment, ensure that all national and local safety, electrical, and plumbing codes are met.**

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## TROUBLESHOOTING

### PROBLEM

- (1) Venturi fails to draw chemical.
- (2) Venturi stops drawing chemical.

### SOLUTION

- Insufficient water supply pressure.  
Minimum operating pressure is 20 PSI.
- A. Residue may be blocking footvalve.  
Soak in hot water to clean footvalve.
- B. Residue may be blocking flow tip.  
Soak in hot water to clean flow tip.

## DISCLAIMER

Knight LLC does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight LLC. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user, Knight does not accept any liability in such circumstances.

## WARRANTY

All Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE year. All electronic control boards have a TWO year warranty. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

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