



How to Flush Your Water Heater

One of the most commonly overlooked, yet easy to perform, home maintenance activities is flushing water heaters. Water heaters accumulate sediments over time and should be flushed frequently. Flushing the water heater removes the accumulated sediment and it allows the heater to run more efficiently, thus, prolonging the lifespan of the system. Here are tips on how to flush your water heater.

Identify your Types of water heater:

There are basically two types of water heater systems that are most commonly found in Phoenix homes. There is a tanked water heater system and a tankless water heater system.

A tanked water heater system uses an insulated tank to heat and store hot water for use within a home. Tanks can range in size from 2.5 gallons to 119.9 gallons. Typically, most found in the Phoenix area are 50 gallons. Water can be warmed through the use of gas, electrical or solar (or a combination).

A tankless water heater is a system that heats water as it passes through internal coils. There is no storage tank, the system makes the water hot when a faucet in the house calls for it to be supplied. Thus, tankless systems are also called on-demand systems. The power of the systems can be either gas or electric. Sizes of the systems are determined by flow rates or the estimated amount that would be used in the house. The capacity of the water heater is measured in the gallons per minute (GPM) that the system can provide at steady use. If the proper tankless water heater is installed in a house, it should provide an endless supply of water.



Why You Should Flush Your Water Heater Regularly

Tanked:

The water supply to your home contains mineral and soil particles that may remain even after purification. These minerals build up and calcify in the tank due to the heat and water quality. They form limescale that builds up at the bottom of the tank.

The buildup of debris or minerals causes uneven heating that can eventually damage the tank. With electric heaters, the scaling can damage the element. In gas-fired water heaters, where there is a collection of sediment, you can hear a rattling or knocking in the tank when the water is heating. Sediment build-up can also block the drainage valve creating a challenge when attempting to flush or replace the unit. A homeowner can reduce build-up by cleaning your heater or tank regularly.



How to Flush A Water Heater with a Tank

Items you will need:

- 1 - Garden hose
- 1 - Small bucket
- 1 - Screwdriver

Steps to flush:

1. Turn off the power supply. If it's an electric water heater, turn off the breaker. If it's a gas water heater, turn off the gas valve.
2. Turn off the supply or cold water valve which is often found at the top of the tank. This stops the flow of water into the tank.
3. Connect a garden hose to the drain spigot at the bottom of the water heater.
4. Open a hot water faucet in any part of your home to allow air to flow to the tank so that water can drain out. Be careful - this is hot water!!
5. Open the drainage valve with a screwdriver to let out the dirty water. If you do not hear water flowing, there may be a backflow preventer valve in the heating system.
 1. In this case, use the pressure relief valve to allow air into the tank. Lift the lever, and you will hear water coming out of the drainage valve. Please be advised, if a pressure relief valve is opened, there is the possibility that it will not reseal correctly and this may require additional repair/replacement.
6. Drain the tank and check the color of the water to determine if there is a sediment build-up.
7. Open the cold water inlet for a couple of minutes to flush out any sediments that might be remaining at the bottom.
8. Use a bucket to trap some of the water for careful inspection. You should be able to see some particles at the start.
9. Keep the cold water flowing until there are virtually no particles in the bucket.
10. Turn off the drainage spigot
11. Turn off the hot water faucet you turned on
12. Turn on the cold water valve leading to the heater
13. Turn on a hot water faucet to remove air trapped
14. Turn on the power
15. Wait for about 30 minutes for the water to heat.
16. Turn on one of the hot water taps in your home to ensure hot water is flowing



How To Flush A Tankless Water Heater

Items you need:

- 1 - Submersible pump
- 1 - 5 gallon bucket
- 2 - Short hoses (washing machine hoses work great)
- 1 - Tankless water heater descaler or vinegar (check your manufacturer recommendations)

Steps to flush:

1. Turn off the power supply
2. Turn off the water heater supply and the hot water valve
3. Connect one end of the hose to the cold water isolation valve and the other to the submersible pump.
4. Connect the other hose to the hot water isolation valve leaving the other connection loose in the bucket
5. Place the pump and the loose end of the second hose in a five-gallon bucket and add the descaler per the directions
6. Open the hot and cold isolation valve and turn on the pump
7. Let the cleaner circulate for one hour, then turn off the pump
8. Close the cold-water isolation valve
9. Empty the bucket and place the loose hose back in the bucket.
10. Turn on the cold water supply valve and let the water flow into the bucket for five minutes
11. Close the cold water valve and disconnect the hoses
12. Turn off the hot water isolation valve
13. Remove the inlet filter screen and rinse to wash away sediments, then reinstall it
14. Turn on the hot and cold water valves
15. Open a few faucets to ensure water is flowing
16. Turn on the power supply



How often should you flush your water heater?

It is recommended by most manufacturers that homeowners should flush their water heater at least once per year.

Hire Professional Home Inspectors

Your water heater system is critical to the proper functioning of your home and ensures comfort for you and your family. You should schedule regular maintenance to clean your water heater for optimal longevity and proper function. Additionally, it is a good idea to check the condition of your water heater frequently to attempt to avoid leaks or other potential damage.

Dwell Inspect Arizona is the ultimate solution for all home inspection and consulting services. We serve homeowners in Phoenix and all the surrounding communities.

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