

OWNER'S GUIDE



CAL-BOATS

235 Fischer St. • Costa Mesa, Calif. 92626 • Phone (714) 540-3440

A BANGOR PUNTA COMPANY

IMPORTANT

Please Read

Jensen marine

SUBSIDIARY OF BANGOR PUNTA OPERATIONS, INC.
235 FISHER STREET / COSTA MESA, CALIFORNIA 92627

THE JENSEN MARINE WARRANTY

Jensen Marine warrants each new product manufactured by it to be free from defects in material and workmanship under normal use and service for a period which shall expire on the sooner of 180 days after commissioning by the original retail purchaser, or one year after the date of shipment by Jensen Marine.

Jensen Marine makes NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE, as to the mast, as to any external finish applied to the product or any part thereof.

Jensen Marine makes NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE, as to engines, toilets, stoves, refrigerators, batteries, ignition, lighting devices, blowers, propellers (folding or otherwise), and/or other equipment or trade accessories manufactured by others. Jensen Marine will deliver to the original retail purchaser the warranties, if any, extended to Jensen Marine by other manufacturers.

Jensen Marine makes NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE, on each new product which is not operated or maintained in accordance with the Owner's Guide furnished with each new product, or as to any product or part thereof which has been subjected to misuse, negligent acts or omissions, or accident.

If within the foregoing time period it is established to Jensen Marine's satisfaction that the product, or any part thereof included in this warranty, is defective in material or workmanship under normal use and service, then the sole and exclusive remedy and Jensen Marine's liability shall be, at Jensen Marine's sole option, the repairing of the defective product or part thereof, or the replacement of same by shipment to purchaser F.O.B. Jensen Marine's factory.

Defective parts or products to be repaired or replaced pursuant to this Warranty shall be returned by the purchaser to a Jensen Marine Dealer, or, if repair by a Dealer is determined by Jensen Marine to be impracticable, returned to Jensen Marine's factory. All such returns shall be freight prepaid.

This writing contains the entire Agreement between Jensen Marine and the purchaser.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THE FOREGOING WARRANTY.

TABLE OF CONTENTS

	Page
INTRODUCTION.....	1
I. OPENING UP	
A. Above.....	1
B. Below.....	1
C. Marimetic Panel.....	2
D. Tank Control Panel.....	3
E. Steering.....	4
II. STOPPING AND STARTING THE ENGINE	
A. Engine Control Panel.....	4
B. Stopping the Engine.....	5
C. Starting the Engine.....	5
III. CLOSING DOWN.....	6
IV. STEERING SYSTEM	
A. Pedestal.....	6
B. Emergency Tiller.....	7
V. PLUMBING SYSTEM	
A. Water Tanks.....	7
B. Line of Flow-Water.....	7
C. Drains.....	8
D. Bilge Pumps.....	8
E. Heads.....	9
VI. ENGINE SYSTEM	
A. Fuel Tanks.....	9
B. Line of Flow-Fuel.....	9
C. Lubricants.....	10
D. Propeller Shaft.....	10
E. Exhaust Line.....	10
F. Maintainance.....	11
VII. ELECTRICAL SYSTEM	
A. Battery.....	10
B. Marimetic Panel.....	11
C. Shore Power.....	12
VIII. GALLEY STOVE.....	12
IX. CLEAN-UP.....	12
X. SAILS.....	13
XI. SPARS, RIGGING AND HARDWARE.....	14
XII. APPENDIX	

Congratulations Skipper! Here is your new Cal Cruising 35. 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 three 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 seaworthyness of your yacht. Therefore, maintainance of your new Cal/ Cruising 35 is extremely important.

From section four on in the guide there is information to assist you in establishing a good maintainance routine. Through the use of fiberglass, stainless steel, anodized aluminum, and other non-corrosive materials we have reduced the number of maintainance 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 unless you live on board. 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 sliding aft window, dorade vents, and forward daylight hatch will all contribute to a flow

of fresh air through the boat.

2. Valves

All below water line through hull hittings are equipped with gate valves. It is vital that you know the function and location of these valves. 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 someone trying to pry them further open, thinking they are closed. Following is the location and function of the five standard thru-hull gate valves.

A. Under the floor hatches just inboard of the quarter berth are:

- 1. 3/4 inch SALT WATER ENGINE INTAKE VALVE
- 2. 3/4 inch GALLEY SINK DRAIN VALVE

B. In the head vanity cabinet are:

- 1. 1/2 inch head intake valve
- 2. 1 1/4 inch overboard head drain valve with check valve to prevent flooding.
NOTE: Standard marine heads are plumbed in this way. Optional heads are plumbed individually.
- 3. 3/4 inch vanity sink drain valve.

Open all valves and close one quarter turn.

C. Marinetic Panel

The master electrical panel is the first of three important control panels aboard and is located just port of the companionway ladder above the engine room access door, next to the chart table.

1. Battery Condition Indicator.

Before tripping the master switch on, determine the condition of your battery (s) by using the battery condition indicator. This type of "indicator" or "meter" is technically reffered to as a "Suppressed Zero Voltmeter". Note that calibrations do not start at zero but provide a full scale reading from 8 to 10 or 16 volts, depending on the meter. Below 8 to 10 volts the battery charge is so low that terminal voltage readings are meaningless. Approximate voltage range interpretations are as follows:

Engine Not)	Below 11-----	Very low battery charge
Running or)	11-12 -----	Low battery charge
at idle)	12-13 -----	Well charged battery

Engine)	13-13 1/2 -----	Low charge rate
Running)	13 1/2-15 1/2 -----	Alternator & Voltage Regulator OK
Above Idle)	15 1/2 or above-----	Voltage Regulator out of Adjustment

It is important for you to understand that the reading on the Battery Condition Indicator Dial is determined by the TOGGLE TEST SWITCH POSITION REGARDLESS OF THE MASTER SWITCH POSITION unless

it is in the "BOTH" position. When the Master Switch is in the "BOTH" position, the Battery Condition Indicator Dial will indicate BOTH BATTERY CONDITIONS NO MATTER WHICH WAY THE TOGGLE TEST SWITCH IS PUSHED. When the master Switch is in either the "OFF", "BAT 1", or "BAT 2" positions, the meter will read the condition of the battery TOWARDS which you push the Toggle Test Switch. Note that panel and meter illumination is also provided by this same Toggle Test Switch.

Before activating the electrical system, check the condition of both batteries if you have the optional battery.

2. Now trip the master switch on the marintic panel to the "on" position.

3. If you have the optional engine/room blower, trip this switch "on" along with the pressure water pump, electric bilge pump, and lights as needed. If the battery registers a low charge delay tripping these switches until the engine is going.

D. Tank Control Panel

This is the second vital control panel and is located just inside the engine room access door to the left.

1. Fuel Tank Selection

a. The fuel gauge is at the top of its panel and reads like a car fuel gauge. To measure the fuel in the starboard tank, press the momentary switch below the gauge to the right. For the port tank push the switch to the left.

b. With this information, choose the tank the engine will draw from by turning the selector lever, just below the momentary switch, to the tank desired. The lever has three positions; "port", "starboard", and "off". Return the lever to "off" when closing-down.

c. Diesel engines circulate more fuel from the tank than they actually consume. Therefore, the next selector level, below the first, determines the tank receives the returned fuel. CAUTION: Under normal conditions, always return the fuel to the same tank from which it is being drawn. This way none is wasted overboard if the other tank is full and fuel consumption can be more closely monitored. So, set both selector levers to the same position.

Also, to avoid running out of fuel, draw from only one tank at a time by making sure the selector levers are definitely in one of their three positions. A lever positioned between port and starboard tanks might allow fuel to be drawn from both.

d. The fuel tank fill plates are located on deck just outboard of the main cabin mid windows. The port plate fills the port tank and the starboard plate fills the starboard tank.

2. Water Tank Selection

a. The water tank sight gauges are actually lengths of clear vinyl hose located on either side of the Tank Control Panel. The hose to the left is for the port tank and the hose to the right is for the starboard tank. Initially, you will need to fill your water tanks through the on-deck fill plates and mark the vinyl hose where full, half full, and quarter full levels are for your boat.

b. Each sight gauge has a shut-off valve intersecting the hose near the base of the panel. To determine usage, close this valve after the tanks are full and open once daily. The water level will drop correspondingly. KEEP SIGHT GAUGE VALVE CLOSED FOR NORMAL USE (WILL DRAW AIR INTO PUMPS)

c. To draw water from the starboard tank open the right gate valve at the bottom of the panel. To draw water from the port tank open the left gate valve at the bottom of the panel. CAUTION: Do not open both valves! This will drain the tanks simulataneously and could leave you with both tanks empty.

E. Steering

1. Pedestal Steering

a. The steering pedestal is built to accept a five inch shelf mount compass. Mount this now.

b. The shift control for the engine is on the port side of the pedestal. Check to see--while the engine is off--that it is free to move forward for forward gear and aft for reverse gear. Leave it in the neutral or straight-up position. The engine will not start when the boat is in gear!

c. The throttle control is on the starboard side of the pedestal. Check to see that it is free moving also. Leave it slightly advanced for starting the engine.

d. Release the steering brake if it is on, by unscrewing it counter-clockwise.

2. Emergency Steering

If the pedestal steering system should ever fail, remove the chrome plate in the cockpit floor aft of the pedestal and insert the emergency tiller provided with the boat.

II. STARTING AND STOPPING THE ENGINE.

A. The Engine Control Panel

This is the third important panel and it is located in the forward part of the cockpit behind a sliding plastic window. The panel includes engine gauges that are read just like car engine gauges and three switches.

B. As a precaution lets cover stopping the engine before

To Stop the Engine:

1. Push in the push-pull switch and
2. Hold the momentary switch to either side.

WARNING: The Cal/Cruising 35 is equipped with an audible alarm system that goes off when:

1. Starting the engine
2. Oil pressure is too low
3. Water temperature is too high

After starting the engine the alarm will quit when oil pressure has reached a safe level.

C. Starting the Engine

1. Make sure salt water intake valve is open.
2. Pull out the push-pull switch.
3. Push in the starter push button until the engine ignites.
4. Adjust the throttle lever on the pedestal to idle.
5. Check the exhaust thru-hull in the transom to make sure water is being expelled with the exhaust. If it is not, stop the engines and check the salt water intake valve. Make sure the engine gets enough water to cool itself properly. Overheating is a common cause of diesel engine break-down. The alarm should give you enough time to prevent engine freeze-up.
6. If the engine won't start, the problem may be water in the fuel line according to the engine manufactures directions.
7. Now that the engine is going your battery is being recharged. Leave the battery indicator switch on the starting battery for 15 to 20 minutes to replenish the charge drawn off to start the engine. Then, if you have the optional second battery, switch to it so that you keep one fully charged battery in reserve for engine starting. Switch only at idling speed. Never switch to "off" while the engine is running or the alternator diodes will burn out.

Before casting off, check your:

- + Sails
- + Provisions
- + Fire Extinguishers
- + Life Preservers
- + Radio
- + Passengers and Crew

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

III. CLOSING-DOWN.

1. Reverse the Opening-up procedure
 - a. Closing valves
 - b. Shutting-down control panels
 - c. Securing hatches, gear, and sails.
2. Set the fenders-if docking.
3. Spray the hull and deck with water.
4. Attach the halyards so that they don't beat against anything in a breeze.
5. Double check the mooring lines.

IV. STEERING SYSTEM.

A. Pedestal Steerer

1. Manufactured by:

Yacht Specialties Co., Inc.
1555 East Street Gertrude PISA
Santa Ana, California

It is warranted by the manufacturer against defects for a period of one year.

2. The pedestal accepts a five inch shelf mount compass.

3. Cables.

- a. 64c Morse for the shift control lever.
- b. 33c Morse for the throttle control lever.
- c. or equivalents.

4. Maintenance.

a. Periodically check the steering cables and quadrant to see that they are aligned and firm-not rigid. The quadrant is the brass triangular piece bolted around the stainless steel rudder post. All of this is located just aft of the engine.

b. There is a zerk fitting on the upper bearing of the steering post that occasionally requires lubrication. Use any multi-purpose grease.

B. Emergency Tiller.

To use, remove the five inch chrome plate in the cockpit floor aft of the pedestal and insert the emergency tiller provided.

V. PLUMBING SYSTEM

A. Water Tanks.

1. The plastic water tanks are located port, under the dinette or settee, and starboard, under the galley.

2. The fills are on deck. Port fill for port tank and starboard fill for starboard tank. *BOTH VENTS ARE AFT-PORT*

3. Each tank will hold 55 gallons, giving the boat a capacity for 110 gallons.

4. Water should be drawn from one tank at a time.

5. If you draw from opposing tanks for fuel and water, it will distribute the weight better. For instance, when drawing from the starboard fuel tank-draw from the port water tank.

B. Line of Flow-Water.

1. The water in the tanks goes by hose to the tank shut-off gate valves on the tank control panel.

2. From here the water is drawn to the pressure pump.

a. The pressure pump is 12 volt and located just aft of the water heater of the port shelf in the engine room.

b. Pump capacity, type, and maintenance procedure are available from the manufacturer if they are not included

with this manual.

c. It's a good idea to carry a spare parts kit aboard for long cruises.

3. Once beyond the pump, the cold water hose takes the water to the galley and head sinks.

4. Another hose takes the water from the pump to the water heater. This is located on the port shelf, just inside the engine room access door.

IMPORTANT: Water can be heated two ways.

- a. The engine water flows through one set of coils in the heater generating hot water everytime the engine is running.
- b. The heater has a second set of coils powered by 110 volt AC shore power current. This is turned on at the marimetic panel when you have the shore power connected.

CAUTION: Never, Never, use the 110 Volt heating coils without water in the heater. They will overheat and self-destruct in a few minutes. To make sure the pump has filled the water heater, turn on a hot water tap. If water flows it is safe to turn on the 110 volt heating element.

C. Drains

1. The cockpit drains are self-tending.
2. The sinks and some marine heads drain overboard by way of brass thru-hull fittings. Each has a shut-off gate valve in the drain line, as mentioned before. See Section I for the location and size of each.
3. The shower and ice box drain into the bilge. Clean the bilge periodically by sending soapy water down these drains. Follow with a baking soda and water chaser to eliminate odors.

D. Bilge Pumps.

1. The hand bilge pump is under the port cockpit seat hatch.
2. The automatic electric bilge pump is 12 volt and located just forward of the steering quadrant in the engine room.

The switch is on the marinetic accessory panel. If more information is not included with this manual, the manufacturer or your Cal-Boats dealer will assist you.

IMPORTANT: On long cruises it is a good idea to carry a spare parts kit for the bilge pump.

3. Both bilge pumps empty into the port cockpit drain.

E. Heads

Due to recent legislation, standard marine heads without holding hanks are no longer legal in many ports. Therefore, your boat may have any one of a number of different types. Please see the manufacturer's literature for the correct operation and maintainance procededure for the head in your boat.

VI. ENGINE SYSTEM

A. Fuel Tanks

1. The diesel fuel tanks are located under the main cabin sole. The plumbing ends are visable through the lift out floor hatch inboard of the stove well. The port tank is further accessible beneth the aft bottom drawer of the dinette or though the adjacent floor hatch if you have the "L" shaped settee.

2. Each tank holds approximately 85 gallons giving you a capacity of 170 gallons.

3. The large (2") round fitting on the top of the tank is the sending unit for the fuel gauge. This may be removed for cleaning the tank, if necessary.

4. The white wire is the ships common ground.

5. The small red hoses are the drain and return lines.

6. The large red hose is the fill.

7. The black hose is the vent.

B. Line of Flow

1. From the tanks the fuel flows to the tank selector panel where you determine which tank is open.

2. From the panel the fuel flows to the filter bowl, mounted on the aft side of the engine room bulkhead behind the tank control panel. For the specifics about bleeding and cart-ridge changing refer, once again, to the manufacturers literature. The quality of the fuel you use will determine how often this must be done.

3. The fuel now flows to the engine and the engine owners manual provides detailed service information.

C. Lubricants

1. Use "Type A" auto transmission fluid in the transmission and V-drive units. They share the same dip stick, fluid entry porthole and fluid.

2. To add fluid, unscrew the one inch fitting with dip stick attached on the side of the transmission.

3. Use only API service class CC oil in the diesel engine. Change the oil every 200 engine hours or two months, whichever occurs first.

D. The Propeller Shaft Packing Gland, located in the engine room, should be damp. Tighten the nuts snug enough to eliminate any excess water drips.

E. The engine exhaust line is always open.

F. Familiarize yourself with routine engine maintenance procedures as they appear on page 36 of the Perkins diesel owners manual.

VII. ELECTRICAL SYSTEM

A. Battery.

1. You have a 12 volt 105 amp battery located under the floor hatch at the bottom of the companionway ladder. If you have the optional battery, it will be here also.

2. Fill the battery, as you would a car battery, with distilled water as needed. Do not fill the battery all the way to the top.

3. The battery condition indicator is on the marintic control panel and instructions on its use are in Section I.

CAUTION: Use the Master Switch in "Both" position only for emergency starting or for "top off" charging when both batteries are near full charge. When both batteries are completely charged, transfer to either battery, keeping one in reserve. There is no way to start the engine with a dead battery.

4. Never move the master switch to "off" while the engine is running or the alternator diodes may burn out!

5. The battery is recharged by a 35 amp alternator mounted on the engine. The panel will permit only the battery indicated to be recharged.

6. Maintenance

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.

B. Marinetic Panel

1. The basic circuit breaker electrical system may be altered to the electrical requirements of your accessories. In the event that you make electrical modifications, be sure to follow the wiring diagram or consult a competent Marine Electrician.

2. A one year warranty is offered by:

Marinetics Corporation
P. O. Box 1015
Newport Beach, California 92663

if you return the enclosed warranty registration form within 30 days of commissioning.

3. In the event of an overload or short in any circuit, the corresponding circuit breaker will trip itself off. Once the problem has been corrected, trip the switch "on" again. It will continue to trip "off" until the circuit is safe. You do not need fuses.

4. The master switch cuts off all power to the other circuits, it must be on for anything electrical to work.

5. The left accessory panel and the top three circuits on the right accessory panel are 12 volt current. The remaining circuits are 110 volt AC current unless marked otherwise. All factory installed circuits are labeled.

a. The RUNNING LIGHTS switch activates the red and green lensed lights forward and the white, 12 point stern light aft. The COMPASS LIGHT connection for the cockpit is also on this switch. When under sail at night, these are the only lights that should be shown, except for the shining of a white light on the sails if you feel there is a real need for greater recognition.

b. The WHITE STERN LIGHT takes a (GE-68) type bulb while a (GE-90) bulb should be used for the RED PORT LIGHT and a (GE-94) bulb for the GREEN STARBOARD LIGHT. 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.

c. 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 its trim and in emergency cases when recognition is important. This light uses a (GE-68) bulb if replacement is necessary.

d. The cabin lights have their own individual switches, but must be activated by the CABIN LIGHT switch on the Master Power Control Panel. 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.

C. Shore Power

The shore power connection is in the port aft corner of the cockpit. It requires a Hubbel 30 amp twist lock cord.

VIII. GALLEY STOVE

A. Operating instructions for the optional 3 burner Pressure Alcohol Stove come with the stove but a few additional points are important.

The 2 gallon Pressure Alcohol Tank is under the quarter berth. When filling this tank, please observe the following BEFORE removing the stopper:

1. All burners are OFF
2. Main alcohol shut-off valve on top 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 than the recommended 10 pounds.

B. Other types of stoves are also optional on the Cal/Cruising 35. Please consult the manufacturer's literature for operating and maintenance procedure.

IX. 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. To remove anything that won't come off with soap and water or window cleaner use a heavy duty solvent. Choose the 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 its 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.

X. 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!

XI. SPARS, RIGGING AND HARDWARE

It is impossible to fully guarantee the mast of your CAL/35 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 Tune

The mast should be set straight a thwart-ships 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 mph 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 headstay, backstay, mid-stay and uppers tight, the intermediates not so 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 $\frac{1}{2}$ " to 2" of play of the uppers, 2" to 3" on the lowers and about 2" on the intermediates. The intermediates are set last and serve to balance the pull of there uppers and 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 re-varnished every six months and the tips re-taped.

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/35. 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.

This brings us to the end of our "Sailing Check-List" and leaves only the securing of your CAL/35. If we ran the list in reverse,

adding only one item, your CAL-35 will be ready for the next sail. This one important item is a GOOD HOSING. Nothing keeps a boat better than fresh water and the chamois. Use plenty of pressure, especially in the cockpit scuppers, non-skid areas and metal surfaces. Turn to with sponge and chamois and you will be rewarded with a sharp, sparkling yacht that is only matched by its comparable performance.

Good Luck and Happy Sailing

JENSEN MARINE

STANDING RIGGING

Corrected: 6/12/74

Headstay	9/32"	1x19x41'10½"	ME & ½" RH stud
Upper shroud	9/32	1x19x39' 8 "	ME & ½" RH stud
Fwd Lower Shroud	¼"	1x19x19'0"	ME & ½" RH stud
Aft Lower Shroud	¼"	1x19x19'3½"	ME & ½" RH stud
Backstay, sloop	9/32	1x19x45'0½"	ME & ½" RH stud
Backstay, ketch	9/32"	1x19x28'6½"	ME & Fork
Backstay, Bridle Ketch	3/16"	1x19x16'2½"	Fork & 3/8" RH stud

STANDING RIGGING
MIZZEN MAST

Corrected: 6/10/74

Upper shroud	3/16"	1x19x22'7"	ME & 3/8" RH stud
Lower shroud	7/32"	1x19x10'43/4"	ME & 3/8" RH stud
Forestay	3/16"	1x19x17'4"	ME & 3/8" RH stud
Jumper	1/8"	1x19x11'8½"	ME & ¼ " RH stud
Running backstay (optional)	3/16"	1x19x22'11½"	ME & 3/8" RH stud

RUNNING RIGGING

Main Halyard	3/16"	7x19x43'10"	Thimble & Head Board Shackle
Jib Halyard	3/16"	7x19x43'6"	Thimble & Swivel snapshackle
Main Boom Topping Lift	1/8"	7x19x37'6"	Plastic coat Thimble & Thimble
Mizzen Halyard	1/8"	7x19x23'0"	Thimble & Head- board shackle
Mizzen Boom Lift	1/8"	7x19x17'9"	Plas. Coat Marine eye & 5/32" Thimble
Mainsheet	7/16"x56'0"	Dacron	
Genoh sheet	½"x56'0"	Dacron	
Main & Jib Halyard tails	3/8"x41'0"	Dacron	
Mizzen sheet	5/16"x40'0"	Dacron	
Mizzen Halyard Tail	5/16"x21'0"	Dacron	



