

Daily

- Test engine controls before you leave the dock;
- Test all your electronics and do a radio check;
- Test interior lights, horn, and spotlights;
- Test all engine alarms and high water alarms;
- Check fluid levels such as fuel, lube oil, coolant, reverse gear and PTO oil, power steering, battery electrolyte, and hydraulic fluid;
- Check and test batteries for starting and air compressor for air start;
- Check engine while it's running for proper operation, as well as fluid leaks, belt drives, and electrical connections;
- Grease the main shaft bearing;
- Check drip rate at the propeller shaft and rudder post packing glands;
- Make sure the bilges are dry and bilge pumps are functioning properly;
- Secure all equipment and watertight closures;
- Activate the steering system, turning from full right and left rudder; and
- Inspect all navigation lights.

Weekly

- Inspect all deck machinery for leaks, bearings, and wear;
- Grease winches, controls, bearings, and blocks;
- Inspect for fuel leaks;
- Check fluid levels for the main engine and genset expansion tank;
- Check primary fuel filters (Racor);
- Check and test all batteries and chargers;
- Check operation of auxiliary generators;
- Check that all PTO shutoffs are functioning properly;
- Check hydraulic system for leaks; and
- Perform a visual and operational check of the electronic systems.

Monthly

- Test all vessel lights – deck, interior, backup, gauges, dash, alarms, etc.;
- Inspect emergency equipment for operational status and expirations – flares, life raft, EPIRB, hydrostatic releases, life buoys and lights, immersion suits and lights, fire extinguishers, hand-held VHF, and batteries;
- Change oil and oil filters for main engine (max 400 hours);
- Change oil and oil filters for auxiliary gensets (max 250–300 hours);
- Change fuel filters for main engine and gensets;
- Change air filter;
- Check for corrosion of machinery, equipment, and compartments;
- Inspect the condition of steering gear, rudder, packing gland, bearings, and bearings and bushings on hydraulic rams;
- Check net drum chain stops;
- Check brakes, clutch, and controls on winches and hoisting systems;
- Inspect all lines, hooks, and main wire for wear;
- Inspect compartments for leaks;
- Check for exhaust leaks and carbon buildup; and
- Inspect all hose connections, secure with two hose clamps, and tighten all hose clamps.

Quarterly

- Inspect electrical system wear and chafing;
- Inspect battery connections and look for corrosion;
- Inspect belts for alternators and pumps and replace if necessary;
- Inspect gearbox oil filter;
- Inspect fuel lines – suction and return – for leaks;
- Change sight gauges (plastic tubing) on fuel tanks, lube tanks, and fresh water expansion tanks;
- Clean strainers on suction line to all compartments;
- Clean out fish hold and shaft alley bilge;
- Inspect all deck plates, hatches, doors, and windows for watertight integrity;
- Check condition of nonskid coatings;
- Change fresh water filter for potable water system;
- Inspect hydraulic hoses and connections for wear and corrosion;
- Inspect and replace zincs in saltwater plumbing; and
- Have a diver inspect zincs, propeller, rudder, through-hull fittings, strainers, keel coolers, and transducers.

Semiannually

- Change hydraulic system filters;
- Change the oil on air compressor motor;
- Clean out crankcase breather fittings and line;
- Inspect the hull structure for cracks and corrosion;
- Inspect all rigging, shackles, blocks, stays, and turnbuckles;
- Inspect blocks, bushings, and shivs for wear; and
- Visually inspect watertight bulkheads and fittings.

SAFE BOAT - SMART BOAT



by Fred Mattera

SAFE BOAT — SMART BOAT Checklist

Conduct your inspection and maintenance activities according to the following schedule.

