



## Servicing Those Hot Water Heaters

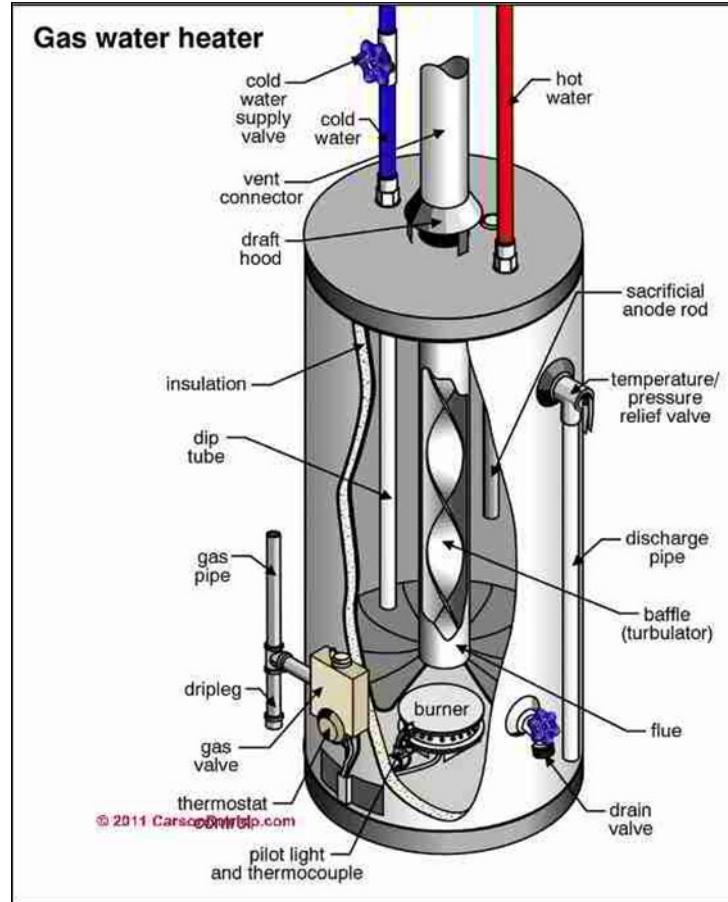
Anyone who owns a house, condominium, or commercial building has a domestic hot water heater. This heat may be electric or gas-fired. The heater may have a storage tank to maintain a reservoir of heated water or it could a tank-less hot water system that can also do the job for the owner.

With all hot water heaters there is annual maintenance that should be performed to keep the equipment operating as efficient as possible. Each type of heater has one or two unique features based on the energy used to heat the domestic water but all of them have standard maintenance inspection requirements that should occur annually or semiannually depending on the manufacturer's recommendations.

Whether the individual doing this maintenance is a building maintenance person, or a service technician here are things to do:

**Tank Blow-Off:** Annually the water heater storage tank should have the drain valve on the side of the tank opened and water drained from the tank. Obvious precautions should be taken to collect the drained water and not simple have the water blown off from water system pressure to the floor to be mopped up.

- Turn off the electricity to the water heater or turn off the gas switch to pilot.
- Connect a garden hose to the tank's drain valve.
- Locate the draining end of the hose in an area that won't be adversely affected by the scalding hot water.



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- Keep the water draining until the water runs clear.

Sediment will probably be found in the water. Removing this sediment should eliminate the built up in the tank thus extending the tank life and system performance. It can also affect water quality over time if not removed.

For tankless water heaters there is no tank to flush sediment out but there is a potential for lime scale

build up within the pipe on the elements resulting in a drop off in performance and increase operating cost. While some may be comfortable doing this flushing, an experienced plumber can also do this task.

Changing out anode rods, intended to be sacrificial designed to corrode so that the tank does not. Here again, some individuals may be confident in checking the anode annually, it is suggested that most owners of hot water heaters look to an experienced plumber to complete this task.

Hot water heaters are typically located in a closet or in the corner of a basement. Over time, storage boxes, etc. may find their way stacked near this heater. Storing anything around a hot water heater must be avoided due to the potential for a fire being started especially when the heater is gas-fired. These burners need combustion air and restricting the flow of air to the tank or burner inlet can be hazardous. In addition, if the heater is enclosed in a closet sized room this heat requires ventilation for the gas burner to operate efficiently.

When there is a call for hot water within the tank because the water low temperature set point occurs the electric heater or burner will start. When the high temperature set point is reached the heater/burner will stop. As water is heated there will be a build up of pressure within the tank. The tank has a safety relief to relieve this excessive pressure and it is important the safety relief has a discharge pipe to direct the water away from the burner and controls.

Here again, an experienced plumber should test the safety relief valve performance by lifting the safety relief lever.

One last tip from the Diocese of Cleveland Facilities Services Corporation is that hot water heater has an estimated service life of 10 to 12 years and so owners with hot water heaters 8 years old or more years should consider purchasing a wireless leak

detector interfaced with a smart phone app. The cost of this monitoring and alarm device will cost approximately \$50 to \$70 dollars depending on the manufacturer. This can be money well spent when the hot water is out of sight and out of mind in a basement or other secluded space.

The bottom line to owning a hot water heater is that it needs routine inspection and scheduled maintenance annually. If you need assistance with this maintenance, please contact the Diocese of Cleveland Facilities Service Corporation for a list of pre-qualified plumbers capable of assisting you with your hot water heaters.

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