

CHUBB®

Recreational Marine

Coming Out of Lay-Up

Important Recommendations For Boating Season



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Coming Out of Lay-Up

It's spring - and time to prepare for boating season. If your boat was in lay-up over the winter, you'll need to take care of a few things before it's ready to go. Here are some suggestions from Chubb Recreational Marine Insurance, to help you make sure your vessel is ready for a successful launch and you can enjoy a safe and relaxing season.

Coming Out of Lay-up

As a boat owner, you're responsible for knowing the condition of your boat and its equipment.



Bringing a vessel out of lay-up gives you a great opportunity to perform a thorough inspection before boating season begins. You'll want to check everything that can affect the boat's performance and reliability, as well as things that might affect the safety of those aboard.

Before you launch your boat, be sure to: **Review manuals, instruction sheets and other documents** for details about the vessel and onboard systems, proper operation and maintenance, as well as contact information for manufacturers and suppliers in case you have questions or need parts.

Perform a full inspection of your boat while you do your spring cleaning. Refer to this brochure for details and suggestions.

Before the Launch

Outside the Boat

Rule number one: While working on the hull, always let the yard employees move stands and blocking. If you plan to do any bottom repairs or painting yourself, do not move jackstands or blocking yourself. If you're using a ladder to get onboard, don't forget to secure the top of the ladder to a stanchion or a cleat on deck.

Inspect the Bottom

Check all through-hull fittings and scrape inside their openings. Make sure the bronze is bright and smooth. If any through-hulls are covered by grates, remove the grates to get a good look. Pitting or a pink appearance can indicate corrosion problems. If the struts that support the prop shafts are painted, scrape off a bit of paint so you can inspect them. Be sure all seawater intakes are clear of obstructions.

If you plan to apply anti-fouling paint, do a thorough inspection of the bottom beforehand. If you find any blisters, repair and fair them before painting.

Through-Hulls and Zincs

Check all the through-hulls above the waterline. If any are plastic, shine a flashlight into them and look closely for cracks. White plastic through-hulls deteriorate with sunlight and are under tension from the nuts tightened against the inside of the hull. Cracks are common and can cause sinking. Any questionable through-hulls should be replaced with marine-grade bronze or fiber-reinforced plastic.

If there are sacrificial zinc anodes attached to the hull, they should be removed prior to painting. The hull under the zincs can be painted but do not paint the studs to which the zincs attach. Mask the studs before painting and be sure they are bright and clean before replacing the zincs. It's important that the studs and



the zinc anodes have a good electrical connection. Install fresh zinc anodes if the old ones are half depleted.

There may also be zinc anodes attached to underwater metal parts, like prop shafts, prop nuts, trim tabs, rudders, bow and stern thrusters, and outdrives. Remove them prior to painting, clean the metal surfaces to which they attach until shiny, then install fresh zincs.

Transducers and Running Gear

Inspect underwater transducers for depth sounders, fish finders, and knot meters. The faces of depth transducers should be clean and free of marine growth. Knot meter paddle wheels should turn easily and smoothly. Check with the transducer face manufacturer to see if the faces can receive a thin coat of bottom paint.

Check propellers for damage and straightness. A screwdriver, held tightly against the hull or against a strut, can be used as a reference. Check prop tips, and the leading and trailing edges of each blade. If you find variances of more than about 1/16 inch, have the yard remove the prop for service. Put a light coat of waterproof grease on the shaft taper and key when installing the serviced prop (hint: the narrow nut goes on first).

When the clean, straight props are back on the shafts, check them again. If you still find too much variance, a prop shaft may be bent.

You should have removed the impeller for lay-up. Replace it now, if necessary, and install a fresh gasket before you put the cover back on.

Check shaft bearings for wear. Try to move the shaft up and down. A small amount of movement is okay, but too much slack can mean the rubber bearing is worn out. If you're unsure, ask your yard to check them for you. Also, check the rudders by trying to move the bottom of the rudder from side to side, and up and down. Too much slack can indicate a worn bearing, shaft or support collar.

Inspect swim step supports, trim tabs, thruster grates and boarding ladders. If the ladder is telescoping and mounted under the swim step, be sure it deploys properly. Operate the trim tabs to be sure they have the proper range of motion.

Before the Launch

If it's an open boat and the hull has a drain plug, drain any accumulated water from the bilge, and then put the plug back in place and tighten securely! Many boats sink because a drain plug was overlooked.

Outdrive Hints

Outdrives typically have flexible rubber bellows between the drive and the transom that can be damaged by sunlight, marine growth and chemicals, and eventually wear out from normal raising and lowering of the outdrive. They don't last forever. Inspect them carefully! Raise and lower the drive to see everything. Pay close attention to the "valleys" in the bellows, where cracks often occur. If a bellows looks less than perfect, have it replaced. Failed bellows are a major cause of sinking of outdrive-powered boats!

Run your finger along the edge of the skeg at the very bottom of the drive. If you find any oil, a seal may need to be replaced. Change the oil in the drive. If the oil that's drained out is cloudy or milky, a seal may be failing. Replace bad seals right away, since water in the oil can ruin expensive internal parts.

Important Tips to Remember

If the exhaust ports in the hull are normally plugged to keep critters out during storage periods, don't forget to remove them in the spring. If it's an open boat and the hull has a drain plug, drain any accumulated water from the bilge, and then put the plug back in place and tighten securely! Many boats sink because a drain plug was overlooked.

Check for Leaks

Check all deck hardware for loose or degraded sealant and consider using a garden hose to test for leaks. Service or replace as needed.

You should also use a hose to check the watertight integrity of deck hatches and access ports into below deck spaces.

Inside the Boat

Every through-hull below the waterline must be equipped with a seacock. On a

sailboat, some through-hulls above the waterline may submerge when heeled under sail; those need seacocks, too. Make sure all seacocks operate smoothly and their handles are in good condition. If any of the seacocks are gate valves (with round handles like water faucets, common in older boats) replace them with proper marine-grade seacocks or ball valves that meet ABYC standards (gate valves do not). Some seacocks have grease fittings; lubricate them if necessary.

If the through-hulls are connected with bonding wires, the connections must be clean and bright to work properly. Check the bonding connection to the sacrificial zinc, too.

Inspect seawater intake strainers on engines, generators, air conditioner pumps and any other equipment that requires them. If strainers weren't drained last fall, they could have been damaged by freezing. Disassemble them, clean if necessary, and be sure they go back together properly. Make certain drain plugs are secure, and that gaskets and washers are in good shape. Replace any damaged parts.

On deep-draft boats, some seawater intake systems are fitted with vented loops that prevent siphons. The vents contain small springs and diaphragms that can fail if corroded or if scales have built up. To inspect a vented loop, remove the small fitting at the top of the inverted U-shaped loop. If a vent is plugged or damaged, your engine could drown or your boat could sink.

Hoses and Clamps

Inspect the hose clamps and the hoses attached to all the seacocks and through-hulls. Also look at the clamps on the other ends of those hoses, where they attach to the equipment. If you see any sign of rust, replace the clamp with one that is all stainless (many clamps marked "stainless" have screws that will rust; if a clamp is

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attracted by a magnet, don't use it). Buy replacements from marine suppliers only.

Examine all stuffing box hoses and exhaust hoses, and fill hoses from the decks to the tanks. Exhaust and fuel fill hoses are required to have two clamps at each end, and it's a good idea to have double clamps on every hose that attaches to a fitting below the waterline. When adding a second clamp, be sure there's enough room on the fitting, since a clamp can damage the hose if it only contacts part of the fitting inside the hose.

Suction hoses from seacocks to pumps should be heavy-wall or wire-reinforced, and should stay round when you try to pinch them. Replace any soft hoses in these locations, and any other hoses that show signs of bulging, cracking or damage.

Pickup hoses on non-submersible bilge pumps should be oil-resistant, and should feel firm when pinched. While you're down in the bilges, lift the float switches and make sure your bilge pumps and high-water alarm operate properly. Check the bilge, wiring, and soft goods for evidence of rodents and insects.

Engines and Generators

Engines and generators may have sacrificial zinc anodes in their cooling systems. Check and replace them if necessary. To find them all, refer to your engine manuals or ask your mechanic. These zincs are important! Neglecting them can result in a cooling system failure, which could ruin your engine.

Check all the V-belts on the engines, too. They should be properly tensioned and in good condition. If you're not sure if the belt is in good condition, take it off the engine, turn it inside out, and bend it sharply. Replace it if you see any signs of cracking. A full set of belts should be

carried in your spares kit, along with extra fuel filters and other service parts.

If the knotmeter transducer is removable from its through-hull, pull it out and inspect the O-rings. Turn the unit on and have a helper watch the display while you give the paddlewheel a spin to be sure it's working. Apply a light coat of waterproof grease to the O-rings and be sure the transducer tube is clean before reinserting the transducer.

If the water-lift exhaust muffler on a generator or sailboat engine was drained last fall, remember to put the drain plug back in place! All mufflers should be inspected for signs of rust or peeling paint, which can indicate a dangerous exhaust leak.

Steering Gear

Operate the steering gear lock-to-lock. If it's hydraulic, make sure it's firm against the stops. If it's cable steering, make sure there's no slack. Have a helper turn the wheel while you observe the rudder gear at the stern. Make certain that all fittings are tight, and that there's nothing stowed near the rudder gear.

Batteries

If you removed the batteries for winter storage, clean the terminals and the clamps on the cables before you connect them. Pay attention to polarity. Be sure the batteries are fully charged.

During the Launch



You, or someone else who knows the boat, should be there when she is launched.

As the weather warms up, boatyards become very busy, often launching several boats an hour. When they're extremely busy, yard employees may not take the time to properly check for leaks after the boat goes in the water. You, or someone else who knows the boat, should be there when she is launched.

Check for Leaks

As soon as the boat is in the water, get below with a bright light and check for leaks. Remember to check prop shaft and rudder stuffing boxes.

For Sailboats

If your sailboat's mast was removed for winter storage, the yard will usually step it when the boat is in the water. It's easy to get the rig ready for sailing if you remembered to measure the turnbuckles, and to inspect all the standing and running rigging last fall. Be sure all turnbuckles are secured with cotter pins once the rig has been tuned.

Start the Engine

Before you start an engine, be sure the seawater intake seacock is open. As soon as the engine is running, check for exhaust water flow.

As you move the boat to her mooring, watch the temperature gauge to make sure the engine's cooling system is working properly. If an engine won't start right away, don't crank it for very long; water can collect in the muffler and drown the engine.

Before the First Voyage

Make sure all windows, portlights and hatches are secured, and give the boat a thorough washing. As soon as you're done, go below and look for leaks.

Be in Ship-shape

Now that the boat is on her mooring or in her slip, check everything before you depart on your first cruise. Start on the foredeck and work your way aft before going below.

Anchors and Mooring Lines

Be sure the anchor and rode are secured properly and ready to use. The "bitter end" of the anchor line must be attached to a strong point inside the boat. All shackle pins must be secured with seizing wire. If there's a windlass, make sure it works properly.

Replace any mooring lines, fenders and life-ring lines that are suffering from chafe or sunlight damage. If the boat is kept on a mooring, pay extra attention to the mooring bridle.

If the boat has wire lifelines, be sure they are properly secured and tensioned. If you see cracks in vinyl wire covers, or rust or cracks at end fittings, replace the wire. Be sure pulpits, stanchions and ladders are secure and in good repair, and all setscrews are tight.

Rig Deck Canvas and Check for Leaks

Set up and inspect all of the canvas.

Make sure all windows, portlights and hatches are secured, and give the boat a thorough washing. As soon as you're done, go below and look for leaks using a garden hose to check the watertight integrity of deck hatches and access ports into below deck spaces.

Don't forget to look at chainplates on sailboats. Use a good light and look at as much of the hull-to-deck joint as you can see. Make a note of any leaks you find, so they can be repaired before the next storage season. Remember that water may be getting into the boat some distance away from where you find it

inside. Chasing leaks can involve some careful detective work.

Check Your Shore Power

Before you plug into shore power, inspect the ends of the cord and the receptacle that's mounted on the boat for any signs of heat damage. Replace anything that's not in like-new condition.

Plug the boat in, turn on the battery charger and be sure the voltage rises in the batteries. Be sure battery water levels are correct. If the charger is portable, don't leave it connected when you're not aboard. After dark, make sure the running and anchor lights work.

Engines and Generator Check

Start engines and generators, warm them up thoroughly, and change the oil and filters. This should be done even if oil was changed last fall, since condensation will contaminate the oil over the winter.

While you're warming up the engines, check the battery voltage. If alternators are working properly, a 12-volt system will charge at close to 14 volts. Also, while engines are running, inspect fuel, cooling and exhaust systems for leaks and correct any leaks you find, no matter how minor. Be sure fuel filters are clean.

Check engine mounts and make sure all locknuts are tight. Since you checked the prop and shaft condition prior to launch, any vibration you notice while underway may mean an engine needs aligning. Alignment can change when motor mounts are new since they settle as they "break in," so it's important to monitor alignment for the first few seasons on a new boat or after a repower. Alignment can't be checked when the boat is hauled out; the hull will change shape slightly when it's in the water. After the boat has been afloat for a day or two, alignment can be checked with a feeler

Spend time checking everything before your first cruise. Begin on the foredeck and work your way aft, before going below.

gauge between the halves of the output coupling. There should be less than one thousandth (.001) of an inch of tolerance per inch of coupling diameter. It takes experience and special tools to move engines into proper alignment, so this may be a job for your mechanic.

Water Tanks and Heater

If the domestic water and waste systems were winterized, they will need draining and flushing, and any fittings that were disconnected will need to be secured. When the tanks are full and the system is pressurized, check all the fittings for leaks.

If you have a propane system, open the valve on the tank, turn on the remote solenoid switch if there is one, and light a burner on the stove. Then turn off the burner, leave the remote switch on and go back to the locker. Note the reading on the pressure gauge and close the valve on the tank. Wait 10 minutes and look at the gauge again. If there's any change in the reading, there's a leak somewhere. Use soapy water to find the leak; never use a flame!

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Now that you've done your spring chores, you can spend a relaxing season enjoying your boat. Keeping a few final tips in mind can help throughout the season and as you prepare for lay-up later in the year.

- Check the lifejackets, flares and first-aid kit to make sure you and your boating companions will be safe while onboard

your vessel. Be sure the horn, running lights, anchor light and searchlight work properly.

- Check the fire extinguishers and have them serviced or replaced as needed, and change the batteries in the smoke and CO detectors, and emergency radio beacon (EPIRB) if you have one.
- Make certain the boat's registration or documentation is current, and that all the required papers are onboard.
- Start a "punch list" of things that will need attention before the end of the season.
- Inventory all equipment, personal items and outfitting onboard, and update it during the season.
- Replace anything that's missing, damaged or out of date.

Before you haul out at the end of the season, remember to ask your insurance agent for a copy of Chubb's *Going into Lay-up* brochure or visit www.chubb.com/boatandyacht to view and download this brochure and many others.

Have a great summer of safe boating!

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