

BEFORE INSTALLATION

PRODUCT INSPECTION

Visually inspect the product for any signs of damage that may have occurred during transportation. If the tank is dented, bent or scratched, return the product to the original purchase point for replacement.

PRE-CHARGE ADJUSTMENT

This expansion tank is shipped from the factory with a pre-charge of 40 psi. Any adjustments to the factory pre-charge must be done prior to initial tank installation and with 0 psi pressure on the system. **DO NOT ADJUST THE PRE-CHARGE OF THE EXPANSION TANK WITH THE SYSTEM UNDER PRESSURE!**

The expansion tank should be pre-charged to the incoming system water pressure but must not exceed 80 psi. **IF WATER PRESSURE IS ABOVE 80 PSI, A PRESSURE REDUCING VALVE MUST BE USED. Failure to properly adjust the pre-charge will shorten the life expectancy of the product.**

TO ADJUST TANK PRECHARGE

Remove the protective cap from the air valve.

Check the tank pre-charge pressure using a standard tire pressure gauge.

If required add air to the tank using a manual bicycle tire pump until the proper pre-charge pressure is reached.

Replace the protective cap on the air valve.

INSTALLATION

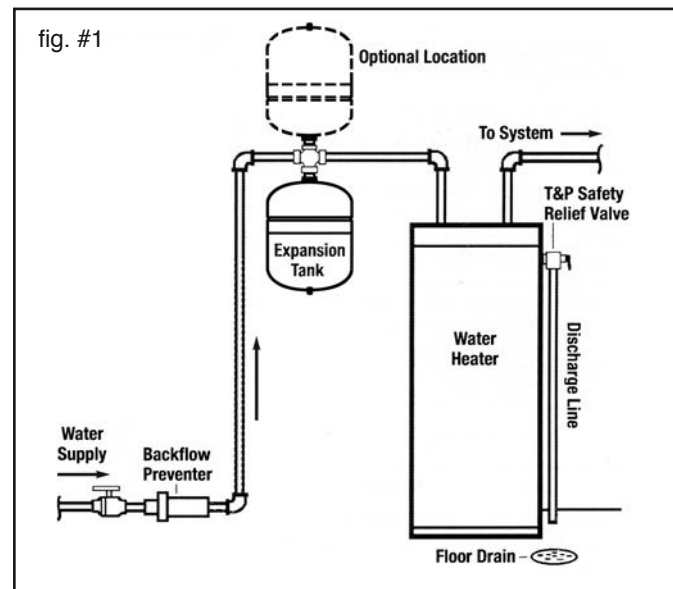
LOCATION

Select a location where a water leak will not cause property damage and provides adequate means for water drainage. This expansion tank and the associated piping will in time leak. The manufacturer is not responsible for any water damage that may occur in association with the expansion tank installation.

WARNING Disconnect or shut off the electrical power source to the water heater. Shut off the water supply to the system and remove all water pressure from the system. Failure to follow these instructions may result in serious injury or death and or property damage.

The tank is designed to be supported by the system piping. Make sure that there is adequate means of supporting the system piping and if necessary add strapping, brackets or pipe hangers. **DO NOT INSTALL THIS EXPANSION TANK IN THE HORIZONTAL POSITION.**

Install the expansion tank in the incoming water line to the water heater between the water heater and the backflow preventer or check valve (see Fig. 1). Adequate thread sealant (pipe dope) must be added to ensure a leak free installation. **DO NOT USE ONLY TEFLON TAPE.**



Before turning on the water supply to the system, open a hot water faucet to prevent any damage to the water heater and remove air from the system piping. Turn on the water supply and inspect the installation for water leaks paying close attention to the connection between the expansion tank and the piping.

Follow the water heater manufacturer's instructions for proper start-up of the heater and the system.

MAINTENANCE

This expansion tank and the entire system must be checked annually by a qualified professional.

Visually examine the tank and its connection to the system piping looking for any signs of water leakage or corrosion on the exterior of the tank or the connection.

WARNING If this expansion tank shows any visible signs of leaking, corrosion or rusting, the tank must be replaced immediately to avoid personal injury or property damage. Do not adjust the tank air pressure if there are any signs of corrosion on the tank. Failure to follow these instructions may result in serious injury or death and or property damage.

SPECS/DIMENSIONS

MATERIALS OF CONSTRUCTION

- Tank: 16 gauge cold rolled steel
- Finish: Appliance quality paint for indoor or outdoor installation
- Water chamber: 100% butyl rubber, lined with polypropylene
- Connection: Stainless Steel
- Testing: High pressure, seam weld, helium, final precharge check
- Air valve: Brass valve with o-ring seal
- Warranty: One year

DIMENSIONS & CAPACITIES

Model	Total Tank Volume		A Height		B Diameter Connection		C	Total Weight	
	gal	liters	in	cm	in	cm		lbs	kilos
PH 5	2.1	8	11.6	30.0	8.00	20.0	3/4" MNPT	5.0	2.3
PH 12	4.8	18	14.5	37.0	11.00	28.0	3/4" MNPT	10.0	4.6
PH 25	9.0	32	18.9	48.1	12.50	31.8	3/4" MNPT	15.40	7.0

Maximum working pressure 150 psig. Maximum working temperature, internal & external 200° F. Tank pre-charge 40 psig. NOTE: Ph Series tanks are certified to NSF Standard 61 Domestic Hot, but are suitable for temperatures up to 200° F.

QUICK SIZING CHART

Water Heater Size/Volume	Maximum Water Temperature			
	130° F	140° F	160° F	180° F
30 GALLONS	PH 5	PH 5	PH 5	PH 5
40 GALLONS	PH 5	PH 5	PH 5	PH 5
50 GALLONS	PH 5	PH 5	PH 5	PH 12
60 GALLONS	PH 5	PH 5	PH 5	PH 12
80 GALLONS	PH 5	PH 12	PH 12	PH 12
100 GALLONS	PH 12	PH 12	PH 12	PH 25
120 GALLONS	PH 12	PH 12	PH 12	PH 25
150 GALLONS	PH 12	PH 12	PH 25	PH 25
175 GALLONS	PH 12	PH 25	PH 25	PH 25

Sizing based on water heater recovery from 40F, water supply pressure of 60 PSIG, and relief valve set at 150 PSIG. Adjust tank precharge to equal incoming water pressure.

