

WATER 
WORKER

Water Heater
SAFETY TANK

**Owner's
Manual and
Installation
Instructions**

For Models
G-5, G-5L,
G-12, G-12L



**NOW REQUIRED BY CODE
IN MANY COUNTIES AND STATES**

SPECIFICATIONS

Model	Volume (Gallons)	Max. Pressure (psi)	Max. Temp.	Air Cushion Pressure (psi)	Diameter	Height	Tank Connection
G-5	2.0	150	200°F	40	8"	12 3/4"	3/4" NPT
G-5L	2.0	150	200°F	40	8"	12 3/4"	3/4" NPT
G-12	4.4	150	200°F	40	11"	15"	3/4" NPT
G-12L	4.4	150	200°F	40	11"	15"	3/4" NPT

For water heaters up to:

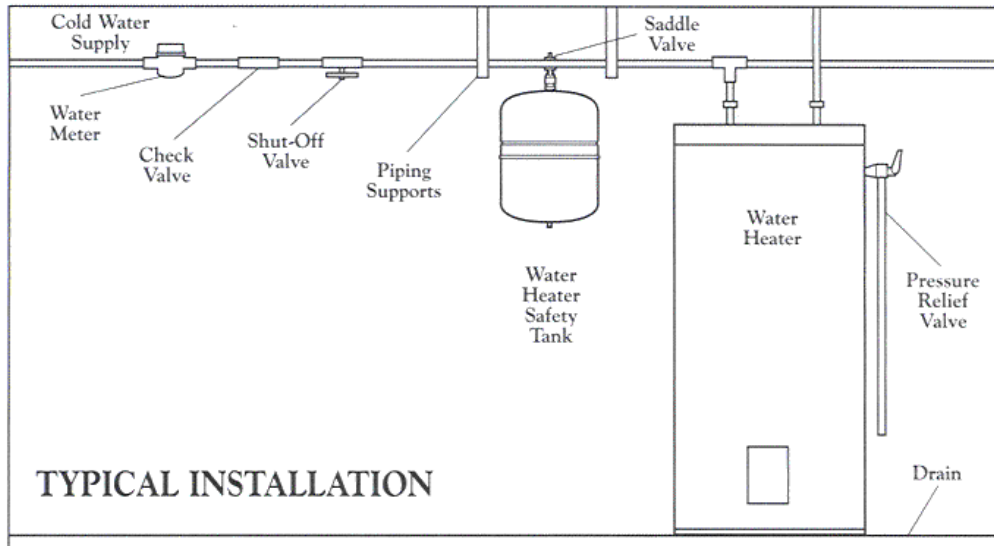
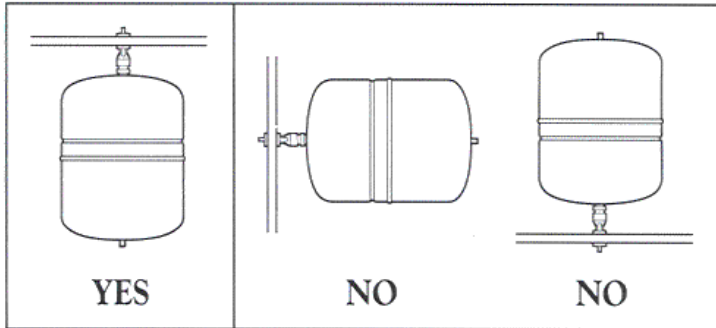
40 gallons -
Use Model G-5 or G-5L

80 gallons -
Use Model G-12 or G-12L

TOOLS REQUIRED

Tire pressure gauge
Adjustable wrench
Teflon® tape or pipe sealant

PROPER PRESSURE SAFETY TANK POSITIONING



**Please read the entire Owner's Manual and Installation Instructions
before installing your water heater safety tank!
Save all documents and manuals for future reference.**

HOW YOUR WATER HEATER SAFETY TANK WORKS

Your water heater safety tank is a specifically designed pressure absorbing device. It protects your entire plumbing system, including your water heater, from over pressurization caused by thermal expansion. As water is heated, it expands, and since water is not compressible, a rapid increase of pressure in the water heater and throughout the entire plumbing system results. This increase in pressure is known as thermal expansion, occurring every time your water heater heats water, when the expanded water is not allowed to return to the supply line.

Common problem signs of high pressure caused by thermal expansion:

- High surges when opening faucets.
- Relief valve on water heater opening to release high pressure - **DANGER: NEVER PLUG RELIEF VALVE.**
- Frequent faucet washer failure rate.
- Short water heater life.
- Problem deformities with pipes and fittings.

Your water heater safety tank operates as a collection point to accept thermally expanded water (figure 1). As water enters the tank (figure 2), the diaphragm is pressed downward, compressing the captured air cushion in the tank. The air volume is specifically engineered to control pressure well below the water heater pressure relief valve setting. As water is used (figure 3), the thermally expanded water is expelled from the tank back into the piping system by the compressed air cushion.

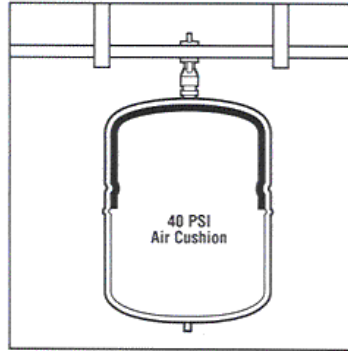


Figure 1

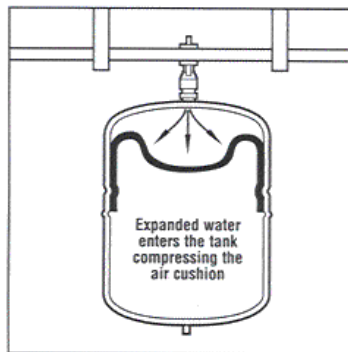


Figure 2

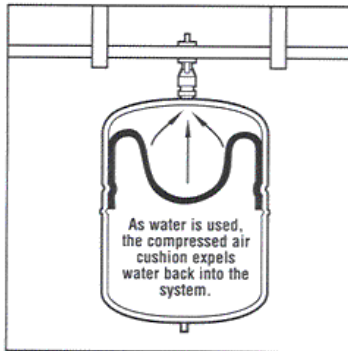


Figure 3

PRE-INSTALLATION CHECK LIST

1. Remove tank from box and inspect for any damage. If damage is evident return immediately to place of purchase.
2. Use pressure gauge or tire gauge to verify precharge pressure in the tank. Precharge should measure 40 psi (± 5 psi depending upon gauge accuracy).
3. Locate position in piping system to install your water heater safety tank. The ideal position is anywhere on the cold water line leading to the water heater. Ensure that the tank's position will not interfere with the ceiling, wall, or any appliances once it is installed.
4. The saddle valve is designed to be installed on a **HORIZONTAL PIPE ONLY**. The tank must be positioned to **HANG DOWNWARD** from the horizontal pipe (figure 4, page 2).
5. Utilize proper pipe hangers and supports to handle a possible future waterlog condition of the tank. This support must handle a weight of approximately 40 lbs.

INSTALLATION INSTRUCTIONS

Read completely before proceeding and refer to typical installation diagram and photos.



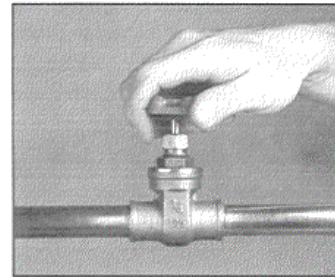
Typical "Completed" Installation



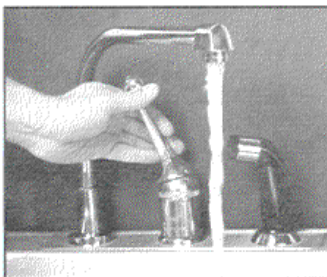
1. Measure pre-charge pressure with a tire gauge to ensure 40 psi before proceeding.



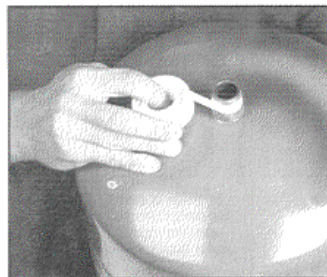
2. Turn water heater to the lowest temperature setting.



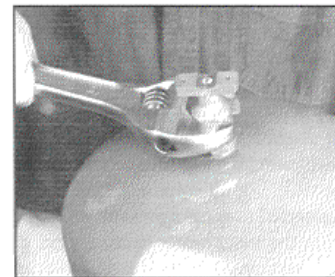
3. Shut off water supply main valve.



4. Open hot water faucet to relieve pressure. Close faucet when pressure subsides (flow stops).



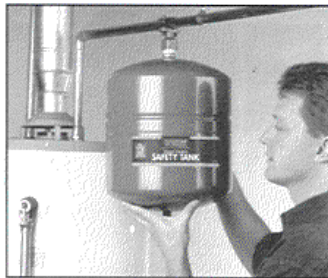
5. Apply Teflon® tape to tank threads.



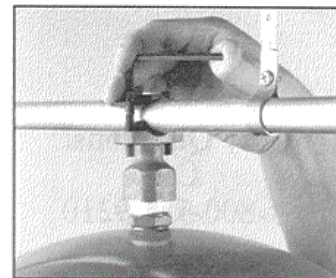
6. Screw tank into saddle valve. **IMPORTANT**, use wrench flats to tighten tank into position.



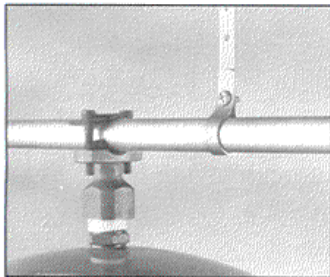
7. Insert piercing pin and gasket into saddle valve. **NOTE:** for best pin piercing, position point to pierce the center of the pipe.



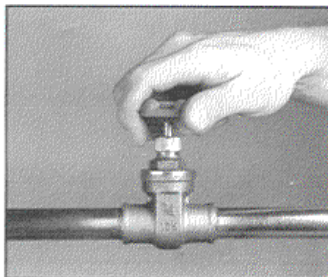
8. Hold assembly up to piping, ensure that there is no interference with the wall, ceiling, or other appliances.



9. Tighten saddle valve in place by turning two (2) Allen screws. Alternate between the two (2) screws every one (1) revolution.



10. Use appropriate supporting tube straps and hangers to hold tank into position.



11. Turn water supply main valve on and check for leaks.



12. Re-check air pressure with tire gauge. If higher than 70 psi, a pressure reducing valve must be installed. (See trouble shooting.)



13. Open faucet to evacuate air from plumbing system.

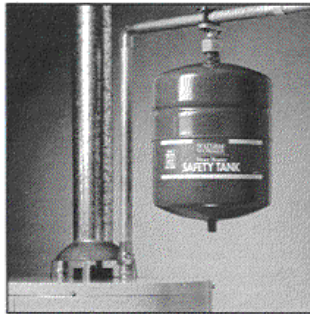


14. Turn water heater back to desired temperature setting.

TROUBLE SHOOTING

If the tell-tale signs of thermal expansion return, the water heater safety tank should be examined to determine if the tank is operating properly.

Any Questions?
Call
1-800-521-9210



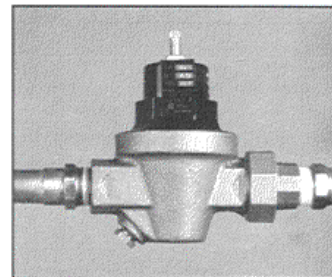
Typical "Completed" Installation



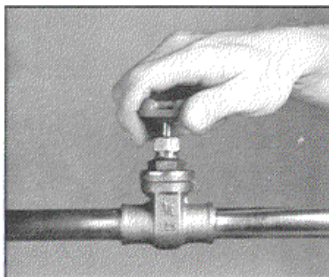
1. To check for excessive line pressure, open a faucet near the water heater for approximately one (1) minute.



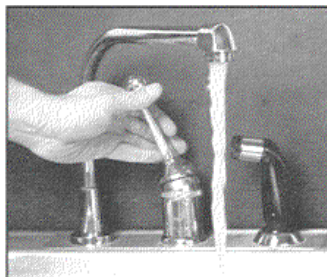
2. Remove air stem cap and measure pressure in the tank. If pressure is greater than 70 psi, a pressure reducing valve is required.



3. Install a pressure reducing valve to reduce pressure to an approved, acceptable level, (below 70 psi).



4. To check tank pre-charge pressure, shut off water supply main valve.



5. Relieve system pressure by opening a faucet near the water heater.



6. Measure pressure in the tank. The tank pressure must equal 40 psi (± 5 psi).