

## MAINTENANCE INSTRUCTIONS FOR THE VYLEATER METERING PUMP OPTION

Although BLUE-WHITE has designed the PUMP to provide long life with little maintenance, service life can be adversely affected by the chemicals used, the amount of back pressure, the motor RPM and the stroke length. More information is available in the Metering Pump manual found in the Appendix section of this manual.

### ***Preventative Maintenance Schedule***

**Daily:** After the last run of vials for the day, turn off power to the Metering Pump and supply only clean water to the Flush System for about 5-minutes. This helps clean out residue left behind by the rinse agent being used. The **Vyleater** does not need to be running for this operation.

**Every 6 Months:** Check & clean the Discharge, Suction & Injection Valves for calcification. If a buildup of calcified chlorine is evident, the frequency may have to be increased accordingly.

**Once a year:** The Diaphragm should be checked once a year for signs of wear and replaced when necessary.



**Typical Metering Pump Install**



**Metering Pump**

### ***Cleaning the Valves***

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The Discharge Valve at the outlet (top) of the Pump-head and the Suction Valve at the inlet (bottom) of the Pump-Head tend to build up with calcified chlorine or a similar washing chemical.

#### ***For slow pumps:***

1. Fill a container with undiluted vinegar and insert the suction and discharge tubes into the liquid. Run the pump for at least 10 minutes.

#### ***For severe clogs:***

2. Disconnect the electricity to the PUMP. Release any pressure that may be in the discharge lines.
3. Remove the inlet and outlet hoses by unthreading and removing the caps on the end of the Valves. Pull the hoses off the stems.
4. Remove the Valves from the pump head by unscrewing the valve bodies.
5. Remove the Injection Valve (it looks similar to the Discharge and Suction Valves but is located between the Pump and the connection to the **Vyleater's** flush system.
6. Soak all three Valves and the Foot Valve located on the end of the suction hose, in a weak solution of 10 parts water to 1 part muratic acid. If build up is evident on the hoses, these can be soaked as well.
7. Leave the parts in the solution for an hour or longer if the buildup is excessive. Once clean, rinse the parts with pure water and replace.

#### **NOTICE**

*While not usually necessary, the Valves can be disassembled before soaking. However, it is important to make note of the order and orientation of the individual components when the Valves are to be reassembled.*

### ***Replacing the Diaphragm***

The diaphragm should be checked once a year for signs of wear and replaced when necessary.

1. Disconnect the electricity to the PUMP.  
Release any pressure that may be in the discharge lines.
2. Remove the four screws that pass through the Pump-Head securing it to the motor mount. Visually inspect the diaphragm and look for signs of splits, cracks, rubber swelling or other damage.
3. To replace the diaphragm, turn the stroke adjustment knob located on the top of the PUMP to "MIN" (counterclockwise) and lock with the set screw.
4. Grasp the diaphragm firmly with both hands and unscrew the diaphragm from the drive assembly (counterclockwise).
5. Make sure that any spacers that may have been on the old diaphragm are also located on the new one.
6. Screw the new diaphragm all the way into the drive assembly by hand tightening only and reset the adjustment knob to "MAX".
7. Install the pump head, being sure to tighten the four mounting screws with equal pressure.



#### **NOTICE**

*A complete parts list for the Blue-White pump is located in the pump operating manual that follows this section. S&G stocks some parts – but most can be ordered online at [www.blue-white.com](http://www.blue-white.com) Other Flush parts not specifically for the Metering Pump are listed on the Vyleater Flush Bill of Material List.*

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