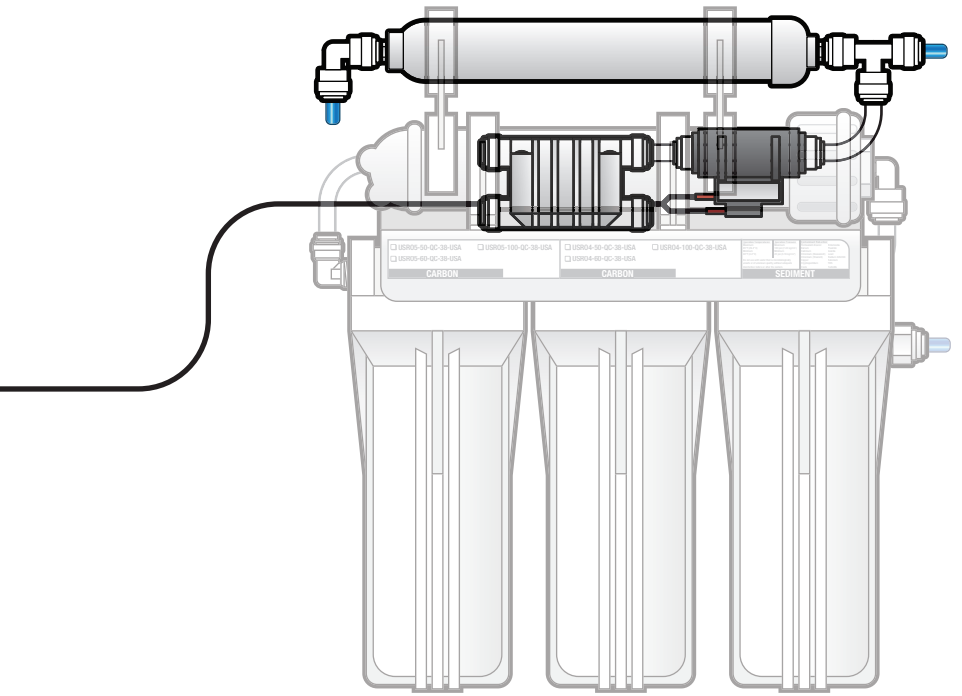
Switch connected between Post-filter T fitting and Automatic Shut-off valve.



OPERATIONAL AND INSTALLATION GUIDELINES
"CDP" SERIES BOOSTER PUMP

Please read these Operational and Installation Guidelines before installing the "CDP" Booster Pump. If additional help is needed, please consult the Factory.

CAUTIONS:

1. The pump is equipped with either a fixed or adjustable bypass valve which controls the maximum operating pressure. In addition, never subject the pump to pressures above 125 PSI (8.5 bars).
2. Never operate the pump in a 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 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 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 Electrical 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. Consult the Factory.

B. Do not subject the pump to extreme high or low (freezing) temperatures while in operation. (Operating ambient temperature range is 32°F to 115°F).

C. 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% . Consult Aquatec for ceiling mount solutions.

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 (150 micron or 100 mesh) be installed at the inlet side to keep foreign debris out of the system. Please consult your Aquatec catalog for an in-line filter.

D. Avoid any sharp bends which may crimp tubing and restrict flow. Use 90° elbow fittings if necessary. Aquatec provides pumps with different kinds of fittings. Please consult the Factory for your needs.

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 CDP series pumps are designed for continuous duty. If used for intermittent duty cycle, make sure that "off" periods are greater than 60 seconds. Consult the Factory for particular data and design criteria.

B. If a power supply 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.

INSTALLATION PROCEDURE
"CDP" SERIES BOOSTER PUMPS

The basic **"CDP"** pump consists of a pump and transformer unit. Systems may be supplied with other options: e.g. **PSW** system pressurized shut-off switch, **LPP** low feed-water shut-off switch, **TLC** tank level controller or **AFT** membrane auto-flush valve or **AFR** membrane auto-flush/flow restrictor valve. Pumps are completely assembled, tested and ready for immediate connection to your R.O. system.

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

1. Determine the optimum location for you pump before proceeding.
   NOTE: Locate the pump after the sediment pre-filter and before the carbon pre-filter (If part of R.O. system).
2. Turn off the water.
3. Cut the 1/4" or 3/8" O.D. 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. If fittings are John Guest type, be sure tubing is inserted past the resistance point until it bottoms out against the port stop. If compression fittings with threaded nuts are used, insert tubing until it bottoms out in the port and hand tighten the compression nut until the connection is tight. Then tighten the nut 1/2 turn clockwise or follow the wrench tightening instructions provided by the fitting manufacturer.
5. The **"CDP"** pump is now ready for operation. Open the feed-water valve to allow water to flow through the R.O. system (Open flow-restrictor by-pass valve if part of R.O. system).
6. If the power source is a transformer, plug the appropriate Aquatec supplied/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. Allow water to circulate, purging any entrapped air. For pumps equipped with our "AFT" auto-flush, the flow restrictor by-pass will open and close automatically when the transformer is plugged in.
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.
   NOTE: If the flow restrictor is too small (We recommend 300Ml/min. for standard CDP 6800 series pumps and 500Ml/min. for CDP 8800 series pumps), or if the R.O. system is clogged, an internal pump by-pass mechanism limits the output pressure.
8. If compression fittings with threaded nuts are used, observe any leaks after pump has run for approximately 15 minutes. Further tighten compression nuts approximately 1/8 to 1/4 of a turn on all fittings in the system. Wait 15 minutes and repeat the leak check.
   NOTE: Further adjustments should not be necessary although it may take several days of operation before all the air has been purged and the system is stabilized.

SERVICING:

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