Noisy Gas Water Heaters

Rumbling and Pounding

Rumbling, pounding and other noises when the heater is in operation are usually caused by formation of scale and sediment. Minerals will form a scale on the bottom of the inner tank that traps minute amounts of moisture. Heat from the gas burner changes these tiny trapped amounts of moisture to steam and the pressures developed cause the rumbling and pounding noises. In addition to being very annoying to the homeowner, accumulation of sediment and mineral deposits in the bottom of the tank can appreciably shorten the tank life of the heater.

The sediment can interfere with the transfer of heat from the flame through the tank wall to the water. The sediment acts as an ‘insulation’ restricting heat transfer and may contribute to a ‘not enough hot water’ trouble call. If a homeowner does not periodically drain and flush the tank, the sediment will continue to accumulate on the bottom the tank. The result is a clogged drain valve and scale build up - eventually to the point it may cover the immersed thermostat bulb. Diagnosed early, these sediments may be flushed out simply by periodically draining the tank.

Sizzling

Another noise associated with a gas water heater is a sizzling or pinging noise. Condensation is the most likely cause of this annoying problem. Condensation forms on the side of the tank and flue ways when it is first filled with cold water, during heavy hot water usage periods or when the cold water inlet temperature drops as the seasons change. Drops of water falling on the burner can produce a sizzling or pinging sound and may be seen by opening the jacket door and looking at the burner assembly. The condensation is not unusual and will disappear after the water in the heater becomes hot. If the problem persists, check connections and the tank for signs of leaking.

Banging Baffles

Inside the middle of the water heater is a flue, a device that carries the combustion air products and discharges them, through the venting system, to an outside atmosphere. The flue also aids in heating the water by transferring heat through the flue tube to the water. Inside the flue tube is a device that retards air movement through the flue called a baffle. The flue baffle is a metal device used to keep the heated combustion gases in the flue longer for maximum heat dispersion to the tank water. The baffle is an engineer designed component of the heater and is essential to the heater’s efficiency rating. On occasion, the baffle will make a noise like banging metal to metal. This is exactly what is happening. The baffle is ‘wiggling’ around in the hanger bracket and making noise by banging against the side of the flue tube. This is a normal noise and can be removed by bending the metal tabs on the hanger bracket to tighten the baffle. Another method is to remove the baffle and bend it slightly; then reinstall the baffle. The idea is to make a snug fit back into the flue tube.