

STEAM BOILERS

In a steam system, water heated in the boiler turns to steam, and the steam rises to radiators to heat the home. For the most part, steam boilers have not been installed in new homes since the 1940s, when forced hot water heating systems were introduced. While there are many similarities between a steam boiler and a hot water boiler, there are a few differences, including devices found in a steam boiler system that may be unfamiliar to you.

Steam valves. Located on the radiators, these valves vent the air in the pipes to make room for the steam. If you notice white calcium buildup around a steam valve, it means steam is escaping.

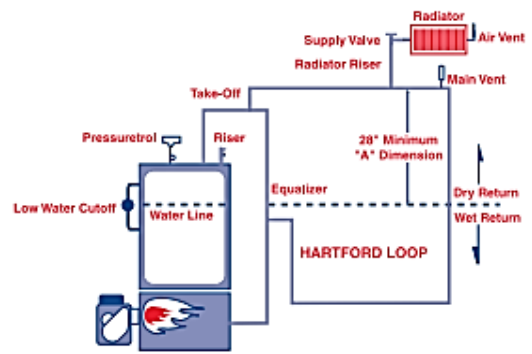
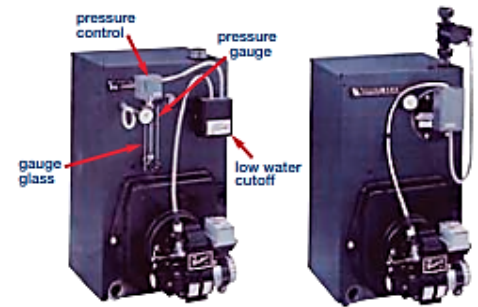
Gauge glass. This shows the water level in the boiler. The normal level is usually in the center of the glass. The water level in the glass will fluctuate slightly when the burner runs.

Low water cutoff. Required by code, this device shuts off the burner if the water level in the boiler falls too low.

Automatic water feeder. This optional device, which is sometimes found on steam systems, automatically adds water to the boiler if the level gets too low. Even if a system has an automatic water feed, the homeowner should still check the boiler's water level on a regular basis.

Pressure relief valve. The pressure relief valve is a safety device to prevent the system from over-pressurizing.

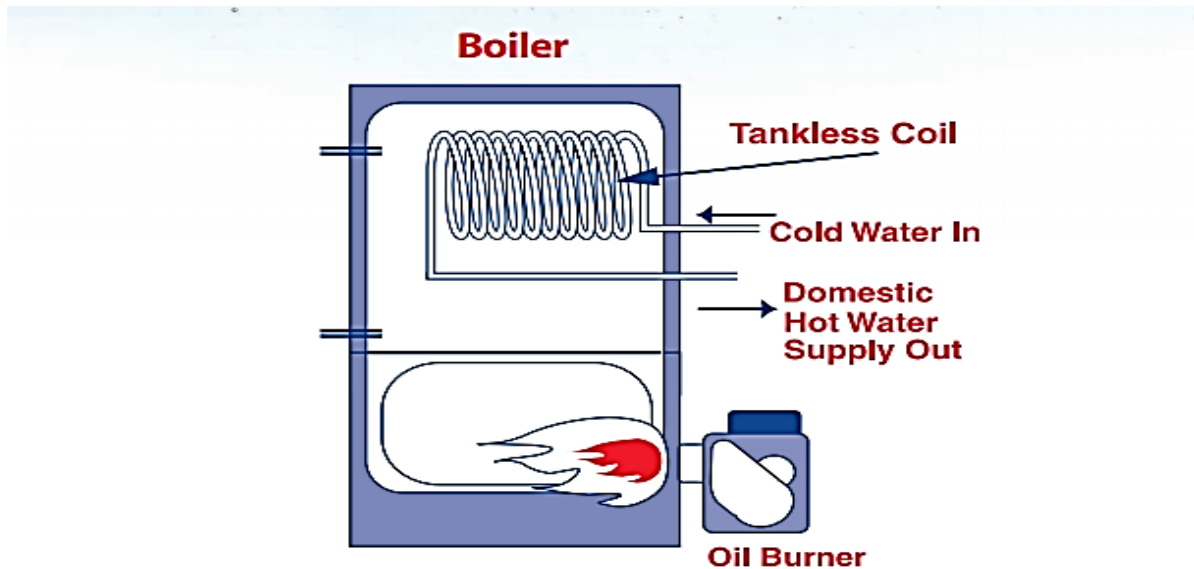
Steam limit control. Sometimes called a pressuretrol, the steam limit control turns off the burner when sufficient steam pressure is achieved.



A typical configuration for a one-pipe steam heating system.



Hot Water Using a Boiler



Internal tankless coil. In this type of indirect tankless water heating system, the coil containing the domestic water supply is located in the water jacket of the boiler. One drawback to this design is the absence of hot water storage; another is the need to maintain the temperature of the boiler water at a high level, high enough to heat the domestic water as it passes through the coil.

External tankless coil. This indirect-fired water heater has a separate storage tank that contains an internal coil. The unit connects to the sides of the boiler. A newer version of the external tankless coil water heater is the plate heat exchanger. It contains a series of wafers or plates with internal porting; plates alternate between boiler water and domestic water.

Tankless coil with storage tank. Better known as an aqua booster, this indirect water heating system was introduced to boost water heating capacity. After water has been heated by going through the indirect system's coil, it is stored in a vertical storage tank. The temperature of the hot water in the tank is usually maintained by means of a recirculating loop; it allows water to be reheated by going back to the coil, either by gravity or forced circulation.

NOTE: Some local codes require an anti-scald control, also called a tempering valve, for tankless coil indirect water heating units. (See following section on water heating controls.)



Liability - Who is Responsible When the Sale is Complete

<https://www.commtank.com/tank-articles/home-sale-purchase-abandoned-underground-tank.php>

It is important to understand that you, the owner, are responsible for cleaning up contamination on your property. If you purchase a property "As Is" then you assume liability for that cleanup. You are also responsible for cleaning up pollution that has traveled from your property onto another property. Fuel oil is lighter than water; it will penetrate soil until it encounters ground water, and then travel on the water surface. Groundwater moves at different rates and can migrate great distances depending on the soil composition. A heating oil release includes any kind of spill or leak from the oil tank, oil delivery line or other part of the heating system.

You may pursue the seller in court to recuperate clean up expenses, however you must prove the seller was deceptive during the transaction to be successful. Many homeowners have purchased homes without knowledge of an [abandoned underground tank on the property](#). This was not typically disclosed years ago, as there was little awareness of the environmental hazard presented by a leaking tank. Make sure to cover yourself from future risk during the transaction, if the home had a buried tank removed, get a copy of the tank closure report and any lab reports.

It's best to have underground oil tanks removed prior to closing on the sale of a home. Many buyers will include the removal of the underground tank as part of the terms to their offer. The removal cost of a residential underground oil tank ranges from \$1,000 and \$2,500 depending on size. Typical residential oil storage tanks are 275, 500 or 1,000-gallons. Understanding the scope of the project and your liability will help you to negotiate and keep your transaction on track.

How to sell a property with a UST

Heavily edited: [November 15, 2017](#) [Jeremy Fox](#) Environmental Consulting

- Determine contents stored in the tank
- Determine the size of the tank
- Determine the material the tank is made of
 - Tanks are typically constructed of one of two types of material: steel or fiberglass. Steel tanks are usually older and can develop problems if they have not been maintained and monitored over the years. Fiberglass, both single-wall and double-wall, tanks are typical of what is currently being installed. These tanks do not rust over time and are more dependable.
- Determine the age of the tank
- Determine if the tank needs to be tested and/or removed
 - in many cases, it may be advisable to remove the tank to clearly demonstrate there are no issues.
- Determine if the tank is accessible
 - Trees, buildings, and other structures may cause complications during the removal process. Be wary of undermining them and causing structural instability.
- Determine if there has ever been a release
- Determine location related to environmental receptors
 - Contamination of wells that supply potable water to the property or a network of users is never a good thing.
- Determine state requirements for removing a tank
- Choosing a contractor - In most states it is a requirement to employ the services of a licensed contractor for the removal of a regulated tank.