



HVAC Tech Note #8 – September 2003

Pre-Charged Expansion Tank Hints

Pre-charged expansion tanks contain a factory pre-charge of air (usually 12 psig) that is separated from the waterside of the tank by a membrane. Here are some hints that may help to diagnose and/or avoid problems.

The air charge in the tank has to equal the cold fill pressure required for the system.

There must be no pressure on the waterside of the tank when checking or adjusting the air charge.

Check the air charge on new tanks before installation, as the air may have leaked out. If it has, check the Schrader air-charging valve. It may just need tightening.

Use oil-free air to avoid the possibility of damaging the membrane.

Don't expose small tanks to city water pressure when filling and purging the system.

If you get water out of the air charge valve, the membrane is leaking. Bladders can usually be replaced; diaphragm tanks cannot be repaired and the entire tank must be tossed.

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