

How To Guide

2016 RS Adventurous



HOW TO: Water System Winterizing

Do you really need to winterize?



If your Roadtrek is going to remain heated to comfortable temperatures, and the temperatures during the day are well above freezing (above 40 deg. F or above 4 deg. C) and the forecast is for temperatures just below freezing for a few hours at night with calm winds, then you don't need to winterize. The heat in your Roadtrek is enough to keep the lines from freezing.



If the forecast is for extended cold periods, with daytime temperatures at or below freezing, if you're not heating your Roadtrek, or if you expect sustained winds and the roads and ground is already frozen, you need to winterize.



As always, you are final judge and you need to do what is comfortable and makes you feel good. If you are not comfortable with leaving water in your lines when it gets cold, and you will sleep better, go ahead and winterize.

How to winterize using anti-freeze



Typical non-toxic RV antifreeze



Water heater enclosure, under microwave convection oven

This procedure can be done in less an hour with only one specialized tool, a 1-1/16 inch (27 mm) socket and a ratchet or breaker bar.

- Get 2-3 gallons of RV antifreeze.



DO NOT use automotive antifreeze. RV antifreeze is non-toxic and safe for potable water lines.

- Dump and rinse the gray and black tanks if they are not already empty.
- Turn off the water pump and open your single lever galley faucet, putting it in the middle halfway between the hot and cold settings.

- Drain the fresh water tanks by opening the fresh water tank drain valve, located under the passenger front door step. Let this drain for at least 10 minutes. Close the drain for the exterior tank.
- Turn the water pump back on. Put the galley faucet in the cold position, and open it. If the fresh water tank is empty, the open galley sink faucet should sputter. If it emits a steady stream of water, the tank is not empty. You will need to run the water until it is empty, either catching it in a container and throwing it outside, or running it down the sink and re-dumping the gray water tank. Do so if necessary, and then turn the water pump off. Return the galley sink lever to its open position halfway between hot and cold.

❗ If you have a Webasto hot water/heating system instead of a conventional Suburban propane water heater, skip the next steps dealing with the Suburban water heater and its bypass valves, go to the bottom of this article and perform the steps pertinent to your unit, and resume below.



Freshwater tank drain valve

Suburban Water Heater



Water heater cover removal (turn tab vertically to remove cover)



Water heater pressure relief valve

- Make sure the water heater is turned off on the control panel switch. Go outside and take the cover off the water heater. Pop open the pressure relief valve at the top of the water heater. A small amount of water might flow out.
 - ❌ If water is gushing out continuously, STOP! Go back to the beginning of this guide. DO NOT remove the anode rod until you figure out what's going on. You either left the water pump on, or you are hooked up to city water.
 - ! Testing the pressure relief is a good way to check if the water heater is full of water before turning it on in the spring.



Water Heater Anode



Water heater anode with some corrosion, but probably cleanable and usable for another year.

- Drain the water heater by removing the anode rod. You will need a 1-1/16" socket and a ratchet or breaker bar.



This is a good time to rinse out the water heater and inspect the anode rod. If the anode rod looks spongy or all that is left is a rusty iron rod, throw it away and buy and install a new anode rod. Use teflon tape on the threads to reinstall the anode rod. Do not overtighten.



Fore and aft adjustment lever for rear captain's seat



Accessing water heater bypass valves, behind driver's side rear captain's seat



Bypass valves in normal position. Green means open, red means closed.



Water heater bypass valves in the bypass position. Green means open, red means closed.

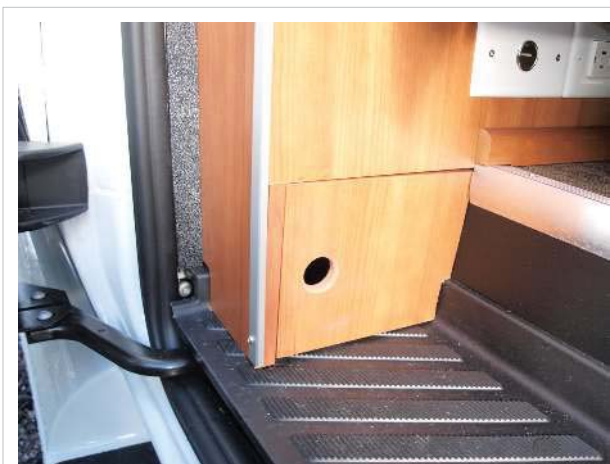
- Move the driver's side rear captains chair all the way forward and pull the water heater bypass valve access panel out about an inch, then straight up to remove it and expose the bypass valves. Do not continue to try to pull the panel out more than an inch, or you will break the channel this panel sits in.
- Set the valves on the horizontal water lines to the by-pass position (at right angles to the water lines). The “middle valve” (the one on the vertical water line connecting the two horizontal lines) should be turned in line with the tubing. Turn each one 90 degrees from its normal position to achieve the bypass position.

All Systems



Users with Webasto units come back in here after performing the steps at the bottom of the page for their unit.

- Check to be sure that the drain on the fresh water tank and the black and and gray waste water tank valves are all closed. Move the single lever galley faucet all the way to the cold side, and leave it open.
- Add 2 gallons of non-toxic RV approved antifreeze to the fresh water tank gravity fill using a spout or funnel, and wash any spillage off the paint.
- Turn the water pump on and allow to prime. Close cold galley sink faucet once you see pink antifreeze coming out.
- Move the single lever galley faucet to the hot side, and run until you see pink antifreeze come out. Open both hot and cold faucets in the bathroom sink. Open the toilet valve. Open the hot and cold faucets on the outside shower. Observe the antifreeze flow through all fixtures, then close each fixture. Ensure antifreeze flows into all P-traps (galley sink, washroom sink, and shower drain). Add antifreeze any extra antifreeze to the galley, bathroom sink, and shower drains.
- If the water pump loses its prime in this process, add more antifreeze to the fresh water tank.
- Open the grey and black waste tank valves, and operate the waste water discharge pump for about 10 seconds. You should see pink antifreeze coming out of the waste water discharge hose.



Access to the city water valve



City water connection valve, shown closed

- Open the city water valve. This valve is behind the access panel to the left of the side door step, The water pump will operate. Allow it to run about 20 seconds. Turn city water valve off.



Water pump access inside passenger side bench enclosure



Water pump filter

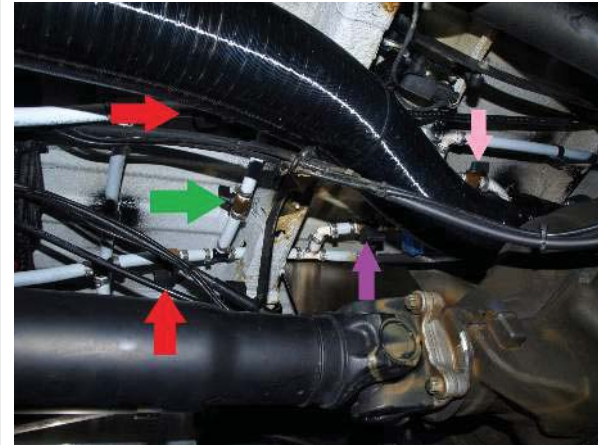
- Turn the water pump off and open a galley sink faucet to release back pressure.
- Open the fresh water tank drain line under the passenger front door briefly until antifreeze flows out.
- Remove and clean the water pump filter if so equipped. To access the water pump filter, loosen the screw on the lid of the passenger side bench just behind the bathroom, and lift the lid. Replace water pump filter.
- This is the end of the regular winterization instructions - steps below are for Roadtreks with the optional Webasto unit only.

Webasto Bypass Instructions - **ONLY If You have the Optional Webasto System**

- Locate the Webasto unit control on the cabinet face behind the television. Turn the left knob to the dump position (all the way counterclockwise). Open the galley sink hot water faucet to allow air into the hot water system. It will take approximately 10 to 15 minutes for the unit to drain completely. The Webasto unit will reset after 90 minutes to close the dump valve.



Webasto control

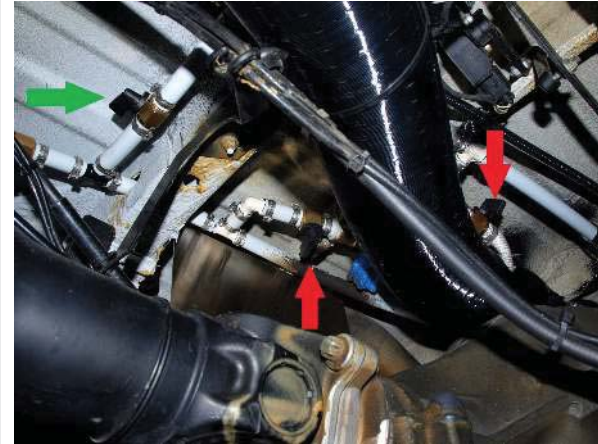


Valves at red arrows should be left alone (always open). Green arrow points to shunt valve; pink and purple arrows point to hot and cold supply lines for Webasto

- Locate the diesel-fueled hot water unit underneath the vehicle. It is immediately behind the center of the rear axle (the differential). There are two air ducts on the front side of the unit, near the top. There are also two white water lines coming back from the front of the Roadtrek, one on each side of the chassis centerline. Just before these lines get to the Webasto unit, there is a transverse white hose connecting them, with a valve on it. This is the shunt valve. To winterize, you open the shunt valve, and close the two valves on the hot and cold lines going into the Webasto **BETWEEN THE SHUNT (TRANSVERSE) LINE AND THE UNIT**. There may be other valves on the hot and cold lines forward of the transverse white hose connecting the two water lines - **DO NOT TURN THESE VALVES**. (see photos above and below). If your outside shower quits working, you turned the wrong valves.



Shunt and Webasto supply line valves in normal position (shunt closed, supply valves open)



Shunt and Webasto supply line valves in bypass position (shunt open, supply valves closed))

- From the passenger side of the differential you will see two valves. The one on the transverse line is the shunt valve, and the one on the line between the transverse line and the Webasto unit leading to the blue overpressure relief valve is the cold side supply valve. Turn each 90 degrees so the shunt valve is parallel to the water line (open) and the cold side supply valve is across the line (closed).
- Now go around to the other side (driver's side) of the differential, and look for the hot water line. It will be white and may have a piece of red tape on it. Look on this line for a valve BETWEEN THE SHUNT (TRANSVERSE) LINE AND THE WEBASTO UNIT which is open in normal operating mode. Turn it so that the black plastic handle is across the line (closed). There may be other valves on the hot water line forward of the transverse (shunt) line - DO NOT TURN THESE VALVES. If your outside shower quits working, you turned the wrong valves.
- Go back to the middle of the winterization procedure and continue.

Winterizing using compressed air

Roadtrek recommends against using compressed air for winterizing.

Other methods of winterizing

Roadtrek only recommends the winterizing method outlined above using RV antifreeze.