



SINCE 1908
wessels
company

INSTALLATION & OPERATION

TYPE: BLADDER AND DIAPHRAGM
EXPANSION TANKS

MODELS: NLA, NTA, NVA, NL, N, TXA, TTA, TX,
T, FXA, FXT, FX

Date: 10/16

<u>MODEL</u>	<u>SYSTEM APPLICATION</u>	<u>FACTORY PRECHARGE</u>	<u>MAXIMUM PRESSURE</u>
NLA NTA NVA NL & N	HYDRONIC HEATING/COOLING SYSTEMS	12 PSIG	125 PSIG
TXA TTA TX & T	THERMAL EXPANSION POTABLE HOT WATER SYSTEMS	40 PSIG	150 PSIG
FXA FXT FX	HYDROPNEUMATIC OR PRESSURE BOOSTER SYSTEMS	30 PSIG	125 PSIG

1. Visually inspect tank for damage, which may have occurred during transit.
2. Factory precharge pressure may not be correct for the installation.
3. Tank **MUST** be precharged to system design fill pressure **BEFORE** placing into operation. Remove pipe plug covering the valve enclosure, check and adjust the charge by adding or releasing air for each application.
4. If the system has been filled, the tank must be isolated from the system and the tank emptied before charging. This ensures all fluid has exited the bladder and proper charging will occur.
5. If precharge adjustment is necessary, oil-free and water-free compressed air or nitrogen gas must be used. To avoid excessive pressures, compressed air or nitrogen gas must be regulated (using an appropriate pressure regulating valve) at or below the maximum working pressure of the tank (as noted on the data plate). Check the precharge using an accurate pressure gauge at the charging valve and adjust as required. Check air valve for leakage. If evident, replace with schrader type tire valve core. Do not depend on the valve cap to seal the leak. After making sure air charge is correct, replace pipe plug over charging valve for protection.
6. Set tank in place and pipe system connection to system. Be sure to include isolation valve(s) and drain. Do not loosen nuts on cover plate -this will result in loss of precharge. Cover plate nuts should only be removed when replacing bladder, and then only after the air pressure in the tank has been bled off to zero gauge pressure (note: NTA, TTA and FXT do not have bolted cover plates).
7. Purge air from system **BEFORE** placing tank into operation. All models have system water contained inside bladder.
8. When filling the system with water, open valves to tank to ensure that any residual air in the tank is displaced by water.
9. Models NLA/FXA 85 through 800: Both top and bottom system connections access the bladder. It is recommended only the bottom system connection be used for system feed. The top auxiliary connections may be used for gauges, relief valves, etc. Any connection not used must be plugged and checked for any air leakage.