

ZeroEnergy[®]

Water Heating System

Use and Care Manual



Model No.: TSHRU060

OliveTree
Energy[™]
Sustainability Through Innovation

Please note: ZeroEnergy does not require any maintenance. However, please be sure to follow the maintenance, care and use instructions required by your water heater and your air conditioning system. Also, with any water heater and air conditioner installation (regardless of whether ZeroEnergy is installed), you should check all refrigerant and water line connections for leaks on an annual basis. The basic water line connections from the installation manual are included here. Please check the installation manual for any other refrigerant or water line connection information needed for your particular implementation.

WARNING

This device produces hot water capable of scalding or burning. All lines must be insulated and the Anti-Scald Valve (included in the installation kit –Sold separately) must be installed to mix/temper water from the hot water tank with cold water make up supply to avoid high domestic water supply temperatures. Refer to installation drawings.

Plumbing Connections:

1. Install the ZeroEnergy[®] system as closely as possible to the water heater. The bottom of the ZeroEnergy[®] system must be installed so it is about 2" higher than the bottom of the water heater. The "Water In" connection on the ZeroEnergy[®] system must be at least 1" (but no more than 1 1/2") higher than water outlet connection at bottom of the water heater. Install unit on top of the 2" thick Styrofoam pad provided with the unit.
2. If a new water heater is not being installed at the same time, **thoroughly flush the old water heater through the bottom boiler drain as per the water heater manufacturer's recommendations.**
3. DISCONNECT POWER / TURN OFF GAS and TURN OFF COLD WATER SUPPLY to the water heater. Drain water from lines and tank.



4. Remove the P/T Valve. Assemble and install into the P/T valve mounting location the component pictured above using (2) 2" Nipples, (2) 3/4" Brass Tees, (1) 3/4" MNPT X 1/2" Push Fitting, (1) 3/4" Bushing, (1) Vent Valve, and existing P/T Valve. **See alternate assembly for horizontal P/T Valve mount (pictured at right). ******NOTE**** The Vent Valve must always be installed vertically! ****NOTE******



5. Remove the existing boiler drain. Assemble and install into the boiler drain mounting location the component pictured above using (1) 3/4" Brass Tee, (1) 2" Brass Nipple, and (1) 3/4" MNPT X 1/2" Push Fitting.
6. Using the (2) 1/2" Push Fittings and 5/8" O.D. (1/2" I.D. plumbing size) insulated flex copper pipe, connect the boiler drain assembly to Hot Water In port of the ZeroEnergy[®] Unit and the Hot Water Out port to the New P/T Valve Assembly.
7. Install the ANTI-SCALD VALVE (required accessory) by connecting the water lines from the Hot Water Tank to their specified Ports on the valve. Insulate the ANTI-SCALD VALVE to reduce scale deposit possibility. Note: All of the piping on top of the water heater should be done with standard 3/4" I.D. plumbing size pipe/tubing.
8. **Pipe the discharge from the P/T relief valve to the outside** of the building, then refill Hot Water Tank and check for leaks.
9. Reset upper hot water thermostat to 130°-140°F and lower thermostat to lowest possible temperature setting (approximately 90°F) and restore power. For gas tanks, lower the bottom thermostat to approximately 100°F. *****Note***** It may be necessary to raise the lower element to a higher setting if hot water is not available from the ZeroEnergy[®] unit in areas where compressors have low run hours.