

# Aquatec 5800 Delivery/Demand Pump #92341

## Installation Instructions



Please read these Operational and Installation Guidelines before installing the 5800/550 Delivery/Demand Pump. If additional help is needed, please consult the Factory.

### **CAUTION:**

1. The pump is equipped with a pressure sensing demand switch which controls the maximum safe operating pressure.
2. Never operate the pump in harsh environment or hazardous atmosphere, since motor brush and switch may cause electrical arcing.
3. Pumphead materials are designed for use with water only. Do not use with petroleum products.
4. As long as there is inlet water pressure, the pump will not stop forward flow of water even if the motor is turned off. Be sure the system has positive means of shutting off water supply.
5. Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician per Local and State Electric Codes.

### **MOUNTING:**

- A. The pump should be mounted in a dry place and away from any source of heat. If an enclosure is used, special provisions for cooling the motor may be necessary. Certain models may be ordered with a thermal protected motor.
- B. Do not subject the Pump to extreme high or low (freezing) temperatures while in operation. (Operating ambient temperatures range is 32°F to 115°F)
- C. The pump may be mounted horizontally with the outlet port on the right when viewed from the pump end or vertically with the pump above the motor.
- D. Do not mount the pump with the head down, as air can become trapped causing the pump to malfunction.

### **PLUMBING:**

- A. We recommend use of flexible tubing with proper pressure rating.
- B. Pump will prime only if all pressure is relieved from the outlet port.
- C. It is recommended that an in-line sediment filter be installed at the inlet side to keep foreign debris out of the system.
- D. Avoid any sharp bends which may crimp tubing and restrict flow. Use 90° elbow fittings if necessary.
- E. The pump should always be mounted prior to the carbon pre-filter to prevent carbon particles from entering the pump chambers and possibly causing clogging.

### **ELECTRICAL:**

- A. The 5800/550 series pumps are designed for intermittent duty, but may run continuously if the motor temperature does not exceed the recommended limit. Please consult the appropriate Data Sheet for continuous running parameters, noting the effect of rapid On/Off Cycling.
- B. If a power supply is used with the system and the supply is not furnished by Aquatec, it will need to be reviewed for correct application and approval by Aquatec.

The basic 5800/550 pump is controlled by a built-in pressure sensing demand switch. When a faucet or valve is opened down stream of the pump, line pressure drops thus starting the pump automatically. Conversely, when the valve shuts, the line pressure increases turning the pump off automatically. The pressure switch actuates in response to the pump outlet pressure at a predetermined and preset pressure. The pump label indicates the predetermined OFF pressures. Typically, the OFF pressure is accurately set at the FACTORY and the ON pressure is within an allowable range below that value. In response to the characteristics of the system in which the pump is installed, such as the flexibility and length of the tubing, and the faucet or valves and the duration that they are open, these pressure settings may vary. Therefore, changes in pressure settings is expected with use over time.

**Read the OPERATIONAL AND INSTALLATION GUIDELINES carefully before starting to install the pump. Consult the Factory if there is any question.**

1. Determine the optimum location for your pump before proceeding.
2. Turn off water.
3. Cut the flexible tubing in sufficient length to avoid any stress on the tubing where it connects to the pump or the fitting on any accessory.
4. Insert tubing into pump ports. Be sure tubing is inserted past the resistance point until it bottoms out against the port stop.
5. The 5800/550 pump is now ready for operation. Open the inlet water valve to allow water to flow to the pump.
6. If the power source is a transformer, plug the appropriate Aquatec supplied or approved transformer into the receptacle and connect the pump to the transformer. If the power source is not a transformer, connect the pump to the appropriate power source. Open the discharge or dispensing valve. Allow water to circulate, purging any entrapped air.
7. The pump will now start building pressure. Operating pressure will vary with membrane flow rate, flow restrictor flow rate, feed-water pressure and line voltage. Check for fitting leaks.
8. **ADJUSTING THE PRESSURE SWITCH.** Should the pressure switch OFF setting vary with use and time to an unsuitable value, it may be adjusted for optimum performance. Turn the set screw clockwise to increase the OFF pressure setting and counter clockwise to decrease. The screw should not be adjusted more than one turn without consulting the Factory. Excessive adjustment of the pressure switch could cause low system pressure, and rapid ON/OFF cycling, reducing pump and motor life. Damage may occur if recommended maximum pressures are exceeded. **The Warranty does not cover improper adjustment of the pressure switch.**
9. Rapid On/Off Cycling must be limited to no more than 6 times per minute, even if the pump is operating in the Continuous Duty zone. Start up current each time the pump is turned on will always exceed the normal running current, and could cause the motor to heat beyond the recommended maximum temperature.

#### **SERVICING:**

Every Year: Check system against operating standards.

Every 2-3 Years: Replace diaphragm and check against operating standards.

#### **AQUATEC WARRANTY**

Aquatec Water Systems, Inc. ("Aquatec") warrants its products to be free from defects in material and workmanship under the following terms:

Series 58XX, 68XX, 88XX, 55XX, ERP 1000, ERP 500 as well as PFR/TLC and PAW: The warranty will last for a period of thirteen months from date of shipping from an Aquatec warehouse with the exception that the period will be extended for an additional twelve months for 68XX series, ERP 500 and ERP 1000. Aquatec's obligation under this warranty shall be limited to replacing or repairing at Aquatec's discretion, any such product or part which is returned to Aquatec's factory with a Return Material Authorization Number (RMA), transportation charges approved by Aquatec or prepaid, and upon examination, is found to Aquatec's satisfaction to have been defective under the terms of this warranty. No credit will be allowed against future purchases for items returned as defective under the terms of Aquatec's warranty.

**This warranty does not extend to any products, which have been altered or modified outside the Aquatec factory, nor does it apply to units that are returned in an unassembled condition.** Furthermore, the warranty does not extend to pumps that are identified by a 9XXX model number, indicating non-compliance with Aquatec's Engineering Standards. This includes, but is not limited to, pumps ordered without an integral control mechanism. The warranty guarantees that products will perform to Aquatec's flow and pressure specifications throughout the life of the warranty. The warranty does not cover wear, appearance, misapplication or external water damage. If the returned product is found not to be defective under the conditions of this warranty, a charge will be made for repair or replacement.

**This is a Limited Warranty. It covers the product only and the extent of the coverage is limited to the cost of the product. As the manufacturer has no control over shipping, handling and installation, the warranty cannot cover water damage, or any other damage, caused by a leak or other malfunction.**

This warranty is in lieu of all other warranties, expressed or implied, and no person is authorized to give any other warranty or assume obligation or liability in Aquatec's behalf. Aquatec shall not be liable for any indirect, incidental or consequential damages of any kind incurred by the reason of the use or sale of any defective product and part.