How to flush your water heater tank

Sediment, bacteria, minerals and metals can build up in your water heater tank. This can impact household water quality and water pressure. Depending on your water heater tank, flushing the tank is recommended annually to maintain performance. To protect the life of your water heater, we recommend following the manufacturer’s instructions for flushing. It is important to keep in mind that 30 to 75 gallons of hot water will be lost during the flushing process.

To flush the tank:
1. Take note of the position of your gas control valve (Item 1 in Figure 1) so that it may be reset to the same position when the task is completed.
2. Set your gas control valve to the pilot or off position. (This is important: If the burner control is left on while the tank is empty and/or being emptied and the flame comes on, the heat will ruin the tank.) You may want to use up the hot water either with a load of clothes or some other means like a shower or dishes before you continue.
3. Shut off the cold water valve leading to the tank (Item 2 in Figure 1).
4. Open a hot water faucet anywhere in the home (this will let air into the tank while it is draining).
5. Attach a short garden hose to the hot water tank drain spigot and run it to a floor drain (Item 4 in Figure 1).
6. Open up the hot water tank drain spigot (Item 4 in Figure 1) and empty the tank. This may take several minutes.
7. When the tank is drained, leave the drain spigot open, turn on the cold water valve (Item 2 in Figure 1) in 15-second bursts and wait for it to drain after each burst. Three bursts should do the job.

To fill the tank:
8. Close the hot water tank drain spigot (Item 4 in Figure 1) and remove the hose.
9. Leave the hot water faucet open (from step 4 above).
10. Turn on the cold water valve (Item 2 in Figure 1) leading to the hot water tank until water comes out of the hot water faucet (from step 4 above) in a steady stream.

11. Shut off the hot water faucet (from step 4 above).
12. The gas control valve (Item 1 in Figure 1) can be turned back to its usual setting as noted in step 1 and follow the hot water tank’s manufacturer’s instructions for lighting the gas pilot if the tank does not have an automatic pilot.

This process must be completed in this order (burner off, hot water faucet open, etc.) or damage can result from heat, vacuum, pressure or water damage to the tank, faucets, pipes and/or finished floor.

After a period of time, you may find some deterioration of the washer in the hot water tank’s spigot and it may need to be replaced if the hot water tank’s spigot drips after closing. Plumbers often will cap the spigot with a garden hose cap found at hardware stores to prevent dripping.

Figure 1: Standard Water Heater Tank