

SAN JUAN SAILING

ANNUAL PREVENTIVE MAINTENANCE SCHEDULE FOR 2012 SEASON

Responsibilities:

After the owner and maintenance professional have agreed who will do each task, the maintenance pro will check "M" (maintenance pro) or "O" (owner) by each task AND the maintenance pro will deliver the PMS to our Fleet Manager (Tim Hoving) who will place the ORIGINAL "official working copy" of this checklist in the Charter Guest Reference Notebook (at the end of 3-ring binder section). After each task is completed, the person completing the task is to record their initials & date on the "official working copy" onboard the vessel.

IMPORTANT:

Both owner and maintenance pro are responsible to keep this "official working copy" (located onboard the vessel) up to date with initials & dates for SJS's fleet manager to monitor throughout the off-season. Status of completion of each task vis-à-vis the due dates will be reported to Roger Van Dyken (owner) and Rick Sale (general manager).

For Charter-Ready Certification:

Vessels are eligible for charter only when 100% of the required tasks are completed...as indicated by initials & dates recorded next to each task. On due dates (below), SJS's fleet manager will review the status of initials & dates to assure that preventive maintenance is being accomplished in a timely fashion per this required schedule.

Boat Name: _____ Maintenance Pro: _____

FALL 2011: Complete no later than December 31, 2011, or earlier for freeze damage control, all required tasks below:

1. **M** **O** Date & Initial: _____ Add green (always on), yellow ("on" only when needed) and red (never touch) "dot" labels by all circuit breaker switches.
2. **M** **O** Date & Initials: _____ Apply two coats varnish/Cetol/polyurethane to exterior teak. Renew areas as necessary. (Starting in September, look for first good weather window and schedule break.)
3. **M** **O** Date & Initial: _____ Check with owner regarding fall/winter use of vessel before removing sails. Unless sails are less than 3 years old, remove sails and deliver to sail maker/loft for annual inspection and repair, and ask sail maker to ensure minimum three tell tales on both main (leach) and two on jib (luff). Pick up sails and store onboard in v-berth, making sure sails are not touching the overhead or ceilings for good ventilation.
4. **M** **O** Date & Initial: _____ Inspect dodger for signs of deteriorating stitching, pulled-out grommets, loose or missing snaps (male and female), strap and buckle failures. If any issues are detected, remove dodger and deliver to canvas specialist for detailed inspection and repair. Pick up dodger and store onboard below decks, making sure dodger is not touching the overhead or ceilings for good ventilation. (Recommend removing and storing all dodgers below decks.)
5. **M** **O** Date & Initials: _____ Lift all floorboards and thoroughly clean bilge of dirt, hair, crumbs, odors and mildew (all compartments). Consider using enzyme-action cleaners. (Vinegar/water solution is inadequate to reduce odors that build up in bilge.)

6. **M** **O** **Date & Initial:** _____ After thoroughly cleaning center bilge area with fresh water and keel bolts with fresh water, soap and bronze brush, dry and coat all “naked metal” keel bolts/nuts (those without paint or fiberglass coatings) with *LANOCOTE* as a moisture barrier to inhibit “pink” pigment electrolysis corrosion and rust.
7. **M** **O** **Date & Initial:** _____ Check smooth operation of the Y-valve(s). If any are stiff, lubricate or replace.
8. **M** **O** **Date & Initial:** _____ Check ports and hatches for leaks. Reseal where necessary. Clean and coat opening port and hatch gaskets with talcum powder.
9. **M** **O** **Date & Initial:** _____ Ensure cabin is properly vented, heater(s) set properly, cushions lifted or removed, drawers/doors open for ventilation to prevent mildew.
10. **M** **O** **Date & Initial:** _____ Before first predicted freeze, drain fresh water tanks, scrub interior (if accessible) to remove algae, rinse, treat with bleach solution to prevent algae build-up. Then, after a few hours, drain to prevent freezing.
11. **M** **O** **Date & Initial:** _____ Before first predicted freeze, check antifreeze level and freezing point in engine, genset (if applicable) and diesel furnace hot water cabin heat system (if applicable). Add protection if necessary. Test with PH test strips (bought in bulk from Owners Consumables Fund), and add corrosion inhibitor to heating system and/or engine(s) as necessary.
12. **M** **O** **Date & Initial:** _____ Before first predicted freeze, close all seacocks below waterline except engine and genset (if applicable) for winter months to minimize danger of seacock, pipe and hose freezing.
13. **M** **O** **Date & Initial:** _____ Before first predicted freeze, treat toilets(s)/head system with a liming solution (salt water head systems only). Two options to do this:

UNCLORIC ACID (Option #1): Mix one bottle unchloric acid powder (available from SJS Owners Consumables Inventory) in gallon warm water. Pour into toilet bowl. Leave for 48 hours; then pump sequentially through hoses and holding tanks at 48 hour intervals to remove salt buildup.

MURIATIC ACID (Option #2): Pour mixture...two gallons water, one quart acid (available from SJS, Owners Consumables Inventory)...into the bowl. When fizzing stops in a few minutes, pump on dry-bowl setting until bowl is empty. Wait a few minutes, pump 10 times on wet setting, to move acid into discharge hose. Wait a few minutes and pump 10 times on wet-bowl setting to thoroughly flush system. Depending on condition of system, another acid flush may be needed. Pump out tank. (Especially important if Stainless Steel tank.)
14. **M** **O** **Date & Initial:** _____ After flushing holding tank(s) thoroughly, add prescribed amount of “No Flex Digester” (follow directions on container) into toilet and pump 20 times on wet-bowl setting so solution reaches holding tank. This will foster bacterial growth to eliminate “fecal lard” build up in the bottom of the holding tank(s). Then pump on dry-bowl setting to clear toilet of all standing water. Add RV antifreeze and flush on dry-bowl setting to flush solution into toilet fixture(s).
15. **M** **O** **Date & Initial:** _____ Test the electric and manual bilge pumps to ensure they pump water. (Rebuild/replace if necessary.) Protect manual pump(s) from freezing.
16. **M** **O** **Date & Initial:** _____ Before first predicted freeze, “pickle” watermaker (if applicable).
17. **M** **O** **Date & Initial:** _____ Check battery voltages (with charger “off”) and, on unsealed batteries, the water level. Load test all batteries, replace if necessary. Assure the connection is tight and is coated with silicone grease. Turn charger back “on”.

18. **M** **O** **Date & Initial:** _____ Check shore power cord connection (male end, at dock box) for signs of black electrical arcing on prongs or prong holes. If present, cord has a short inside...replace! If okay, lubricate prongs at vessel's electrical receptacle and at end of cord with dielectric silicon grease and re-plug into boat and dock box. (Turn dock box power breaker "on" and vessel's charger breaker "on".)
19. **M** **O** **Date & Initial:** _____ Check seals / O-rings on deck filler caps. If deteriorated, repair to prevent leaks (especially water into diesel tank and contamination into fresh water tanks). Make sure safety chains are attached to caps. Lubricate with NSF-approved SUPER LUBE.
20. **M** **O** **Date & Initials:** _____ Replace raw water impeller in engine, and generator (if applicable). NOTE: For Volvo and Perkins diesels, replace every 200 hours.
21. **M** **O** **Date & Initials:** _____ Every year, replace primary fuel filters (2 micron) on engine and genset (if applicable), bleed fuel system and assure no air locks, test for proper operation and no leaks.
22. **M** **O** **Date & Initials:** _____ Check belts for tension (1/2 inch deflection) and wear (look for black powder and cracks in belts). Adjust or replace.
23. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** **Date & Initial:** _____ **No one** Pick up oil sample kit from NAPA (best price). Take oil samples (old oil, before change) from main engine, transmission, and genset (if applicable) and submit to testing service for analysis and recording in oil sample log. Report any problems to owner and SJS.
24. **M** **O** **Date & Initial:** _____ If not changed for past 12 months, change oil (recommend Delo 400 15/40) in engine and in genset (if applicable).
25. **M** **O** **Date & Initial:** _____ Change transmission oil. IMPORTANT NOTE: Check with engine manual to be sure the proper transmission oil is used for individual makes/models.
26. **M** **O** **Date & Initial:** _____ Check all bolts, screws, hose clamps, engine fittings for tightness.
27. **M** **O** **Date & Initial:** _____ Check hoses for wear (i.e., chafe, cracking, swelling and general deterioration). Replace as necessary. Add chafe guards as necessary.
28. **M** **O** **Date & Initial:** _____ Wipe engine and mechanical components in engine compartment with oily cloth to remove dirt and grease (use degreaser if necessary). Remove any rust, spot paint engine and other components if necessary for "like new" appearance. Coat engine with *WD-40* or *BOE SHIELD* anti-corrosion spray.
29. **M** **O** **Date & Initial:** _____ At end of season, make sure fuel tanks are full. Add STANADYNE (1 oz per 4 gallons) and Racor Biocide (1 oz per 40 gallons "shock", per 80 gallons maintenance).
30. **M** **O** **Date & Initial:** _____ 1) Remove floorboards or inflatable floor from inflatable dinghy, if applicable. Thoroughly wash sand/rocks from inside hull. If wood floorboards/transom, check condition and, if needed, re-varnish or repaint each with *PETTIT EZ-POXY* paint (gray recommended). 2) If inflatable, re-insert floorboards and re-inflate dinghy, verify leak-free. (If dinghy leaks air, spray bottle of soapy water to find leak and repair.) 3) Clean with *SUPER CLEAN* (NOT acetone) or *SEA POWER* cleaner/wax. Protect with *303 AEROSPACE PROTECTANT* or *ISLAND GIRL* protectant or *FLEET WAX*. 4) Store in dry storage, or upside-down on dinghy cables at slip or on dinghy rack, secure for winter.
31. **SJS** **ONLY** **Date & Initial:** _____ Take outboard to West Coast for service (at group rate).

32. **M** **O** Date & Initial: _____ Inspect BBQ and replace any worn parts, remove from rail and stow in cockpit locker for winter protection.
33. **M** **O** Date & Initial: _____ Affix nylon string or wire tie to dorade vents (if applicable) to prevent loss.
34. **M** **O** Date & Initials: _____ Remove and check exterior ignition control panel for water intrusion, loose wires and corrosion, spray with *WD-40* or *BOE SHIELD* anti-corrosion spray to prevent corrosion/rust.
35. **M** **O** Date & Initial: _____ Confirm all stanchions secure. If stanchions have tension bolts for uprights, check bolt tension. (If loose, apply *LOCTITE* and retighten.) Confirm lifeline gates and latches operate smoothly, lubricate. Tension any cables between stanchions as required for tightness and safety. Check for rust at life line fittings (replace when necessary). Inspect (and replace if needed) ring cotter pins.
36. **M** **ONLY** Date & Initial: _____ Remove compass cover, pedestal bearing brake drum, lubricate steering chain and shaft(s) with PTFE grease. Grease pedestal shaft(s) bearings with suitable lubricant. Inspect and lubricate steering quadrant sheaves (if applicable) with PTFE grease. Below decks, check cables for tension and wear. Replace cables if worn. To prevent slacking, tighten all bolts/nuts and (if re-tensioning is indicated) apply medium-hold *LOCTITE* to threads of double nuts, then tighten.
37. **M** **O** Date & Initial: _____ Check throttle and shift controls and cables. Lubricate, adjust or replace, as needed. NOTE: Consider spare cables (appropriate length) be onboard.
38. **M** **O** Date & Initial: _____ Lubricate and inspect anchor windlass. Check electrical connections and ground wire attachment bolt for tightness.
39. **M** **O** Date & Initial: _____ Assure that there is a shackle between anchor and swivel connector to chain. Tighten shackle pin and secure with seizing wire, including on shackle at chain's bitter end.
40. **M** **O** Date & Initial: _____ Inspect bulkheads, tables, galley fiddles, doors, companionway stairs and cabin sole. (Expect to re-varnish sole annually.) Renew to "like new" varnished and/or oiled finish. Replace non-skid on companionway steps if worn.
41. **M** **O** Date & Initial: _____ Assure "stop knots" at end of all halyard and all sheets are secured with zip ties or needle and thread. (Exception: Sheet that must be removed for spinnaker.)
42. **M** **O** Date & Initial: _____ **Every 5 years**, replace non-PVC head system waste hoses. Use PVC pipe wherever possible, and top-quality thick-wall hose where necessary. If "premium" hose (e.g. Trident) is used, please change hose replacement interval to every 10 years. (Also, any lengths of PVC pipe can follow the every-10-year replacement interval.) Use two stainless hose clamps on all hose connections. Note: Write on hose (inside a compartment, but visible when compartment is opened) with indelible marker both "hose installed (00/00)" AND "change on (00/00)" (5 or 10 years hence).

43. **M** **ONLY** Date & Initials: _____ **Every 5 years**, thoroughly service the diesel cabin heater. (Follow service manual.) Or subcontract task to authorized service technician or company.

WEBASTO (use certified Webasto technician only):

- **Forced Air System: Annually**, inspect/replace filter, check lint/dust around cowling, check ducting, check exhaust and exhaust blanket. Test run for 1-2 hours. (In addition **on odd numbered years**, open unit, clean and inspect, evaluate seals.)
- **Hydronic System: Annually**, inspect/replace filter, check pH balance, check fans, check exhaust, quick air bleed, blow coils out, quick check combustion tube (clean as necessary). Test run for 2-4 hour. (In addition **on odd numbered years**, change fuel nozzle, change water conditioner filter, wipe photo eye clean, clean electrodes, pull combustion tube out and wire brush clean.)

44. **HIGHLY RECOMMENDED (BUT OPTIONAL):** **M** **O** Date & Initial: _____ **No one** On all holding tanks, use 1" vent hoses (replace fitting to larger 1" if necessary) to prevent overflow clogs (debris) in the vent hoses leading to "vacuum lock" which prevents/hinders holding tank discharge, and for odor abatement (microbes in tank need lots of oxygen).

45. **M** **ONLY** Date & Initials: _____ Inventory tools in onboard toolbox against SJS's required Tool List. Purchase and/or replace tools as necessary. Wipe down all metal tools and parts with WD-40. NOTE: Maintenance professional is required to confirm to SJS that all required tools are aboard.

46. **M** **ONLY** Date & Initials: _____ Inventory spare engine parts against SJS required "Engine Spares" (see and check off list below). Purchase and/or replace engine spares as necessary. Place items in plastic (e.g., Sterilite) box labeled "Engine Spares". NOTE: Maintenance professional is required to confirm to SJS that all required engine spares are aboard.

47. **M** **ONLY** Date & Initials: _____ Inventory general spare parts against SJS required "General Spares" (see and check off list below). Purchase and/or replace general spares as necessary. Place items in plastic (e.g., Sterilite) box labeled "General Spares". NOTE: Maintenance professional is required to confirm to SJS that all required general spares are aboard. OWNERS: Location of general spares must be clearly indicated in Notes from Owner, under "S" for "Spares Parts".

(See next page for required tools and spares – check off that all are aboard)

Assembled in BOX with clear plastic cover labeled: “Engine Spares”

- Spare fuel filters for engine, generator (if applicable)
- Spare filters for watermaker (if applicable)
- Spare belts for engine, and generator (if applicable)
- Spare impellers for engine, and generator (if applicable),
- Spare impeller plate gaskets
- Minimum of a half dozen 12” zip ties

In a compartment (with location noted in you Owners Notes):

- 1 quart each spare oil for engine, and for generator (if applicable)
 - 1 gallon of appropriate engine coolant (NOTE: Not automotive engine coolant.)
 - Battery water (distilled) – write “for batteries” on container

 - Replacement head pump (for manual pump toilets only) / plus a dozen pairs of surgical gloves
- OR**
- If you have a VacuFlush head, 4 duckbill valves per toilet plus on bowl seal and one ball valve assembly.

Assembled in BOX with clear plastic cover labeled: “General Spares”

- Minimum of 2 spare light bulbs for each type of navigation and cabin lights
- Minimum of a dozen 12-inch zip ties
- 2 hose clamps for each size fitting
- 6 cotter rings, various sizes
- Various screws, nuts, bolts
- 2 spare lifeline pins – clevis pins
- Spare stanchion tensioning screws (if applicable)
- Whipping twine for end of sheets
- Stainless seizing wire
- Sail repair needles and thread, sail repair tape

If applicable, assembled in BOX with clear plastic cover labeled: “Hydronic Heater Spares”

- Coolant conditioner filter
- Fuel Nozzle
- Photo eye

Maintenance Professional (initials) & Date: _____

“WINTER WATCH” STORM CHECK

October - April DURING AND AFTER STORMS: Complete 1-5 below.

Date & Initials: _____	Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
Date & Initials: _____	Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
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Date & Initials: _____	Date & Initials: _____	Date & Initials: _____	Date & Initials: _____

1. **M** **O** Check bow, stern and spring lines for wear, alter/replace (add chafe guards) as needed. Recommend double bow lines to the finger pier cleat for added holding in storms.
2. **M** **O** Check fenders for placement, pressure, wear. Reposition, inflate or replace as needed.
3. **M** **O** Assure dinghy remains secure.
4. **M** **O** Check power cord (make sure it's out of the water). Check power is “on” and charger is “on” in the boat.

If severe freeze is predicted:

5. **M** **O** Confirm anti-mildew heater(s) “on”. While below, inspect for mildew, clean if necessary. Adjust temperature setting to higher-heat setting. IMPORTANT: Following freeze, lower temperature!

MONTHLY OFF-SEASON: Complete 1-7 below.

Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
Date & Initials: _____	Date & Initials: _____	Date & Initials: _____

1. **O** **ONLY** Date & Initials: _____ If owner, against SJS’s advice, chooses *not* to store sails for the winter, deploy all furling sails and let air dry for 1-2 hours to prevent mildew.
2. **M** **O** Start main engine and genset (if applicable), run under load up to operating temperature to prevent corrosion of cylinder walls.
3. **M** **O** Run diesel cabin heater (on highest setting) for a minimum of 30 minutes.
4. **M** **O** Run refrigerator and freezer (if applicable) for a minimum of 30 minutes.
5. **M** **O** If necessary (varies by vessel...check with maintenance pro), inspect and replace engine and genset zincs. (If monthly checks reveal a slow rate of deterioration, then less frequent checks okay.) List comments below:

6. **M** **O** Check bilges. Operate bilge pumps and float switches. (Repair/replace if necessary.)
7. **M** **O** Rotate rudder post to lubricate shaft and reduce exacerbated passive electrolysis.
8. **M** **O** Conduct security check for entry, missing major equipment, damages. (Notify SJS if problems.)

ANNUAL HAUL-OUT

Complete all required tasks no later than March 15, 2012, in preparation for the April 15 “charter-ready” deadline (and CharterFest in early April).

NOTE: If you would like your vessel eligible for “spring break” (mid-March) charters, please be sure to schedule your annual haulout in fall 2011. Consult with your maintenance professional.

1. **M** **O** Date & Initials: _____ Schedule boat for haulout with yard and deliver to yard.
2. **M** **O** Date & Initials: _____ Pressure wash bottom.
3. **M** **O** Date & Initials: _____ Check hull and keel for damage. Check running gear for damage: shaft(s), strut(s), prop(s), rudder(s). Report any damage to SJS. Arrange for any necessary repairs after consulting with SJS. (SJS expense if could be detected by diver, unless caused by owner.)
4. **M** **ONLY** Date & Initials: _____ Evaluate condition of bottom paint. Complete 5 and 6 below, or comment below. Note: ablative paints recommended; after several years or coats of ablative, occasionally repainting may not be necessary.

Maintenance Professional’s Paint Condition Evaluation/Comments:

-
-
-
5. **M** **O** Date & Initials: _____ Sand or rough up existing paint surface (where needed) to prepare for fresh coat of bottom paint. Wipe surface with Acetone prior to painting.
 6. **M** **O** Date & Initials: _____ Obtain and mix paint (ablative recommended), tape waterline with special painter’s tape, then paint bottom. Add a second coat from the water line down 2 feet and on all leading edges.
 7. **M** **O** Date & Initials: _____ Sand propeller shaft(s) and propeller(s) with #400 sandpaper. Service folding prop (if applicable).
 8. **M** **O** Date & Initials: _____ Replace all zincs.
 9. **M** **O** Date & Initials: _____ Inspect fiberglass on hull and deck for any blisters.
 10. **M** **O** Date & Initials: _____ Rub out hull gelcoat scratches with rubbing compound and power buffer. Inspect for chips and scratches through the gelcoat. (Report any chips/scratches to SJS. Arrange for any necessary gelcoat repairs after consulting with SJS -- SJS expense, unless caused by gelcoat voids or by owner.)
 11. **M** **O** Date & Initials: _____ For non-painted hulls: Wash, buff (lightly with buffing compound) and wax hull. Polish until a sheen. For painted hulls: Wash and (optional) apply paint brand’s recommended restorative/protectant. If owner does work, maintenance pro must inspect for quality control -- Maintenance Pro Initials: _____ (NOTE: Wait until late March to buff / wax of smooth surfaces on deck and coach roof. Do NOT wax non-skid areas!)
 12. **M** **O** Date & Initials: _____ Operate all seacock valves. If stiff and do not open/close easily, disassemble, clean, emery cloth any scratches, grease and reassemble OR replace. On the interior, yank on seacock to check integrity (not to exceed 50 lbs force). On exterior, tap seacocks with screwdriver and hammer—if pink pigment, replace seacock.

13. **M** **O** Date & Initials: _____ Check condition of cutlass bearing for excessive or uneven wear, replace if necessary.
14. **M** **O** Date & Initials: _____ Evaluate rudder play. If excessive, find cause and correct.
15. **M** **O** Date & Initials: _____ If needed, repack rudder packing gland.
16. **M** **O** Date & Initials: _____ Service thruster(s)...if applicable. (Follow service manual.)
17. **M** **O** Date & Initial: _____ **Every 5 years**, have the fuel tanks professionally checked (no charge through Petro-Clean) and, if sediment is found, polish the fuel in every tank to remove sediments and bacterial growth. Note: Write on the tank with indelible marker “fuel polished 00/00”. (If no “fuel polished” date on tank, and if the boat is more than 5 years old, arrange for inspection by Petro-Clean.)
18. **M** **O** Date & Initials: _____ Refloat boat, deliver boat to slip and secure.
19. **M** **O** Date & Initials: _____ After back in slip for 48 hours, check alignment of shaft with a feeler gauge, re-align engine if necessary. During realignment, check tightness of the nut that secures the coupling to the transmission.
20. **M** **O** Date & Initial: _____ With flashlight and mirror, check all motor mounts for signs of “general wear” (crack in a bolt, weakening of rubber sometimes coming off mount, u-shaped bracket settling down onto base). If no obvious signs of wear, look for sagging/sinking of the engine toward any of the mounts. Replace if signs of wear or if engine is tilting forward, aft or to one side. (If realigning engine, tilt becomes more apparent.) Expect to replace motor mounts after 5-10 years.
21. **M** **O** Date & Initials: _____ Tighten all engine, transmission and generator (if applicable) fittings and motor mounting bolts.
22. **M** **O** Date & Initials: _____ Check (and tighten if needed) the set screws on the dry seal on shaft(s) and assure that a hose clamp is installed close to and forward of the dry seal. For Volvo-type shaft seals, check manufacturer “replace date”. If replacement is due, replace with a P.Y.I. dripless shaft seal (using double-stacked neoprene set screws, and consider *LOCTITE*) and place a hose clamp, forward of seal, to secure it in place.
23. **M** **O** Date & Initials: _____ Clean and lube sail slides for main with *McLUBE* dry lubricant or equivalent. Bend on main (if haulout is in spring versus fall). Inspect any lazy jacks.

SPRING 2012: Complete no later than April 1, 2012 all tasks below.

(NOTE: Bellingham “CharterFest” Boat Show is typically the first weekend of April each year.)

1. **ONLY** Date & Initials: _____ Read “Owners Notes” and edit for accuracy and completeness (need to cover all systems on your vessel). If not sure about accuracy of the operations procedure for a system, check with your maintenance pro or SJS. (NOTE: Inaccurate operations procedures in Owners Notes for a system on the vessel will make it difficult/impossible to hold a charter guest responsible for damage to that system.) **IMPORTANT:** Location of your “Engine Spares” box plus the extra oil and coolant, your “General Spares” box, and your tool box (or bag) must be clearly indicated in your Owners Notes under E for “Engine Spares, Oil & Coolant”, under S for “Spare Parts (general)” and T for “Tools”.
2. **M** **O** Date & Initials: _____ Inspect and if necessary, apply two coats varnish/Cetol/polyurethane to exterior teak trim. Renew areas as necessary. Note: no treatment for teak decks; optional for teak rails; mandatory for grab rails/trim.
3. **M** **O** Date & Initials: _____ Inspect canvas for mildew or dirt and if present, clean canvas (e.g., dodger, bimini, sail cover) with “Oxy Clean”, replace tension bungees and snaps as necessary. Apply Vaseline to all snaps. (Machine wash boom cover on gentle cycle with Woolite or Oxy Clean, line dry.)
4. **M** **O** Date & Initials: _____ If Bimini, check that zippers are operational (with no teeth missing) and fasteners are tight and complete.
5. **M** **O** Date & Initial: _____ Check battery voltages (with charger “off”) and, on unsealed batteries, the water level. Load test all batteries more than one year old to confirm they still have capacity, replace if necessary. Turn charger back “on”.
6. **M** **O** Date & Initials: _____ Turn on all interior lights. Replace bulbs if in-op.
7. **M** **O** Date & Initials: _____ Replace batteries in CO detector(s).
8. **M** **O** Date & Initials: _____ Turn on running, steaming, deck flood, anchor and other exterior lights, check and replace as necessary.
9. **M** **O** Date & Initials: _____ Check all non-engine hoses and pumps to assure they are operational.
10. **M** **O** Date & Initials: _____ Open all seacocks. Assure that there are wooden plugs (appropriate size) attached with nylon string to each seacock.
11. **M** **O** Start engines and genset (if applicable) and warm up, verify proper operation.
12. **M** **O** Date & Initials: _____ Spray engine and electrical components with WD-40 to prevent corrosion/rust.
13. **M** **O** Date & Initials: _____ Grease rudder shaft(s) (if zerk fitting available), check adjustment of rudder packing gland (if applicable).

14. **M** **O** Date & Initials: _____ Check P.Y.I. dripless shaft seal (if this type is on vessel). Examine for signs of rubber deterioration/cracking. Assure that double-stacked neoprene set screws (two pairs) are tight...and assure second set screws are actually being used. Consider using *LOCTITE* if compatible with neoprene set screws.

OR

If the vessel has the “Volvo” type black rubber shaft seal, grease the inside lip of rubber seal with waterproof grease.

15. **M** **ONLY** Date & Initials: _____ Remove drum and inspect all winches. If necessary, clean parts in kerosene, lubricate bearings with winch grease and light lubricant on pawls, reassemble.
16. **M** **ONLY** Date & Initials: _____ Service all Jabsco toilets: Replace flapper and duckbill valves. If necessary, rebuild pump or replace pump **OR** replace entire toilet (fairly inexpensive). All other toilets, inspect and service as recommended by manufacturer.
17. **M** **O** Date & Initials: _____ Check accuracy of holding tank “full” lights and gauges. If floating sensor mechanism, clean and lubricate. If in-tank sensors, clean off film. (SJS recommends the in-tank single-stage “red light full” type of holding tank gauge.)
18. **M** **O** Date & Initials: _____ Inspect (and operate) stovetop burners and oven burner(s) for scale and rust. Clean if indicated to assure proper flow and operation.
19. **M** **O** Date & Initials: _____ Aloft inspection: Remove spreader boots, inspect for corrosion and spreader shroud retention (and repair as necessary). Inspect masthead (VHF antenna, coaxial connections, masthead roller and masthead fly alignment). Remove light bulbs (steaming, deck/spreader, anchor, running) clean contacts on bulb and socket and spray with electrical anti-corrosion lubricant; re-insert bulbs and ensure that lights are operative. Check jib furler ease of operation and luff stretch (how high top roller sits on forestay). Wash upper roller furling bearings with fresh water. Descend along forestay and inspect extrusion pins on forestay for failure or “backing out”.
20. **M** **O** Date & Initials: _____ Inspect roller furling gear turning blocks and line for wear. Wash lower unit bearings with fresh water.
21. **M** **O** Date & Initials: _____ Inspect all blocks (and attachments) for stressed/bent parts. Replace as needed.
22. **M** **O** Date & Initials: _____ Inspect running rigging for wear or faded lines. Replace as needed.
23. **M** **O** Date & Initials: _____ Check all standing rigging for broken wires.
24. **M** **O** Date & Initials: _____ Lubricate all threads on standing rigging with *PERMATEX* or *KROIL* penetrating oil, unless coated with *LANOCOTE*.
25. **M** **O** Date & Initials: _____ Replace all cotter pins (if removed).
26. **M** **O** Date & Initials: _____ Check tune of rig, and retune if necessary.
27. If boat remained in service throughout winter: **M** **O** Date & Initials: _____
Boat Decommissioned in Fall, So Already Been Done Unless sails are less than 5 years old, remove sails, deliver to sail maker/loft for inspection/reconditioning, and ask sail maker to ensure minimum three tell tales on both main (leach) and jib (luff). Pick up sails.
28. **M** **O** Date & Initials: _____ Bend on sails.

29. **M** **O** Date & Initial: _____ Mark chain. (Paint recommendation: *Hammerite Rust Cap*, *Rust-Oleum*, or *Krylon Rust-Tough* gloss enamel.)

SJS requires a single 1' mark of yellow paint at 50 feet, at 100 feet mark with one 5' mark of yellow paint, at 150 feet mark with one 5' and one 1' mark of yellow paint (with 12 inches of unpainted chain in between marks), 200 feet mark with two 5' marks of yellow paint (with 12 inches of unpainted chain in between marks), at 250 feet mark with two 5' and one 1' mark of yellow paint (with 12 inches of unpainted chain in between marks), at 300 feet mark with three 5' mark of yellow paint (with 12 inches of unpainted chain in between marks)...pattern: each 1' mark equals 50 feet and each 5' mark equals 100 feet The last 20 feet of chain should be marked in yellow paint.

30. **M** **O** Date & Initials: _____ Assure proper air pressure in dinghy. Confirm that there are no air leaks. Check painter and bridle (if applicable) for wear. Replace if necessary with a multi-filament soft polypropylene line (available from SJS, Owners Consumables Inventory)...minimum length 30', recommend 50'. Check bottom for wear. Recondition as needed. NOTE: For AquaPro brand, use rubber washer in front of stop knot.

SJS requires a single 12" mark of yellow paint at 50 feet, at 100 feet mark with one 5' mark of yellow paint, at 150 feet mark with one 5' and one 1' mark of yellow paint (with 12 inches of unpainted chain in between marks), 200 feet mark with two 5' marks of yellow paint (with 12 inches of unpainted chain in between marks), at 250 feet mark with two 5' and one 1' mark of yellow paint (with 12 inches of unpainted chain in between marks), at 300 feet mark with three 5' mark of yellow paint (with 12 inches of unpainted chain in between marks)...pattern: each 1' mark equals 50 feet and each 5' mark equals 100 feet The last 20 feet of chain should be marked in yellow paint.

TURNAROUND SERVICE (During Season)

AFTER EVERY CHARTER: Log engine and genset (if applicable) hours, complete 1-8 below:

Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____
Date: _____	Initials: _____	Eng: _____	Gen: _____		Date: _____	Initials: _____	Eng: _____	Gen: _____

1. **M** **O** Check oil (recommend Delo 400 15/40) and coolant levels in engine and genset (if applicable), add fluids as needed.
2. **M** **O** Check belts for tension (1/2 inch deflection), wear (look for black powder and cracks in belts). Adjust or replace.
3. **M** **O** Check sea strainers on engine and genset (if applicable), clean as necessary.
4. **M** **O** Check oil pads, clean engine bilge and replace pad if dirty. Follow up any fluid leaks!
Date new absorbent pads with permanent marker pen.
5. **M** **O** Check center bilge for water, empty if wet.
6. **M** **O** Check extra oil (quart-size only) and coolant supply (wherever supplies are kept).
IMPORTANT NOTE: Leave no transmission oil onboard.
7. **M** **O** Check shower and potable water strainers. Clean if needed.
8. **M** **O** Quick visual check of standing and running rigging and stanchions and life lines.

MONTHLY DURING SEASON (April 15 –October 15): Complete 1-5 below.

Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
Date & Initials: _____	Date & Initials: _____	Date & Initials: _____

1. **M** **O** Check rate of raw water lubrication of prop shaft. Adjust if necessary (applies only to adjustable shaft logs). Check for water leakage at shaft log seal.
OR
On dripless shaft seals, hand-check seal. Make sure the set screws are tight. (Does it spin on shaft?) Make sure hose clamp is close to seal and the screw adjustment is tight. (Does it spin?)
2. **M** **O** Check absorbent pad under transmission for signs of leakage. Follow up any leaking!
3. **M** **O** If unsealed batteries, check battery water levels, top off if needed.
4. **M** **O** Check vacuum gauges on fuel filters (if present).
5. **M** **O** Inspect and, if necessary, replace engine and genset (if applicable) zincs. (If monthly checks reveal a slow rate of deterioration, then less frequent checks okay.)

MEMORIAL DAY:

M **O** **Date & Initials:** _____ Add *STANADYNE* to fuel (1oz per 40 gallons of fuel).

AT LEAST EVERY 200 HOURS OF OPERATION:

M **O** Change oil and oil filter in engine and genset (if applicable). Recommend Delo 400 15/40.

Date & Initials: _____	Date & Initials: _____	Date & Initials: _____
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