



SEIDELMANN YACHTS

October 31, 1983

Dear Seidelmann Owner:

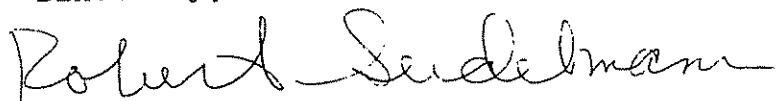
As an owner of a Yacht there are certain items that require maintenance in order to maximize the safety and enjoyment of your equipment. Due regard must be given to the hazards of sailing, and to proper maintenance procedures.

The following is only a basic partial list of items that are the responsibility of the owner to insure safe enjoyable operation of your yacht.

This list should be used as a guide line and for further safe operating information the owner should consult with his local U.S. Coast Guard and Power Squadron Offices.

As fall approaches, this is an excellent time to do maintenance. Please read this information and complete the maintenance that has not been taken care of during the course of the sailing season.

Sincerely,


Robert Seidelmann

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ANNUAL MAINTENANCE ITEMS

WINTERIZING

The end of the season is a good time for a complete inspection of all of the boat's systems. Taking the time to put your boat away in good order will benefit an early launching in the spring.

HAULING: The boat should be lifted with hoist slings positioned so as not to damage speedometer impellor or engine shaft, strut or propellor. A good boat yard is seasoned in hauling and maneuvering boats on land. You may verify this by checking to see that the weight of the hull is resting on the keel and the bottom of the keel has good contact all along the bottom.

The shores or cradle uprights are meant to balance the boat and not to support it's weight.

BOTTOM: Scrape and scrub the yacht's bottom clean of any marine growth as soon as the boat is hauled. It is generally preferred to wait until spring to paint the bottom.

CUTLASS BEARING: The saft strut contains a rubber type bearing which lubricates the support of the shaft. At haul out, be sure the bearing slots are clear and apply silicone lubricant or castor oil to the bearing to preserve its suppleness. Replace shaft zinc of necessary.

FRESHWATER SYSTEM: This system is best winterized with one of the antifreezes available for use in boat recreational freshwater systems. It is an easy method which insures that no pure water is left in the system to freeze.

If there is a hot water heater on board, allow heater to cool and open the pressure release valve on top. Disconnect the hot

FRESHWATER SYSTEM (CONT'D)

and cold water hoses and allow the tank to drain either in a bucket or into the bilge. Connect and clamp the hot and cold water hoses together using a short length of $\frac{1}{2}$ " pipe in order to bypass the heater.

Mix the appropriate amounts of antifreeze and water, as directed on the label, to deliver the degree of protection desired. Put $1\frac{1}{2}$ to 2 gallons of the solution into each water tank.

If your boat is equipped with two water tanks, turn selector valve to the auxiliary tank and pump the antifreeze solution through each of the nonpressurized outlets.

Use the foot pump in the galley and head and pump until antifreeze is seen coming out of each faucet. If a manual shower hook-up is installed, open that fixture and pump until antifreeze runs through.

Switch selector valve to other water tank and if only one tank is aboard, carry out the above procedure using that one tank.

If a pressurized water system is installed, turn on the pump and open all fixtures until antifreeze runs through. Be sure to open the hot water selector valve in order to supply antifreeze to the hot water hoses and through the bypass loop.

At this point the freshwater system should be completely protected by antifreeze against freezing to a degree indicated by the strength of the solution placed into the supply tanks.

New boats delivered in winter have their freshwater dry.

WASTE DISCHARGE SYSTEM:

Several days before completing haulout procedures, freshwater should be allowed to stand in the head unit to dissolve any salt accumulation in the hoses and pump. Remove all water from the head unit. Special lubricants for the pump's internal mechanism are available. Check with your marine hardware dealer for a recommended brand. Never put oil, gas, kerosene or alcohol into the head or they will ruin the internal valves.

If a holding tank is aboard, completely pump out all waste and pour in a cleansing, deodorizing solution. Allow this to sit in the tank overnight if possible, then completely pump out and drain the entire system. If antifreeze is used in the system, check in the manufacturers literature binder for the recommended type.

ENGINE: The engine owner's manual for your specific engine contains guidelines for winterizing. Follow the instructions carefully to insure the engines protection.

The exhaust system should be drained by means of the drain plug at the bottom of the low point of the metal exhaust tube on some models or by removing the water hose. The water lock cannister, accessible through the cockpit locker, should be partially filled with antifreeze. Cover and seal the exhaust port at the transom to prevent air from circulating into the engine.

FUEL SYSTEM:

Shut off the fuel valve and drain the fuel filter. Clean the filter bowl and replace the fuel element filter in the spring before launching. This insures that residual fuel will not gum up and clog the fine passages of the filter element. The fuel tank should be kept full for winter storage with about 5% expansion room left at the top. Empty fuel tanks encourage the formation of condensation.

BATTERIES:

Clean battery terminals and cable ends thoroughly of any corrosion with a baking soda and water solution, and apply a light protective layer of petroleum jelly. Batteries should be fully charged before storage and the fluid level maintain. Store batteries in a warm dry place. Do not store batteries directly on a stone or cement floor.

SEACOCKS:

Open and drain all seacocks after boat is hauled. Close all seacocks for winter storage.

BILGE:

Completely pump out bilge of any water and clean out any debris present. Bilge pumps should be pumped dry and disconnect hoses if necessary to insure that no water is left in the system.

ICE BOX:

Remove any remaining food from the ice box and wash down thoroughly with any warm water and detergent solution. Ordors can be removed with a baking soda and water solution and an open box of baking soda left in the box will continue to remove ordors throughout storage. Completely pump out any water from the bottom of the ice box and make sure pump is completely pumped dry of any water. Leave ice box lid open during storage to allow ventilation.

STOVE:

Clean stove thoroughly. For alcohol stoves, release pressure from fuel tank and leave empty. For CNG stoves remove tanks containing gas and store in a warm dry area.

COVERING THE BOAT:

Cover the boat adequately during storage to prevent excessive weathering. Note: Black polyethylene film can cause excessive fading of colored hulls if in direct contact with fiberglass surface. This is caused by an unusual chemical reaction between the polyethylene and the fiberglass gelcoat.



MAST:

The aluminum mast requires a minimum of care and maintenance. at the end of each season it should be washed with a mild detergent and water solution, followed by a complete rinsing with freshwater. Tie off all halards and lifts and inspect the mast completely for scratches through the finish. Paint should be applied to any scratches found to prevent corrosion.

Check all hardware on the mast carefully for signs of corrosion and check the tightness of the fastenings. Masthead sheaves should show no signs of wear and should move freely. Lubricate if necessary.



KEEL BALLAST

Lead has traditionally been the preferred material for use as ballast. While comparatively the most expensive, its superiority justifies the expense.

Unlike most metals, lead is immune to the corrosive action of salt water. It's non-magnetic character means no interference with compasses and other electronics. In itself, it provides an ideal source of grounding for the bonding and lightning protection system and lead is easily molded to provide a high weight to volume ratio in a desirable shape.

CONSTRUCTION: The keel is a lead casting of hydrofoil shape to provide least resistance and maximum lift. Stainless steel bolts are molded into the lead. The threads protrude about 2" and are wrapped in a flexible sealant. The keel is attached to the hull by drilling holes through the thick fiberglass keelson to line up with the keel bolts, and then lowering the boat onto the keel. The keel bolt nuts are located in the main cabin bilge compartments; also in the shower sump area of the Seidelmann 34

Epoxy putty is used between the keel and hull to fill all voids and irregularities. However, this is not intended as an adhesive to bond the keel to the hull, and is used solely as a filler. In addition, epoxy putty is used to fair the exterior of the joint between the keel and the hull before the bottom paint is applied.

CRACK BETWEEN KEEL AND JOINT:

It is very normal for a crack to develop between the lead and the fiberglass at the joint of expansion rates of the different materials, and the differences in the stresses that occur at this joint with the boat in the water, compared to the boat resting on cradle. This crack is cosmetic and is of no structural significance as the keel bolts are designed to support the full weight of the keel. The crack, itself, can be filled with epoxy filler putty, such as "Phila Bond", as part of the procedure for preparing the bottom of the boat for anti-fouling paint.

Occasionally, water from the bilge may seep through this crack when boats are hauled. This would be due to a slight leak at a keel bolt, which can readily be overcome by tightening the keel bolt nuts. As part of launching procedure, check all keel bolt nuts for tightness to 140 foot pounds before the boat is lifted out of the cradle.

KEEL BALLAST (CONT'D)

PROCEDURE FOR REBEDDING KEEL BOLTS:

If it becomes necessary to rebed keel bolts, we recommend the following procedure. This work may prove to be more difficult than it at first appears. Therefore, we recommend that it be done by experienced marine service personnel.

NOTE: If more than one bolt needs rebedding, remove only one nut at a time.

Also, the following steps should be completed with the boat out of the water and in her cradle;

1. Remove the nut and washer from leaking keel bolt with a 1-1/8" wrench.
2. Clean all of the old bedding compound from the keel bolt and surrounding area.
3. Using an electric drill with a 3/16" bit or a small chisel, drill or chip the fiberglass away to form a 3/16" x 3/16" void around the bolt (if access permits).
4. Make sure the keel bolt and the keel bolt hole are dry. An electric hair dryer may prove helpful.
5. Rebed keel bolt and surrounding area with a polysulfide or urethane calk such as 3M-1126, 3-M5200, or Lifecalk.
6. Replace washer and retighten keel bolt nut to 140 foot pounds.

TOE RAIL

Your deck to hull joint consists of fiberglass flange molded into the hull which allows stainless steel bolts with washers and aircraft locknuts to fasten the aluminum toerail extrusion, deck flange and hull flange together. The flanges are bedded in butyl compound and the bolts are bedded in 3-M urethan #5200 compound.

This joint is designed to be water tight by using bolt pressure to compress the butyl gasket.

Once a year, or if a leak should occur, the interior covering boards should be lowered and the toerail nuts tightened. This annual tightening will compress the gasket, filling any voids, and insure the water tight intergrity of the joint.

FIXED DEAD LIGHT WINDOWS

Your fixed windows are fastened to the fiberglass deck with both butyl compound and 3-M #5200 compounds, then mechanically fastened with stainless steel screws. Due to the difference in thermal expansion rates of the different materials and the differences in the stress that occurs at the joint, the screws should be tightened by hand once a year. Caution - over tightening may strip the screw in the fiberglass and require the hole to be partly filled before the screw will hold again. The adjusting of these screw should eliminate unnecessary window leaks.

EXTERIOR MAINTENANCE

The following is general guide for use in the maintenance of your yacht's exterior and should be done at least once a year. Materials of the highest quality have been used in construction and with regular attention their appearance and performance should remain new.

FIBERGLASS:

As a boat building material, fiberglass is recognized as one of the most maintenance free. The exterior surface is gelcoat, a color impregnated resin. Care is needed for the boat to withstand the rigors of usage.

Frequency of washing will depend on need, yet several times per season should be anticipated. Wash with mild detergent and warm, fresh water, using a soft sponge or soft natural brush. Non skid areas may require a stiffer brush. Rinse entirely with fresh water. Stubborn stains and minor scratches can be removed with conservative use of a fiberglass cleaner containing a gentle abrasive, after which the area will need waxing with a quality automotive or boat wax.

FIBERGLASS (CONT'D)

The entire topsides and superstructure should be waxed at least once yearly, with a routine of waxing at launching and hauling preferred. Leaving non-skid areas unwaxed will increase the non-skid effect.

Minor gelcoat damage may be repaired through use of a gelcoat repair kit available from Seidelmann Yachts. Other gelcoat and fiberglass damage should be referred to Seidelmann Yachts.

Pencil line cracks may appear in the gelcoat at corners of the deck molding, especially around the cockpit and backstay chain plate. This is strictly a surface condition in the gelcoat finish and does not indicate structural weakness.

YACHT'S BOTTOM:

A quality anti-fouling bottom paint is needed to protect your boat from marine growth. Factory applied paint is Interlux Bottom Kote, suitable for most conditions.

Different geographical locations may dictate the need for a specific paint. See your local marine dealer for this information. Painting is recommended before launching each season.

It is necessary to properly prepare the new fiberglass surface for painting by etching with a chemical product designed for this purpose. This is followed by washing twice with a fiberglass solvent wash. Paint should then be rolled on to produce as smooth a surface as possible. Certain bottom paints are chemically incompatible and care must be taken in their selection. Read all information and instructions supplied with paint.

At hauling and as required through the season, the bottom must be cleaned of all marine growth. If the yacht is hauled for other reasons, and is to be kept out of the water for any length of time, the bottom also needs cleaning then. This will prevent the marine growth from having the opportunity to dry and become hardened.

Scrub the bottom with a stiff scrub brush and detergent diluted in warm water. A high pressure hose, if available, is useful and a flexible stainless steel spatula used with care can be helpful.

The external crack at the keel joint may be filled at this time. Refer to the section on keels concerning this area. This can be followed by sanding the entire bottom to prepare for paint or to produce a smooth race surface.

PORTS & HATCHES:

The ports and hatches are either high strength plexiglass, Lexan or safety glass. A soft cloth should be used in cleaning and any type of abrasive cleanser or solvent should be avoided. While plexiglass and Lexan are highly impact resistant, they have a tendency to scratch easily. Plastic cleaner and polish, available in hardware stores, will remove most surface scratches.

STAINLESS STEEL AND DECK HARDWARE:

Many of the hardware pieces are custom made for Seidelmann Yachts. All are made of corrosion resistant metal alloys. However, discoloration will occur in salt air environment. Routine rinsing with fresh water after a cruise will retard this and regular cleaning with metal polish followed by waxing will keep them protected and free of stains.

EXTERIOR TEAK:

The exterior teak may be treated with one of the many teak oil preparations available from marine stores which will maintain the brown color of the teak. However, this will require continual application at short intervals to maintain an attractive appearance.

We recommend leaving the exterior teak unfinished, as allowing the teak to weather naturally is the most satisfactory long term solution. An annual treatment with one of the many teak cleaning compounds, that work by chemically dissolving the gray material that forms on the teak, is suggested. This will rejuvenate the appearance to virtually original condition, and has been found to greatly postpone further graying of the teak.

SAILS:

The care given your sails will be reflected in their long life.

Ultraviolet light from the sun is one of the main causes of sailcloth deterioration. Sails must be properly folded when not on the boom and kept covered with a sail cover.

Sails that get wet must be rinsed with fresh water and dried before storing for any length of time. Washing the sails in a mild detergent and water solution each year before storage will remove minute salt crystals which otherwise can act as abrasives and hold moisture in the sail.

Rinse thoroughly with fresh water and dry completely before folding and storage.

EXTERIOR MAINTENANCE (CONT'D)

DECK LEAKS:

Small but annoying leaks are the scourge of the boating world. They occur after a boat is in use due to the relative movement between components caused by sailing stress. Special conditions do occur and need special repair techniques. Before contacting Seidelmann Yachts, please document the condition as fully as possible.

The selective use of a water hose on the deck is the best way to locate elusive deck leaks. Isolate suspected areas and work from the deck drains forward, and from the toe-rails toward the center of the boat. Often a leak will not appear instantly or directly inside. The water may run between the deck and liner and show up some distance from the source. Persistent leaks will eventually leave telltale stains on stainless steel, teak, and vinyl.

The following is a listing of possible deck leak sources and standard repairs.

1. Chainplates: Each year at commissioning after rig is installed and tuned, add a caulking bead around the base of the chain plate. If persistent leaks occur, when the boat is decommissioned, lift the stainless steel chainplate cover, countersink a larger sealant groove under the cover, and recaulk with a polysulfide or urethane sealant.
2. Toerails: Various techniques may be involved, depending upon the severity of the problem. First, tighten toerail bolt nuts on the hull flange. If tightening alone does not work, remove nuts and reinstall with a recessed washer and solid butyl caulking. In extreme cases, and if toerails are loose enough to see a void and will not tighten down, remove all nuts. Apply a urethane sealant, such as 3M5200, and reinstall with caulked recess washers.
3. Deck Drains: Clean surfaces thoroughly and apply a urethane sealant around joint between drain tube and hull, and deck outside and inside the cabin.
4. Genoa Tracks Inboard: Tighten bolts after removing cover. If not successful, remove bolts and track, countersink sealant groove if not in place, rebed track with butyl sealant and install oversize washers.
5. Windows: a) If water appears on liner under windows or berth tops, rub silicone around frame edge. Clean off excess caulking immediately with clean rag. If not successful, remove window and recaulk with butyl and silicone sealants.

6. Mast Collar: Seidelmann 30-34-37 recaulk and seal boot. Recaulk collar bolts and around base.
7. Traveller Bolts and Spray Hood Bolts: Recaulk bolts with urethane sealant.
8. Stanchion Posts and Rail Bases: Rub in silicone or urethane sealant around base edge and screw heads. If this is not successful, remove base and countersink a sealant groove at each bolt. Recaulk with solid butyl tape sealant.
9. Winch Pockets: Recaulk with silicone along all joints inside pocket.
10. Emergency Tiller Cover, Pedestal and Wheel Guard Base, Cockpit Drains: Recaulk with butyl sealant.
11. Other Deck Hardware: Remove and rebed with butyl caulk. Countersink bolt hole in deck if not done, to provide sealant groove.
12. Dorade Vent: Apply urethane sealant to inside joint between box and sides inside the box.
13. Engine Ventilation Scoops: When not in use, block with rag or sponge.

HULL LEAKS:

There are a number of sources of excessive water in bilge. Only a few are of a potentially serious nature. Locating hull leaks is facilitated by noting when the water fills in the fastest (i.e. sailing, motoring, or at mooring). Even then, it is usually just a slight trickle. Possible sources are as follows.

1. Anchor Well Drain: Hose may be loose, remove cover and tighten hose clamp.
2. Rudder Stuffing Box: Tighten or replace packing. If not successful, check for leaks between the bronze stuffing box and the fiberglass, and then refiberglass.
3. Shaft Stuffing Box: Tighten or replace packing, or replace shaft log.
4. Keel Bolts: Rebed with polysulfide sealant. Tighten nuts to 140 foot pounds.
5. Thru Hulls and Seacocks: Reseat internal cone, or reseal seacock to thru hull and hull.

OTHER SOURCES OF WATER IN THE BILGE AREA: Check all water systems components: small tanks, hoses, foot pumps, pressure pumps, accumulators, hot water tank, engine coolants, mast boot, internal water flow in the mast, and water closet gaskets.

INTERIOR MAINTENANCE

Cleaning your yacht's interior should become a regular part of maintenance. Sunny, breezy days are best suited for this as they will aid you in the drying and airing process. The end results will increase your sailing pleasure.

TEAK:

The interior teak on new Seide yachts may show considerable variation in color, shade and hue, due to the natural variations in freshly cut teak surfaces. The light sensitive pigment inherent in teak will allow it to season to a deep, golden brown color over the first few months of exposure to sun and air.

Areas that become especially soiled may be washed with a very mild detergent water solution. After drying, these areas will require light sanding and oiling.

We recommend a light teak oil such as Amazon's Golden Teak Oil. This is a thin oil-based material, which seals wood fibers to prevent absorption of surface oils and stains. It also contains a fungicide protecting against bacterial and fungal action. It may be used repeatedly to restore the original luster of the teak. Apply with a soft cloth and rub off the excess. Application in itself is a cleaning process. Do not use linseed oil as it will result in excessive buildup and a varnished type appearance. Consult knowledgeable marine store for alternative products.

CAUTION: OILY RAGS ARE EXTREMELY SUSCEPTIBLE TO SPONTANEOUS COMBUSTION AND MUST NEVER BE LEFT ONBOARD.

VINYL:

Some of the exposed surfaces in your yacht are marine engineered vinyl. It is moisture proof, sun and oil resistant. This vinyl is sensitive to most solvents and is best cleaned with Windex and a terry cloth rag.

PORTS:

Ports are made of either plexiglass or safety glass. They should be cleaned with a soft cloth. Avoid the use of abrasive cleanser or solvent. Plexiglass has a tendency to scratch easily. However, plastic cleaner and polish will remove most surface scratches.

CUSHIONS:

Our cushion supplier recommends the following steps for cleaning of cushion covers. Vacuum thoroughly, rub in a foam mixture made from Ivory Snow and a little water. Rinse with clean water on a damp sponge and revacuum. This should all be done with the covers still on the cushions. Also you should use as little water as possible. Placing the cushions out in a sunny breeze to dry will compliment your work.

CUSHIONS (CONT'D)

If the yacht will be left unused for some time, standing the cushions on edge will allow air to circulate around them and remove the chance of mildew.

SINKS:

All sinks on board are stainless steel. With reasonable care they will stay new looking for years. They are easily cleaned with detergent and water and then rinsed and dried. Soaps tend to leave films and, if not dried, residual minerals in water can leave watermarks. If watermarks occur they are removable with a 25% vinegar/water solution followed by cleaning with a nonscratching household or stainless steel wool as small bits of steel may adhere to the surface, causing rust.

Certain substances may harm and even corrode stainless steel if they remain in contact too long. They include bleach, salt solutions, disinfectants, cleaning compounds and food substances such as mustard, mayonnaise, lemon juice, vinegar and salt.

FORMICA:

The gleaming white formica provides a clean, hard durable surface. It should be cleaned with non-abrasive kitchen cleaners. Protect countertops when cutting with knives or working with other sharp objects, as gouges in the surface cannot be repaired. Otherwise, it is virtually carefree.

ICE BOX:

The ice box on Seidelmann yachts are custom designed to optimize space by conforming to the hull shape. It is surrounded by insulating foam up to three inches thick. The covers are designed with attention that includes an insulation layer sandwiched between top and bottom.

Food should be packed with sufficient ice to last its duration of storage. Pre-freezing items not needed immediately will benefit the planning of a long passage.

Water from melted ice will drain into a recessed sump in the bilge. As water collects here it can be periodically pumped out with the hand pump, or the electric bilge pump.

STOVES:

A complete owner's manual written on the use of the stove has been included with it. We recommend reading all supplied information thoroughly before first attempting to use it. Keeping your stove clean will aid you in it's safe operation. Clean stainless steel under the guidelines given.

HEAD:

The marine head on board has been installed in compliance with U.S. Coast Guard regulations regarding marine sanitation systems. It is of highest quality and will provide years of service.

The head unit can be cleaned with a non-abrasive cleanser and warm water. (refer to the head manual for complete operation and maintenance instructions.)

SAFETY MAINTENANCE

Upkeep of your boat's equipment is a necessary part of its usage, ensuring your safety and the maintainance of the boat's worth.

STANDING RIGGING:

Standing rigging includes all parts concerned with support of the mast. All components should be examined each time before going sailing and given a more thorough examination on a monthly basis. Spreaders should be positioned at the appropriate angles and have boots or taped ends. Bent or damaged spreaders must be replaced. Turnbuckles should all contain cotter pins top and bottom to secure their position and have boots or be taped over with plastic tape to prevent snagging of clothes or sails.

Check thoroughly the point at which the wire cable enters the swaged terminal ends. A small silicone bead around this junction will prevent salt from penetrating and will easily identify any slippage of the wire out of the terminal.

A complete inspection of all rigging should be conducted monthly and cables or parts should be replaced if any rust or breaks are found.

RUNNING RIGGING:

Running rigging includes all the gear used in handling and trimming sails. The main and genoa halyards are Dacron rope. As the rope passes over sheaves at the masthead and the turning blocks at the foot of the mast, they are exposed to continual heavy loads and flexing. This constant strain will wear the rope after a period of time so the halyards should be examined on a regular monthly basis and sooner if the boat is sailed more frequently. When signs of wear or stress are found the halyard will need replacing.

LIFE LINES:

As with the rigging, a thorough examination of the cable and cable ends should be conducted monthly. Routine inspection should be done every time the boat is sailed. Look for loose cables, frayed wire, or rusted fasteners and replace worn parts. Turnbuckles should be fully engaged onto the threaded rod and lock nuts tightened securely. Line tension should be snug without being overly tight. Small cotter pins will insure that turnbuckles will remain tight and the whole turnbuckles assemble should be taped with plastic tape to prevent snagging and chafe.

STANCHION POST:

Stanchion posts should be securely fastened to the deck as described.

FIRE EXTINGUISHERS:

Each fire extinguisher should be checked monthly. A guage on each extinguisher allows you to easily check the charge. Each passenger should be made aware of the best way to exit the cabin in the case of a fire or other emergency.

THRU HULLS:

At hauling each season all seacocks and thru hulls should be completely drained, cleaned and greased.

Before launching and every time before the boat is sailed, each seacock should be checked for tightness and to see if they are functioning properly.

Keep all but the seacocks closed whenever the boat is left unattended.

DECK HARDWARE:

Considerable strain is applied to all deck hardware during the course of the season and each fitting should therefore be retightened at launching. Most all deck hardware is bolted through the deck and either reinforcement is molded into the fiberglass deck in that area, or wooden backup plates are used, or both. Frequently check the tightness of these nuts and bolts especially if the boat is sailed hard. Nuts are accessible by removeing access panels through-out the boat, through the anchor well and cockpit lockers, as well as along the edge of the headliner flange at the sheer.

Be careful not to over tighten deck hardware which could possibly strip the threads. Keeping all deck hardware clean and waxed will prevent any corrosion from forming.

CHAINPLATES:

Chainplates are thru bolted to the bulkheads with nuts and bolts with lock washers. Check nut and bolt tightness monthly.

WINCHES:

During active sailing periods the winches should be stripped down, cleaned and lubricated at least once a year. Disassemble, clean and lubricate the internal mechanism with a light water pump grease.

It is recommended that you wash down winches each month with fresh water and dry. Refer to the literature in the manufacturer's binder on the winches for detailed maintenance instruction. As with other deck hardware, removeable access plates allow access to nuts for the cabin top winches and the nuts for the coaming winches are accessable through the openings of the winch pockets.

BILGE:

The bilge should be checked for water and drained every time you board or leave the boat. A reinforced hose leads from the pump to the bilge. A strainer in the bilge protects the pump from large foreign objects. It should be checked frequently. In the event that something clogs the pump, it may be disassembled and cleared.

STEERING:

Tiller and wheel steering should be thoroughly examined monthly and regularly during extended voyages.

WIRING:

The wiring system, should be inspected seasonally or as the need arises. Check wire insulation and terminal ends for soundness.