

## INSTALLATION AND OPERATING INSTRUCTIONS

# SX Series Diaphragm Expansion Tanks

### SX SERIES Expansion Tanks

This line of expansion tanks is specifically designed for use in hydronic heating systems.

The unique proven design of these tanks incorporates a flexible diaphragm that separates system water from the tank air charge (12 psig) resulting in more positive system protection.

### HOW THEY WORK:

Heated water expands, and in a closed hot water heating system, provision must be made for this expansion. The captive air volume separated by the flexible diaphragm in the expansion tank provides for water expansion without permitting absorption of the air cushion by the water.

### ATTACHING ACCEPTANCE FITTINGS:

SX tanks are equipped with a convenient bottom outlet elbow for connection to the system. Models SX-30V, SX-40V and SX-60V use a 1" NPTF fitting and models SX-90V, SX-110V and SX-160V use 1 1/4" NPTF fitting. The air valve is located on top to provide accessibility no matter how the unit is positioned.

### PROPER LOCATION AND INSTALLATION:

The SX Series tank may be located at any convenient point on a hot water heating system on the suction side of the pump. It may be installed into a tee or any other suitable tapping. The preferred installation is to pipe the SX tank into the system piping between the pressure reducing valve (in the water supply line) and the air removal trap / air vent, as shown in Figure 1. Conversely, the SX tank may be piped directly into the Armstrong Air Removal Trap. Regardless of installation, both offer continuous automatic air removal and complete pressure control protection.

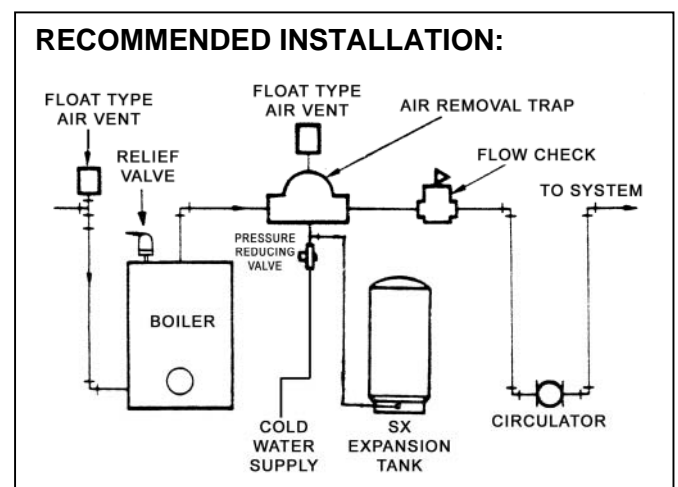
### ADJUSTING SX EXPANSION TANK PRECHARGE TO SYSTEM REQUIREMENTS:

All SX Series tanks are shipped with a standard precharge of 12 psi. This precharge can be adjusted if necessary. The following steps should be taken:

1. Remove red air charge valve cap and, using a suitable pressure gauge, check precharge pressure.
2. Release or add air as necessary to make precharge pressure equal to the desired fill pressure.
3. Replace protective air valve cap and seal with the air valve label provided. This will enable you to determine if valve has been tampered with on possible future service calls.

### SYSTEM CONNECTION:

1. Locate SX Series expansion tank in final desired location.
2. Level as necessary.
3. Connect to heating system.
4. All piping should be in accordance with prevailing local codes and standards.



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