Maintaining Your Hot Water Heater

From: Lowes.com

Performing routine maintenance on your water heater every six months will ensure proper functionality and prolonged use. As some homeowners discover, something like an old cap can cost you a lot of money in damages if it breaks, leaking in your unit and the units or carport below. When was the last time yours was checked? Next time you do it, consider marking the date clearly on the outside of the hot water heater, so that you notice when it needs maintainance again.

Planning

Both gas and electric water heaters have a safety device called a pressure relief valve. In the event the tank overpressurizes, the relief valve opens and releases the pressure. If the valve doesn't operate correctly, the tank can overpressurize and explode.

To check the pressure valve:
Always wear gloves, goggles and other protective clothing while performing maintenance on your water heater.

Step 1
Turn off the electricity to the water heater or turn the gas switch to pilot.

Step 2
Shut off the cold-water inlet to the water heater.

Step 3
Position the bucket to catch water from the pressure relief valve.

Step 4
Pull the trip lever on the valve. You should hear a slight rush of air or see some water and vapor exit through the pressure relief valve. If you don't, drain the tank and replace the valve.

Flush the Tank Every Six Months

Sediment buildup in the tank can reduce your water heater's energy efficiency and also clog your water lines. Avoid these problems, and increase the life of your unit by flushing the tank each time you check the pressure relief valve.
Following these simple maintenance procedures every six months will keep your water heater operating safely and efficiently for years.

To flush the tank:

Step 1
Turn off the electricity to the water heater or turn the gas switch to pilot.

Step 2
Shut off the cold-water inlet to the water heater.

Step 3
Connect a garden hose to the tank's drain valve.

Step 4
Locate the draining end of the hose in an area that won't be adversely affected by the scalding hot water.

Step 5
With the pressure relief valve open, open the drain valve and allow the tank to drain completely. Completely draining the tank ensures that you've removed all of the sediment possible.

Step 6
Close the tank drain valve, disconnect the hose from the valve and close the pressure relief valve.

Step 7
Open all the hot-water spigots in the house, and turn on the cold-water inlet to the tank.

Step 8
Close each hot-water spigot as water begins to flow from it. After all the spigots are closed, turn on the electricity to the water heater, or turn the gas switch to run.

Before Connecting Electric Power

Step 1
The most common problem with electric water heaters is turning the power on before the tank is completely full of water. If this happens, the upper heating element will burn out, and you'll have no hot water (until the upper element is replaced). Once you've installed the water heater, open a hot-water faucet all the way and let the hot water run for three minutes. This will ensure all of the air has been removed and the tank is completely full of water.

Step 2
If you don't have hot water after two hours, check to make sure the unit is getting the correct voltage. See the unit's label for power requirements. No electric power or the wrong voltage causes many electric water heater problems. An electrician may be needed to solve wiring / power problems.

Leaks and Drips

Step 1
Most leaks are caused by faulty water supply connections. Use good materials and proper techniques and check your work carefully. Compression fittings are easier to use for DIYers (do-it-yourselfers) than soldering copper pipes.

Step 2
Drips from the temperature and pressure (T&P) relief valve discharge pipe usually mean a thermal expansion tank is needed.