

OWNER'S GUIDE



CAL-BOATS

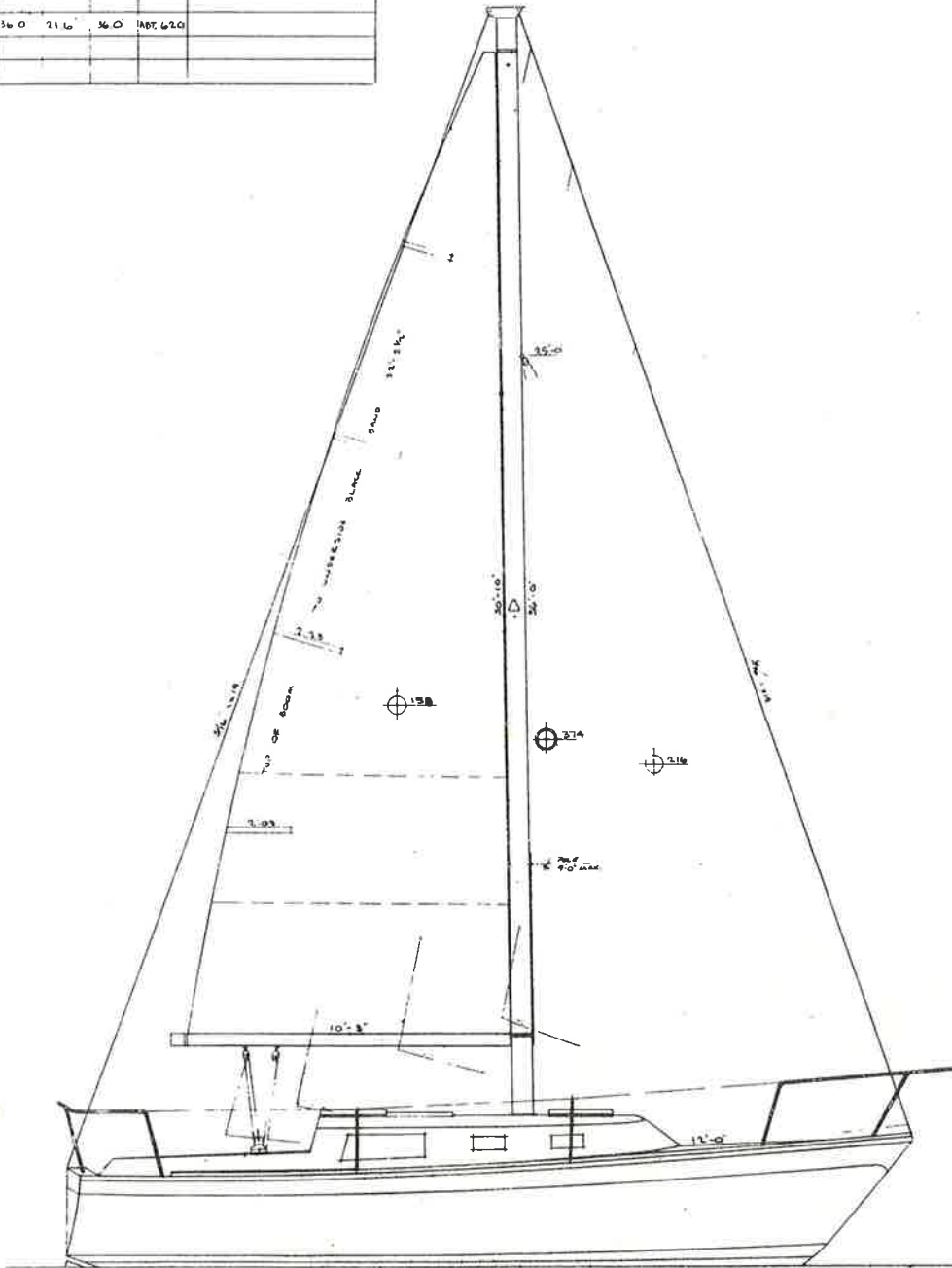
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A BANGOR PUNTA COMPANY

IMPORTANT

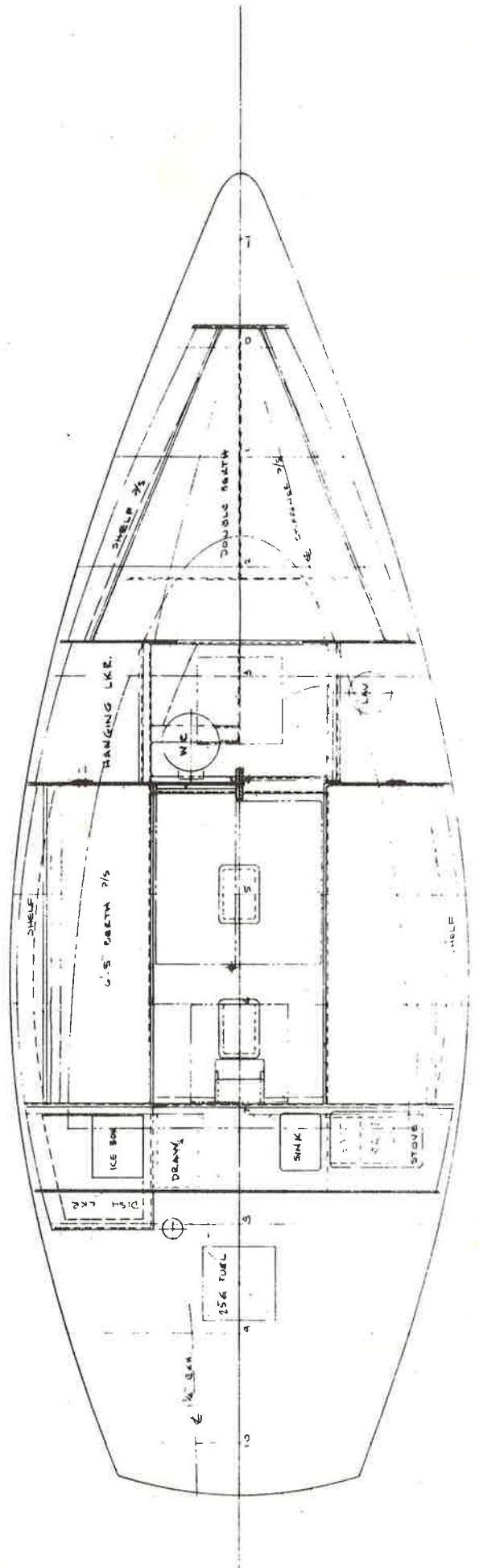
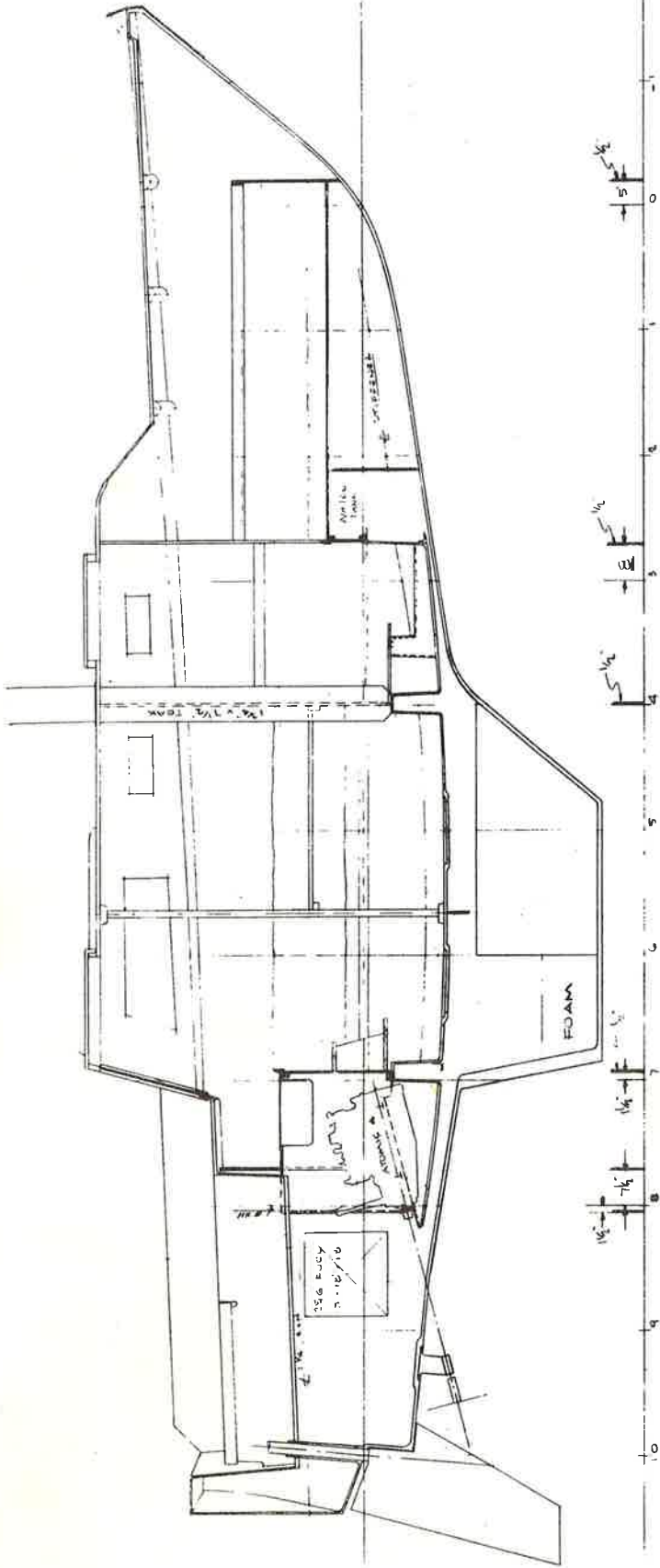
Please Read

SAIL LOCKER						
SAIL	HT	LUFF	FOOT	LEAD	AREA	REMARKS
MAIN	65'0"	26'0"	19'4"	21'7"	143	1/2 SURE-MAST; COOPER BOOM
FRONT	45'0"	17'0"	14'4"	16'5"	130	LP-11'0" - 10'0" HEAD RUNNERS
SPENNA	5'0"	36'0"	19'4"	34'0"	314	LP-18'0"
LOGGON	4'0"	36'0"	21'7"	35'5"	367	LP-20'5"
COCKPIT	15'4"	36'0"	21'6"	36'0"	187.620	



C. WILLIAM LAPWORTH
 NAVAL ARCHITECT
 505 30TH NEWPORT BEACH
 CALIFORNIA 927
 SAIL & RIG PLAN
 1/2" = 1 FOOT
 22 MARCH 1974

106/16



OWNERS GUIDE - CAL 2-27

Congratulations Skipper! Here is your new Cal 2-27. It was made for you with care by the men and women of Jensen Marine. We have done our best to see that your every passage is comfortable and safe. It is now in your hands, so take your place at the helm of one of the finest fiberglass sailing yachts afloat.

This guide is in outline form. The first two sections are to be used as a ready reference each time you open up or close down your yacht. To avoid costly oversights, keep it handy until the procedure becomes spontaneous. Remember, even the most experienced pilot goes over his pre-flight check list every time.

The sea and the salt air, while rejuvenating for man's spirit, are the world's most corrosive natural elements. An enjoyable cruise and survival itself depend on the seaworthiness of your yacht. Therefore, maintenance of your new Cal 2-27 is extremely important.

There is information to assist you in establishing a good maintenance routine. Through the use of fiberglass, teak, stainless steel, anodized aluminum, and other non-corrosive materials, we have reduced the number of maintenance man hours tremendously, but please don't overlook what needs doing.

Full information on optional equipment may not be contained herein. Contact the option manufacturer or your Cal-Boats dealer for more information.

I. OPENING UP

Welcome aboard! It will be necessary to open up your boat each time you use it. The following is a guide for this opening up procedure. Make up your own check list after becoming familiar with the information contained herein.

A. Above

As you approach, check for any damage in the rigging, to the hull, or on deck. Once aboard, it is hard to see the hull or mast as well as you can from the dock. Note also the condition of your mooring lines. They should be maintained in good condition and replaced before they become frayed.

B. Below

1. Ventilation

Once the companionway hatch is open, it will be apparent that ventilation is needed below. The forward hatch, optional opening ports, coast guard system vents, and optional engine room blower will all contribute to a flow of fresh air through the boat.

2. Valves

All below water line thru hull fittings are equipped with gate valves. It is vital that you know the function and location of these valves, and periodically open everyone of them. Gate valves OPEN by turning counter clockwise and CLOSE by turning in a clockwise direction. It is a good idea when you open any gate valve to then close it a quarter turn! In this way, anyone can immediately tell if a valve is open or not. Open valves are sometimes broken by trying to pry them further open, thinking they are closed.

a. Starboard Galley Locker

1. 3/4 inch galley sink drain valve
2. 3/4 inch salt water engine intake valve with optional engine.

b. Head Compartment - Options

1. 1/2 inch head intake valve is beneath head platform.
2. 1 1/4 inch head outlet valve is behind head hanging locker panel.
3. 3/4 inch vanity sink drain valve is inside the vanity door.

3. Electrical

The Cal 2-27 has a 6 fuse panel that distributes 12 volts direct current from one (or optional - two) 70 AMP hour battery, located in the starboard cockpit seat locker. To protect the battery, there is also a battery safety switch behind the galley sink next to the 6 fuse panel.

a. To turn on lights, blower, etc.

1. Switch "ON" battery safety switch.
2. Trip needed switches on 6 fuse panel.

4. The Motor

a. The battery is also used to start your in-board or outboard motor. If battery charge is low, turn off all accessories - but leave the battery safety switch "ON" while starting and running the motor.

b. Before starting the optional inboard engine.

1. Familiarize yourself with the engine control panel in the cockpit. Normal engine gauges have been used and are read like automobile gauges. If you have questions regarding specific engine performance limits or fuel specifications, refer to the owner's manual for your engine.

2. Check your fuel level and fill your tank through the fill plate marked fuel in the cockpit sole. The dip stick method is best for measurement.

3. Adjust the engine control levers mounted in the cockpit (a) the longer lever is for shifting. Forward for forward, straight up for neutral, and aft for reverse, (b) the shorter lever is the throttle. Advance to the vertical position for starting and idle.

4. Open the fuel line by turning the shut off lever so that it runs parallel with the fuel line. This lever is located on top of the fuel tank. Both are visible through the port seat hatch in the cockpit. To close the fuel line, the lever should be at right angles (perpendicular) to the fuel line.

5. Most important - make sure the salt water engine intake gate valve is open! Water will be expelled with the exhaust if it is functioning normally. Shut down the engine if no water is expelled after a few seconds.

c. How to stop and start the inboard engine.

As a precaution let's cover stopping first!

1. To Stop:

Push "IN" the push - pull switch on the engine control panel in the cockpit.

Turn the ignition key off on Volvo engines.

2. To Start:

Open salt water intake valve.

Turn battery safety switch "ON".

Pull "OUT" the push - pull switch on the engine control panel.

Turn the ignition key on (with Volvo engines).

Depress the starter button.

Advance the throttle.

5. The Bilge

While the engine is warming up, empty the bilge by using the hand bilge pump, located in the port cockpit seat locker. Put the loose end of attached hose overboard and pump.

Before casting off, check your:

Sails

Provisions

Fire extinguishers

Life preservers

Radio

Passenger and crew

Boat in gear, cast off, throttle up, and you're away!

II. CLOSING DOWN

A. Reverse the opening up procedure

1. closing valves

2. shutting down control panels

3. securing hatches, gear and sails

B. Set the fenders - if docking.

C. Spray the hull and deck with water!

D. Attach the halyards so that they don't beat against mast or rigging in a breeze.

E. Double check the mooring lines.

III. MORE DETAILS ABOUT YOUR CAL 2-27

A. Bilge Sump

1. There are bilge inspection plates in the cabin sole. The aft plate is for the sump. The forward plate is for the ballast and is a good place for the installation of a knotmeter.

2. The ice box, located in the port galley, drains directly to the bilge sump. To eliminate odors, clean regularly and flush ice box and sump with baking soda and water.

B. Cockpit Drains

1. The drains for the cockpit are connected and expell through the transom.

2. To flush the drains, shoot pressurized water directly into the drain via the dockside water hose.

C. Fresh Water System

There is a 20 gallon fresh water tank under the "V" berth - forward. Hose lines deliver fresh water to the galley sink and optional vanity sink in the head. The tank is vented forward into the chain locker. The tank fill plate is located under the "V" berth cushion.

To pump water, simply move the pump handle back and forth.

D. Fuel System - comes with optional inboard engine.

1. The fuel tank holds approximately 15 gallons of gas or diesel fuel and has the following attachments.

The white wire is the ships common ground

The small diameter hoses are the drain and optional diesel fuel return lines.

The large hose leading aft is the vent.

The engine drives a one inch shaft with a 2 blade propeller. The shaft stuffing box is accessible through the starboard seat hatch. Keep the stuffing moist but avoid excess dripping.

F. Lights

1. Replacement Blub

White stern light	GE-68 or equiv.
Red port running light	GE-90 "
Green starboard running light	GE-94 "
Cabin spot lights	H-1176
Galley light	1157

It is important that a stronger bulb be used with the darker lenses or visibility of the lights is considerably less than the required one mile.

2. The BOW LIGHT switch is for the 20 point white light on the mast and is to be used in conjunction with the running lights WHEN UNDER POWER OR WHEN MOTOR SAILING. It also serves as a quick way of illuminating the jib at night to check it's trim and in emergency cases when recognition is important. This light uses a (GE-68) bulb if replacement is necessary.

3. The cabin lights have their own individual switches, but must be activated by the CABIN LIGHT switch on the 6 fuse control panel.

4. If the cabin lights start getting dim, this is fair warning that the battery needs a charge or is getting old. Remember that you have an automotive type battery whose charge and water level must be checked at least once a month. If your boat is to be unused or stored for extended periods of time, it is advisable to remove the battery (s) and store in a warm, dry place.

5. Check all electrical connections for corrosion. The battery terminals are especially important to keep clean. If contact is not good, recharging will take longer and the battery (s) will perform poorly. A little vasoline on any connection will aid in preventing corrosion.

F. Galley Stove - Option

Operating instructions for the optional 2 burner pressure alcohol stove come with the stove, but a few additional points are important.

The pressure alcohol tank is integral with the stove. When filling this tank, please observe the following BEFORE removing the stopper:

1. All burners are OFF.
2. Main alcohol shut off valve on tope of pressure tank is CLOSED.
3. Tank pressure is ZERO: Remove stopper.
4. Fill the tank three-quarters full to allow for air pressure.
5. Replace stopper and screw down tight.
6. Experience has shown that 5 pounds of tank pressure is more than adequate and imposes less strain on the fittings that the recommended 10 pounds.

IV.

CLEAN UP

A. Windows

1. The windows are made of a scratch resistant plexiglass, called Abcite. Any window cleaner is fine with a soft cloth or paper towel.

2. No abrasives! Do not use any scouring agent. Choose any solvent carefully and read the instructions.

B. Fiberglass Surfaces

Periodic application of Tide and fresh, warm water with deck brush and sponge followed by a good hosing and chamois will do the cleaning job. If the gloss dulls or fades, wax the smooth surfaces with Vista or Meguiar's Mirror Glaze paste wax. Surfaces that have started to oxidize can be brought back to life with a lather of Tide or Mr. Clean. Be sure to follow up with lots of fresh water to avoid streaks on the topsides.

Avoid any metal filings on the fiberglass surfaces, as they will leave rust spots. These spots can be removed with oxalic acid or Teak-Brite, but first test a small area against bleaching out the surface color.

C. Wood Surfaces

All of the exterior is teak which is weather resistant due to it's natural oils. Teak does fade to a dull gray, which if objectionable can be scrubbed clean with Teak-Brite and brass wool. Teak's natural color and texture can be preserved by applications of Weldwood's "Woodlife" or similar sealers. Teak, when well varnished, produces the ultimate in a yacht wood finish, but requires constant loving care!

All below deck teak surfaces are finished with a sealer. To restore the luster, sand lightly with grit paper and apply any wood teak oil/sealer with a soft cloth. Treat all the materials used below deck as a home interior. Air is a wonderful cleaner; bring the vacuum cleaner aboard and always keep the boat well ventilated, especially the bilge and lockers.

D. Hardware

Many materials are used, all of which clean well with fresh water and a chamois. Winches must be kept clean and well oiled (Lubriplate is excellent unless the manufacturer recommends otherwise), as do all turnbuckles, track slides, sheaves, and shackles. The chrome and stainless steel brighten up with the chamois, while a good automotive chrome cleaner or mild kitchen abrasive like Comet takes care of the tarnished spots.

Keep all gear lubricated and in good working condition. Remember, the less an item is used, a turnbuckle, for example, the more apt it is to freeze up.

V. SAILS

The mainsail, with battens removed and outhaul slacked, is properly furled on the boom, under a cover. Headsails have been stripped of sheets, properly folded and are bagged below ready to be brought on deck. The dacron and nylon sails do get wet and become caked with salt. When they do, hose them off with fresh water and dry thoroughly by hoisting them at the dock on a still, warm day.

Take care of your sails with periodic checks, especially spinnakers, for small tears and chafe. Hoisting and lowering sails, except spinnakers, while head-to-wind, is good practice and easier on the sails!

VI. SPARS, RIGGING AND HARDWARE

It is impossible to fully guarantee the mast of your Cal 2-27 under our current warranty program. Rigging as well as tuning becomes all important when setting up the mast because of the light weight section we use. A knowledgeable person should oversee the rigging and tuning so as to eliminate the possibility of an eccentric load which might occur with an improperly loaded shroud. Special attention should be given to the initial stretch of the uppers and a further gradual stretch of the wire over the first few hard sails.

A. Mast Tube

The mast should be set straight athwartship in the boat and have a slight rake aft. A straight mast can best be obtained by turnbuckle adjustment, while sailing to windward in a 5 to 10 m.p.h. breeze. The head of the mast should NOT "hook" to windward. If not straight, it would be more desirable to have the head "fall off" slightly to leeward. This should give the mast a smooth, even curve from head to deck. Sighting along the back of the mast of each tack, from deck level, will give a comparison and indicate the necessary adjustments.

For normal cruising conditions, we recommend a "firm" rig. Thus a dockside starting point would have the head-stay, backstay, and uppers tight, and lowers fairly firm. Now the backstay may be made slightly tighter to "hook"; the top of the mast aft. One should be able to stand facing the mast, reach out and pull on any stay and see the mast move in that direction. Try to get tension on both stays equal with about 1/2" to 2" of play of the uppers, 2" to 3" on the lowers.

A description of all standing and running rigging, if replacement is necessary, can be found in the Appendix. Following are some maintenance tips which should be of value.

B. Spars

The finish of natural aluminum is protected against corrosion by a thin, transparent film of aluminum oxide. Dust, dirt, smoke, salt and traffic fumes will adhere to this film, making the surface dull and unsightly. Coating the new surfaces with a good paste wax like Vista or Simonize, will help protect the aluminum oxide from foreign matter. If the surface has become tarnished, any high grade cleaner-wax-polish (collinite #34 or #38 for example) will restore the original sheen. Heavier pitting can be removed by wet-sanding with #600 paper prior to polishing and waxing. You need not worry about sanding, cleaning or polishing destroying the aluminum oxide film as it reforms or "heals" immediately.

If spars are black anodized, hose down portions subject to salt water spray after each sail.

The spreaders are of spruce and have been well varnished. Because of seal chafe and weather, they should be sanded and revarnished every six months and the tips retaped.

C. Rigging

Clean rigging means clean sails. A quick trip aloft with damp rags takes care of this problem. While aloft, check the entire rig for loose screws, nuts, bolts, cotter pins and chafe, which may have resulted from hard sailing. Periodic inspection of the rig from aloft is your best insurance against rigging and spar failure. Keeping halyards tied away from the mast, stops the annoying dockside clanking and saves the mast finish.

Salt water will gradually stiffen dacron line. Hosing with fresh water or soaking in warm soapy water will make the line soft and flexible again. Keep coiled and stowed in a dry spot below.

Jensen Marine's interest in both customer and product continues long after you have commissioned your Cal 2-27. Within limits of our specifications, the company's Parts Department is ready to serve your nearest dealer quickly and efficiently. All replacement parts or accessories are delivered through your dealer. He must have detailed information from you to be certain we send the parts requested.

Additional sailing and maintenance tips can be found in various boating publications. Yachting's Annual Maintenance issue in April is an excellent starting point.

Happy Sailing & Let Us Head From You!

JENSEN MARINE

CAL 2-27 RIGGING LIST

Headstay - 36', 5 1/8" x 3/16", 1 x 19
Backstay - 38', 2 3/8" x 3/16", 1 x 19
Uppers - 33', 9 3/4" x 3/16", 1 x 19
Lowers - 16', 4 3/8" x 7/32", 1 x 19
Main halyard wire - 33' x 1/8", 7 x 19
Jib halyard wire - 36' x 5/32", 7 x 19
All wire Jib Halyard - 70'6" x 5/32", 7 x 19
Main sheet - 70' x 3/8" Samson Braid
Jib sheet - 2, 35' x 7/16" Samson Braid
Hal Tails - 2, 34'6" x 3/8" Samson Braid
Cunningham - 6' x 1/4" Samson Braid
Out Haul - 14' x 1/4" Samson Braid
Traveler Lines - 11' x 5/16" Samson Braid
Reefing clew - 32' x 3/8" Samson Braid
Reefing tack - 17' x 5/16" Samson Braid
Cockpit hatch ties - 9' x 1/4" Samson Braid
 - 12' x 1/4" Samson Braid
Spin. Hal. - 75' x 3/8" Samson Braid
Spin. Sheets - 2, 35' x 3/8" Samson Braid
Foreguy - 32' x 3/8" Samson Braid
Topping Lift - 55' x 3/8" Samson Braid

