**WELLMATE® UT, HP & SP SERIES**

**INSTALLATION INSTRUCTIONS**

**INSTALLATION**

**WARNING:** Before starting the installation, please read all installation information and supplements.

The tanks are not designed to withstand vacuum. Install an adequately sized vacuum relief valve if the possibility of vacuum exists.

A pressure limiting device or pressure relief valve must be installed with the tank. The warranty is void if the system pressure or temperature exceeds the maximum operating rating on the tank label.

Never install the tank where it can freeze.

All plumbing should be in compliance with local codes and standards.

Adequately support all piping.

**RETENTION TANK APPLICATIONS (UT TANK MODELS)**

1. Turn off electrical power to pump at control box.
2. If replacing an existing tank, drain and depressurize system of water and remove old tank.
3. Remove tank from box and connect two 1-1/4” PVC pipes to drain so they extend through holes in base sufficiently to connect to plumbing. Place identifying mark on inlet PVC pipe to assure correct flow direction.
4. Place tank in vertical position on level surface. The base should be fully supported to ensure maximum stability.
5. Connect all plumbing lines. Lube the O-ring on the connector with the supplied lube packet, and then install the connector into the top of the tank. Install the red clip into the slot on the side of the fitting until it bottoms out against the fitting. The system connection to the top of the tank should accommodate vertical expansion. Flex connectors are recommended.

**NOTE:** Prevent the tank connection from heating up if you are sweating fittings.

6. Turn on system and check to assure all connections are leak free.

**HYDRO-PNEUMATIC TANK APPLICATIONS (HP AND UT TANK MODELS)**

The following components are included with the HP models:
- AVC assembly
- 1/4” NPT x 90° barbed fitting
- 1/4” NPT plug
- O-ring

**NOTE:** To function properly, a device that adds air to the system may need to be used.

1. Turn off electrical power to pump at control box.
2. If replacing an existing tank, drain and depressurize system of water and remove old tank.
3. Remove tank from box and connect two 1-1/4” PVC pipes to drain so they extend through holes in base sufficiently to connect to plumbing. Place identifying mark on inlet PVC pipe to assure correct flow direction.
4. Place tank in vertical position on level surface. The
base should be fully supported to ensure maximum stability.

5. Connect all plumbing lines.
   **NOTE:** Prevent the tank connections from heating up if you are sweating fittings.

6. Lube the O-ring on the connector with the supplied lube packet. Place AVC assembly in the top openings of tank and install the red clip into the slot on the side of the fitting until it bottoms out against the fitting.

7. Install sniffer valve into 1/4” NPT threaded opening on top fitting of AVC assembly. If a sniffer valve is not being installed, use the 1/4” NPT plug supplied in the parts kit.
   **NOTE:** Apply Teflon tape to threads on sniffer valve or 1/4” NPT plug. Hand tighten until snug, then turn 1/4 to 1/2 additional turn.

8. Install 1/4” NPT x 90° barbed fitting.
   **NOTE:** Apply Teflon tape to threads on fitting. Hand tighten until snug, then turn 1/4 to 1/2 additional turn.

9. Turn on system. Systems that do not have a sniffer valve installed in top fitting of AVC should skip steps 10 and 11.

10. Water entering tank will begin to push air out through the vent on the top fitting of the AVC. Once the release of air stops, immediately shut system off.

11. Add air through the sniffer valve installed on the top fitting until the system pressure is equal to the cut in setting on the pressure switch.

12. Turn on the system and check to assure all connections are leak free.

**AVC ASSEMBLY INSTRUCTIONS**

**AIR VOLUME CONTROL**

**TOP CONNECTOR**

**PIPE LENGTH**

**Figure 3 - Air Volume Control Assembly**

**Convert UT Tank Models Into Hydro-Pneumatic Tanks**

The following materials are needed:
- 1/2” schedule 40 PVC
- 1/2” slip fit x 1/2” FNPT adapter
- Top vent adapter, Wellmate part no. CH20347 with quick-change or CH14937
- Air volume control, Wellmate part no. CH5551
- Multipurpose (PVC, CPVC and ABS) cleaner and glue.

1. Apply cleaner and glue to the threaded portion of air volume control and attach to threaded portion of 1/2” PVC adapter.
2. Glue the socket portion of the 1/2” PVC adapter to the 1/2” PVC pipe.
3. Glue the socket portion of the top vent adapter to the other end of the 1/2” PVC pipe.

**CAUTION:** Excessive glue could cause vent hole to become plugged.

**HYDRO-PNEUMATIC TANK APPLICATIONS (SP TANKS)**

1. Turn off electrical power to pump at control box.
2. If replacing an existing tank, drain and depressurize system of water and remove old tank.
3. Remove tank from box and connect two 1-1/4” PVC pipes to drain so they extend through holes in the base sufficiently to connect to plumbing. Place an identifying mark on inlet PVC pipe to assure correct flow direction.
4. Place tank in a vertical position on level surface. The base should be fully supported to ensure maximum stability.
5. Install side mounted air control assembly per manufacturer specifications.
6. Turn on the system and check to assure that all connections are leak free.