



## Operation and Installation Guidelines Aquatec Pressure Booster Pumps

Please read these instructions before installing the booster pump. If additional help is needed, please contact Buckeye.

### CAUTIONS:

1. The pump is equipped with an adjustable bypass valve which controls the maximum operating pressure. Never subject the pump to pressures above 125 PSI (8.5 bars). **Never exceed the maximum operating pressure of any component in the water purification system. Operate the pump only on systems equipped with a pressure gauge.**
2. **Never operate the BFS-5007 High Capacity Booster Pump, 3/8 Inch over 78 PSI.**
3. Never operate the pump in a harsh environment or hazardous atmosphere, because the motor brushes and switch may cause electrical arcing.
4. Pump head materials are designed for use with water only. Do not use with petroleum products.
5. As long as there is feed 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 the water supply. See Buckeye's solenoid valves.
6. Always consider electrical shock hazard when working with electrical equipment. If uncertain, consult an electrician. Electrical wiring should only be done by a qualified electrician per local and State Electrical Codes.
7. Operate the pump only on systems equipped with a pressure gauge. Install a pressure gauge add on kit if needed. Use of a liquid filled gauge is recommended.
8. The Aquatec 6800 pump is intended for RO systems of 50 gpd or less. The 8800 pump will function appropriately on systems of 150 gpd or less. The High Capacity pump will work with systems up to 400 gpd.



### MOUNTING:

The pump should be mounted in a dry place away from any source of heat. If an enclosure is used, special provisions for cooling the motor may be necessary. Consult Buckeye. Do not subject the pump to extreme high or low (freezing) temperatures while in operation. The operating ambient temperature range is 32°F to 115°F.

The pump may be mounted in any position. If "ceiling mounted," however, with the pumphead upside down, air entrapment may reduce the operational performance by up to 15%.

### PLUMBING:

We recommend use of flexible tubing with proper pressure rating. Avoid any sharp bends in tubing leading to or from the pump which may crimp and restrict flow. Use 90° elbow fittings if necessary.

The pump will prime only if all pressure is relieved from the outlet port.

Use an in-line sediment filter/strainer (150 micron or 100 mesh) upstream of the pump's inlet port to keep debris out of the system. Note the direction of water flow through the strainer indicated by the arrows on the strainer.



### ELECTRICAL:

Aquatec pumps are designed for continuous duty. If used for intermittent duty cycle, make sure "off" periods are greater than 60 seconds. Consult the factory for particular data and design criteria. We recommend use of Aquatec approved transformers (only).



### INSTALLATION:

1. The basic pump unit consists of a pump and transformer. Other common configurations include a pressure sensitive shut-off switch, an auto flush valve, and a shut off solenoid. Pumps are completely assembled, tested and ready for immediate connection to your RO system.
2. Determine the optimum location for the pump before proceeding. Ideally, the pump will be located after the prefilters, and after a strainer, and before the liquid-filled pressure gauge and membrane. This avoids exposing the prefilter housings to the high pressure pump output.
3. Turn off the water supply.
4. Make the 1/4" or 3/8" O.D. flexible tubing of sufficient length to avoid any stress on the tubing where it connects to the pump or the fitting on any accessory.
5. Inspect the pump head to identify the direction of water flow through the pump as indicated by the two arrows.
6. Insert tubing into the quick connect fittings at the pump ports. Be sure tubing is inserted past the resistance point until it bottoms out against the port stop.
7. The pump is now ready for operation. Open the feed-water valve to allow water to flow through the RO system. Open the flow-restrictor by-pass valve/flush valve for 1 minute if possible to allow water to circulate through the pump to purge any entrapped air. Close the flush valve for normal operation.

8. Connect the pump to the transformer, and plug the Aquatec supplied/approved transformer into a 110v receptacle.
9. The pump will immediately start building pressure. Operating pressure will vary with membrane flow rate, flow restrictor capacity, feed-water pressure and line voltage. Check the pump ports for leaks. The pressure produced by the pump should be adjusted to a maximum of 80 PSI for Buckeye Hydro water purification systems or another setting if used with other systems to **assure the maximum operating pressure of any system component is not exceeded.** Never operate the High Capacity Booster Pump, 3/8 Inch over 78 PSI.



Pressure adjustment screw

10. Operate the pump only on systems equipped with a pressure gauge.
11. Adjust the pressure produced by the pump by turning the small Allen screw in the raised area on the pump head.

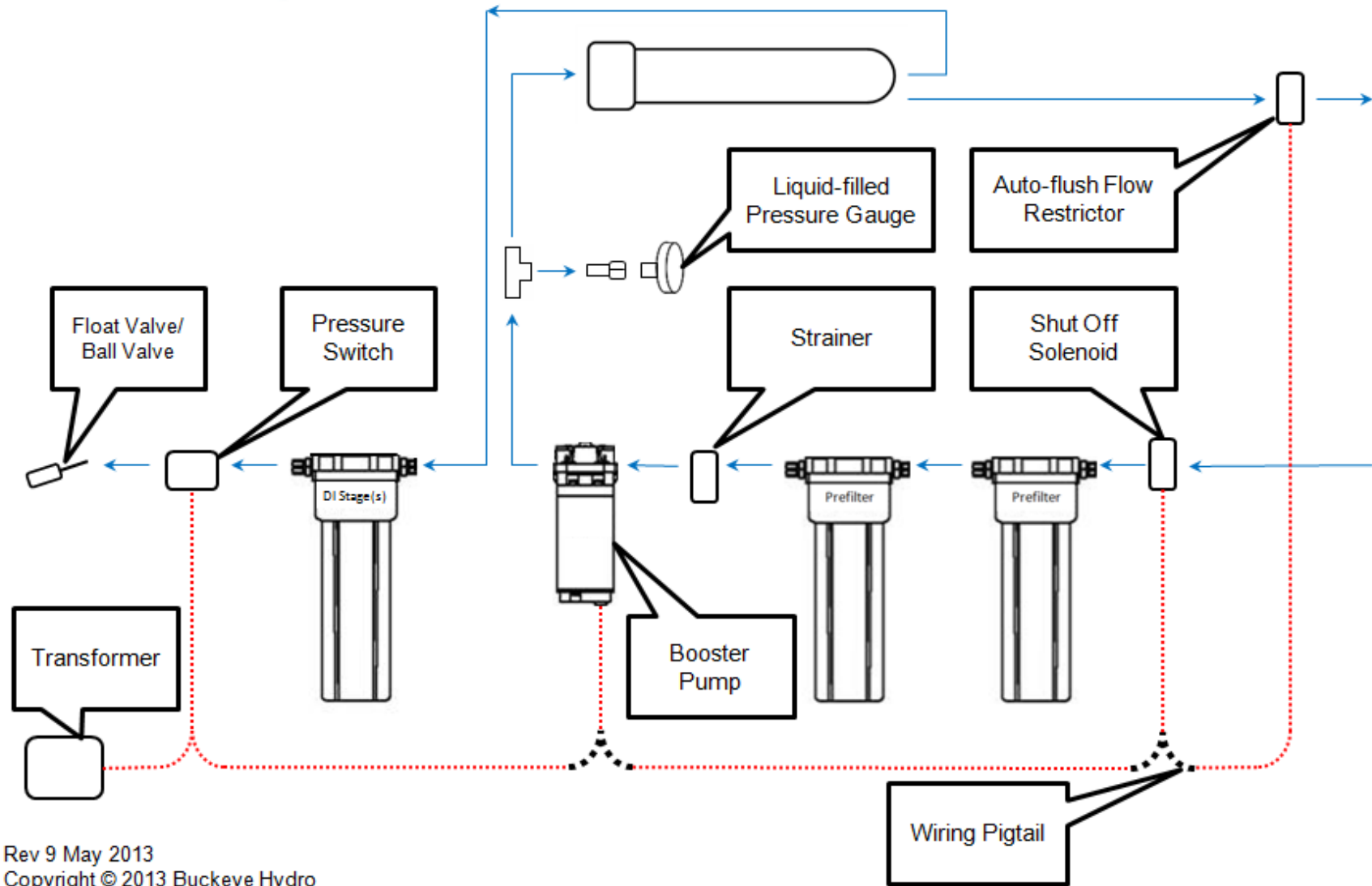
### SERVICING:

Every Year: Check system against operating standards.

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



# Booster Pump & Related Components With Purified Water Routed to Float/Ball Valve





# Booster Pump & Related Components With Feed Water Controlled by Timer Valve

