

WAGGONER CRUISING GUIDE

Preparing for Hibernation

As winter approaches and temperatures begin to drop, Pacific Northwest boaters begin to think about winterizing their vessels. Some hire professionals to do the job and others like to invest a little time doing a portion or all of it themselves. Whatever the case, the process is the same.

When winterized properly it will:

- Provide protected from the harsh elements of winter.
- Properly maintained equipment will save you money.
- Gets you boating quicker in the spring.

Generic Checklist

✓ Batteries

- Check for loose or corroded connections and wirings.
- Clean battery terminals and protect with corrosion inhibitor.
- Top-off wet cell batteries with distilled water.

✓ Bilge

- Clean and properly dispose of any oily wastewater.
- Remove and replace any dirty oil absorbent pads.

✓ Bilge Pumps

- Drain water from all bilge pumps and hoses.
- Verify proper operation of all automatic floats, manual on switches and bilge alarms.

✓ Cooling System

- Flush raw water system.
- Shut-off through-hulls.
- Drain raw water side of system and insure there is no water trapped in low area where water could be trapped.
- Check coolant level and strength in the heat exchanger and reservoir.

✓ Dinghy & Outboard

- Remove marine growth.
- Clean inflatable with mild household detergent.
- Apply protective shield to protect from UV rays.
- Change outboard gear case lube.
- On four-cycle engines change crankcase oil.
- Replace raw-water pump impeller.
- Inspect propeller and repair/replace as required.
- Add fuel stabilizer to fuel tank and run motor to circulate through engine.

✓ Engine

- Change the oil and filters to prevent sludge and contaminants from resting in the crankcase all winter. After changing run the engine for five minutes to distribute clean oil throughout the engine.
- Inspect for corrosion, loose hardware, leaks and other issues, all of which should be corrected before winter.

- ✓ **Exhaust**
 - Block exhaust outlets and air inlets to prevent unwanted guest taking up residents.
- ✓ **Exterior**
 - Wash the hull to remove dirt and grime.
 - Detail removing stains and oxidation, then apply a good quality wax.
 - If your teak is finished, apply a couple coats to bare spots. Even if you plan refinish in the spring this will help seal and protect the wood during the winter.
 - Clean all canvas and apply reconditioner.
 - Check that the cockpit drain hoses are in good condition and properly clamped to their fittings.
 - Clean hatches and port seals, then lubricate with silicone grease.
 - If storing ashore and shrink wrapping, ensure robust enough to withstand winter weather and that it provides adequate ventilation, or it becomes a breeding ground for mildew.
- ✓ **Freshwater System**
 - Drain the entire freshwater system (head, galley, ice maker, pumps, low points and hoses) and/or a solution of antifreeze. Draining eliminates the need to flush the system of antifreeze in the spring.
 - Drain the water heater and leave all faucets open.
- ✓ **Fuel**
 - Change primary and secondary fuel filters; check and clear bowls of water and sediment.
 - Top off all fuel tanks to prevent condensation from forming.
 - E-10 gasoline (gasoline containing 10 percent ethanol) requires additives to prevent separation. Once fuel is treated, run engine for 15 minutes to circulate treated fuel throughout the entire fuel system.
- ✓ **Generator**
 - Change oil and filter.
 - Change fuel filter.
- ✓ **Hoses**
 - Check all hoses for leaks or signs of deterioration.
- ✓ **Interior**
 - Remove all food items, bottles or cans containing liquids (which can freeze and burst) bedding and clothes.
 - Clean the refrigerator and leave the door propped open with a tray of baking soda to keep things fresh.
 - Defrost freezer and prop door open.
 - Clean stove, oven, and microwave
 - Store cushions ashore or prop them up to allow air circulation.
 - Prop open locker doors to promote air circulation.
 - Remove all linens, books and anything else that will retain moisture.
 - Clean and drain sink and shower sumps and pumps.
 - If installing a heater or lamp for heat, make sure they are marine grade, with automatic shut-off switches (in case they tip over) and thermostatic control.
- ✓ **Lines**
 - Clean all lines.
 - For storm lines, place chafe protection at fairleads and other high-wear zones.
 - For extra protection secure the boat with a second set of backup dock lines.
- ✓ **LPG**
 - Inspect all fuel hoses for chafe or damage.
 - Close LPG gas valves at the cylinder.

- Conduct a leak test to verify no leaks are present.
- ✓ **Raw Water Strainers**
 - Clean intake strainers.
 - Close through hulls.
- ✓ **Running Gear**
 - Check engine transmission to shaft coupling for loose or missing hardware, ensuring all shaft retaining bolts are secure.
- ✓ **Sails and Rigging**
 - Remove, inspect and bag sails and store at them at home to extend their life.
 - Tie off halyards with bungee cords to prevent them from flapping against the mast.
- ✓ **Sanitation System**
 - Flush and drain completely and/or add antifreeze solution to the entire system.
 - Check all sanitation hoses for leaks, loose hose clamps and permeation. If a hose is suspect, wipe it with a rag dripped in hot water. If the rag fails to pass the sniff test, replace the hose.
 - Replace vent filter.
- ✓ **Shore power**
 - Make sure shore power connections are clean and secure.
- ✓ **Steering**
 - Top-off all fluid reservoirs and inspect system hoses and seals for leaks.
- ✓ **Through-hull Valve**
 - Exercise all valves before closing for the winter.
- ✓ **Transmission**
 - Check fluid levels and change if recommended by the manufacturer.
- ✓ **Zinc**
 - Check cooling system zincs and replace as needed.
 - Make sure there is enough zinc on running gear to last through the winter.

The above in no way should supersede following all layup procedures recommended by the manufactures.

And finally, don't forget about your boat over the winter. It's a good idea to stop by the marina or dry storage periodically to make sure everything is just as you left it, safe, secure and smelling fresh. Regular visits to the boat are a win/win: the boat gets some off-season TLC and you get to dream of summer.

Disclaimer: This information is provided for general boating guidance and maintenance. More in-depth maintenance and any issues need to be discussed with a marine service professional.