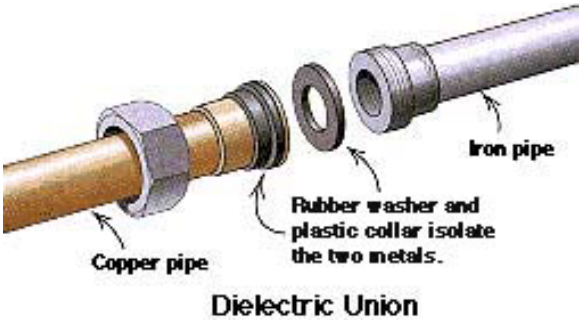
HOMEOWNER REPAIR GUIDE

WATER HEATER SAFETY ISSUES

DIELECTRIC UNIONS

When two dissimilar metals such as iron and copper are connected to each other, a weak electrical current is generated. Although you won't feel the current, it will accelerate the corrosion of iron pipe or the steel tank of a water heater. A **dielectric union** should be used to insulate iron from copper pipes, to minimize the corrosive effect of the electricity.



Dielectric union



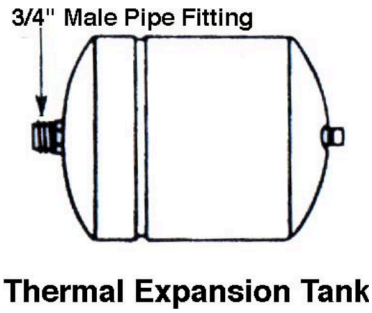
Dielectric union installed

THERMAL EXPANSION TANKS

If there is a **pressure regulator** installed on the water line (usually near the water meter), a **thermal expansion tank** should be mounted on the cold water pipe above the water heater. This installation is an Ohio Plumbing Code requirement. Water expands as it is heated, raising the pressure in the pipes. That expansion causes faucets to "hammer" and pipes to bang in the walls. Sometimes the expansion will cause the **temperature/pressure relief valve** (T-P valve) to leak. The expansion tank eliminates the hammering by giving the water a place to go as it expands.



Water pressure regulator



Thermal expansion tank

TEMPERATURE/PRESSURE RELIEF VALVE

The T-P valve is designed to open when pressure or water temperature rises above safe levels, minimizing the chance of an explosion. A pipe should be routed from the valve to within 6 inches of the floor.



T-P relief valve

NEVER PLUG A LEAKING T-P VALVE

Never block-off or plug the T-P valve to stop it from leaking. Instead, replace a leaking T-P valve with a new valve of the same rating.

Home Repair Resource center

Home Repair Resource Center empowers homeowners to maintain their homes for sustainable and diverse communities.

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