



E-TANK SERVICE ASSEMBLY™

INSTALLATION & SERVICING INSTRUCTIONS

The Webstone® Pro-Pal E-Tank Service Assembly (ESA) saves time, space, and leak paths in hydronic installations. The ESA is designed for use with expansion tanks having 1/2" NPT connections and up to 8-gallon nominal tank capacity.

IMPORTANT: Follow all federal/national, state, and local codes when installing, testing, or performing work on systems. All parts are covered by a lifetime warranty against manufacturing defects, provided they are installed by a licensed plumber and operated under normal working conditions. If you have any questions or comments, please contact us at (800) 225-9529 or visit us on the web at www.webstonevalves.com.

INSTALLATION

WARNING: Components are loosely assembled. All pressure joints should be fully assembled and checked during product installation.

INSTALL BRACKET

The ESA should be installed on the cold water supply to the heating system. Shut off the water supply before installation.

The "arm" of the ESA should be oriented horizontally, with the air-vent and gauge ports facing up. Ensure the ESA is secured using appropriate hardware to a surface designed to support the weight of the complete unit, any related system piping and the expansion tank with its highest contained volume of water.

The system piping must be aligned to prevent side loading of the union joints.

COMPLETE ASSEMBLY

1. Ensure all union gaskets are in good condition and placed as shown in the diagram. Apply PTFE tape to all threaded NPT connections. Union connections which contain gaskets do not require tape.
2. Connect Union Ball Valves to system piping, orienting handles in desired directions.
3. Connect Union Ball Valves to ESA arm, ensuring gaskets are placed as shown.
4. Install union fitting onto the expansion tank in accordance with manufacturer's specifications, then install the union with attached expansion tank onto the arm.
5. Install automatic air vent in port.
6. Install pressure gauge in port.
7. Verify handle(s) are in their normal operating position(s), and all connections are leak-free after installation is complete.

Note: When filling the system, ensure vent cap is tightened to help prevent possible damage to the unit. The air vent is designed to extract microbubbles and static air; it is not intended to be used to bleed the entire system.

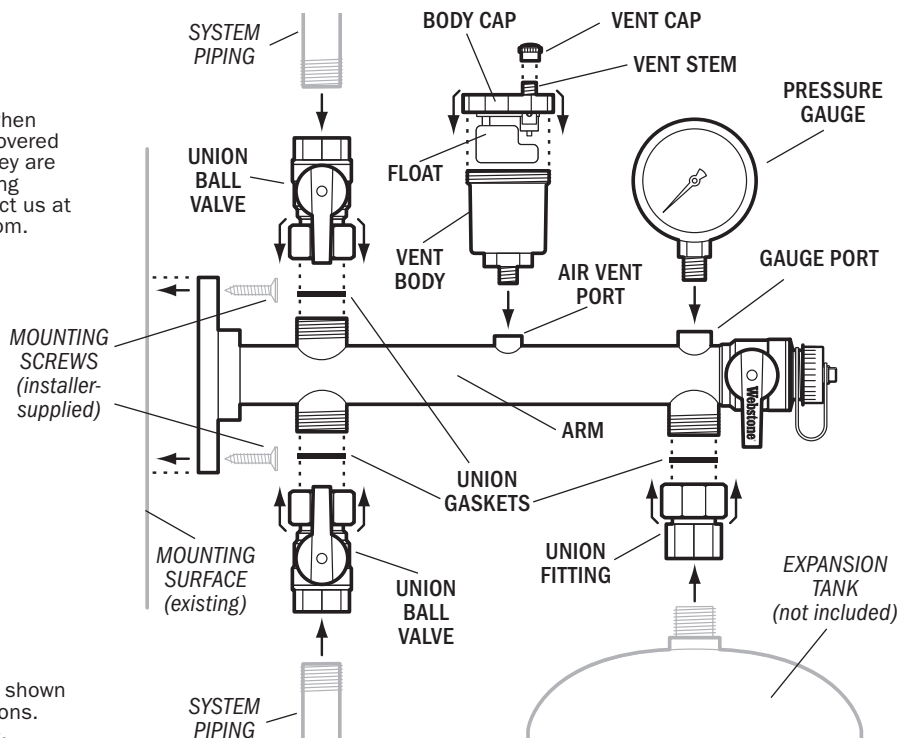
After the system is filled and a manual bleed has been performed, loosen the vent cap to automatically vent any air that accumulates in the future.

AIR VENT SERVICE

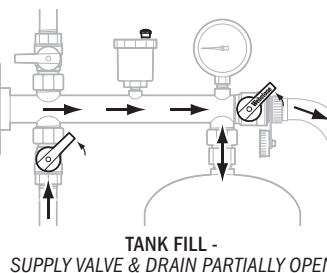
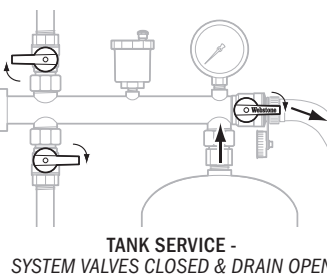
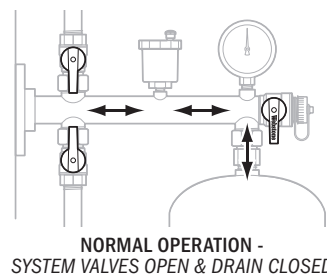
Regular maintenance of the air vent is not required. However, over time debris may collect in the unit and impact performance. Should this occur, use the following instructions to clean the unit:

CAUTION! System fluid under pressure can be very hazardous. **Isolate the ESA assembly from system, then perform Expansion Tank Service procedure to reduce stored pressure to zero before inspecting the vent.** Water temperatures above 100°F can also be very hazardous. Allow the system to cool to below 100°F before proceeding. Use caution and maintain a safe distance from the vent while it's open. Failure to follow these instructions may cause serious bodily injury or property damage.

1. Using two strap wrenches, hold the body in place and carefully remove the body cap, exercising caution to avoid damage to its O-ring. Lift up on the vent stem to remove the vent head assembly.
2. Use a mild detergent or water/vinegar solution to clean the vent head assembly. If there is excessive build-up, soak the vent head assembly in mineral spirits for several hours and then clean thoroughly.
3. Reassemble the air vent.
4. Return system to operating condition.



EXPANSION TANK SERVICE



CAUTION! System fluid under pressure can be very hazardous. Use caution and maintain a safe distance from the vent while it's open. Failure to follow these instructions may cause serious bodily injury or property damage.

To service the expansion tank:

- Turn off heating system to prevent pressure buildup during service
- Isolate ESA from system and water supply as shown
- Remove cap and attach hose
- Open expansion tank drain valve
- Drain valve will release pressure and drain a portion of the tank's contents
- Service or replace tank as required

Caution! Expansion tank will still contain water and if bladder is ruptured may be upwards of 70 lbs. Tank needs to be supported at all times during removal from the unit to unload and prevent damage to threads.

- Before filling, ensure air vent cap is tightened.
- Move drain valve into partially-open position
- Partially open water supply valve to slowly fill tank and bleed air through hose drain.
- Close hose drain when majority of air is removed. Remove hose, and replace drain cap.
- Loosen the air vent cap to bleed any remaining air
- Fully open system and water supply union ball valves and return system to normal operation