

How To Guide

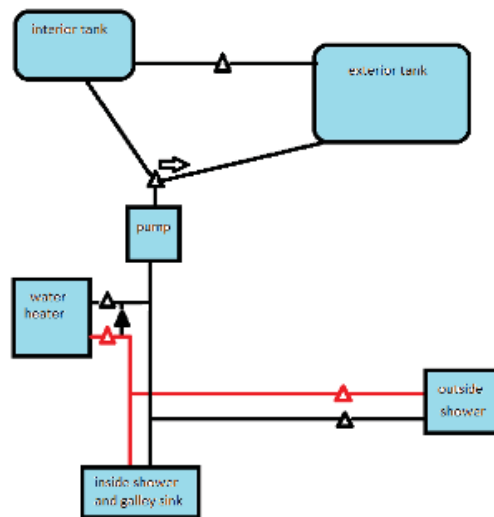
2016 170 Versatile



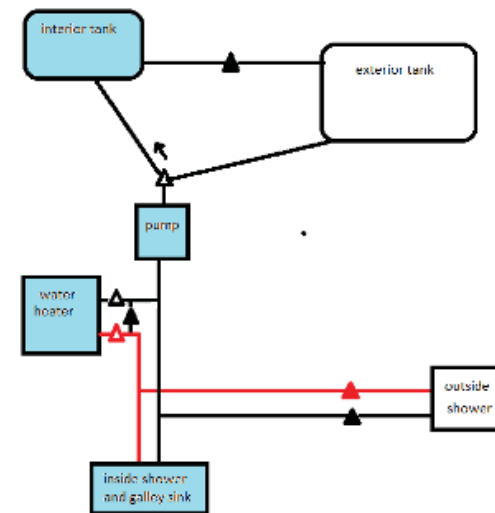
HOW TO: Summer and Winter Mode

Summer and Winter Mode

The 190 and 210 Popular models have the capability to operate in mildly sub-freezing conditions, provided the water system is properly configured. To better understand this it is best to know how the plumbing is configured. The diagrams below show how water is supplied in each mode. Solid triangles are closed valves; hollow triangles are open valves.



Fresh water system in summer mode



Fresh water system in winter mode

In summer mode, both fresh water tanks are in use. The interior tank is inside the vehicle and is filled via the gravity fill in the back door frame, and the exterior tank is below the vehicle, and filled via the gravity fill in the driver's door post. The water line between the two is open, so water flows from the higher interior tank to the lower exterior tank as the water pump draws water from the exterior tank.

In winter mode, the line between the two tanks is closed, and the exterior tank is drained to prevent it from freezing. The outside shower water lines are closed and drained to prevent them from freezing, and the water pump draws water from the interior tank, which is protected from freezing by cabin heat. The hot water heater will also not freeze if left running. In this way, hot and cold running water continues to be supplied to the galley sink, toilet, and shower.

 "Winter mode" and "winterized" are two different things. Winter mode protects the water in the system from mildly sub-freezing conditions as long as the Roadtrek is adequately heated and in use. If you plan extended stays in sub-freezing conditions or if you store your vehicle in freezing conditions, you must winterize to avoid damage to the water system. To prepare your vehicle for really cold weather, see HOWTO: Water System Winterizing - Standard Edition

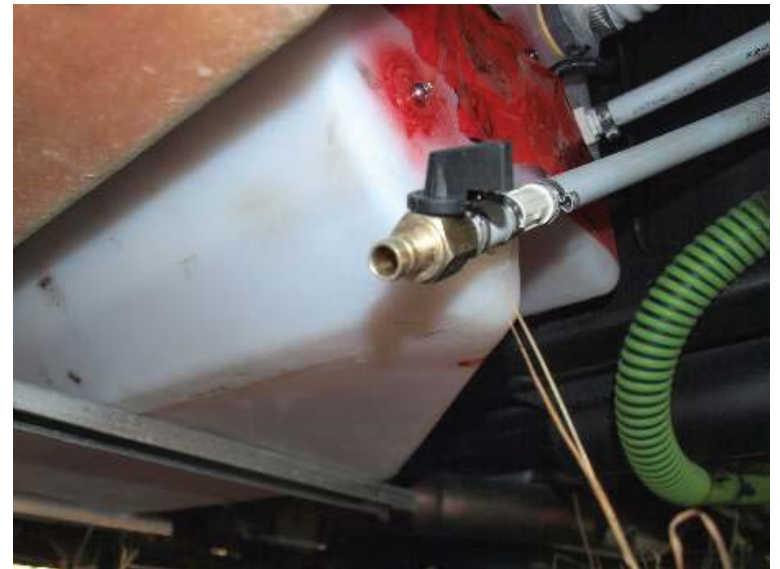
Switching from Summer to Winter Mode

To change from summer to winter mode, you perform the following steps:

- Open the water heater enclosure under the driver's side bench, and close the tank isolator valve connecting the two fresh water tanks by turning the black plastic handle so that the handle is across (perpendicular to) the water line, pointing up.
- Drain the exterior tank by opening the valve under the driver's door step. The valve is open when the black plastic handle is aligned with the water line. It may take several minutes for the water to drain out.



Tank isolator valve in closed position (black plastic handle pointed up). This valve is located inside the hot water heater enclosure, at the base of the large black speaker on the back wall.



Exterior tank drain, located under the driver's door step. To open the valve and drain the tank, turn the handle so that it points along the water line.

HOW TO: Summer and Winter Mode

- Run the water pump briefly to drain water from the water line to the exterior tank, then switch the tank selector valve from the exterior to the interior tank.



Tank selector valve in exterior tank position (colored plastic handle pointed toward driver's side of Roadtrek). This valve is located inside the hot water heater enclosure, just in front of the tank isolator valve.



Tank selector valve in interior tank position, with the colored plastic handle pointed toward the front of the Roadtrek.

- Open the lid on the water heater enclosure by removing the side bench's cushion and table to expose the hinged lid. Undo the two Robertson head screws to raise the lid.



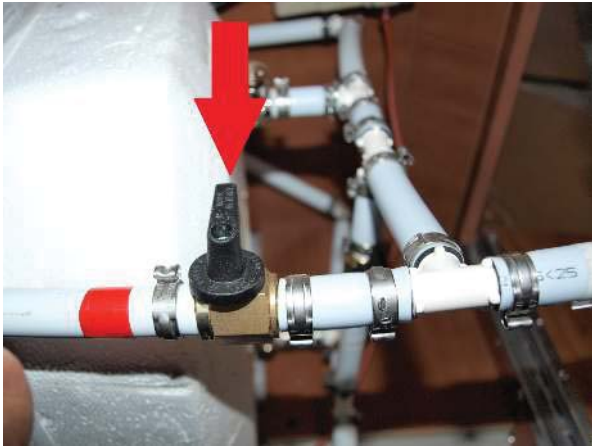
Water heater enclosure



Screw to remove in order to lift lid

HOWTO: Summer and Winter Mode

- Close the two shutoff valves going to the outside shower faucet. The hot water shutoff valve is at the top left corner of the water heater front. The cold water shutoff valve is harder to find; it is alongside the left side of the water heater about halfway back, on the floor. To shut these valves, turn them so that the black plastic handles are across the water line.



Hot water shutoff valve, shown closed



Cold water shutoff valve, shown open

- Open the outside shower faucets to drain the water from the lines. There will be no water pressure; just let the small amount of water remaining in the lines dribble out. Leave these faucets open.

In winter mode, remember that you need to keep the interior temperature at least 60 degrees F (15 C) by running the propane furnace or heat pump, and keep the water heater running. Also remember that the waste water tanks are not protected from freezing. If you use them, mix pink RV antifreeze with whatever you put down the drain 50/50. If you do not use them, drain and winterize the waste water system.

Switching from Winter to Summer Mode

- Check to be sure the exterior tank drain valve under the driver's door step is closed, and fill the exterior tank using the gravity fill on the driver's door post. To open the valve and drain the tank, turn the handle so that it points along the water line.
- Open the tank isolator valve to connect the two tanks. This valve is located inside the hot water heater enclosure, at the base of the large black speaker on the back wall.
- Switch the tank selector valve from the interior to the exterior tank. This valve is located inside the hot water heater enclosure, just in front of the tank isolator valve.



Tank isolator valve in open position (black handle pointed horizontally).



Exterior tank drain, located under the driver's door step.



Tank selector valve in interior tank position, with the colored plastic handle pointed toward the front of the Roadtrek.



Tank selector valve in exterior tank position (colored plastic handle pointed toward driver's side of Roadtrek).

HOW TO: Summer and Winter Mode

- Open the lid on the water heater enclosure by removing the side bench's cushion and table to expose the hinged lid. Undo the two Robertson head screws to raise the lid.

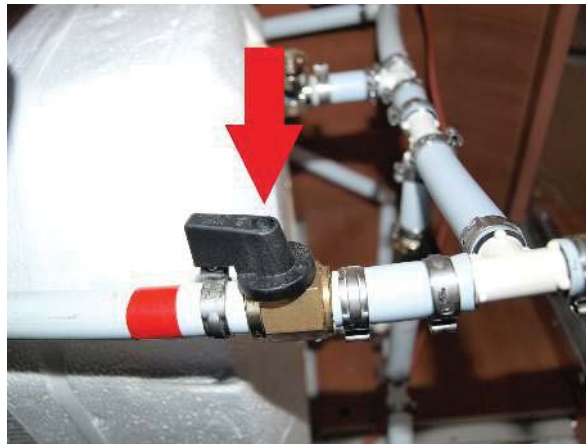


Water heater enclosure



Screw to remove in order to lift lid

- Open the two shutoff valves going to the outside shower, and close the outside shower faucet after running water through them briefly to flush air and any contaminants.



Hot water shutoff valve, shown open



Cold water shutoff valve, shown open