

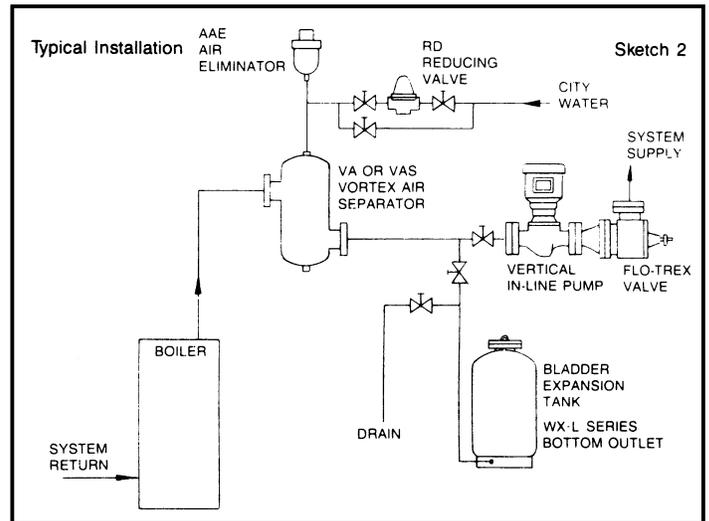
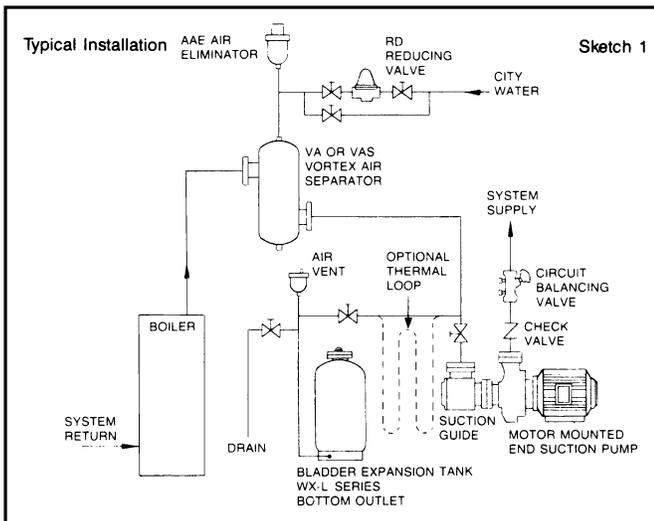
BLADDER EXPANSION TANKS WX-L SERIES - BOTTOM OUTLET

INSTALLATION AND OPERATING INSTRUCTIONS

CAUTION: Do not remove the drain plug or loosen the nuts on the blind flange or system connection.

If it is necessary to remove the drain plug, be sure the air pressure in the tank is at zero. Before bleeding to zero psi, isolate the tank from the system by closing the isolation valve. Also, DO NOT remove the blind flange or system connection before first bleeding to zero gauge pressure.

1. Inspect the Expansion Tank for damage which may have occurred during shipping. If any damage exists, note it on the freight bill and file a claim with the shipping company. DO NOT INSTALL THE UNIT.
2. A gate valve, with lockshield recommended, to isolate the tank from the system should be installed to facilitate:
 - a) Hydrostatic testing of the system.
 - b) Service of the tank.
3. A drain valve should be installed between the gate valve in #2 and the tank system connection to facilitate service.
4. System air must be purged and not allowed to enter the tank.
5. Check the tank system connection to be sure nothing is obstructing the inlet passage way.
6. See sketches 1 and 2 for typical piping configurations.
7. Tanks are pre-charged at 30 psi. Before installing the tank, check the charge with an automotive tire gauge. If the tank charge is not at the desired psi, bleed off or fill to the psi required. Any alteration in the factory pre-charge should be completed JUST PRIOR to filling the system with water.
8. Tank connection piping and air separators with air vents should be arranged, so that the air will not be trapped in the tank. When possible, connect the piping with the pitch down to the tank, using air vents as illustrated in the sketches.
9. On a closed system, connect the tank on the suction side of the pump. This is the point of no pressure change. When used as an accumulator for a pressure booster system, the connection is on the discharge with a check valve installed between the pump and piping to the tank.



CHANGING A SERIES WXL BLADDER IN THE FIELD

The WXL Series water system tank has been designed with a replaceable bladder. It is unlikely that replacement will be necessary; however, should some incident occur which requires the replacement of the bladder, the procedure outlined below should be followed:

1. Isolate the tank from the system by means of a shut-off valve.
2. Drain the bladder tank as much as possible through the drain valve installed between the system isolation valve and the tank. Compressed air may be added through the charging valve to assist in draining the tank.
3. Depress the air valve (fig. 1) to remove most of the air. Remove the valve air core in order to remove the remaining air charge. Be sure that the entire air charge has been removed before proceeding.
4. Open the drain plug (fig. 2) to drain the water.
5. Disconnect the tank from system piping.
6. Unbolt and remove the system connection. Prior to removal, mark the mating flanges to match when re-assembling. (fig. 3).

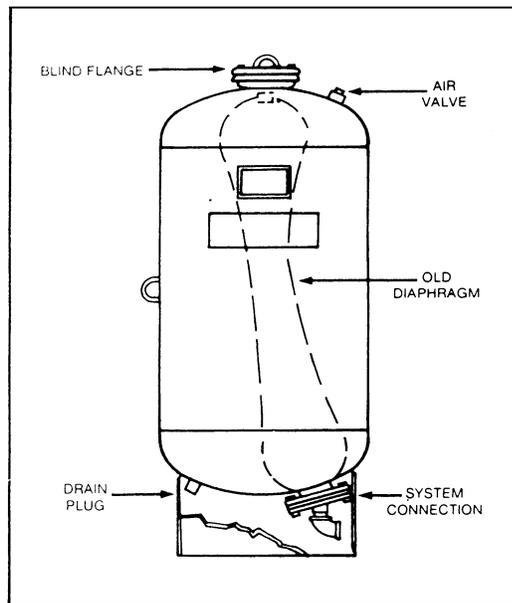
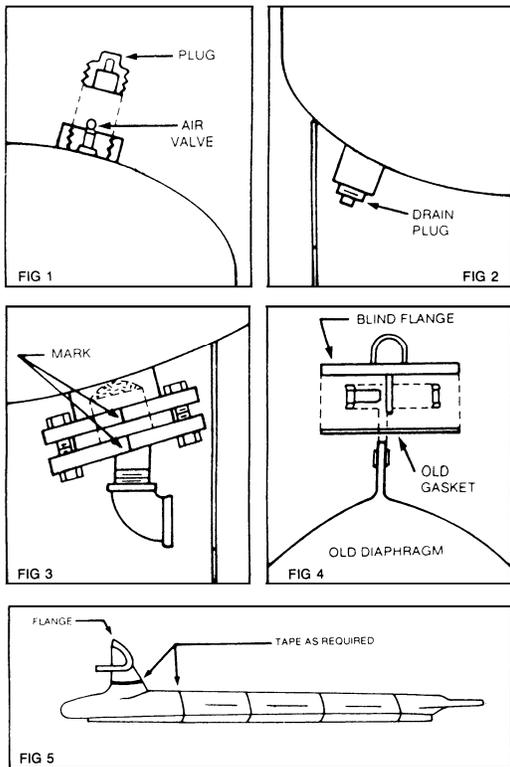
7. Unbolt the blind flange from the tank and attach suitable lifting equipment to the lifting eye. Turn the top flange counter clockwise to wrap the bladder around itself.
8. Push the bladder flange into the tank at the system connection.
9. Pull the old bladder from the tank through the blind flange opening.
10. Unbolt the blind flange (fig. 4) from the old bladder and remove the old gasket.
11. Prior to inserting the bladder in the tank, inspect the tank's internal surface and remove any sediment. The internal surface must be dry. 12. Fold the new bladder lengthwise and tape at necessary intervals (fig 5).
12. Fold in the bladder neck and tape.
13. Rebolt the blind flange to the new bladder and use the new gasket.
14. Working by hand, insert the bladder into the tank through the top flange opening with the flange pointing to the opening in the system connection, removing the tape as it is inserted into the tank. Do not remove the tape from the bladder flange.
15. Find and pull the bladder flange into position and remove the tape. Check through the top flange opening to assure the bladder is not twisted.
16. Rebolt the blind flange to the tank. Cross tighten the bolts evenly in several stages per the accompanying torque chart.

17. Line up the marks on the system connection flanges and be sure the surfaces are clean. Rebolt the system connection, cross tightening the bolts evenly in several stages per the accompanying torque chart.
18. Using soapy water, check the drain fitting threads, air valve, and flange joints for leakage. **THIS CONNECTION MUST BE ABSOLUTELY AIR-TIGHT.**
19. Reinstall the tank to the system and open all valves slowly.
20. Install the drain fitting and pressurize through the air fitting to the proper pre-charge pressure. **WARNING:** Be sure the proper pre-charge pressure is not exceeded.

DRY BOLT TORQUE FOR FLANGED TANK OPENINGS

SIZE OPENING	DESIGN PRESSURE		TORQUE	
	psi	kPa	IN-LBS	FT-LBS
6"	125	865	84	7
6"	175	1211	120	10
6"	250	1730	168	14
8"	125	865	168	14
8"	175	1211	240	20
8"	250	1730	336	28
10"	125	865	252	21
10"	175	1211	300	25
10"	250	1730	420	35
14"	125	865	252	21
14"	175	1211	360	30
14"	250	1730	444	37

TORQUE LISTED ARE MINIMUM REQUIREMENTS TO SEATSEAL GASKET AGAINST DESIGN PRESSURE.



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