

wellcare[®] information for Well Contractors **Pressure Tank Pre-charge**



Before installing a pressure tank, the tank's air pressure should be checked. Do not assume that all tanks are pre-charged to suit your installation, as standards vary across tank types and manufacturers. Follow the manufacturer's instructions to properly adjust pre-charge below the pump cut-in pressure. *Failure to properly adjust the air pressure may result in poor system performance and reduced life of the system's components.*

Checking Pre-charge Before Installation

It is easiest for the installer to check the pre-charge of the tank prior to plumbing the tank into the system. Checking the pre-charge before installation also allows the installer to adjust for different pressure system settings and to adjust for the customer's drawdown requirement.

Why is it Important to have the Correct Pre-charge?

There are a number of reasons why it is important to have the correct pre-charge, including:

- To prevent interruption of water flow caused by a pre-charge that is too high;
- To prevent excessive cycling, which can lead to premature failure of the pressure switch, pump or tank;
- To improve customer satisfaction, as it relates to drawdown capacity or system water pressure; and
- To maximize system efficiency.

Adjusting the Pre-charge When the Tank is in Service

To check the air charge in a tank that has already been installed in the system:

1. Shut off electric power to the pump
2. Open a faucet near the tank, and
3. Drain completely.
4. Then, follow the instructions for adjusting pre-charge prior to installation, per the manufacturer's instructions.

For more information on pressure tanks

Water Systems Council. (2006). Chapter 1: Pressure Tanks. In Book IV of the *Water Systems Handbook* (12th Edition).

WSC wellcare® Information Sheet on Sizing a Pressure Tank (January 2007). Available at www.watersystemscouncil.org/wellcare/infosheets.cfm.

For more information on your drinking water

The following website provides up-to-date information on efforts to protect drinking water supplies and steps you can take as a private well owner. In addition, you may contact the wellcare® hotline at 1-888-395-1033.

U.S. Environmental Protection Agency

www.epa.gov

For more information about wells and other wellcare® publications

wellcare® is a program of the **Water Systems Council (WSC)**. WSC is a national nonprofit organization dedicated to promoting the wider use of wells as modern and affordable safe drinking water systems and to protecting ground water resources nationwide. This publication is one in a series of wellcare® information sheets. They can be downloaded FREE from the WSC website at www.watersystemscouncil.org. Well owners and others with questions about wells or ground water can also contact the wellcare® hotline at **888-395-1033** or visit www.wellcarehotline.org



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