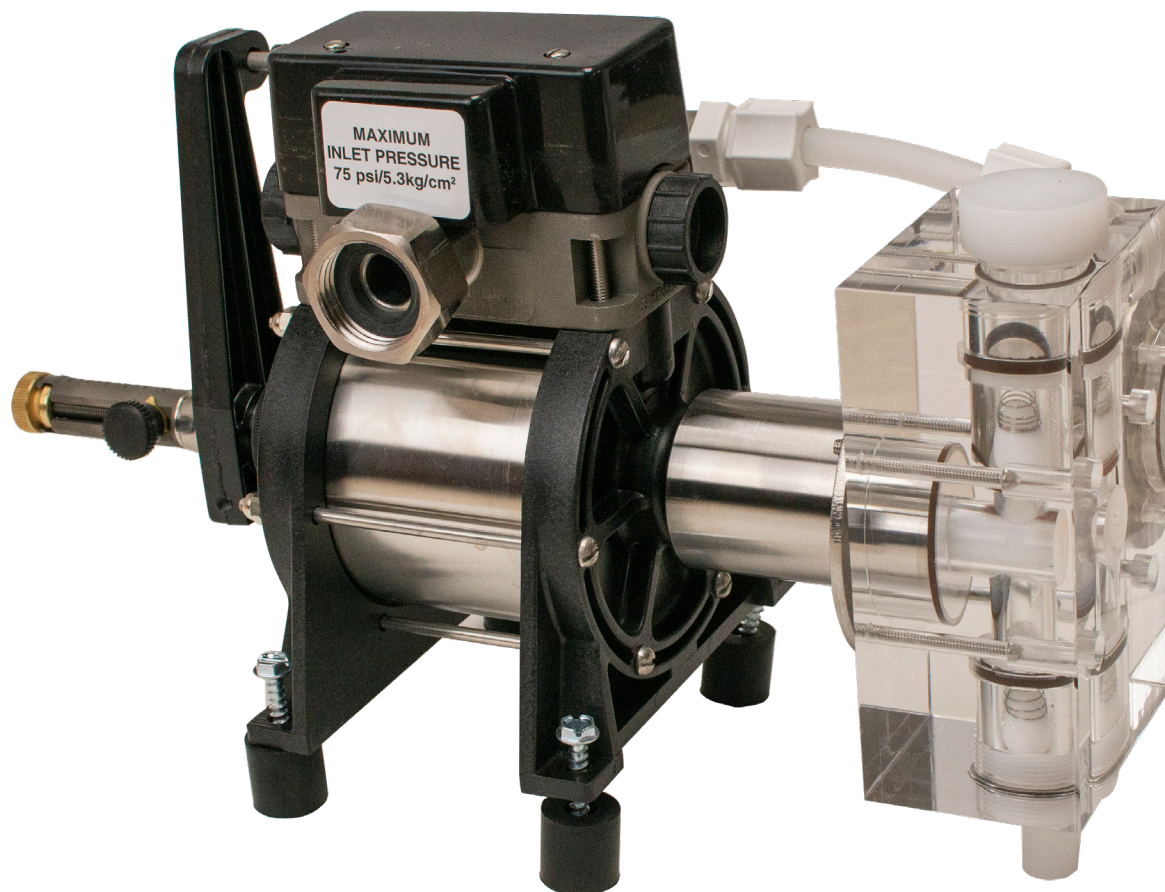
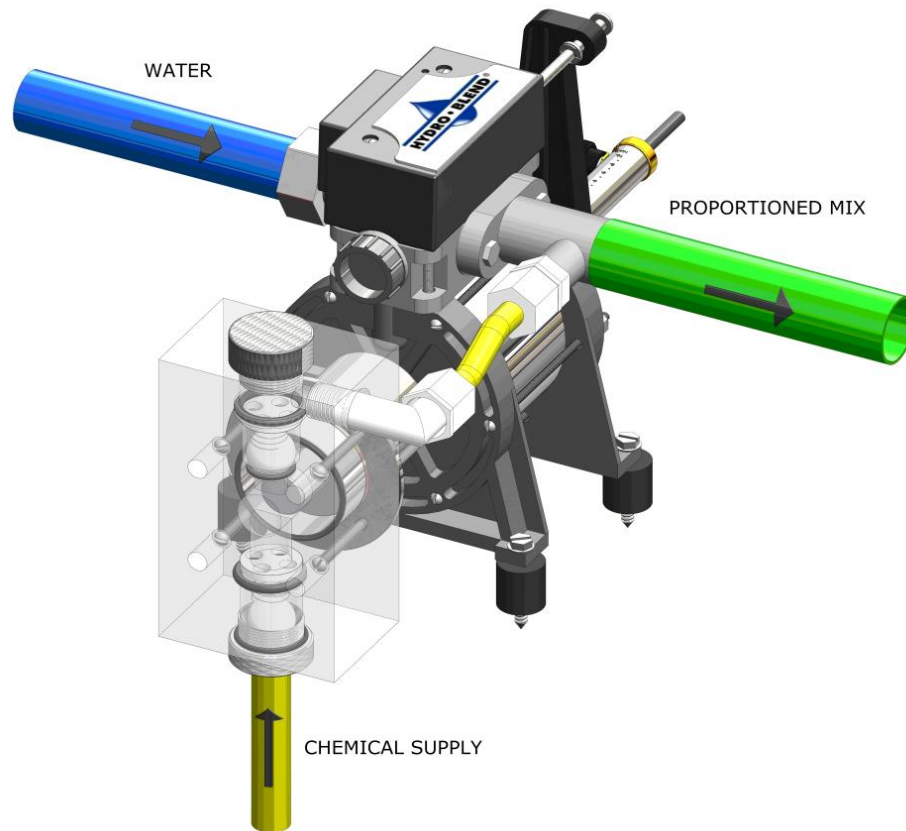


MIXPP Series



Zebra Skimmers Corporation

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INSTALLATION

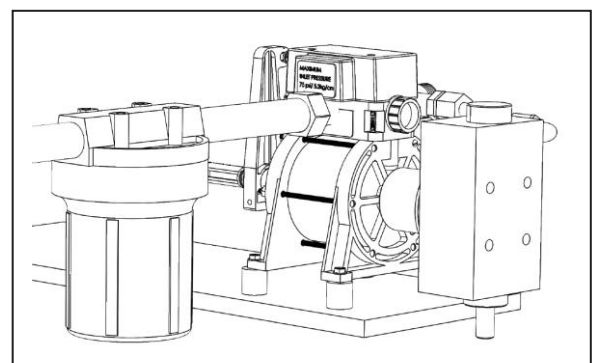
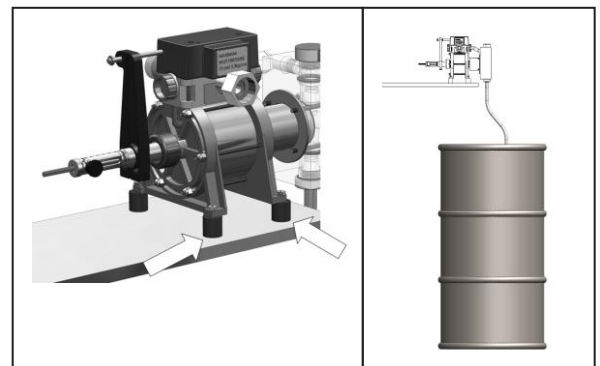
1. Mount the proportioner on a bracket or shelf using the (4) rubber feet provided. See back of manual for horizontal and vertical mounting instructions.

NOTE: MOUNT THE UNIT SO THE BOTTOM OF THE BRACKET IS 42" FROM THE FLOOR. THIS WILL ALLOW A DRUM OF PRODUCT TO BE PLACED UNDER THE PROPORTIONER.

2. Install a 25 micron water filter in the inlet water line of the proportioner. Failure to filter the proportioner water supply will void warranty. If the inlet water pressure can exceed 75 PSI, a regulator should be installed in the inlet water line.

NOTE: THE PROPORTIONER IS DESIGNED TO BE USED WITH 3/4" GARDEN HOSE CONNECTIONS FOR BOTH THE WATER INLET AND OUTLET. THE UNIT CAN BE CONNECTED WITH RIGID PIPE IF DESIRED. ALL NECESSARY HOSES AND PIPING MUST BE SUPPLIED.

3. On the discharge side of the proportioner, connect the pipe or line which will feed the mixture to a central reservoir or to the mixture use points. If you are using pipe to make these connections, use a 3/4" Garden Hose to NPT adapter.
4. Attach the suction tube to the chemical pump and place the bottom end of the tube into the product container.



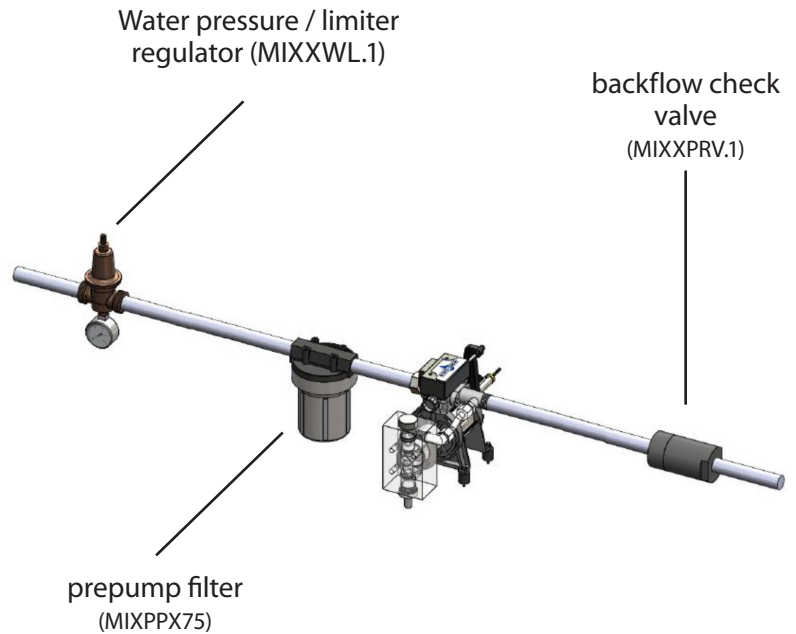
MIXPPX75 Water Filter Assembly

INSTALLATION DIAGRAMS

The proportioner is water powered and can therefore be located near an isolated water source without electrical connections. Installation is simple, straight forward and takes very little time. Below are two installation setups.



Basic Install



Installation with optional accessories

IMPORTANT LEAKING-DRIZZLING FLOAT VALVES

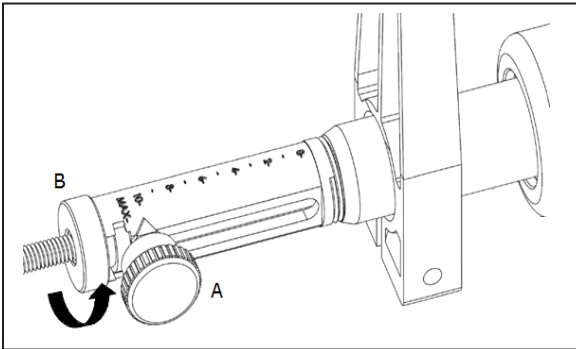
Occasionally non-positive water flow valve can be encountered in older, somewhat dated, press recirculating system. This is the least desirable installation, however, the proportioning pump will operate accurately and repeatedly in this environment.

After the system is filled at full flow and if the level is maintained with a leaky-never fully on, never fully off float valve, the proportioning pump may have to be reset at slightly higher settings to maintain the desired dilution.

Although the proportioning pump operates at water flows much lower than any other device of its type, a small amount of water will bypass the upper valve block. As the total flow decreases to a trickle, that bypass will represent a greater percentage of the total flow volume thus the mixture may be slightly more dilute. This will require a slightly richer chemical setting. Correspondingly, at this setting and at full flow, the mixture may be a little rich.

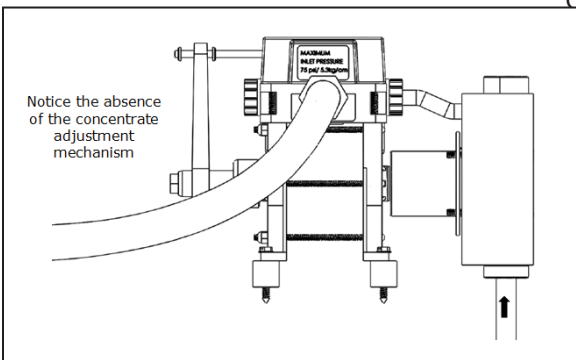
The best solution would be to eventually install a positive on-off flow valve. Please call our Customer Service department with any further questions at **440-528-0699**.

PUMP START-UP

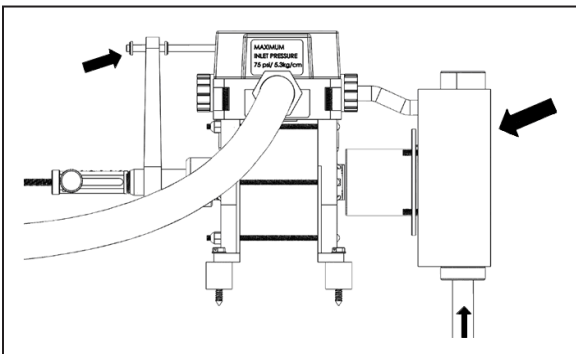


1. If your proportioner is a variable ratio model, loosen the adjustment locking knob (A) and turn the concentration adjustment knob (B) to the maximum setting (Position 10)
2. If your proportioner is a fixed water to chemical ratio model (no concentrate adjustment mechanism), disregard step 1 (note picture #2).
3. Check all connections and fittings for proper tightness and turn on the water to the machine.

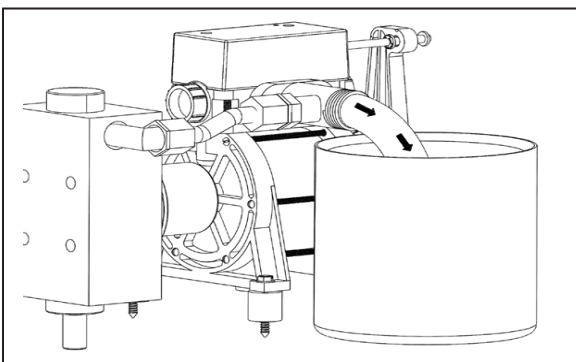
NOTE: THE PLASTIC FITTINGS ON THE PROPORTIONER ONLY NEED TO BE TIGHTENED BY HAND FOR PROPER SEALING.



4. As water flows through the water motor of the proportioner, the actuating arm and piston at the rear of the proportioner will move back and forth. This shaft operates the chemical pump piston. The concentrate will start rising up the suction tube.



5. Once the product leaving the chemical pump reaches the main water stream, a 3-5 gallon sample can be taken of the mixture for a concentration test (either titration, volumetrically, or with a refractometer). If a variable ratio unit, you may adjust the concentration knob as needed to give the desired product-to-water ratio. The numbers on the graduated guide are reference marks only, and do not represent any particular ratio. The #10 is the strongest concentration and the #0 is the weakest. When the proper ratio is reached, tighten the adjustment locking knob. Finger tight is sufficient.

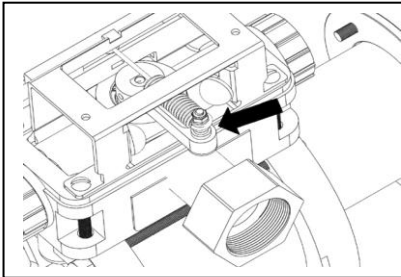
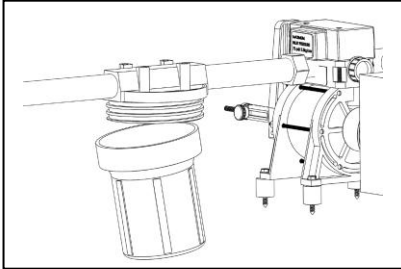


The proportioner must be installed in compliance with all local plumbing codes. The proportioner water feed line must be isolated because chemical back flow through the proportioner is possible. An approved back flow preventer must be installed upstream from the proportioner to prevent possible chemical contamination of the water supply.

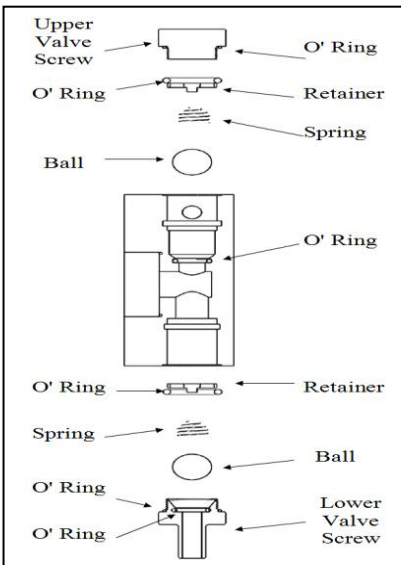
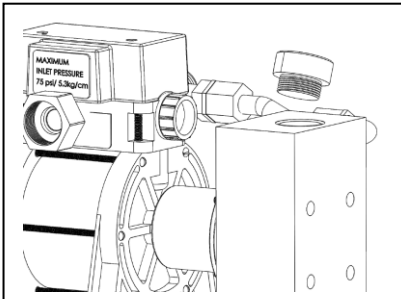
TROUBLESHOOTING

ISSUES

1. Water motor will not run



2. Will not draw chemical



CAUSES

- A. Water turned off to unit.
- B. Water filter clogged.
- C. Discharge lines shut off or clogged
- D. Proportioner stalled. Proportioner operates intermittently, and then stalls.
- E. Weak or broken toggle lever spring
- F. Actuating Arm out of adjustment

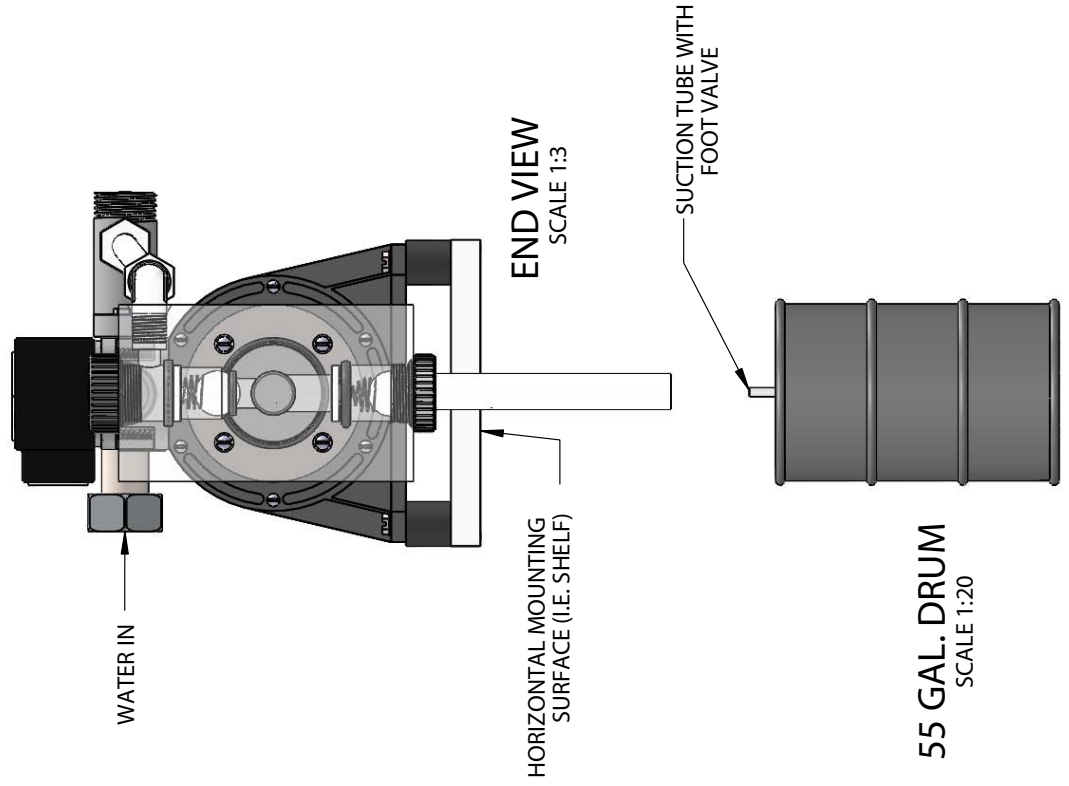
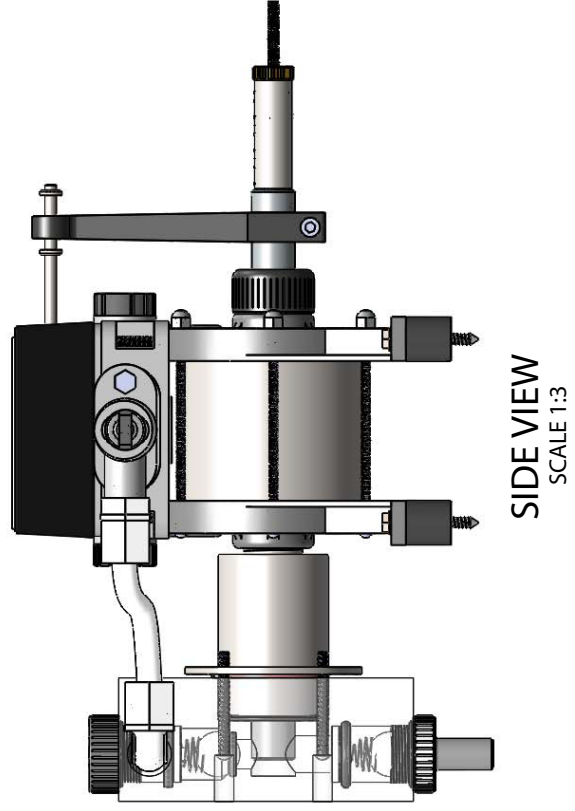
- A. Water motor not working.
- B. Proportioner concentrate adjustment set on minimum.
- C. Pump head seals dry.
- D. Upper or lower valve screws sucking air.
- E. Foreign material on ball seat. Concentrate has caused balls to stick.
- F. Excessive discharge backpressure.

CORRECTIONS

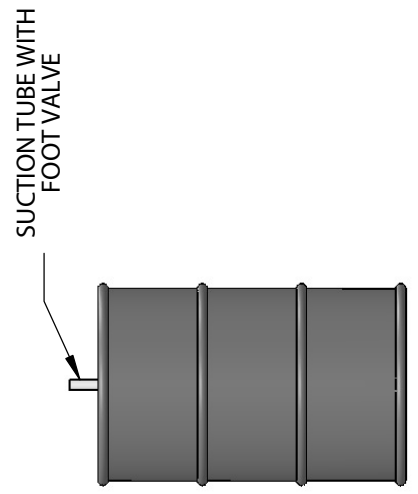
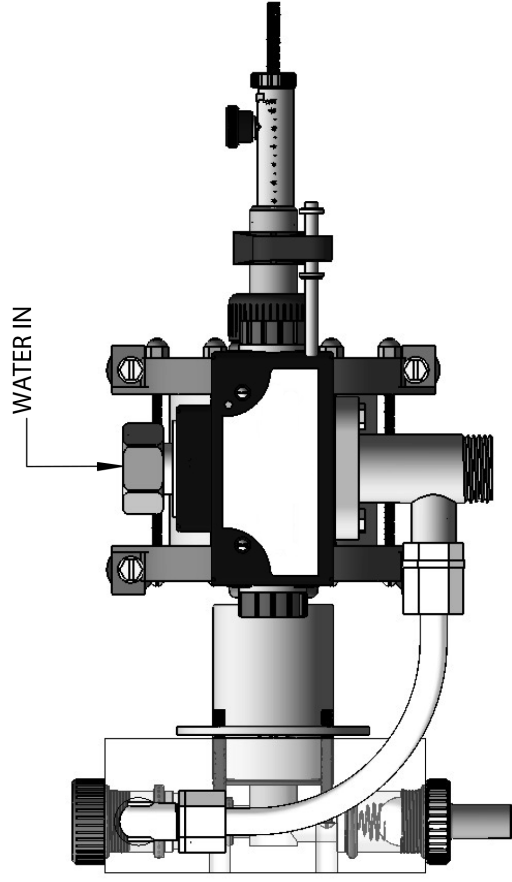
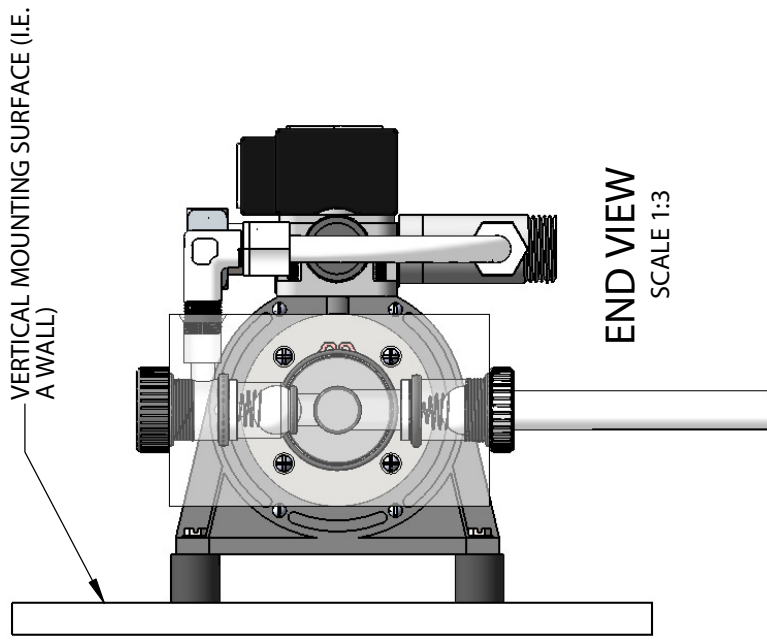
- A. Turn water on to unit.
- B. Remove and replace filter element.
- C. Check to be sure lines are clear and all system valves are open.
- D. Water inlet pressure has dropped. Relieve downstream back pressure. If unit restarts, there is no problem. If unit does not restart, the valve block may need to be rebuilt.
- E. Replace toggle lever spring.
- F. Relocate actuating arm to .400" from back of chrome shaft. See attached print.

- A. Check motor per item 1 above
- B. Re-adjust. Set on 10 to prime.
- C. Remove top valve screw, flood cavity with water. Replace spring and valve screw carefully. Start unit.
- D. Tighten fittings - hand tight only.
- E. Remove valve balls carefully and clean. Flush and clean ball o'rings in place carefully. Replace balls, springs and upper and lower valve screws carefully.
- F. Relieve downstream back pressure until unit is primed.

HM = HORIZONTAL MOUNT - DESIGNED TO MOUNT ON A HORIZONTAL SURFACE (I.E. A SHELF)



VM = VERTICAL MOUNT - DESIGNED TO MOUNT ON A VERTICAL SURFACE (I.E. A WALL)



55 GAL. DRUM
SCALE 1:20

EXPLODED VIEW

