Potable Hot Water Expansion Tank

Installation Instructions

Models: DET-5, DET-12, DET-25

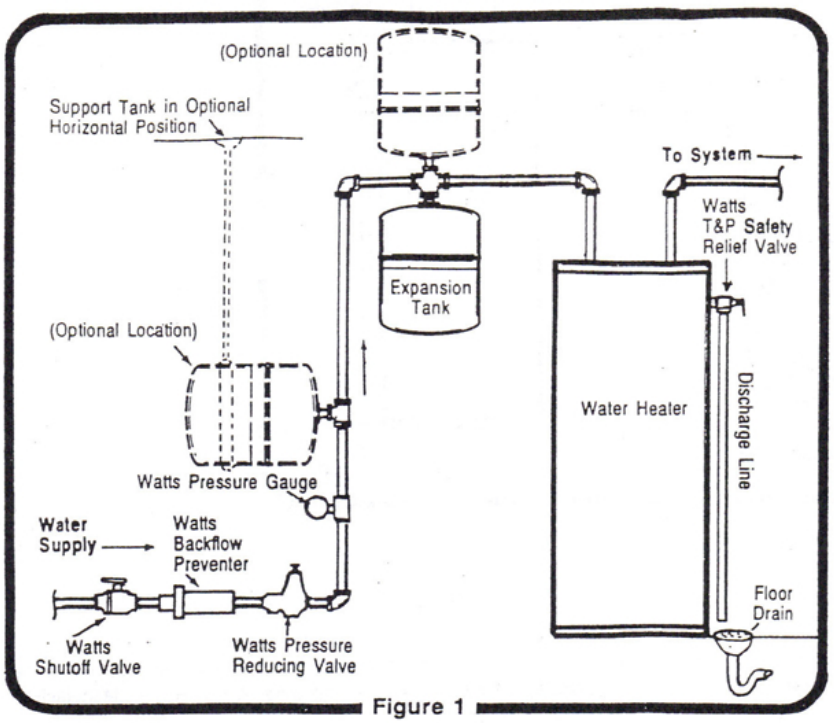


Figure 1

Listed by I.A.P.M.O.

Acceptance Volume

Air Side Pre-pressure (psi)	Water Side Volume at 150 psi (gallons) DET-5	DET-12	DET-25
20	1.65	3.84	9.81
40	1.43	3.25	8.50
60	1.19	2.67	7.28
80	.96	2.21	6.01
100	.76	1.67	4.53
120	.54	1.21	3.48
140	.29	.68	2.21
150	.18	.43	1.58

Description	No. DET-5 EDP # 67437	No. DET-12 EDP # 67438	No. DET-25 EDP # 67439
Max. Pressure - PSI	150	150	150
Max. Temp. - °F	160	160	160
Tank Volume - Gal.	2.0	4.8	10.0
Tank Acceptance - Gal.	1.25	3.0	6.0
Air Pre-charge - PSI	40	40	40
Connections Size - Inches	¾ Male	¾ Male	¾ Male
Diameter - Inches	8⅜	11⅜	16
Length - Inches	12½	14¾	17
Weight - Lbs.	4.5	7.5	18

Warnings:

- ❒ This Expansion Tank is designed and intended for water storage at a maximum pressure of 150 PSIG and a maximum temperature of 160°F. Any use other than for potable water or a sustained or instantaneous pressure in excess of 150 PSIG or 160°F is UNSAFE and can cause property damage, serious bodily injury or result in death.
- ❒ This Expansion Tank as all Expansion Tanks, will eventually leak. Do not install without adequate drainage provisions where water flow will cause damage.
- ❒ Do not exceed 80 PSI air charge. Air charge pressures exceeding 80 PSI could become hazardous and will void any and all warranties, either written or implied. Failure to follow these instructions will result in the possibility of property damage, serious bodily injury or death.
- ❒ Improper installation, adjustment, alteration, service or maintenance can cause property damage, serious bodily injury or death. Read instructions completely before proceeding with installation.
- ❒ Only qualified personnel may install or service this equipment in accordance with local codes and ordinanaces.
- ❒ The manufacturer of this tank does not accept any liability or other responsibility for personal injury or property damage resulting from improper use, installation or operation of this tank or the system of which it is a part.

Important!

- A Pressure Relief Valve sized and installed in accordance with Local Codes must be incorporated in the system. In those systems requiring a combined Temperature and Pressure Safety Relief Valve, the Temperature and Pressure Safety Relief Valve should be sized and installed in accordance with Local Codes.
- Never plug a Safety Relief Valve.

(see reverse side)

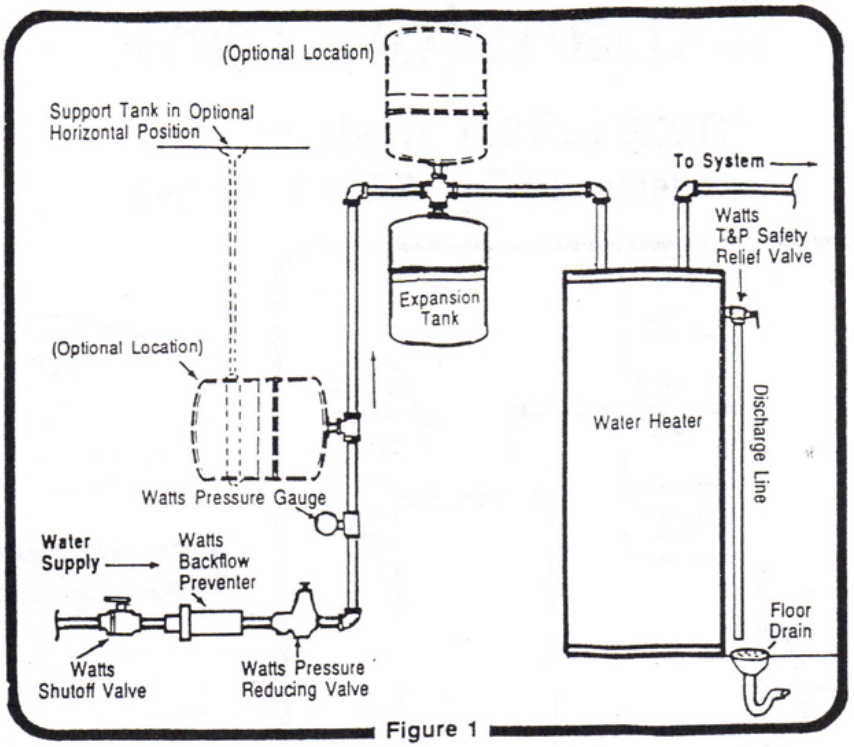
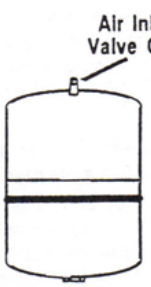


Figure 1

Installation

1. Before beginning installation determine the system pressure.
   a. Open a faucet to allow the system pressure to equalize.
   b. Read the system pressure at the Pressure Gauge (Figure 1).
   c. Close faucet.
2. The Expansion Tank Pre-Charge must be set to the system pressure as determined in Step 1. Pre-charge prior to installation in the system.



Caution: Pre-charge prior to installation in the system. Do not adjust the air pre-charge of the Expansion Tank with the system under pressure. The air pre-charge should only be adjusted under zero system pressure.

Note: The normal pre-charge is 40 PSI. **Do not exceed 80 PSI.** If system pressure exceeds 80 PSI it will be necessary to either: **A.** Add a Pressure Reducing Valve to the system or, **B.** Locate the expansion tank in a riser where the static pressure is below 80 PSI.

   a. Unscrew the protective cap from the air inlet valve.
   b. Using a tire pressure gauge check the tank pre-charge pressure.
   c. If necessary, pressurize the tank to the proper setting using a manual bicycle tire pump. **Caution do not exceed 80 PSI.**
   d. Replace the protective air cap.
3. Shut off the water supply valve.
4. Shut off power source to the Water Heater. (electricity, gas, oil burner switch) and drain system following Water Heater Manufacturer Recommendations.
5. Install the Expansion Tank in the System (Refer to Figure 1).
   a. The weight of the Expansion Tank filled with water is supported by the system piping. Therefore, it is important that, where appropiate, the piping has suitable bracing (strapping, hanger, brackets).
   b. The Expansion Tank may be installed vertically (prefered method) or horizontally. **Caution: The tank must be properly supported in horizontal applications.**
   c. This Expansion Tank, as all Expansion Tanks, may eventually leak. **Do not install without adequate drainage provisions.**
6. Turn on the water supply valve.
7. Open a Hot Water fixture and allow water flow until all air is removed from the system.
8. Reapply power to the Water Heater
9. Open a Hot Water fixture to allow a slight flow until the Hot Water has reached operating temperature.
10. Re-check system pressure following Step 1.a thru c.

    Caution: Pre-charge prior to installation in the system. Do not adjust the air pre-charge of the Expansion Tank with the system under pressure. The air pre-charge should only be adjusted under zero system pressure.

    If necessary adjust the Pressure Reducing Valve to the Expansion Tank Pre-charge as determined in Step 2.

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