

WATER HEATERS

Water heaters used in Winnebago Industries motor homes can be grouped into three basic categories: electric, standard pilot light (gas), and electronic ignition. The three types of heaters utilize different components, but provide the same service, a reliable source of hot water for use in your motor home. Many also offer a motor-aid feature where the engine coolant heats the water while you drive.

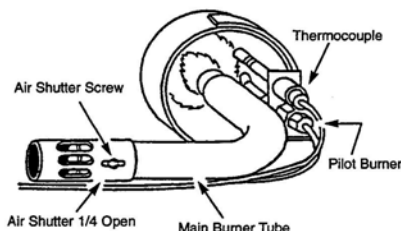
Inspection

For the do-it-yourself, maintenance should begin by shutting off the gas supply at the water heater switch. Remember to keep the control compartment clean and free of any combustible materials and/or flammable liquids and vapors.

Visually inspect the vent and combustion air grille and make sure they are clear of any objects. Spiders, wasps, and other insects can also build nests in the burner tube which may result in poor combustion, delayed ignition, or ignition outside the combustion tubes. A change in the burner sound, a change in flame appearance from a hard blue to a soft, lazy flame, or a very yellow flame can be indications of an obstruction in the burner tube. Inspect and clean on a regular basis.

Cleaning the Burner Tube

1. Remove the air shutter screw and slide the air shutter down the burner tube.



2. Run a flexible wire brush down the burner tube until it is visible at the end of the burner tube.

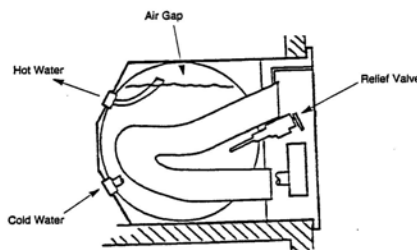
3. Vacuum in and around the burner where it enters the combustion tube.

4. Return the air shutter to its original position and replace the screw.

Dripping Relief Valve

The water system of any recreational vehicle is closed. The water heater may occasionally discharge at the pressure temperature release valve (dripping) due to the thermal expansion of water during the heating cycle. Weeping or dripping of the relief valve during water heater operation does **NOT** indicate a defective relief valve.

The water heater tank is designed with an internal air gap at the top of the tank. In time, the normal expansion caused by heating water allows the cushion to be absorbed.



To reduce weeping from the valve, perform the following steps:

1. Turn off water heater.
2. Turn off incoming water supply.
3. Open faucet in the coach.
4. Pull handle of relief valve straight out and allow water to flow until it stops.
5. Allow relief valve to snap shut, close faucet, turn on water supply.

Water Heater Flushing Instructions

1. Turn **OFF** main water supply (pump or water hookup source).

CAUTION: SCALDING INJURY

Turn off the water heater and allow time for the water to cool before removing the drain plug to flush the tank.

2. Drain water heater inner tank. In doing so, you will note that due to location of drain plug, approximately two quarts of water will remain in the bottom of the tank. This water contains most of the harmful corrosive particles. If, while draining the unit, the flow is sporadic or trickling instead of flowing steadily, it is recommended you perform the following procedures:

A. Open the relieve valve to allow air into the tank.

B. Using the small gauge wire or coat hanger, prod through the drain opening to eliminate any obstructions.

C. 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. Air pressure may also be applied through the relief valve support flange after first removing the relief valve. In either case, with the drain valve open, the air pressure will force the remaining water, along with corrosive particles, out of the unit.

If air pressure is not available, your unit can be flushed with fresh water. Fresh water should be pumped into the tank either with the

assistance of the on-board pump or with external water pressure. External pressure may be hosed into the unit either through the inlet or outlet located on the rear of the unit, or the relief valve support flange on the front of the unit.

Continue the flushing process for approximately five minutes allowing ample time for fresh water to agitate the stagnant water on the bottom of the tank, thus forcing the deposits through the drain opening.

D. Upon completion of the above steps, close the drain valve and the relief valve.

Storage and Winterization Procedure for Water Heaters

Normal storage and winterization procedure:

1. Thoroughly drain the inner tank by opening the petcock drain valve at the front base of unit. To assist in draining and eliminate the possibility of developing an air lock, open the relief valve.

2. Once the unit has been thoroughly drained, approximately two quarts of water will remain in the base of the tank due to the position of the petcock drain valve. For winterizing, the remaining water will not harm the unit as the water has ample room for expansion without causing freezing damage.

If your water heater is maintained on a regular basis and not subjected to misuse, it should provide many years of good, dependable service.