



## **TEN HOT TIPS TO PREPARE YOUR BOAT FOR THE COLD WINTER MONTHS**

**Preparation Will Help Ensure Trouble Free Boating Next Spring,  
Say Experts at Sierra International**

It may seem strange, but winter “time off” can be especially hard on your boat. Extended periods of inactivity actually accelerate wear and tear and can contribute to breakdowns next season. Left unchecked, corrosion will spread (remember, rust never sleeps), moisture can intrude and freeze, lubrication can congeal and neglect can take root over the long, cold months. Put another way, if you don’t get your boat ready for storage the “deferred maintenance” of a busy season can come back to haunt you come springtime. The last thing you want to face on that first warm spring day on the water is a broken boat and a hefty repair bill.

For these reasons, it’s vitally important to get your boat ready for that “long winter’s nap” with a proper autumn lay-up. Even if you don’t live in a place where the waters freeze and the snow piles deep on the ground, following these ten tips will keep your boat “ship shape” and ready for action after an extended period of storage.

**1. Start With a Clean Machine.** A clean boat will weather the time off better and will reduce the work necessary when the time comes to take her out again. Wash the topsides, bottom and deck (with a coat of wax on the topsides too) and clean all hardware and trim. Check for any blistering in fiberglass boats, especially for boats that spend extended periods in the water. If any blisters are found, treat and repair these problems. Don’t forget to clean windscreens as well as any bimini tops, spray hoods and the like. Let all canvas dry thoroughly before neatly storing these away. If possible, remove all canvas from the boat and store indoors. A boat that starts its winter holiday

clean will help keep dirt and corrosion from getting a foothold, and will be much quicker to get ready in spring.

**2. Flush the Cooling System.** For inboard and stern drive boats with raw water cooling systems, thoroughly flush the engine with fresh water to remove salt, dirt and corrosion. In extreme climate areas you should also run anti-freeze into the cooling system by attaching a pickup hose from a container of anti-freeze to the motor's water pump or removing the thermostat and its housing and pouring anti-freeze directly into the cylinder block. Outboard motors should be flushed with freshwater and all water should be drained from the engine.

**3. Prepare the Fuel System.** Top off your fuel tank to avoid build-up of condensation over months of storage. Change the fuel filter at the end of the season (if your boat isn't already equipped with one, install a Sierra water separating fuel filter). Add a marine fuel stabilizer (such as Sierra Universal Fuel Stabilizer) to the fuel tank as per instructions to reduce the build-up of gum and varnish, and to keep the fuel and entire fuel system clean during storage. After adding stabilizer to the tank, run the engine for a few minutes to ensure it circulates through the system.

**4. Treat Your Engine Right.** Taking the time to treat your outboard or sterndrive engine will help remove build-up and protect internal engine components during storage. For example, Sierra Carbon Cleaner aerosol is an easy way to thoroughly remove gum, varnish and carbon deposits from internal engine parts; clean intake ports valves, pistons and combustion chambers, and free sticky rings on two- or four-stroke engines. Sierra Combustion Cleaner can also be run through the fuel system to dissolve gum and varnish, remove internal carbon deposits, displace moisture and stabilize fuel during storage. A key component of this off-season regimen is treatment with Sierra Fogging Oil, a specialized storage oil designed to protect the inside of the engine against rust and corrosion. Simply spray the fogging oil through the air intakes while the engine is running. It is formulated to leave a protective chemical film over internal engine surfaces without leaving a greasy residue or causing smoke when the engine is

re-started. It's also a good idea to spray fogging oil on a soft rag and apply a light coat to visible areas of the engine exterior.

**5. Oil's Well That Ends Well.** Every end-of-season checklist should include a healthy dose of lubrication. Change the engine oil and oil filter on stern drive, inboard engines and four-stroke outboards. This should be done after the engine is slightly warmed up to help flush out sediment and impurities with the discarded oil. Refill the engine with the appropriate oil based on manufacturer's recommendations. For high-performance engines, consider using Sierra's new FC-W Synthetic 10W30 engine oil, designed for extended protection under high operating temperatures and extreme conditions. Then move on to draining and re-filling your boat's outdrive gear case or outboard lower unit, as any water or impurities can freeze and expand in cold weather, causing damage. Be on the lookout for water intrusion — which usually causes gear oil to look “milky” and discolored — as you drain the gear case. If moisture is present, this could indicate leaking seals that need to be inspected and repaired.

**6. Lubricate the Little Things.** Don't overlook the many small but critical systems that should be lubricated regularly — especially before long periods of storage. On sterndrive boats for example, make sure to apply marine grease to the fittings on the sterndrive gimbal bearing and engine coupler not forgetting those on the steering tilt tube and engine trim mechanism. Go around the boat and lightly apply a moisture-displacing lubricant to the myriad moving metal parts onboard such as hinges, latches, push-pull switches, linkages, ratchet mounts, bow rollers and the like. For boats on trailers, this an ideal time to grease the trailer wheel bearings using Sierra Wheel Bearing Grease. If you haven't done it at least once during the season, pull and inspect the wheel bearings for wear and water intrusion, and repack or replace as necessary. Remove the propeller to inspect for fishing line and shaft seal damage, then coat the propeller shaft with quality water resistant grease before replacing the propeller.

**7. Check Her Over From Bow to Stern.** This is the best time to catch small problems before they become major ones. Get up close and personal, and use your eyes to visually go over items that can lead to trouble. For example, inspect mechanical

steering and controls for signs of worn cables, broken cable insulation, visible corrosion or rough operation - Teleflex Marine offers a full range of replacement controls and cables. Check fluid levels on hydraulic steering and fill as necessary, while keeping an eye out for signs of leakage around seals and fittings. Visually check fuses and wiring connections, looking for signs of corrosion, loose connections or broken insulation. Inspect fuel lines and cooling hoses for signs of exterior cracking, bulging or leakage, especially around bends, hose barbs and connections. Take particular care to test all hose clamps for tightness and signs of corrosion. Also inspect all engine belts, and if excessive wear or cracking is noted, replace them with Sierra OEM replacement hoses and belts. Check sacrificial zinc anodes and replace those that are more than 50-percent dissolved. Also pay attention to the rubber bellows or “boots” on your outdrive and rigging tubes, as holes in these can allow damaging moisture and dirt to get in.

**8. Don't Give Moisture a Fighting Chance.** Check the bilges, removing any standing water and cleaning up any dirt or oil. Do the same with any lockers, drawers, live wells, fish holds or storage areas. Remove all objects and clean these spaces thoroughly, then place commercial moisture absorbers to eliminate mould and mildew during the long off-season. Remove all cushions, clean them well (especially underneath where mildew tends to form) and prop them up on edge to allow air to circulate.

**9. Remove and Store Whatever You Can.** It's bad to have all the “stuff” onboard your boat subjected to the elements during the off-season. It also can contribute to the gathering of dirt and moisture in your vessel's storage areas. Get those lifejackets, dock lines, fire extinguishers, flares, fenders, ski ropes and the rest of your gear out of the boat and store them indoors over the winter. To protect against damage and theft, any GPS/chart plotters, radar displays, VHF radios and other electronics that are bracket mounted should be removed and the loose cable ends/connectors wrapped in electrical tape. Marine batteries should be carefully removed and stored in a cool, dry location off the ground such as a garage workbench. Clean the battery cable ends and place a light coat of Sierra White Lithium Grease on the cables and the battery terminals. It's a good idea to check electrolyte levels and bring your battery up to full state-of-charge every 30 days during storage. If your boat will be stored on its trailer, block up the trailer axles

and remove the tires to prevent “flat spots” that can occur from sitting for long periods of time, and sidewall cracking from exposure to sunlight, cold and moisture.

**10. Cover Your Assets...and Check Them Often.** The best option is to store your boat in an enclosed, climate-controlled facility. However, this is not practical in many cases. If your boat will be stored outdoors, a good cover is your first line of defence against the elements. In severe climates, many owners choose to have their vessels professionally shrink-wrapped, which is expensive but creates a tight seal against the elements. The majority must make do with covering their boats themselves. A top quality, custom-fitted cover is best, with commercially available supports used to prop up the cover to prevent water from pooling in low spots. Park your boat under a protective canopy or in a garage if possible. If this isn't possible, store it in a location that minimizes exposure to wind, weather, falling leaves and sunlight. Keep the cover clean and free of snow, debris and water — especially after storms — and after checking underneath to make sure everything is OK, tighten everything down.

Use these general guidelines to help tuck your boat in for her winter's nap — and hitting the water next season will be as smooth and easy as a warm spring afternoon.

While these tips will certainly get you started, there will be variations depending on the type of boat you own. Your boat and engine owner's manuals can offer specific recommendations for winter preparation.

In addition, your boat dealer or marine service engineer can offer advice, supplies or even perform many of the more complicated procedures for you.