

Water Heater Care and Maintenance



ANY ALTERATION TO AN ATWOOD WATER HEATER WILL VOID WARRANTY

THIS INCLUDES USING AFTERMARKET HEATING ELEMENT DEVICES

⚠ WARNING EXPLOSION/BURN INJURY

Aftermarket heating elements can lack critical safety controls.

Use of these devices can lead to an out of control heating of water tank and a catastrophic wet side explosion.

The use of the manufacturer's aftermarket heating element devices may also result in damage to components or water heater. Atwood's written warranty states - "failure or damage resulting from any alteration to our water heater is the owner's responsibility". Any alteration, like the addition of an aftermarket heating element device, will void the warranty.

AFTERMARKET HEATING ELEMENTS

Temperatures produced by these heating elements can exceed the 185°F limit of the ECO on pilot model gas control valves. This gas control valve contains a one-shot ECO. When this ECO blows, the control is completely non-functional and must be replaced. This will be a non-warrantable situation.

When aftermarket heating elements are inserted into the drain plug, customers are more prone not to flush their tanks. Not flushing the tank accelerates tank corrosion on both our pilot and electronic ignition water heaters creating a situation where the tank may have to be replaced. This will be a non-warrantable situation.

If you have any questions, please contact the Atwood Service Department at 1-800-825-4328.

Atwood's website also has information on a wide variety of products available from seven major product lines, water heaters, furnaces, ranges and cooktops, windows and doors, glass products, seating systems and chassis components including jacks, couplers, hitch balls, 5th wheel systems and more. To learn more, visit Atwood online, at:

www.atwoodmobile.com

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GENERAL INFORMATION

1. LP and Water system must be turned on.
2. Have gas pressure tested periodically. Should be set at 11 inches of water column with three appliances running.
3. Drain and flush water heater at regular intervals (at least one time during the year).
4. Drain and flush water heater before storing RV for the winter.

PREVENTATIVE MAINTENANCE

Pilot Models

1. Check main burner orifice and pilot assembly for contamination (dirt, spider webs, etc.).
2. Clean main burner tube with small brush.
3. Main burner adjustment - open air shutter 1/4 way.
4. Low pilot flame. Check for contamination - if clean have the pilot orifice replaced.
5. Pilot will not stay on when pilot button is released. Have service technician check thermocouple and valve.

Electronic Ignition Model

1. Check main burner orifice.
2. Clean and adjust main burner.
3. Be sure that main burner and valve manifold are aligned with each other.
4. Check electrode for cracked porcelain.
5. Check electrode for proper gap - 1/8" between electrode and ground.
6. If module board functions intermittently, remove board and clean terminal block with pencil eraser.
7. If no ignition, check thermal cut-off. If blown, clean burner and flue tube. Then replace thermal cut-off.

ATWOOD CLAD TANK

The Atwood water heater tank is constructed of a high strength aluminum. The interior of the tank consists of a 15% thickness of type 7072 aluminum (pure aluminum and zinc) that is fused to the core during the rolling process. This material protects the tanks from the affects of heavy metals and salts found in waters throughout the country.

It is anodic to these heavy metals and acts much like an anode in a steel glass lined tank except it will last much longer. There is also no need to replace an anode on a yearly basis. Flushing the tank on a regular basis has been found to be helpful in insuring the best performance of your water heater and adding to the useful life of the tank. See flushing instructions below.

WATER HEATER TANK CORROSION

Pinhole leaks from galvanic corrosion may cause the water heater tank to fail. Microscopic particles of metal (like iron and copper) suspended in water, set up a reaction inside the water heater that is not unlike the principle on which an automotive battery operates. The aluminum tank is the anode and the metals in the water serve as the cathode. Consequently, the aluminum particles are carried away with the water flow. A white scale material (aluminum oxide) often is formed around the points where the heaviest action is taking place and heat accelerates the process. Severity of the problem varies considerably in different locales depending on the metal and mineral content of the water. White deposits inside the water heater tank are usually from water impurities that have settled out. Periodic flushing of the water heater tank under pressure is recommended to slow down this process. For flushing instructions see below.

PRESSURE - TEMPERATURE RELIEF VALVE

Weeping or dripping of a pressure temperature relief valve while the water heater is running DOES NOT mean it is defective.

This is normal expansion of water as it is heated in the closed water system of a recreation vehicle.

The Atwood water heater tank is designed with an internal air gap at the top of the tank to reduce the possibility of weeping and dripping. In time, the expanding water will absorb this air.

To replace the air follow these steps:

- Step 1:** Turn off water, let water cool or let run until cool.
- Step 2:** Turn off incoming water supply
- Step 3:** Open a faucet in the coach
- Step 4:** Pull handle of pressure-temperature relief valve straight out and allow water to flow until it stops.
- Step 5:** Allow pressure-temperature relief valve to snap shut; close faucet; turn on water supply.

FLUSHING TO REMOVE UNPLEASANT ODOR

Hydrogen Sulfide results when the protective cladding on the interior of the tank prevents corrosion. The electro galvanic action of the cladding material releases hydrogen from the water. If sulfur is present in the water the two will combine and produce hydrogen sulfide. This compound produces the "rotten egg odor". Hydrogen sulfide can also be present in your fresh water supply and as little as 1mg/liter can cause a perceptible odor. If your fresh water has the rotten egg odor you will need to find another source of fresh water before flushing and refilling the water storage system.

Use four parts vinegar and two parts water to flush tank.

The Atwood water heater is designed for RVs.

Flushing the water heater several times a year will prolong the life of the storage tank.

WATER HEATER TANK CARE

Winterizing (flushing) Instructions

1. Turn off main water supply, - your pump or your water hook up source.
2. Drain water heater inner tank. Due to the location of the drain plug, approximately two quarts of water will remain in the tank. This water contains most of the harmful corrosive particles. While draining the unit, if the water flows sporadically or trickles instead of flowing steadily, we recommend one of two things. First open the relief valve to allow air into the tank and secondly, take a small gauge wire or coat hanger and poke through the drain opening to eliminate any obstructions.
3. After thoroughly draining the tank, flush it with air pressure or fresh water. If you use air pressure, it may be applied either through the inlet or outlet on the rear of the tank. It may also be applied through the pressure temperature relief valve but first remove the relief valve support flange. Air pressure will force out the remaining water and the corrosive particles. If air pressure is not available, pump fresh water into the tank with the assistance of the on-board pump or external water through the inlet or outlet found on the rear or the pressure relief valve support located on the front of the unit. Continue flushing for approximately five minutes to allow the fresh water to agitate the stagnant water on the bottom of the tank and force deposits through the drain opening.
4. Close the drain valve and pressure temperature valve.
5. There will be approximately two quarts of water left at the bottom of the inner tank. Should this water freeze it will not cause any damage to the tank.