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RV Winterizing Guide

Antifreeze & Compressed Air Methods

A practical, easy-to-follow guide for protecting your RV fresh-water system before freezing temperatures arrive.

Before You Start

- Use only RV/Marine antifreeze in the plumbing system.
- Turn the water heater OFF and allow it to cool completely before draining or servicing it.
- Turn off the water pump and disconnect or shut off the city-water supply.
- On-demand water heaters and specialty appliances may require their own winterizing procedure.
- If your RV has an icemaker, washer, dishwasher, refrigerator water line, or other water-using accessory, follow that manufacturer's instructions.

Choose Your Method

Method 1 RV Antifreeze	Method 2 Compressed Air
Pumps RV antifreeze through the pressurized plumbing lines and protects the system for storage.	Uses regulated compressed air to remove water from the plumbing lines, followed by RV antifreeze in the P-traps and toilet.

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Method 1: Winterizing with RV Antifreeze

This method uses the RV water pump to draw RV antifreeze through the fresh-water plumbing system.

1. Drain and Flush the RV Water Heater

Turn the water heater **OFF** and allow it to cool completely. Turn off the water pump and disconnect or shut off the city-water supply.

Once the water heater is cool and isolated from the water supply, carefully open the pressure-relief valve to release any remaining pressure.

Remove the drain plug or anode rod and allow the tank to drain completely.

- **Atwood / Dometic:** Remove the drain plug or cap.
- **Suburban:** Remove the anode rod. A 1-1/16" socket is commonly required.
- Flush sediment from the tank with water or a flushing wand if desired.
- Inspect the anode rod and replace it in the spring if needed.

Never remove the drain plug or anode rod while the water heater is hot or under pressure.

2. Bypass the Water Heater

Make sure the water heater is in **bypass mode** before pumping antifreeze through the plumbing system.

This prevents the water-heater tank from filling with several unnecessary gallons of antifreeze. Many RVs already have a bypass system installed.

The bypass valves are usually located at the rear of the water heater and accessed through an interior cabinet, panel, or service opening.

3. Drain the Fresh-Water Tank and Low-Point Drains

Open the fresh-water tank drain. If your RV has low-point drains, open them as well.

Open the faucets so air can enter the plumbing system and help the water drain more quickly and completely.

Once draining is complete, close the faucets and close or reinstall the low-point drain fittings as needed.

4. Set Up the Water Pump Winterizing Hose

Many RVs have a winterizing hose and valve near the water pump. If yours does not, a winterizing kit can usually be installed.

Place the hose into a container of RV antifreeze and position the valve so the pump draws antifreeze from the container instead of the fresh-water tank.

Turn on the water pump.

5. Winterize Exterior Faucets and Fixtures

Start with the lower or exterior fixtures and work your way through the system.

Operate each fixture one side at a time until pink antifreeze appears.

- Outside shower
- Exterior spray port or wash station
- Outdoor kitchen faucet
- Any additional exterior plumbing fixtures

6. Winterize Interior Faucets, Shower, and Toilet

At each fixture, run the **cold side** until pink antifreeze appears, then close it and run the **hot side** until pink antifreeze appears.

Operate the toilet until pink antifreeze flows into the bowl.

- Kitchen faucet
- Bathroom faucet
- Shower
- Toilet
- Any additional sinks or interior plumbing fixtures

7. Drain and Flush the Black and Gray Holding Tanks

Some liquid may enter the holding tanks during winterizing, so many RV owners prefer to do this step near the end.

Drain the **black tank first**, then the **gray tank**. Flush and clean the tanks as needed, then perform a final drain.

8. Protect the P-Traps

Pour a small amount of RV antifreeze into each drain so antifreeze remains in the P-trap.

- Kitchen sink
- Bathroom sink
- Shower
- Any additional drains
- Add antifreeze to the toilet bowl as appropriate to help protect the toilet seal.

Method 2: Winterizing with Compressed Air

This method removes water from the pressurized plumbing lines with regulated compressed air. RV antifreeze is still used in drain traps and the toilet after the water lines are blown out.

1. Drain the Black and Gray Holding Tanks

Drain the black and gray holding tanks before winter storage. Leave them as empty as practical to reduce the chance of freezing damage.

Drain the **black tank first**, followed by the **gray tank**.

2. Drain the Fresh-Water Tank and Low-Point Drains

Open the fresh-water tank drain and any low-point drains.

Open the faucets so air can enter the plumbing system and help the water drain more quickly and thoroughly.

Once the initial draining is complete, close or reinstall the low-point drain fittings as needed for the next steps.

3. Bypass the Water Heater

Place the water heater in bypass mode before blowing out the plumbing lines.

This directs the compressed air through the RV plumbing system rather than through the water-heater tank.

4. Drain and Flush the Water Heater

Turn the water heater **OFF** and allow it to cool completely. Disconnect the city-water supply and turn off the water pump.

Carefully open the pressure-relief valve and remove the drain plug or anode rod so the tank can drain completely.

Flush sediment from the tank if desired.

- **Atwood / Dometic:** Remove the drain plug or cap.
- **Suburban:** Remove the anode rod. A 1-1/16" socket is commonly required.

Never service the water heater while it is hot or pressurized.

5. Open the Faucets and Plumbing Fixtures

Open the faucets inside and outside the RV so as much water as possible can drain naturally before using compressed air.

Operate the toilet until water stops flowing.

- Kitchen faucet
- Bathroom faucet
- Shower
- Outside shower
- Exterior spray port or wash station
- Toilet

6. Run the Water Pump Briefly

Turn the water pump on briefly to help remove water remaining on the pump side of the system.

Turn it off once water is no longer flowing or spraying from the fixtures.

Do not allow the water pump to run dry for an extended period.

7. Connect the Blow-Out Adapter

Install an RV blow-out adapter into the city-water connection.

Connect a regulated air supply to the adapter.

8. Blow Out the Water Lines

Set the air compressor regulator to **30-50 PSI**. Do not exceed the pressure recommended for your RV's plumbing system.

Work through the RV **one fixture at a time**. Open a fixture until water stops spraying and mostly air is coming through, then close it and move to the next fixture.

Repeat as needed until very little or no water comes from the fixtures.

- Cold-water faucets
- Hot-water faucets
- Shower
- Outside shower
- Exterior fixtures
- Toilet
- Low-point drains if appropriate

9. Protect the Drain Traps

Compressed air clears the pressurized plumbing lines, but it does not protect water remaining in sink and shower P-traps.

Pour RV antifreeze into each drain and add an appropriate amount to the toilet bowl to help protect the toilet seal.

10. Final Check

Verify the final positions of the faucets, low-point drains, fresh-water tank drain, exterior fixtures, and water-heater bypass valves.

Make sure the water heater remains turned off for storage.

Keep this guide with your RV.

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