

# 12 VOLT HOT WATER HEATER

### Winterization Procedure Guide

### **SOME THINGS TO CONSIDER**

- Propylene Glycol or RV antifreeze will only protect your lines in hard freezes if it is undiluted.
  Improper winterization of the heater can dilute the RV antifreeze and can result in damaged or broken fittings when the camper is exposed to freezing temperatures.
- The additional fittings present at the heater are there to prevent this dilution and to enable winterization with less than one gallon of RV antifreeze.

#### WINTERIZATION PROCEDURE

- Empty your water tank using the pump and the faucet. As the tank approaches empty the faucet will sputter. This is normal. Allow this to happen for 30 seconds. Turn your pump off.
- 2. Remove the draw line from the right side of the water pump below the sink by lifting up on the blue quick connect coupler and pulling the draw line away from the pump assembly. This should not require any force. If you encounter resistance make sure the blue retainer clip is lifted fully.
- Replace the draw line with your winterization line and secure it by pushing down on the blue retaining clip.
- 4. Open a gallon of RV antifreeze and rest it on the floor below the sink cabinet. Feed the winterization line into the container.
- 5. RV antifreeze is not deadly to animals or humans but is still toxic. It should not be dumped on the ground or into stormwater systems. Catch it in a bucket and pour it into your toilet where it will be processed by the wastewater treatment facility.
- 6. Turn the black plastic valve next to the water tank so that the lever is pointing up. This is the bypass mode.
  - a. In bypass RV antifreeze will not enter the hot water heater tank

- 7. Attach your sprayer to the sprayer assembly and open both the hot and cold valves.
- 8. We will start at the sprayer and then finish back at the sink.
  - a. With both sprayer valves open spray into a bucket until you see the RV antifreeze. It is often pink but will always be colored.
- 9. At the faucet run "cold" and "hot" until you see RV antifreeze
- 10. Turn off your pump and open the faucet to release pressure in the water lines
- 11. Drain the hot water heater tank
  - a. Leave the black plastic bbypass valve with the lever pointing up
  - b. Open the small brass cap (air valve) on the brass fitting on the hot water line. This allows air into the hot water tank to displace the water in the tank.
  - c. Open the drain line You will need a small screwdriver to remove the screw that secures the valve lever. With the screw removed pull the lever so that it is pointing away from the valve.
  - d. Your tank will now drain.
- 12. Winterization complete



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### **GETTING YOUR CAMPER READY FOR SPRING**

- Close the air bleed valve (brass fitting with the small twist cap on the hot water line)
- 2. Close the tank drain valve (black lever on the silver pressure relief fitting on the cold water inlet)
- 3. Replace the draw line from the water tank at the pump.
  - a. Pull up on the blue retainer clip and remove the winterization line (you've probably already removed the line
  - b. Insert the draw line and press down on the retainer clip
  - c. Gently pull to make sure that the draw line is secured
- 4. Fill your water tank
- 5. Start with the sprayer assembly.
  - a. Open the hot and cold sprayer valves
  - b. Turn on the water pump
  - c. Open the sprayer handle and spray out the RV antifreeze into a bucket until you see clear water.
  - d. The pump will not prime until you provide an outlet for the RV antifreeze in your lines. (using the sprayer)
- 6. Purge the RV antifreeze from the sink faucet (hot and cold)
- 7. At this point your lines are free of RV antifreeze. There will still be some amount in your lines and we recommend running five gallons of freshwater through your system before you drink the water. Reminder (RV antifreeze is not toxic for humans).
- 8. Fill the hot water tank

- a. Move the lever of the black plastic bypass valve so that it is pointing towards the rear wall of the camper.
- b. Turn off your pump
- c. Set the sprayer into the bucket and lock it open with only the hot water valve on the sprayer open
- d. Turn on the pump
- e. You will hear 2.3 gallons of air being purged from the tank. When you have a consistent flow of water coming from the sprayer turn it off.
- f. Repeat the air purge at the sink.
- 9. When finished you should have normal pump behavior. The pump should stop cycling almost immediately after you shut off the faucet or sprayer. If it cycles for a while it means you still have air in the tank or in your lines. Simply flush more water through the hot water lines.
  - a. Note: If you have air in the lines it is most easily purged from the sprayer. This is due to the routing of the hot and cold-water lines through the floor. An air pocket can develop in the lines behind the sprayer box.
- 10. Fill your water tank up again
- 11. Dump RV antifreeze in your toilette. Some municipalities are not okay with this so check with your local water treatment plant.

### **HAPPY CAMPING!**

Still have any questions?

Email us at **support@outpost-campers.com** or give us a call at **(970) 444-1740**.