# Pearson 34











A comfortable sailor is a happy sailor. Although they may look interesting at boat shows, radical departures from the classic arrangement plan shown here (i.e., V-berth forward, head/hanging locker, main cabin, galley, chart table) can be impractical under way.

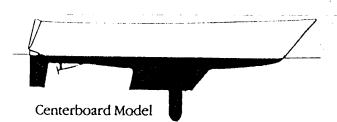
The results of 25 years of building cruising boats confirm that a traditional arrangement plan gives the Pearson 34 the best utilization of space and the most comfort.

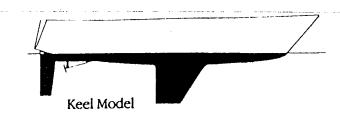
It gives berths that are bigger than any 6-footer in-your crew. It gives well-located and amply-large stowage for food, bedding, and

clothing. It gives you the most practical kind of galley under sail (U-shaped). It gives you a navigation station and wet locker near the companionway. It also gives good engine access.

There's big comfort in the 34's cockpit, too (why not – you spend about 50% of your time afloat there). The cockpit's 8-foot length can handle a crowd. Canted seat backs and radiused edges make sure everyone's con. able. The mainsheet traveller is mounted on the cabin top. This leaves the cockpit unobstructed and lets you mount a full-size spray dodger.







### PEARSON 34

Specifications	* Keel	Centerboard
L.O.A.		33 <b>'</b> 9 ¼ "
D.W.L.		28'15"
Beam		11'2"
Draft	5'11"	3'10"
Displacement	11,240	11,750 lbs.
Ballast	4,250	4,660 lbs.
Sail Area		550 sq. ft.
Fresh Water Capacity		50 gals.
Fuel Capacity		22 gals.
Power Diesel		•
Mast Height Abo	we D.W.L.	48'9"
*approximate		-

### Standard Equipment HULL

One-piece white hand layup FRP truction.

ided-in blue boot stripe. "vlar cove stripe.

- ıll fittings with bronze bcased stainless steel ball valves below waterline.
- External lead ballast.
- Gelcoat finish on bottom.

One-piece molded FRP balsa-cored in horizontal areas for rigidity. Plywood reinforced in high stress areas.

Teak toe rail caps.

Foredeck anchor locker.

Marinium bow chocks, bow and stern mooring cleats.

Stainless steel bow pulpit, split stern rail and lifeline stanchions. Stern swim ladder.

Boarding gate.

Backup plates on all cleats, pulpits and stanchions.

Vinyl coated stainless steel double

lifelines.

Large sail locker to port.

Pedestal steerer with engine shift, throttle controls, pedestal guard and brake.

4" compass with night lighting. Emergency tiller.

Mainsheet traveller on cabin top. Teak hand rails.

Four opening ports with screens. Helmsman seat.

meak drip rail on coach roof. .ent.

> Lied lexan aluminum framed **≥8** .

- Inboard genoa tracks.
- . Sea Hood.
- . Winch handle alcoves.
- . Sliding companionway hatch.
- . Two #43 Lewmar self-tailing genoa sheet winches with handles.
- . Fixed baby stay.

### MACHINERY

- . Yanmar diesel engine, F.W.C., 22 HP, mounted on floor pan.
- . Engine panel with indicator lights, tachometer and key switch.
- . Alarm system for low oil pressure and high water temperature.
- . 22 gallon aluminum fuel tank with cockpit fill.
- . Two blade solid propeller.

### ELECTRICAL

- . Chafe protected, color-coded wiring installed well above the bilge, carefully attached to avoid working loose.
- Easily accessible dual 90 AH batteries.
- . Explosion-proof master switch.
- Navigation lights.
- Grounding system.
- Coaxial cable in mast.
- Circuit breaker switch panel.
- Interior lights.
- Shore power w/50' cord.
- . Anchor light at masthead.

### SPARS AND RIGGING

- Tapered anodized aluminum mast stepped through the deck on the keel.
- Stainless steel wire rigging.
- Internal jiffy reefing.
- Internal halyards.
- #8 Lewmar main halyard winch.
- #16 Lewmar jib halyard winch.
- Mast step, collar, and boot.
- #30 Lewmar self-tailing mainsheet winch.

### PLUMBING

- 50 gallon fresh water capacity.
- . Hot/cold pressure water system with six gallon hot water heater.
- Stainless steel galley sink.
- . Marine holding tank toilet system.
- Offshore discharge valve.
- . Manual bilge pump.

### INTERIOR

### Structure

- Textured FRP floor pan bonded to hull with varnished teak and holly sole.
- Textured FRP fiberglass headliner incorporating shelf and locker storage.

- . Finished teak bulkheads bonded to hull.
- . Teak trim and corner posts. Main Salon
- . Transom berths port and starboard
- . with enclosed lockers above.
- . 4" fabric covered foam berth mattresses
- . Storage areas behind upholstered backrests.
- . Bulkhead mounted dining table with leaf and storage shelves.
- . Hanging locker to port with louvered door opposite head.
- Curtains.
- . Companionway grab rails.
  - Navigation Area
- . Chart table with hinged top storage.
- . Storage under double quarter berth.
- . Electronics compartment outboard. Galley
- Two-burner propane stove with oven and one propane tank stored in cockpit.
- . Large ice box with can rack and 3" urethane foam insulation in sides
- and lid. Open dish storage with enclosed locker underneath.
- . Flap storage under stove.
- . Deep trash bin.

### Head

- . Marine head with manual pump.
- . Molded FRP vanity with storage and mirrored sliding doors.
- . Shower.
- . Mirror
- Forward Cabin
- Drawer storage to port..
- . V-berth insert.
- . Alcove storage in molded headliner.
- Large storage bins under double berth.

### MISCELLANEOUS

. Complete owner's manual.



West Shore Road, Portsmouth, R.I. 02871 (401) 683-0100



West Shore Road, Portsmouth, R. I. 02871 • 401-683-0100

Dear Pearson Owner:

Welcome aboard your new Pearson 34. We are proud to have you join the thousands of other Pearson owners, and we hope you will find this manual helpful and informative.

Your decision to own a Pearson yacht is a source of great satisfaction to us, and we are confident your new boat will provide the same satisfaction for you. By selecting a Pearson, you have expressed confidence in us, and you can be certain that we have made, and will make, every effort to support your trust.

Every Pearson yacht is manufactured of the finest materials available, by dedicated professionals and craftsmen. It asks only that you treat it as one of the family, and it will return all you can ask of it and more. This manual is intended to guide you through your first few days of ownership, as well as to provide information on care and maintenance that should be of value over the life of the yacht. Individual instruction manuals from the manufacturers of installed equipment are also included where more detailed information is required.

Before getting underway, please take the time to familiarize yourself with the operations and functions of the various systems designed into the Pearson 34 to ensure proper operation. In the event that additional information is needed, we suggest you consult your dealer or call our Customer Services Department.

Please accept our congratulations. Have fun and smooth sailing!

Sincerely yours,

PEARSON YACHTS

For your convenience the following list of important locations on your Pearson 34 has been included.

### QUICK REFERENCE LOCATION SHEET

EMERGENCY TILLER IN STBD SAIL LOCKER HEAD INTAKE SEACOCK UNDER V-BERTH STBD SIDE AFT OVERBOARD DISCHARGE SEACOCK UNDER STBD BUNK AFT TRAP GALLEY SINK DRAIN SEACOCK UNDER PORT BUNK AFT TRAP ENGINE RAW WATER INTAKE IN ENGINE ROOM STBD SIDE FWD SEACOCK FUEL SHUT OFF VALVE STBD SIDE IN ENGINE ROOM NEXT TO FUEL FILTER WATER TANK VALVES UNDER GALLEY SINK FWD SUMP PUMP UNDER PORT BUNK FWD TRAP PRESSURE PUMP UNDER GALLEY SINK FWD THRU-HULL FOR SCUPPERS CENTER OF TRANSOM PORT & STBD VANITY SINK DRAIN UNDER VANITY SINK FRESH WATER FILTER UNDER GALLEY SINK FWD ENGINE SALT WATER STRAINER IN ENGINE ROOM STBD SIDE FWD PROPANE SOLENOID IN PROPANE BIN PORT SIDE OF COCKPIT PROPANE GAS VALVE ON BULKHEAD UNDER COMPANIONWAY MASTER ELECTRICAL PANEL ON BULKHEAD UNDER COMPANIONWAY SHORE POWER PANEL ON BULKHEAD UNDER COMPANIONWAY BATTERY LOCATION UNDER QUARTER BERTH IN CENTER HATCH STBD SIDE HOLDING TANK UNDER STBD BUNK FWD TRAP HOLDING TANK Y-VALVE UNDER STBD BUNK FWD TRAP

UNDER V-BERTH FWD TRAP

ANCHOR WELL DRAIN THRU-HULL

### PEARSON 34 SPECIFICATIONS

KEEL MODEL

CENTERBOARD MODEL

L.O.A

33' 9 1/2".

D.W.L.

28' 1 1/2"

BEAM

11' 2"

DRAFT

5' 11"

3' 10" BOARD UP

7' 16" BOARD DOWN

DISPLACEMENT

11,240 lbs.

11,750 lbs.

BALLAST

4,250 lbs.

4,660 lbs.

SAIL AREA

550 sq. ft.

FRESH WATER

CAPACITY

50 gals.

2 25 gal. flexible tanks

FUEL CAPACITY

22 gal.

POWER

DIESEL

MAST HEIGHT ABOVE D.W.L.

481 9"

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### INTRODUCTION

### SECTION 1

### 1.1 INTRODUCTION

1.1 This manual is intended to acquaint you with the various features of your Pearson yacht and to provide information related to the care and upkeep of the yacht and its equipment. The manual supplements the literature supplied by the manufacturers of the systems and equipment installed in the yacht, and wherever practicable refers to this literature. It is recommended that the literature supplied by manufacturers be retained and the instructions therein followed.

### 1.2 FORMAT

The manual is divided into four basic sections followed by a parts supplement.

Section 1, this section, contains a brief description of the contents, format of the manual, and the warranty. The warranty information included on the following page should be read carefully. This information, along with the warranty and parts information supplied by manufacturers of the system installed, will help maintain the yacht and all of its systems.

Section 2 of the manual covers the procedures that should be followed when commissioning the yacht. It includes the procedures that should be followed by the dealer at time of commissioning, as well as those items (such as safety equipment) that are the owner's responsibility. This section of the manual should also prove useful in subsequent recommissionings after periods of layup.

Section 3 of the manual describes the various systems used on the yacht. Reference is made to manufacturers' instructions such as the engine manual and additional information is supplied whenever installations vary from the general conditions assumed in the manufacturers' instructions.

Section 4 provides a maintenance summary covering the procedures that should be followed to maintain the beauty and serviceability of the yacht. There are three sections: routine maintenance, laying-up procedures, and fitting-out procedures. Whenever feasible, reference is made to the appropriate manufacturer's literature.

### 1.3 WARRANTY

PEARSON YACHTS are carefully inspected and tested prior to shipment from our factory.

Because of this attention to quality control, our warranty is one of the most effective in the industry.

More important, however, is the knowledge and cooperation you as the owner, and we as the manufacturer, receive from the PEARSON Dealer Organization.

Your warranty is included in your file of ship's papers. Be sure to follow the instructions on filling out and forwarding. You can rest assured that our policy towards your warranty will result in your satisfaction.

### IMPORTANT NOTICE!

UNDER NO CIRCUMSTANCES WILL PEARSON YACHTS WARRANTY A HYDRAULIC ADJUSTER PURCHASED FROM A SOURCE OTHER PEARSON YACHTS. ΙF THE ADJUSTER IS INSTALLED BY PEARSON DURING THE CONSTRUCTION OF THE YACHT, WARRANTY COVERING THE INSTALLATION WILL BE SUPPLIED BY PEARSON. SHOULD THE ADJUSTER BE PURCHASED ON A PARTS ORDER INSTALLED, AND BE DEALER THE DEALER GUARANTEE THE INSTALLATION. THE ADJUSTER ITSELF CARRIES ITS OWN MANUFACTURER'S WARRANTY.

### 1.4 RESPONSIBILITY OF THE OWNER

- 1. Your prompt return of the warranty will help us ensure continued satisfaction. Your dealer will provide you with the required information and will co-sign the warranty. Please return the manufacturer's copy within thirty (30) days after taking delivery of your new boat.
- 2. Thoroughly check your Ship's Papers file to ensure that all instructions furnished with accessories are included.
- 3. Your Pearson dealer will competently handle any service problems that may arise. It is essential that you contact him for all warranty matters.
- 4. When it is necessary to contact Pearson, please address your letters as follows indicating your boat and hull number:

PEARSON YACHTS DIVISION
GRUMMAN ALLIED INDUSTRIES, INC.
WEST SHORE ROAD
PORTSMOUTH, RI 02871

Attn: Customer Service Department

### COMMISSIONING

### SECTION 2

### 2.1 INTRODUCTION

- 2.1.1 The first commissioning of a yacht is essentially the start the yacht's life, and the importance of proper commissioning procedures time at this cannot overestimated. The commissioning procedure will by dealer personnel and requires no owner performed participation. Therefore, the owner need only to concern himself with items such as safety equipment which considered to be his responsibility. Items of owner responsibility are further delineated in paragraph 2.4 of this section.
- 2.1.2 Complete lists of the pre-launch and post-launch checks employed during commissioning are provided in this section for those owners interested in understanding the decommissioning procedure, as well as for future use in any recommissionings that may be required after periods of wet or dry storage. The lists assume performance by persons cognizant of the procedures that are required, and do not attempt to provide step-by-step instructions. Detailed procedures are available in section 3 of this manual and other manufacturers' instructions that are provided with the yacht.
- 2.1.3 The factory installed equipment, and items of owner responsibility that require attention during commissioning are included in the list with the items marked with an asterisk (\*), and the items involving owner responsibility marked with a double asterisk (\*\*).
- 2.2 PRE-LAUNCH CHECKS
- 2.2.1 Hull Inspection.

Check topsides, decks, and all interior spaces for cleanliness and proper finish. Make certain that all foreign matter has been removed from the bilge areas, and check the following specific items:

 All thru-hull valves lubricated and closed, all hose clamps tight.
 Propeller nuts and cotter pin properly made up.
 Steering gear and rudder operational.

\* \*\_ Anti-fouling bottom paint applied.

Strut bearing in place and secured.

\_\_\_\_ Make sure centerboard is in "UP" position (centerboard

model).

2.2.2	machinery inspection.
·	Make an overall inspection of the machinery spaces. Ensure that they are free of loose material that might interfere with machinery operation, and then check the following items:
	Engine installation work completed.
	Engine oil, transmission fluid, and coolant levels satisfatory.
	All electrical switches OFF.
	Batteries fully charged, tied down, connected; electrolyte at proper level.
*	Installation of all equipment completed.
	All fuel and *LPG valves CLOSED.
	Adequate amount of fuel in tank.
2.2.3	Before Mast is Stepped.
	WARNING!! MOVE YOUR BOAT TO A POSITION THAT IS CLEAR OF OVERHEAD WIRES OR OBSTRUCTIONS. ELECTROCUTION MAY RESULT FROM CONTACT WITH ANY OVERHEAD WIRES!!
	Check the following items:
***********	Shrouds, stays, spreaders, installed and properly secured to mast. Check wire rigging for kinks or defects.
*	Masthead lights, spreader lights, and mast-mounted instrument units operational.
*	VHF antenna installed.
	All chafe points on mast properly taped.
<del> </del>	Mast boot slipped onto mast and secured. (See Fig. 3.4.2)
2.2.4	Equipment On Board.
	Check the following items:
	Winch handles, emergency tiller, and bilge pump handles.
**	Ground tackle.

Dock lines and fenders.

**	Safety equipment: pfd's (life preservers) throwable horseshoe or ring buoy horn ship's bell emergency signals (flares, etc.) fire extinguishers.
**	Medical kit.
**	Spare parts and tool kit.
2.3	POST-LAUNCH CHECKS.
2.3.1	Hull Inspection.
	Make an overall inspection of the hull interior. Check bilge areas for evidence of major leaks near thru-hulls, and then make the following specific checks:
***************************************	Open all thru-hull seacocks. Check each valve and associated hoses, couplings, etc.
- 14 Marie	Check propeller shaft packing gland for nominal adjustment. Unless major leaking is observed, defer adjustment until paragraph 2.3.2.
	After the boat is rigged check shaft alignment, align if necessary, connect couplings. (See Fig. 4.4)
	Check operation of the centerboard (centerboard model).
2.3.2	Electrical Inspection.
	Make the following checks:
	Check the 12 volt supply at the electrical panel with the battery switch in the #1, #2, and ALL positions.
	Make an operational check of all DC circuits connected to the electrical panel.
	Connect the shore power cable, check the polarity indicator, close the main breaker, and make an operational check of the following items if installed.
	110 volt receptacles Hot water heater Converter Other AC equipment
2.3.3	Machinery Inspection.
	Secure the yacht to a peer or dock with bow, stern, and spring lines and operate the engine at <u>low speeds</u> in neutral, forward, and reverse. Check:

throttle and shift controls engine operation charging current (check ammeter). water temperature (operating temp. 170 degrees to 185 degrees F. See engine owner's manual). oil pressure (see engine manual). Check the fuel system for leakage. Recheck the shaft packing gland for proper adjustment. Adjust if necessary. (See Paragraph 4.4.1) Install and check the operation of the emergency tiller. 2.3.4 Rigging And Sails. Check the following after mast is in place: All standing rigging complete and in place, dockside tuning completed. (See paragraph 3.4) Mast boot installation completed. (See Fig. 3.4.2) All cotter pins in place and taped. Running rigging in place. Sails hoisted to check fit. 2.3.5 Fresh Water System. Check the following: Water tanks full, no leaks at tank or fittings. Pressure water system operational. Sinks, foot pumps, drains operational. Hot water system operational. Shower operational. Sump pump operational. Bilge pump operational. 2.3.6 Head System. Check the following: Head, holding tank, or other MSDs operational. Head fill and discharge hoses for leaks.

Y-valve and discharge plumbing.

Activate Lectra/San unit in accordance with owners manual literature.

### 2.3.7 Galley.

Check the following:

Propane or LPG valves, tank, and gauge functioning properly. (See Fig. 3.3)

Galley stove operational.

### 2.4 OWNER RESPONSIBILITIES.

For maximum enjoyment of your Pearson, due regard must be given to proper safety and maintenance procedures. The following is a partial list of items that are the responsibity of the owner:

Insure that your boat is operated according to the U.S. Coast Guard Regulations as outlined in the "Federal Requirements For Recreational Boats". A copy of this pamphlet is included in your owner's manual and you should familiarize yourself with all operating requirements.

Prepare yourself for any situation before going out on the water. Follow the instructions provided in the sections of this owner's manual, the individual supplier instruction manuals, and all applicable U.S Coast Guard and other regulations.

If you are not an experienced sailor, you should attend an accredited sailing school.

Before leaving the dock: be sure that all your equipment is in working order, that you are aware of the weather conditions, and that someone ashore is familiar with your destination or float plan.

# 2.4.1 Manditiory Coast Guard Safety Equipment.

Many safety items are required for compliance with the U.S. Coast Guard regulations. Note that these regulations are subject to change. It is the owner's responsibility to be cognizant of current regulations as outlined in the "Federal Requirements for Recreational Boats". Additional copies may be obtained by writing the Consumer Affairs Staff, U.S. Coast Guard Headquarters, Washington, D.C. 20953 or by calling 202-472-2384.

Depending on the length, passenger capacity, and operating conditions, your boat must be equipped according to the current U.S.C.G. regulations. Be sure that you operate your boat with the necessary

PFDs (life preservers), fire extinguishers, signaling devices, distress signals, navigation lights, etc. as referred to in the "Federal Requirements for Recreational Boats".

2.4.2 Recommended Safety Equipment.

Preparation is the key to safety on the water. As a minimum guide, we recommend that you outfit your boat with the following equipment:

a compass - that is properly adjusted to give the correct magnetic reading.

a large capacity bilge pump

updated nautical charts of your intended cruising area

large waterproof flashlight with spare batteries.

3 fenders

boat hook

docking lines - a good rule of thumb to follow dictates that your bow, stern, and spring be equal to the length of the boat. We recommend 1/2 inch dacron line for this purpose.

2.4.2.1 anchor and rode - the following suggestions are provided as a general guide and should be revised to suit the the areas in which the yacht is to be sailed and the personal preference of the owner:

TYPE ANCHOR	CHAIN	RODE
5H Lunch 12h Wkg 20H Storm DANFORTH*	6' X 3/8" BBB GALV. PROOF COIL	150' X 1/2" 3 STRAND NYLON LINE

- \* DANFORTH ANCHORS are manufactured exclusively by Danforth, Div. of Eastern Co., 500 Riverside Industrial Parkway, Portland, Maine, 04103
- 2.4.2.2 medical kit Every yacht should carry a first aid manual, and a medical kit tailored to the specific needs and capabilities of the owner. Any ship's store should carry a standard type medical kit. Items in the kit should include:

aspirin
over-the-counter motion sickness pills
adhesive strips and tape
ammonia inhalants

antiseptic wipes
antiseptic germicide ointment
sunscreen first aid/burn cream
zinc oxide ointment
gauze bandages
insect/bee sting relief wipes
sterile pads
cold packs for sprains
scissors
tweezers

### 2.4.2.3 tool kit - a basic kit should consist of:

wrenches - adjustable, open end, box, socket hammers - large and small knife - with marlinspike screwdrivers - large and small, standard and Phillips pliers - regular, cutting and needle nose, vise grips wire cutter - capable of cutting standing rigging hacksaw - with spare blades

### 2.4.2.4 spare parts - a basic kit should consist of:

standing rigging repair materials such as cotter pins, turnbuckles, stainless wire, clevis pins running rigging and sail repair material such as blocks, extra line, sail slides, duct tape. assortment of stainless steel screws, nuts, bolts, and washers hose clamps electrical tape, wire, crimp on lugs spare navigation light bulbs lubricating supplies - WD-40, silicone grease check engine manual for spare parts, engine oil and transmission fluid recommendations sail repair kit chafe tape - white vinyl

### 2.4.3 Additional Safety Equipment.

A number of additional safety items are worthy of consideration. These range from safety harnesses to emergency beacons, life rafts, and survival suits. Their use depends upon the intended use of the yacht. We suggest you investigate the necessity of these items through discussion with your dealer.

### 2.4.4 Dealer Responsibilities.

PEARSON YACHTS are sold through Authorized PEARSON YACHTS Dealers who have been chosen to represent the company because of their knowledge of yachts and their ability to provide you with the attention and service you deserve. As experts in their profession they can competently handle any service problem which may arise.

Your PEARSON YACHTS Dealer is responsible for providing you with a high level of service before and after you purchase your yacht. It is his responsiblity to:

Inspect your yacht upon delivery for loss and damage which may occur in transit and process any claims against the transport company.

Prepare your boat for commissioning or assist you by providing the initial commissioning procedures.

Verify that all specifications selected at time of ordering in addition to all other equipment are received in accordance with the Pearson packing list.

Operate and check all mechanical systems under the conditions of actual usage.

Instruct you on the use of your yacht and its systems.

Provide the necessary assistance and service under the terms of the Limited Warranty on your yacht, including the processing of all claims with PEARSON YACHTS.

Whenever a problem arises please contact your PEARSON Dealer. If it is necessary to contact PEARSON YACHTS, please indicate your model and hull number. Address your letters as follows to:

PEARSON YACHTS
GRUMMAN ALLIED INDUSTRIES, INC.
WEST SHORE ROAD
PORTSMOUTH, R.I. 02871
attn: Customer Service Department

### YACHT SYSTEMS - SPARS AND RIGGING

### SECTION 3

- 3.1 MAST.
- 3.1.1 Follow the Mast Tie Rod Assembly diagram on the following page.
- 3.1.2 Familiarize yourself with the Masthead Assembly diagram.
- 3.1.3 Spreaders And Standing Rigging

The standing rigging consists of a single spreader system, with single upper and lower shrouds secured to chainplates athwartship of the mast; a headstay to provide forward support for the mast as well as support for the headsail; a babystay and backstay. See the diagram on the following page.

- 3.2 BOOM
- 3.2.1 Follow the Internal Jiffy Reefing instructions (fig. 3.2.1)
- 3.3 DOCKSIDE TUNING

Your Pearson is delivered in as near ready - to sail condition as possible with all basic tuning completed at time of commissioning. However, a basic tuning procedure has been included in this section to assist the owner in the future.

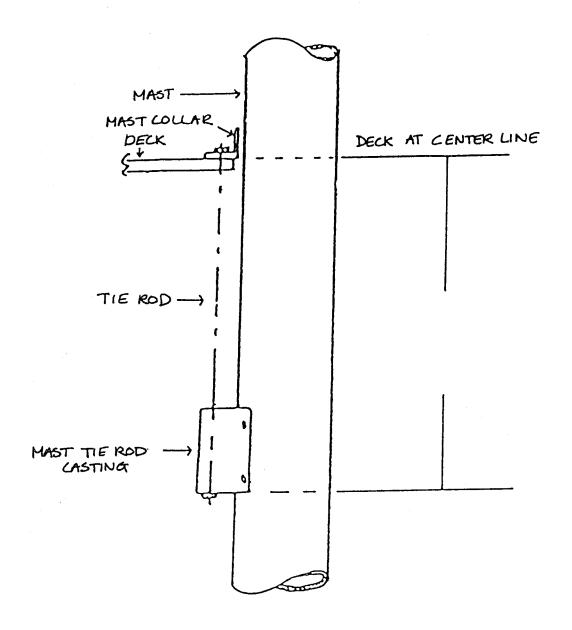
### 3.3.1 Before Mast Is Stepped

Make certain that the headstay, backstay, topping lift, upper and lower shrouds are connected to the mast. Note that toggles must be used when connecting the stays to the mast. Make certain that the headstay also has a toggle at the lower end.

Adjust all turnbuckles to their extended position to facilitate attachment when the mast is stepped. Make certain that each turnbuckle is installed with the clockwise threads in what will be the down position when the turnbucle is in place.

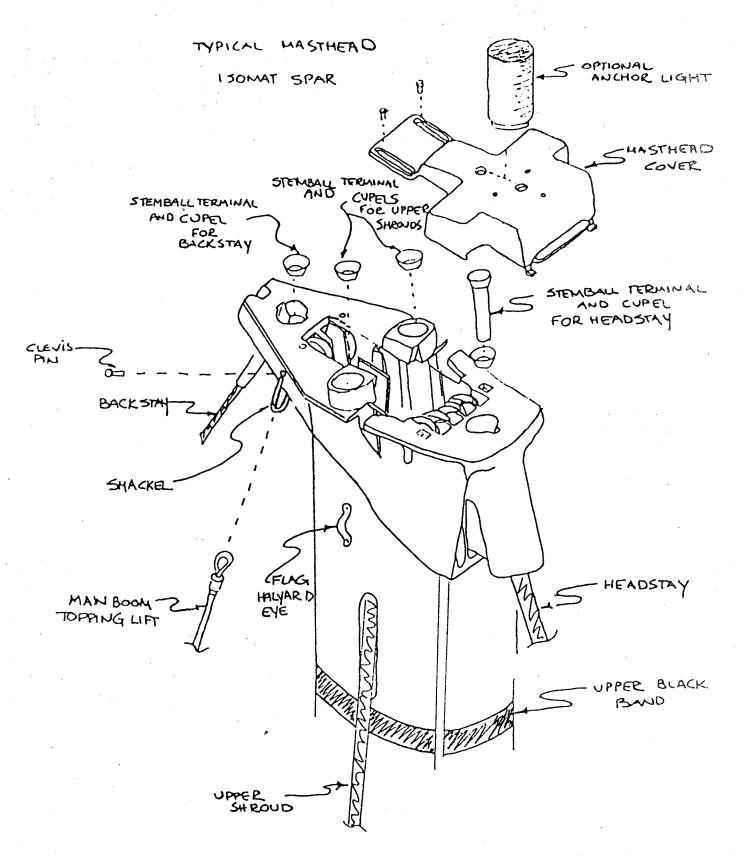
Slip the mast boot assembly onto the mast and position it at a point on the mast where it will not interfere with installing the mast into the yacht. Make certain that it is oriented properly (top side up). AN ERROR HERE WOULD REQUIRE REMOVAL OF THE MAST. Temporarily secure the boot assembly at this position.

Check the operation of any masthead-mounted instrumentation as well as masthead, anchor, or spreader lights. If a flag halyard is desired, it should be rigged now. VHS antenna



YOUR YACHT IS EQUIPPED WITH A TIE ROD THAT RUNS FROM THE MAST COLLAR TO A CASTING ON THE MAST.

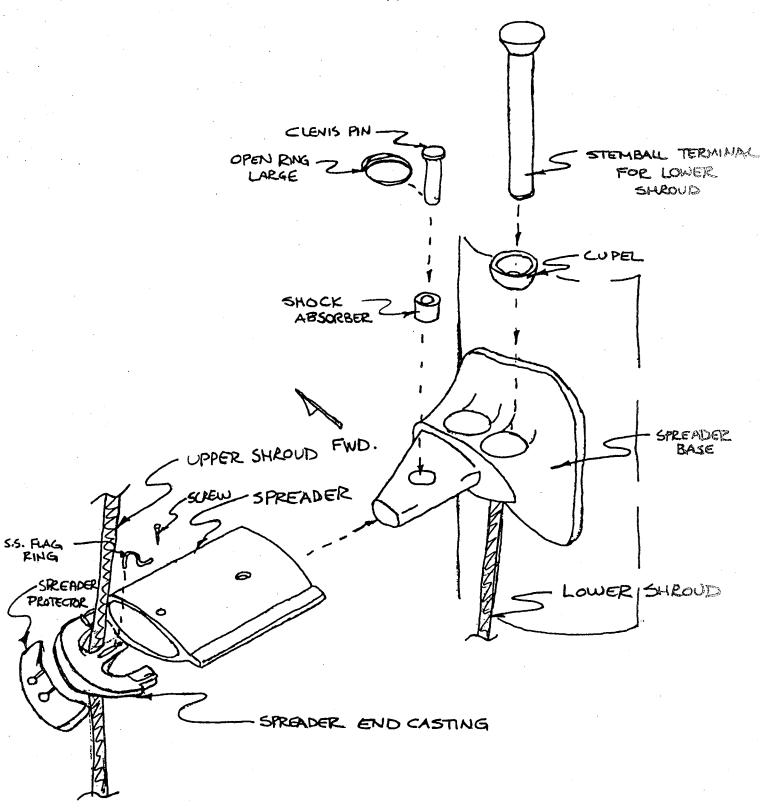
THE TIE ROD MUST NEVER BE OVER TENSIONED.
THE LOWER NUT SHOULD BE "FINGER TIGHT"
WITH THE BOAT AT REST AND THE RIGGING
PROPERLY ADJUSTED.



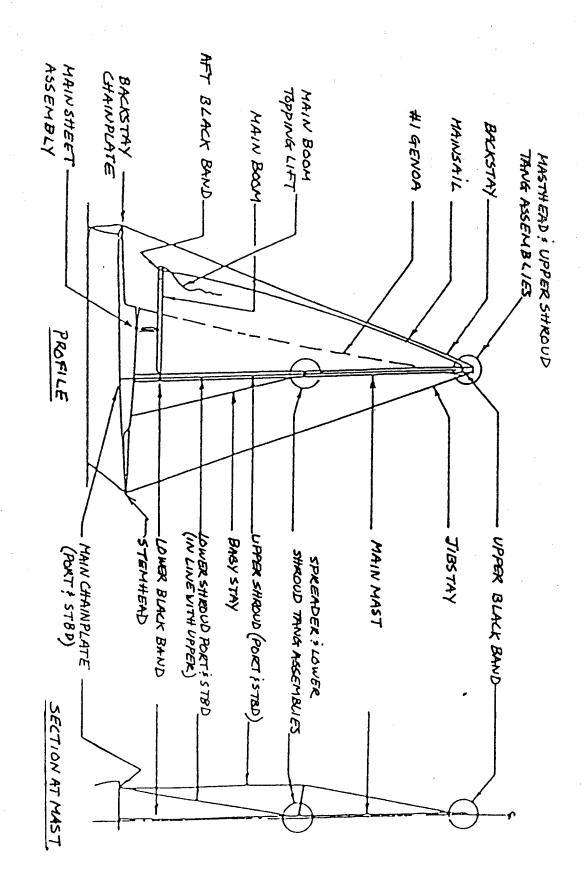
NOTE: LOWER END OF SHROUD OR STAY TO BE SLIPPED THRU
CUPEL AND MASTHEAD.

3.1.2

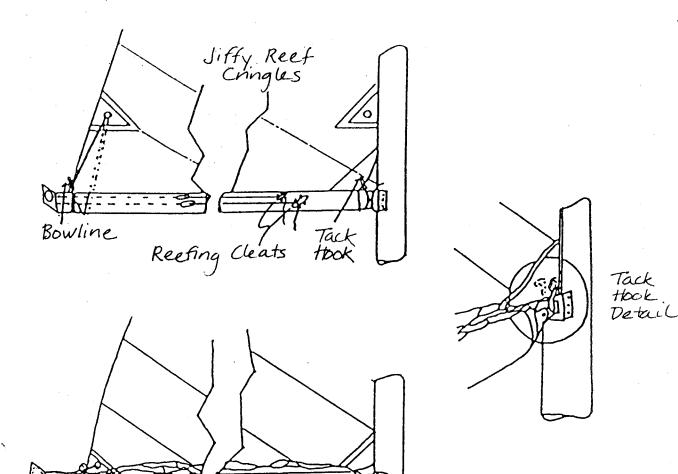
TYPICAL SPREADER INSTAULTION ISOMAT SPAR



NOTE: LOWER END OF SHROUD TO BE SLIPPED THRU CUPEL AND SPREADER BASE



3.1.3



1. Ease the mainsheet until the mainsail liffs.

Cleat

- 2. Release halyard and lower mainsail luff until the reef chingle is chawn down to the gooseneck. (Pre-marking the halyard provides an easy reference when releasing.) The reef tack chingle can then be hooked back onto the gooseneck hook.
- 3. Tighten up on the main halyard.

Reefing

Exit SISTS

4. Ease the mainsheet.

Internal Reet

sheaves

- 5. Pull on the reef line to bring the leach reef cringle down to the boom before cleating it.
- 6. Re-trim the mainsheet.

should be installed.

Ensure that all shrouds and stays are properly secured to the mast with all cotter pins and chafe points taped.

- 3.3.2 While Stepping The Mast
- 3.3.2.1 mast wedges.

With the mast stepped and centered in the column over the mast step, install the mast wedges as shown in figure 3.4.2

Adjust the headstay, backstay, and upper shrouds to a taut condition. The lowers should be slack at this point and the baby stay fully released.

- 3.3.3 After Mast Is Stepped.
- 3.3.3.1 rake adjustment

Hang a weight such as a hammer or wrench from the main halyard just below the gooseneck level. The fore and aft distance between the halyard and the mast at the gooseneck is the amount of rake.

NOTE: YOUR PEARSON IS DESIGNED TO HAVE THE MAST RAKED AFT. SEE SAIL PLAN FOR SPECIFIC INFORMATION. THIS MAY BE VARIED TO SATISFY THE PREFERENCE OF SAILMAKERS, BUT FORWARD RAKE SHOULD BE AVOIDED.

Adjust the headstay and the backstay turnbuckles (let off on one, take up on the other) until the desired rake is achieved. Make certain that the lower shrouds and babystay are slack enough not to interfere with this adjustment.

Pin the headstay and backstay turnbuckles.

3.3.3.2 side-to-side perpendicularity.

Ensure that the lower shrouds and babystay are slack enough so as not to interfere with the following adjustments.

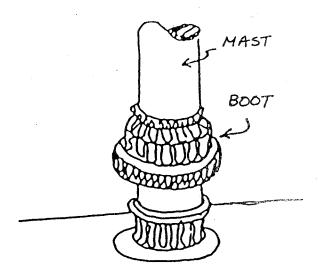
Lead the shackle end of the main halyard to an identifiable point on the rail or chainplate. Adjust the halyard tension so that the shackle just touches this point, and then cleat the halyard.

Lead the halyard to the same location on the opposite side of the deck, and check to see if the shackle touches the same point with the same tension. If this is not the case, let off on one upper shroud turnbuckle and take up on the other to get the desired result.

With the mast centered transversely, tighten both upper shrouds uniformly, one full turn on one side, then one full turn on the other. Repeat until the turnbuckles become properly tight. Pin and tape the upper shroud turnbuckles.

# 3.3.1 BEFORE STEPPING THE MAST

SLIP THE mast boot assembly onto the mast and position it at a point on the mast where it will not interfere with installing the Mast into the yacht. Make certain that it is oriented properly (top side up). AN ERROR HERE WOULD REQUIRE REMOVAL OF THE MAST. Temporanly secure the boot assembly at this position.

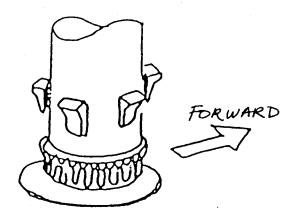


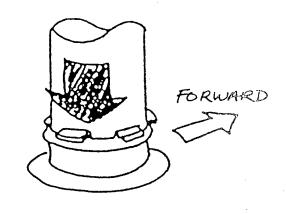
3.3.2 WHILE STEPPING THE MAST

MAST WEDGES. With the mast stepped and centered in the column over the mast step, install the mast wedges as shown below.

Fit four pieces of mast wedge extrusion snugly between mast extrusion and inside of mast collar. (One each forward and aft and one on each side.) If loose, place a wide, thick bead of silicone sealant on outer face of wedge, allow to dry, retest fit.

Push down mast wedge between mast and mast collar until top flange hits mast collar. Mallet may be needed. This wedge system should fit very tightly to minimize mast movement.





Tighten the lower shroud turnbuckles to a hand-tight condition, then sight up the mast to check for straightness. Make appropriate adjustments to the lower shroud turnbuckles if this is not the case. Be sure to make equal and corresponding adjustments on each set of turnbuckles (a one-turn take-up on the port lower shroud should be followed by a one-turn easing on the starboard shroud, etc.).

Pin and tape the lower shroud turnbuckles. Tape any remaining pins.

Make certain that the mast wedges are tight and install the mast boot as shown on the next page.

### 3.4 UNDERWAY TUNING

With the jib and main set, under moderate wind conditions, sail to windward on one tack. Sight up the mast to check for straightness. The mast should not bend to leeward or to windward. If the need for adjustment is indicated, make the proper adjustment to the upper or lower shrouds while observing the following rules.

If a take-up adjustment is indicated, go on the opposite tack so that the shroud is more easily adjusted.

Be sure to make equal and corresponding adjustments on each set of turnbuckles, ie. a one-turn take-up on the port lower shroud should be followed by a one-turn easing on the starboard lower shroud.

Always tack both directions to ensure straightness of the mast.

If at all possible, avoid adjusting the upper shrouds since this will affect the mast perpendicularity.

The baby stay is adjusted in a similar manner to the lower shrouds. Tension should be approximately 3 turns past "hand tight". The purpose of the babystay is to induce mast bend in order to shape the mainsail.

### 3.4.1 Weather Helm

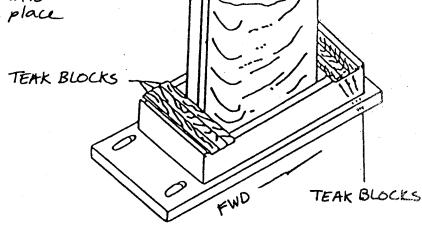
The rake of the mast will affect the amount of "weather helm". Weather helm increases as the mast is raked aft and decreases as the rake is reduced. Final adjustments to rake should provide a slight weather helm in moderate wind conditions.

### 3.5 CARE AND MAINTENANCE

The sails, spars, rigging, and associated hardware constitute the main propulsion system for the yacht and, as such, deserve a measure of attention. Proper care of sails is of utmost importance if expensive replacements are to be

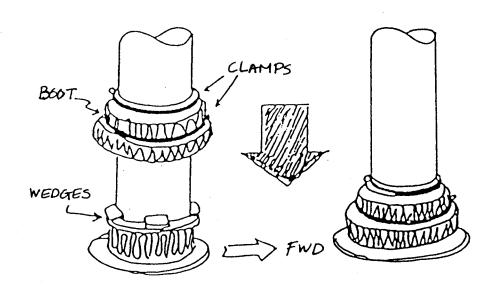
## STEP MAST

Place the butt of the mast into the mast step casting and place teak blocks into position



# 3.3.3 AFTER MAST IS STEPPED

Remember, the mast boot with two clamps should be slipped up onto the mast extrusion Before STEPPING MAST. After stepping the mast and installing the mast wedges, the boot is slipped down into place over the flange on the mast collar and both clamps are tightened sufficiently to provide a watertight joint between the boot and both the mast extusion and collars.



avoided and the recommendations of the sailmakers should be followed closely. The stainless steel standing rigging is virtually corrosion proof, and unless physically abused, should give many years of trouble free service. Running rigging when properly selected should also give good service, but being subject to constant wear as well as the deteriorating effect of sunlight, should be monitored on a continuing basis to avoid inopportune failures. Hardware such as winches, blocks, and travelers also need periodic attention if they are to remain in first-class condition. The following comments are intended as general guidelines. Additional procedures can be added to suit the intended use of the yacht.

### 3.5.1 Rigging and Lines.

Clean wire rope, swage fittings, and toggles with fresh water and, if desired, a water soluble detergent. Use a stiff brush or nylon scrubbing pads. Do not use steel wool or cleansers containing chlorine.

When storing shrouds, stays, or halyards, wash with fresh water, dry with a clean cloth, and store in a dry location away from chemicals, oil, or other contaminants. Avoid crushing, kinking, or coiling too tightly.

Sythetic rope will deteriorate with prolonged exposure to salt and sun. Rinsing with fresh water is beneficial. An occasional soaking in warm soapy water is also advisable. Rinse and dry thoroughly before stowing.

NOTE: AN EXCELLENT WAY TO CLEAN SYTHETIC ROPE IS TO RUN IT THROUGH A WASHING MACHINE SET ON A WARM CYCLE. FOR THE WELFARE OF BOTH THE SYNTHETIC ROPE AND THE WASHING MACHINE, MAKE CERTAIN IF THIS IS DONE, THAT THE CONSTRUCTION OF THE WASHING MACHINE IS SUCH THAT IT IS NOT POSSIBLE FOR THE ROPE TO SLIP BEHIND THE BASKET.

A regualar on-going check should be made on all standing and running rigging with emphasis on the following:

Evidence of fraying, chafing, kinking, or other signs of wear.

Cotter pins secure and taped.

Evidence of stress or cracking around swaged terminals.

CAUTION! DO NOT WRAP WIRE ROPE WITH TAPE, PLASTIC, OR OTHER ADHESIVE MATERIAL. SUCH A COVERING CAN EXCLUDE OXYGEN NEEDED TO MAINTAIN A PASSIVE SURFACE ON THE WIRE. THIS CAN ADVANCE CORROSIVE OR DETERIORATING ACTION.

### 3.5.2 Winches.

All winches should be inspected, cleaned and lubricated in accordance with the instructions in the servicing booklet for the winches that is provided at commissioning.

### YACHT SYSTEMS -POWER

### SECTION 4

### 4.1 GENERAL DESCRIPTION - YANMAR ENGINE

The heart of the power system installed on your Pearson 34 is a Yanmar Diesel Engine. Detailed descriptions of the features of the engine, along with complete operating and maintenance procedures, are provided in the Yanmar manual supplied in the ships papers. The following paragraphs are a brief overall description of the complete power system and supply details where installation varies from the general conditions assumed in the engine manual.

The power system is comprised of:

A fresh water cooled, Yanmar diesel engine with a 2.14:1 reduction gear.

A fuel system consisting of an aluminum tank, a fuel and water separator, and a manual shut-off valve.

Features of the engine include a 12 volt, 35 ampere alternator and electric starting.

A complete list of the engine specifications is in the engine manual.

### 4.2.1 Additional Controls

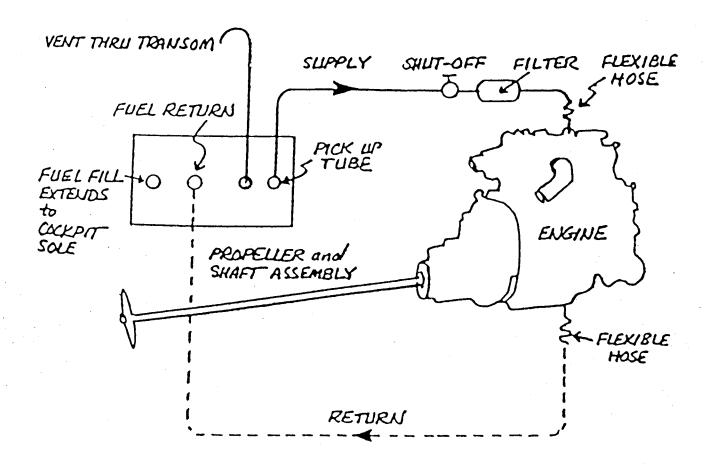
In addition to the control panel, the following controls are associated with engine operation.

Battery Switch - Although properly a part of the electrical system, this switch located in the main cabin forward of the starboard quarterberth, must be energized.

Throttle and Shift Controls - A combination throttle and gear shift control is located to starboard at the helm station.

Decompression Lever - It is located on the engine to assist in cold starts or when the battery is low. See the Yanmar manual.

CAUTION! EXCEPT IN EMERGENCIES SUCH AS ENGINE RUNAWAY OR THROTTLE DAMAGE, <u>DO NOT</u> USE THE DECOMPRESSION LEVER TO STOP THE ENGINE. THIS CAN CAUSE SERIOUS DAMAGE TO THE EXHAUST VALVES



## 4.2 YANMAR DIESEL...OPERATION

Operation of the Yanmar engine includes preparation for starting, running, stopping, and securing the power system after use. The following paragraphs are included as a general guide, with complete procedures being more thoroughly covered in the engine manual.

# 4.2.2 Before Starting

While this is a practice often neglected on an auxiliary, a power system should always be inspected before starting. At the very least, an inspection should be made at the start of a cruise, and before starting the engine after an extended period under sail. The following items should receive particular attention:

Visually inspect the engine space and the engine. Look for fuel and/or water leaks, and any other problems that might preclude starting.

Ventilate engine compartment by opening hatches.

WARNING! ALTHOUGH LESS VOLATILE AND FAR SAFER THAN GASOLINE, DIESEL FUEL IS FLAMMABLE, AND A FUEL LEAK CAN CAUSE A SERIOUS FIRE!

Check fresh water level in manifold.

Ensure that the engine seacock is open.

Ensure that fuel valve is open.

Check fuel supply.

Check engine and transmission oil levels.

Ensure that the battery switch is "ON".

Ensure that the transmission control is in "NEUTRAL".

#### 4.2.3 STARTING

Normal starts, cold weather starts, starting procedures after a long shutdown, and other operational suggestions are contained in the engine manual. Some additional suggestions are listed below:

CAUTION! DO NOT OPERATE STARTER FOR MORE THAN 10 SECONDS AT A TIME.

Forward, Neutral, Reverse. When shifting from forward to reverse, or vice versa, the lever should be held in the neutral position for a moment before proceeding. Shifting should be performed with RPM reduced to idle.

## 4.2.4 Stopping

To stop the engine:

Place throttle in the idle position.

Place transmission shift lever in neutral (center position).

Let engine idle for one (1) minute to allow it to cool down.

Hold throttle lever in the back position against the spring loading until the engine stops.

Release the throttle from the stop position and it will return to the idle position.

Repeat if engine does not stop the first time.

Turn the key to the "OFF" position to shut off the electric fuel pump and accessories.

CAUTION! OPEN BATTERY MASTER SWITCH ONLY AFTER ENGINE HAS COME TO A COMPLETE STOP! THIS WILL PREVENT ALTERNATOR AND REGULATOR DAMAGE.

CAUTION! DO NOT USE DECOMPRESSION LEVER TO STOP ENGINE. THIS COULD SERIOUSLY DAMAGE EXHAUST VALVES.

CAUTION! IF YOU CLOSE THE FUEL AND SEA WATER VALVES AFTER STOPPING THE ENGINE, BE SURE TO RE-OPEN THEM BEFORE RESTARTING. FAILURE TO DO SO COULD CAUSE ENGINE TO OVERHEAT AND CAUSE DAMAGE TO THE PUMP IMPELLER OR CAUSE FUEL LINES TO BECOME AIR LOCKED.

## 4.3 YANMAR DIESEL...MAINTENANCE

Whether maintenance of the power system is to be performed by the owner or delegated to a mechanic, it is the owner who must first initiate any action that is to take place. He must either perform the maintenance or decide to call someone to do the job, and a working knowledge of the power system is essential in the first case, and desirable in the second. The Yanmar engine manual is, of course, the prime source for engine information and should be consulted, preferrably before the fact. The following paragraphs are included as a supplement to cover any required maintenance procedures that are not a part of the engine manual.

# 4.3.1 Fuel Sanitation

The fact that a diesel engine does not require an ignition system can, and usually does, result in an engine that is far superior to a gasoline engine in

regards to dependability. Whether this is actually the case depends greatly on the cleanliness of the fuel that is supplied to the engine since the close tolerances required by the engine's fuel delivery system make it extremely intolerant of any form of dirt or water contamination. The engine is supplied primary or secondary filters that prevent contaminants from reaching the engine where they could cause damage, but a clogged filter, although providing this protection, can also stop an engine. Keeping the filters free of dirt and water is an obvious answer to this problem, and the cleaning schedules set forth in the engine manual will in most cases keep filters clean enough to prevent stoppage.

## 4.3.2 Bacterial Contamination

A factor that can cause additional problems is bacterial contamination of the diesel fuel. The bacteria involved need both water and fuel to exist, and if present, will thrive at the fuel/water interface in a fuel tank. As they multiply, they form more water and a filter-choking brown slime. Often their presence will not be known until rough weather churns up the fuel tank causing clogged filters at a most inopportune time.

Keeping water out of the fuel will, of course, prevent the problem entirely, and while every effort should be made toward this end, such as obtaining fuel from reputable dealers, it must be remembered that a certin amount of water due to normal condensation in the tank is to be expected.

#### 4.3.3 Fuel Additives

Fuel additives or conditioners provide another means of combatting this problem. These additives break the water down to a molecular level, dispersing it throughout the fuel and allowing it to pass harmlessly through the fuel system. Various brands of this product are available at marine supply stores. As with all products of this nature, the directions on the can should be read carefully.

# 4.3.4 Shaft Packing Gland

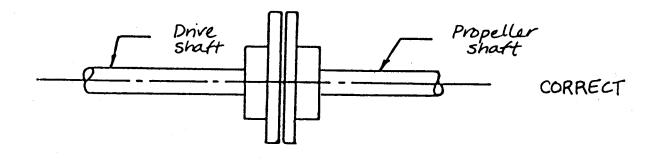
See section 4.6 - Propeller and Shaft Assembly.

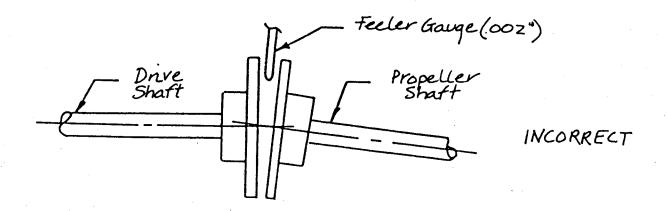
# 4.3.5 Shaft Coupling

See section 4.6.2 - Propeller and Shaft Assembly.

## 4.4 FUEL SYSTEM...GENERAL DESCRIPTION

The fuel system for the Pearson 34 is illustrated on the next page and consists of an aluminum fuel tank, fuel suction and return lines, a fuel/water separator





as a primary fuel filter, a secondary fuel filter on the engine, and an electric fuel pump controlled by the engine key switch.

#### 4.5 FUEL SYSTEM...FUELING

While employment of a diesel engine results in a greatly reduced fuel hazard when compared to gasoline, it should be remembered that diesel fuel is flammable, and that the employment of good fueling practices are necessary. The following steps are provied as guidelines.

## 4.5.1 Before Fueling

Extinguish all smoking materials and check the fueling area for other sources of spark or flame. Remove if found.

Shut off the engine, and the electrical generator if one is aboard.

De-energize all electrical equipment.

Close all hatches and ports.

Ensure that a fire extinguisher is readily available.

Ensure that the proper (diesel, not gasoline) hose is about to be used.

WARNING! DO NOT FUEL DURING AN ELECTRICAL STORM. BESIDES THE OBVIOUS HAZARD OF LIGHTNING, THE POSSIBILITY OF STATIC DISCHARGE IS GREATLY INCREASED AT THE TIME.

## 4.5.2 Fueling Procedure

Remove fill pipe cover and use dipstick to determine fuel requirements in order to prevent overfilling.

WARNING! USE ONLY THE SPECIAL SPANNER WRENCH PROVIDED. DO NOT USE A HAMMER, SCREWDRIVER, OR OTHER TOOLS WHICH COULD CAUSE A SPARK OR DAMAGE THE COVER.

Place nozzle of fuel hose in the fill pipe.

WARNING! KEEP THE NOZZLE IN CONTACT WITH THE DECK PLATE RIM DURING FUELING TO AVOID THE POSSIBILITY OF A STATIC SPARK.

Fill slowly. Do not overfill. If it is not possible to see the meter on the fuel pump, the attendant or a crew member should call out the gallonage from the fuel dock.

CAUTION! FUEL VOLUME WILL INCREASE WITH AN INCREASE IN TEMPERATURE. FILLING THE TANK TO ONLY 95% OF

CAPACITY WILL AVOID OVERFLOW PROBLEMS ON A HOT DAY.

## 4.5.3 After Fueling

Replace cover, clean up any spilled fuel. If any rags, etc. were used for this purpose, dispose of them ashore.

Check below decks for presence of fumes or fuel leakage. Check bilge, engine space, and main cabin.

WARNING! IF FUMES OR EVIDENCE OF LEAKAGE IS FOUND, DETERMINE THE CAUSE, CORRECT IT, AND CLEAN UP ANY SPILLAGE BEFORE PROCEEDING.

Open all hatches and ports to ventilate the boat.

Switch on battery.

The engine should be started only when it is certain that no potentially hazardous condition exists.

#### 4.6 PROPELLER & SHAFT ASSEMBLY

## 4.6.1 Shaft Packing Gland

A properly adjusted shaft packing gland should drip slightly (from 4 to 15 drops per minute) with the engine off. Too loose an adjustment will allow too much water in the bilge, and engine operation will spray water from the shaft. Too tight an adjustment will rob the engine of power, and the lack of water lubrication in the packing gland can generate enough heat to damage the gland and/or score the propeller shaft.

NOTE: THE PACKING GLAND IS LOCATED BEHIND THE ENGINE AND IS ACCESSIBLE THROUGH THE QUARTERBERTH, OR THROUGH THE COCKPIT SEAT LOCKER.

NOTE: IF YOUR P-34 IS EQUIPPED WITH A LASDROP SHAFT-SEAL THE APPROPRIATE MANUFACTURER'S LITERATURE IS INCLUDED IN THE OWNER'S KIT.

### 4.6.1.1 adjustment

Holding the packing nut with one wrench, use a second wrench to loosen the lock nut. Turn the lock nut far enough to keep it from interferring with the next adjustment (2 or 3 turns).

Tighten the packing nut to obtain 4 to 15 drops per minute.

NOTE: HAND TIGHTENING OF THE PACKING NUT IS OFTEN SUFFICIENT TO OBTAIN THIS ADJUSTMENT. IF THIS IS NOT THE CASE, AN ADDITIONAL 1/4 TO 1/2 TURN WITH THE WRENCH SHOULD PRODUCE THE DESIRED RESULT.

Hold the packing nut in place with one wrench, and use the second wrench to bring the locking nut securely against the packing nut.

CAUTION! MAKE CERTAIN THAT THE LOCKING NUT IS TIGHT. FAILURE TO DO THIS COULD ALLOW THE PACKING NUT TO BACK OFF WHEN THE ENGINE IS OPERATING.

Operate the engine at slow speeds in forward and reverse and use a light to check for excessive water at the packing nut. Shut off the engine and recheck packing nut for proper drip.

## 4.6.2 Shaft coupling

A careful alignment between engine and propeller shaft at the shaft coupling is essential if efficient and vibration free operation is to be attained. This alignment involves making adjustments to the engine mounts until the mating surfaces of the coupling are properly aligned and is one of the tasks that is performed during commissioning.

NOTE: THE SHAFT COUPLING IS LOCATED AT THE REAR OF THE ENGINE.

Once adjusted, the alignment is not likely to require readjustment unless it becomes necessary to move the engine, or to perform extensive work on the propeller shaft assembly. In cases such as this, it is recommended that an experienced marine mechanic perform the adjustment.

Since it may become necessary to disconnect and reconnect the coupling at one time or another (some people prefer to do this when the boat is hauled), and since this procedure, as well as the procedure for simply checking the alignment are not extensive, they have been included in the following paragraphs:

WARNING! ENSURE THAT THE ENGINE "OFF/ON" SWITCH IS OFF AND REMOVE THE KEY TO MAKE CERTAIN THAT THE ENGINE CANNOT BE STARTED DURING THE FOLLOWING PROCEDURES.

### 4.6.2.1 to disconnect coupling

Remove the connecting bolts from the shaft coupling, and move the two mating surfaces apart.

CAUTION! IF IT IS NECESSARY TO PRY THE COUPLING APART, USE CARE NOT TO SCAR THE TWO MATING SURFACES.

#### 4.6.2.2 to check alignment

Ensure that the two mating surfaces on the shaft coupling are clean.

Pull the shaft forward until the flange faces come gently into contact, and attempt to insert a .002 feeler gauge between the faces. Do this at the 12, 3, 6, and 9 o'clock position on the flange.

Rotate the propeller shaft 180 degrees and repeat the step above.

If the feeler gauge can be inserted at any point on the flange, the engine, shaft, and V-drive are in need of alignment. If this is the case, an experienced mechanic should perform the adjustment.

# 4.6.2.3 to reconnect coupling

Move the shaft flanges close enough to permit threading the bolts through the flanges. Thread all bolts finger tight.

Tighten all bolts in a uniform manner until they are all tight (approximately 40 ft. lbs.).

#### YACHT SYSTEMS - ELECTRICAL

#### SECTION 5

#### 5.1 GENERAL DESCRIPTION

A dual 12 volt electrical system has been installed on your Pearson. A master ON/OFF switch makes it possible to disconnect the battery from the entire electrical circuit, and an switch/circuit breaker panel supplies the yacht's electrical loads. The electrical circuit is shown in the schematic in the next page and in greater detail in the engine manual. The metal parts of the hull are all bonded to a common point for galvanic stability.

CAUTION! AS STATED, WHEN IN THE "OFF" POSITION THE BATTERY ON/OFF SWITCH COMPLETELY DISCONNECTS THE BATTERY FROM THE CIRCUIT. THIS SWITCH SHOULD NEVER BE THROWN WHEN THE ENGINE IS OPERATING AS THIS COULD CAUSE SERIOUS DAMAGE TO THE ENGINE ALTERNATOR SYSTEM.

The electrical system on your Pearson requires very little maintenance other than bulb replacement, an occasional check for loose terminals, and the battery care described below.

#### 5.2 BATTERY

With proper care, the battery will provide long and satisfactory service, and proper care is not difficult if a few basic points are remembered.

WARNING! THE ELECTROLYTE IN A BATTERY IS A SOLUTION OF SULPHURIC ACID. IF ANY SHOULD ENTER THE EYES, RINSE IMMEDIATELY WITH LARGE AMOUNTS OF FRESH WATER, AND SEEK MEDICAL ATTENTION. ELECTROLYTE SPILLED ON SKIN SHOULD BE RINSED WELL WITH FRESH WATER. EVEN SMALL AMOUNTS OF ELECTROLYTE SPILLED ON CLOTHING WILL DESTROY THE CLOTHING.

# 5.2.1 Electrolyte Level

The electrolyte level in a battery should never be allowed to fall low enough to expose the plates. This not only results in a loss of battery capacity while the battery is low, but will cause hardening of the active material on the battery plates, resulting in a permanent loss of battery capacity.

CAUTION! USE ONLY PURE DISTILLED WATER TO REPLENISH ELECTROLYTE LEVELS. THE WATER FROM MANY CITY WATER SUPPLY SYSTEMS IS UNSATISFACTORY FOR BATTERY USE.

# 5.2.2 Discharged State

Leaving a battery in a discharged state for any length of time can also result in a permanent loss of capacity. Doing so in cold weather can destroy the battery since it will freeze at relatively low temperatures. At the end of each season remove your battery, charge it, and store it in a warm place (not on a cement floor). Be sure that the battery is fully charged before re-installing it in the spring.

## 5.2.3 Clean Connections

Keep battery connections clean and tight. A cup full of strong baking soda solution and a toothbrush will clean corrosion from the terminals and neutralize any spilled acid (do not allow any of the solution to enter the battery cells). A coating of petroleum jelly on the battery terminals will inhibit corrosion.

# 5.3 LIGHTNING PROTECTION AND BONDING SYSTEMS

All Pearson yachts are fitted with lightning protection and bonding systems. These systems connect all pertinent equipment to the keel with number eight gauge stranded copper wire.

# 5.3.1 Bonding System

The bonding system provides a path of low resistance for all attached equipment such as the fuel fill, fuel tank, engine, and keel. Electrically isolated equipment (i.e., thru-hulls) are not connected to the bonding system. Eliminating this connection minimizes the effects of galvanic corrosion because the path of high resistance thus established makes it extremely difficult for electrical current to travel.

The operation of the bonding system should be checked every year at the beginning and end of each season. (See section 5.5 for proper procedure.)

Please see the bonding system diagram in this manual.

# 5.3.2 Lightning Protection System

This system provides a "cone" of protection around the boat during an electrical storm. Remember, lightning strikes are not predictable, therefore caution is advised during a storm.

Number 8 gauge stranded copper wires connect all chainplates and the mast step to the keel.

If lightning strikes, damage to electronic equipment is likely because of the high voltage, low amperage surge of electricity. Therefore, all electrical equipment including the compass must be checked for damage and or changes in calibration.

CAUTION: IN THE EVENT OF AN ELECTRICAL STORM, DO NOT ALLOW ANYONE IN THE WATER. HAVE EVERYONE ON BOARD STAY INSIDE THE BOAT. DO NOT MAKE CONTACT WITH ANY METAL OBJECT REGARDLESS IF IT IS CONNECTED TO THE LIGHTNING PROTECTION SYSTEM OR NOT, ESPECIALLY IN SUCH A MANNER AS TO BRIDGE ANY OF THESE ITEMS.

The operation of the lightning protection system should be checked every year at the beginning and end of each season (see section 5.5 for the proper procedure). Please see the lightning protection system diagram in this owner's manual.

# 5.4 UNDERWATER GALVANIC CORROSION

This condition occurs when dissimilar metals are in physical contact with each other in a solution (i.e. sea water). A potential difference exists between the metals which causes current to flow between them. All Pearson yachts are designed with metals that are close together on the galvanic series. Further, all electrically isolated thru-hulls are eliminated from the bonding system to eliminate a low resistance path for current. Although careful consideration is given to design, sacrificial zinc anodes should be used to protect large submersed hardware such as struts, shafts, and propellers.

# 5.4.1 Electrolysis

Electrolysis occurs when direct current forces a metal to become "anodic". This current may come from a battery or any other external source, and because these voltages are much higher than in galvanic corrosion, the corrosion caused can be rapid.

Zinc anodes may slow down the effects of stray current corrosion, but this problem may be corrected only at its source. Most often, stray current can be traced to damaged equipment, loose and/or damaged wiring, or improperly wired equipment. In some cases, the stray current may come from a source external to the boat.

#### 5.4.2 Check List

The following list may aid you in finding some of the causes of underwater corrosion. Check these wiring connections for cleanliness, integrity, and tight contact.

- 1. Wiring at 12 volt D.C. panel
- 2. Wiring on terminal strips at or near 12 volt D.C. panel
- 3. All bonding connections
- 4. Wiring on engine panel
- 5. Wiring on engine
- 6. Wiring on batteries and battery switch.
- Wiring on mast step terminal strip.
- 8. Wiring on all optional equipment such as lorans, VHF radiophones, electric bilge pumps, etc.
- 9. Wiring on all non-factory equipment
- 10. Wiring on any malfunctioning equipment

# 5.5 CHECKING BONDING AND LIGHTNING PROTECTION SYSTEMS

Check the entire bonding and lightning protection systems for proper operation. The bonding and lightning protection systems may be checked by using a ohmmeter to show that continuity exists between each piece of hardware and ground. The ohmmeter must read "O" resistance for each piece of hardware. If "O" is not indicated for each check, the wiring and connections at both ends must be inspected, cleaned, and/or replaced.

#### NOTES:

- All power must be disconnected before using an ohmmeter.
- 2. If a switch does not shut off (open) properly, it is a source of stray current.
- Reverse wiring is a source of stray current.

### 5.5.1 Propeller and Shaft

Propellers and shafts are large pieces of hardware with good conductivity. Therefore, they are an ideal path for stray currents to leave the boat. Thus, propeller and shaft corrosion are two of the most common results of stray current.

The propeller shaft and propeller are connected to the bonding system via a bonding strap which bridges the shaft coupling.

#### 5.5.2 Electrical Switches

Electrical switches and hardware are another major cause of stray current. The following switches and hardware should be checked for proper operating condition.

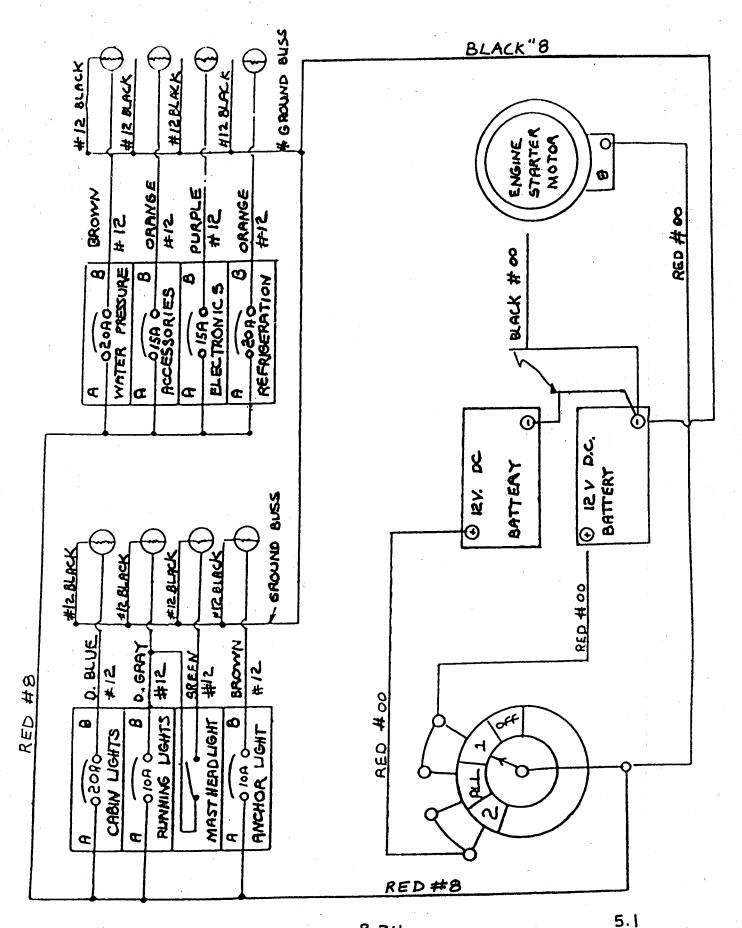
- 1. All 12 volt D.C. switches and circuit breakers
- 2. Battery switches
- 3. All 120 volt D.C. switches and circuit breakers
- 4. Battery chargers
- 5. Engine key switch

#### 5.5.3 External Factors

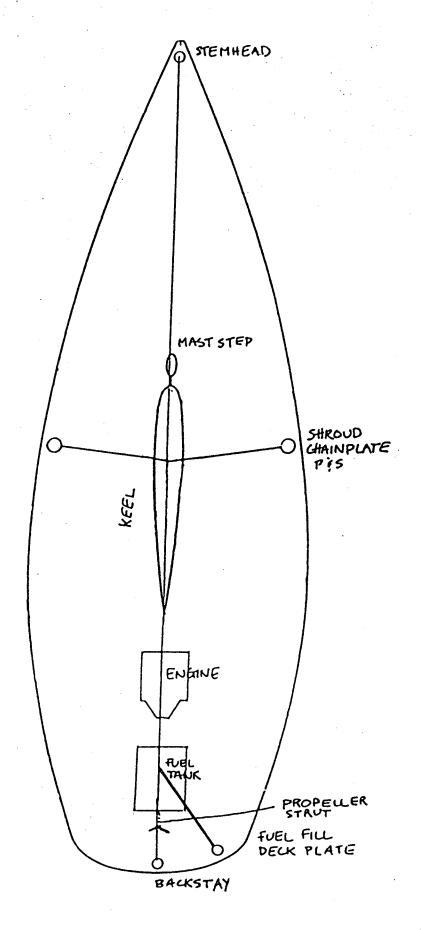
Stray current corrosion can be caused by external sources as well as internal sources. Some major causes of external current sources are:

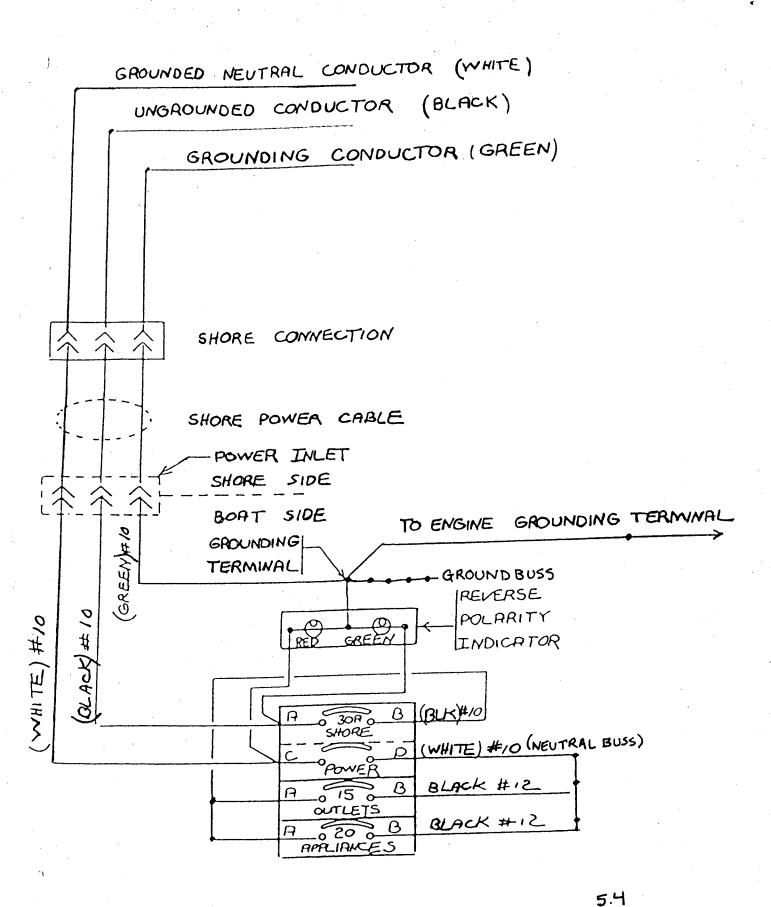
- 1. Adjacent boats with current leaks
- Polluted water
- 3. Dockside shore power connections
- 4. Portable battery charges
- 5. Water velocity and turbulence
- 6. Positive grounding systems on adjacent boats

NOTE: An isolater installed in the green conductor between the shore power connection and the 120 volt A.C. panel may help eliminate some of the external sources of stray current, or an isolation transformer may be installed in all three wires between the shore power connections and the 120 volt A.C. panel to help eliminate stray currents from external sources.



P-34 VOLT 12 VOLT DC ELECTRICAL DIAGRAM





P-34 120 VOLT AC ELECTRICAL DIAGRAM

#### YACHT SYSTEMS - STEERING

#### SECTION 6

#### 6.1 GENERAL DESCRIPTION

# 6.1.1 Wheel Steering System

Your Pearson employs an Edson pedestal steerer utilizing a cable steering system. If your yacht is equipped with the brake mechanism located on the starboard side of the unit it permits the wheel to be locked in position if desired.

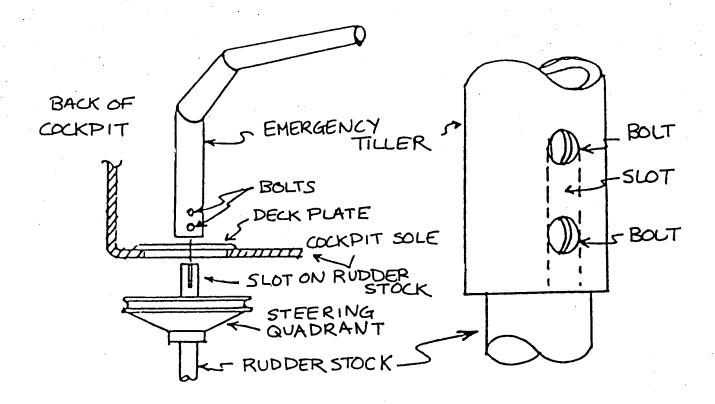
The maintenance that is required for the steering system consists largely of oiling and greasing the mechanism and adjusting the cable. All of this is well-covered in the manufacturer's literature that is supplied at commissioning. It is recommended that the procedures described in this literature be followed to ensure many years of trouble free service.

# 6.1.2 Emergency Tiller

The steering system includes an emergency tiller that can be fitted over the rudder stock head in the event that a failure should occur in the pedestal system. Access to the rudder stock head is gained by removing the cover on top of the rudder stock allowing the emergency tiller to be installed.

A dry run of your emergency tiller system in stable conditions will lessen confusion in times of crisis. Once aboard, make sure the emergency tiller is stowed in the starboard sail locker in an easily accessible place.

NOTE: THE EMERGENCY TILLER WILL MOVE THE WHOLE STEERING SYSTEM SO EACH PART INCLUDING THE CABLE AND RUDDER MUST BE CLEAR. NOTE THAT THE STEERING WHEEL MUST BE REMOVED TO CLEAR THE EMERGENCY TILLER.



REMOVE THE DECK PLATE AT THE AFT END OF THE COCKPIT SOLE TO EXPOSE THE SLOT IN THE TOP OF THE RUDDER STOCK. THE SLOT IN THE RUDDER STOCK WILL RECEIVE THE BOLTS ON THE LOWER END OF THE EMERGENCY TILLER. BE SURE BOTH BOLTS HAVE BEEN SET INTO THE SLOT MAKING A SURE FIT. PERIODICALLY LUBRICATE THE DECK PLATE TO INSURE PROPER OPERATION.

NOTE!! THE EMERGENCY TILLER WILL MOVE THE WHOLE STEERING SYSTEM SO EACH PART INCLUDING THE CABLE AND RUDDER MUST BE CLEAR.

#### YACHT SYSTEMS - HULL

#### SECTION 7

#### 7.1 THRU-HULL FITTINGS

A number of the standard and optional systems used on the Pearson must penetrate the hull for intake of water. In addition, scuppers, drains, and certain waste discharge systems are also brought out below the water line. Knowledge of the precise location of each thru-hull is important, and should be one of the first things a new owner learns about his boat. Thru-hull locations are illustrated on the next page.

## 7.2 FRESH WATER SYSTEM

The diagram on the next page shows the fresh water system installed on your Pearson.

# 7.2.1 Hot/Cold Pressure Water System

Normal operation of the pressure system simply involves energizing the WATER PRESSURE circuit breaker on the DC panel. The pressure pump will then turn itself on and off whenever a faucet is opened or closed. If the system is being started up after a long shut down, or after having run the system dry, it may be necessary to perform the following steps:

Ensure that the selector valve to only one tank is open and that sufficient water is in the tank that is to be used.

Open all faucets, hot and cold.

Energize the "WATER PRESSURE" circuit breaker.

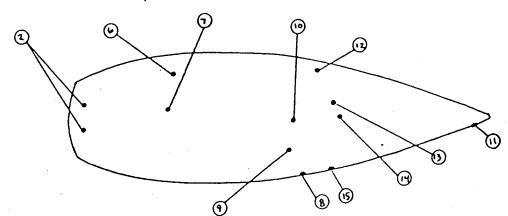
Close each faucet when it starts to deliver a steady stream of water (cold water faucets first).

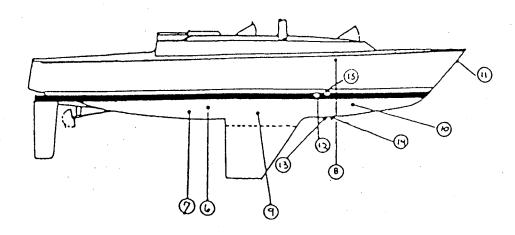
The pump should stop operating when the last faucet is closed, and the system is now ready for automatic operation.

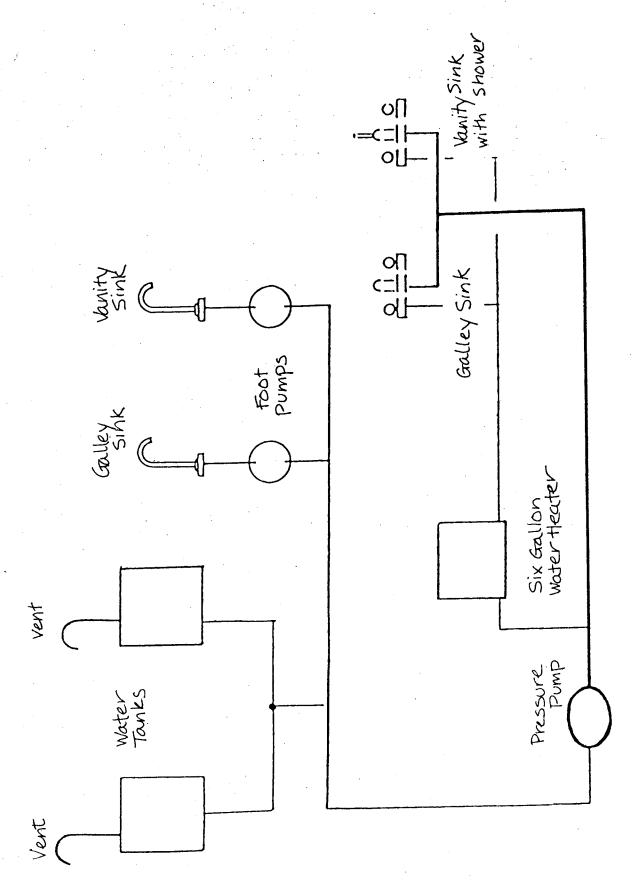
#### 7.2.2 Water System Maintenance

The manufacturer's literature supplied at commissioning provides the necessay information for maintenance and winterization of the water system.

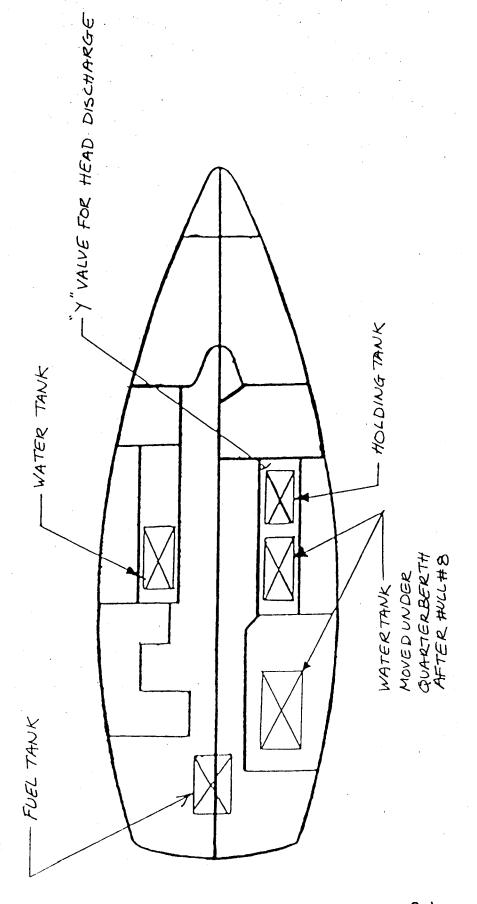
- 1. PROPANE VENTS
- 2. COCKPIT DRAINS
- 3. ENGINE EXHAUST FLANGE OUTLET
- 4. BILGE PUMP DISCHARGE
- 5. FUEL TANK VENT
- 6. GALLEY SINK DISCHARGE
- 7. SEALOCK (PORT)
- 7. ENGINE INTAKÉ SEALOCK
- 8. HOLDING TANK VENT
- 9. HEAD DISCHARGE SEACOCK
- 10. HEAD INTAKE SEALOCK
- 11. ANCHOR WELL DRAIN
- 12. SUMP PUMP DIS. (PORT)
  13. DEPTH SOUNDER TRANSDUCER
- 14. SPEEDOMETER TRANSDUCER
- 15 VANITY SINK DRAIN





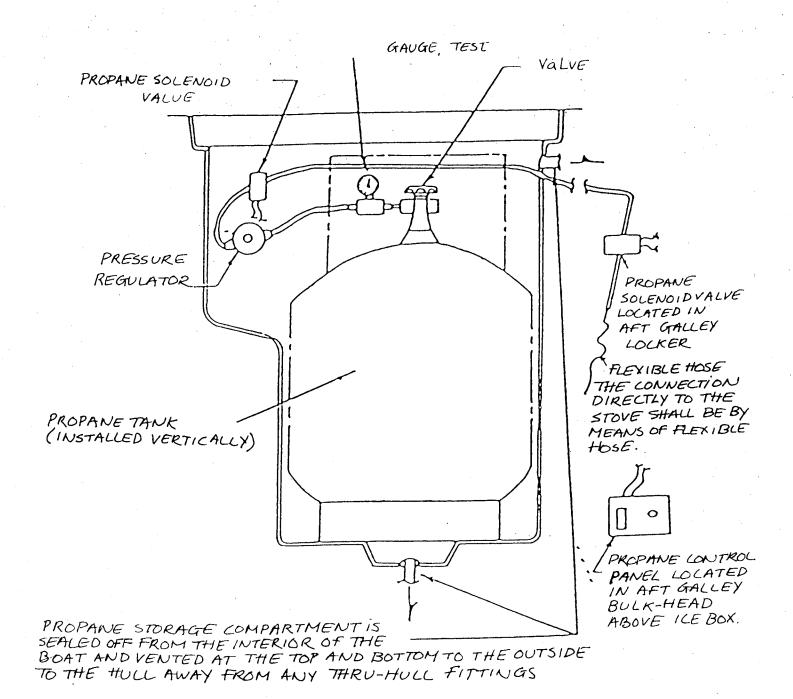


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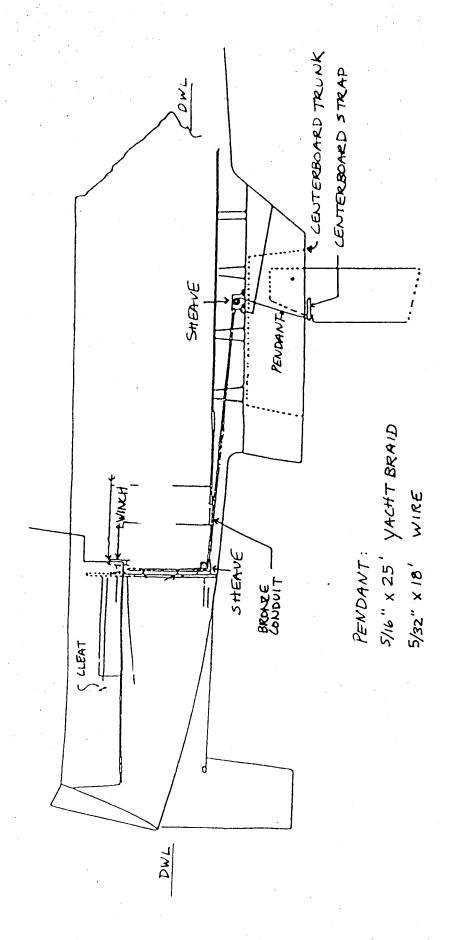


P-34 TANK LOCATIONS

7.2.1



7.3



### MAINTENANCE SUMMARY

#### SECTION 8

### 8.1 INTRODUCTION

This section of the manual consists of a summary of the maintenance required for the hull proper and for the various systems installed in your boat. The section is divided into three categories:

#### ROUTINE MAINTENANCE

Those tasks that should be performed on a regular basis. These range from daily routines such as engine fluid level checks, to tasks such as bottom painting that normally fall into annual cycles.

#### LAYING UP

Tasks to be performed if the yacht is to be stored for a period of time, especially during cold weather.

#### FITTING OUT

Tasks required to place the yacht back in commission after a lay-up period.

It should be evident that it is not possible to draw up precise maintenance schedules that will completely satisfy the requirements of each individual yacht. For example, a vessel receiving moderate use in the summer can have the bulk of the routine maintenance at the beginning or end of the winter lay-up period. Yachts used throughout the year will have to schedule time to perform these tasks.

## 8.2 ROUTINE MAINTENANCE

Many of the routine maintenance tasks, such as care of teak, can be performed when the need becomes evident; others such as checking engine oil level, must be performed on a regular schedule if expensive repair bills are to be avoided. Recommended schedules have for the most part been taken from the literature supplied by the manufacturers of the equipment installed in the yacht. Additional information that may be desired should be taken from these sources.

# 8.2.1 Topsides, Decks, And Below Decks

# 8.2.1.1 gelcoat

A fresh water hose-down of deck and topsides at every opportunity, plus an occasional washing with soap and water, will help preserve the gelcoat surfaces. Use a sponge or a soft brush on the smooth surfaces, and a

stiff brush on the non-skid areas. Rinse thoroughly with fresh water to avoid streaking.

CAUTION! DO NOT USE ABRASIVE CLEANERS FOR CLEANING. IT WILL RAPIDLY DULL THE GELCOAT SURFACE.

NOTE: THE HEAD SINK BASIN HAS A GELCOAT SURFACE AND WILL BE DAMAGED BY THE USE OF ABRASIVE CLEANERS.

At least once a year, the smooth gelcoat surfaces should be cleaned thoroughly, washed and polished. Acetone can be used for cleaning stubborn areas. Abrasive cleaners should be used sparingly, if at all. Use a wax especially formulated for fiberglass surfaces.

CAUTION!! NEVER USE ACETONE ON ANY PLASTIC PARTS, HATCHES OR THE LIKE. AVOID USING TOO MUCH ACETONE OR FROM PUDDLING THE ACETONE ON GELCOAT SURFACES. ANY SPOTS THAT HAVE COME IN CONTACT WITH GELCOAT SHOULD BE WIPED OFF AND RINSED IMMEDIATELY.

#### 8.2.1.2 wood surfaces

Depending on the personal preferences of the owner, exterior teak may be oiled, varnished, or left alone. left untreated, exterior teak takes on a gray appearance that is pleasing to some people, but requires almost constant scrubbing to Varnished teak retains a fresh presentable. light color, but requires a lot of attention since varnish does not adhere well to teak. Oiled teak is easiest to maintain although it has a tendency to darken with age. A number of excellent products for maintaining oiled teak are available, and instructions regarding their use should be followed carefully.

CAUTION! THE USE OF COMMERCIAL TEAK CLEANERS SHOULD BE AVOIDED. IF ANY ARE USED, GREAT CARE MUST BE EXERCISED TO KEEP THE CLEANER FROM COMING IN CONTACT WITH ADJACENT SURFACES SINCE IT CAN DAMAGE VARNISHED, PAINTED, OR GELCOAT SURFACES.

When a lighter finish is desired with oiled teak, the dark outside layer of wood can be removed by rubbing with bronze wool or fine sandpaper. After rubbing, the teak should be well-oiled.

CAUTION! NEVER USE STEEL WOOL FOR ANY KIND OF CLEANING ON A YACHT. SMALL PARTICLES WILL REMAIN, CAUSING RUST SPOTS THAT ARE DIFFICULT TO REMOVE.

The interior wood finishes on your Pearson should last for several seasons before requiring renewal. It should, however, be kept in mind that it is far easier to refinish a surface in fair-to-good condition than to refinish a surface that has been allowed to

deteriorate.

#### 8.2.1.3 window maintenance

A dab of petroleum jelly on the threads of the toggles (only) will prevent corrosion. Twice annually, scrub the gaskets with clean water and an old tooth brush. When dry, dust with talc powder to resist sticking to the window. Clean the window with clean cold water or with cleaner and polish. NEVER WIPE THE WINDOW WHEN DRY, DIRT OR SALT WILL SCRATCH THE SURFACE.

CAUTION!! NEVER USE SPRAY LUBRICANT, WD-40 OR THE LIKE, ON ANY INJECTION MOLDED PARTS IN YOUR YACHT, THE CHLORINATED HYDROCARBONS CONTAINED THEREIN TO DISSOLVE RUST MAY INDUCE STRESS WITH RESULTANT BREAKAGE.

#### 8.2.2 Below the Waterline

With the exception of small craft that are removed from the water after each use, all vessels require some form of bottom protection to avoid the accumulation of bottom growth. This usually needs to be done on a yearly basis. Although fresh water areas do not generate as much fouling as occurs in salt water, it nevertheless will cause growth of moss, grass, and other flora that will significantly affect the performance of the yacht.

# 8.2.2.1 bottom cleaning

Cleaning the accumulated growth from a boat bottom is far easier when the growth is wet than after it has been allowed to dry out. While still wet, a power spray and stiff brush will remove most bottom growth. Barnacles that resist this action can be removed with a scraper.

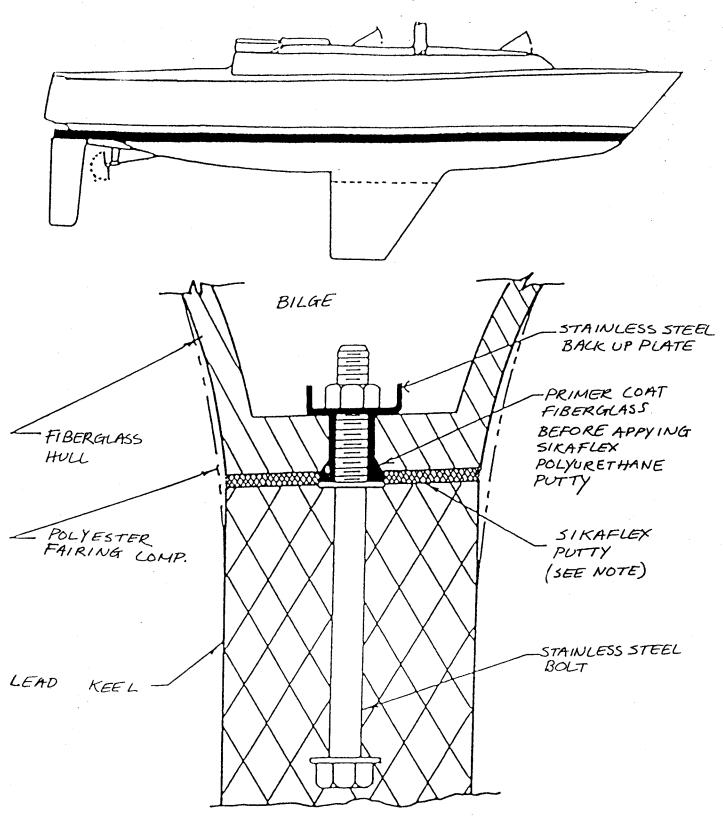
NOTE: WHILE CLEANING THE BOTTOM, REACH INTO THRU-HULLS, CENTERBOARD TRUNK, BETWEEN THE SKEG AND THE RUDDER TO REMOVE ANY BARNACLES.

## 8.2.2.2 bottom preparation

Most bottom paints require removal of all loose material from the bottom, and a thorough but light sanding of any portions of the old paint that remains in good condition. A proper sanding procedure will normally take off approximately the same amount of old paint as it's intended to be reapplied. This avoids excessive paint accumulation that will eventually cause peeling and roughness on the bottom.

#### 8.2.2.3 bottom painting

The actual formula of the bottom paint that should be applied is, to a great extent, determined by the general area in which the yacht is expected to operate



NOTE: A CRACK MAY APPEAR WHERE THE HULL MEETS
THE KEEL. THIS IS THE RESULT OF THE FAIRING
COMPOUND "WORKING" AND IS EXPECTED. IT IS
NOT A STRUCTURAL DEFECT NOR A WARRANTY ITEM.

82.2.2

(fresh or salt water, temperate or tropical areas, etc.) Local advice from reputable yards is helpful. Application of bottom paint should always conform to the manufacturer's instructions if maximum effect is to be achieved. Some bottom paints recommend thinning, others do not. Some specify that the boat be returned to the water before the paint has completely dried out (usually 3 or 4 days), and others make no qualifications in this area but may have other requirements.

CAUTION! SOME BOTTOM PAINT FORMULAS ARE NOT COMPATIBLE WITH OTHERS AND CANNOT BE APPLIED DIRECTLY OVER ONE ANOTHER WITHOUT PROPER PREPARATION. THE OWNER SHOULD KEEP A RECORD OF THE TYPE BOTTOM PAINT THAT IS IN USE TO AVOID ANY PROBLEMS IN THIS AREA.

#### 8.2.3 Winches

Perform maintenance in accordance with the manufacturer's instructions provided at commissioning. This involves periodic disassembly, cleaning, oiling and greasing.

# 8.2.4 Spars and Rigging

Aluminum spars and stainless steel rigging require little routine maintenance other than cleaning, and the regular on-going checks that any prudent person would make for signs of wear. Some cleaning and inspection procedures are included in the following paragraphs:

## 8.2.4.1 cleaning wire rope and rigging

Using a stiff brush or nylon pads, clean with fresh water and detergent. Rinse thoroughly.

## 8.2.4.2 cleaning synthetic rope

When practicable, soak overnight in warm soap and water, rinse thoroughly, dry before storing.

## 8.2.4.3 rigging inspection

At least once a season, make a complete inspection of all the yacht's rigging and fittings. Check fittings for cracks and other signs of wear. Check that cotter pins are secure and properly taped. Check running rigging for "burrs", kinks, etc.

### 8.2.5 Engine System

Details for most of the engine maintenance procedures are contained in the engine manual with the following being a brief summary of items that should receive frequent attention. For long engine life and efficient operation, the complete maintenance schedule

as set up in the engine manual should be followed.

DAILY

Check engine coolant level.

Check engine lube oil level.

Check transmission fluid level.

EVERY 100 HOURS, OR TWICE A SEASON (WHICHEVER COMES FIRST)

Clean air intake filter

Check packing gland on stuffing box for excessive leakage.

EVERY 100 HOURS, OR ONCE A SEASON (WHICHEVER COMES FIRST)

Change engine lube oil. (See engine owner's manual.)

Renew engine lube oil filter element.

Clean primary and secondary fuel filters, renew primary filter element, bleed fuel lines.

## 8.2.6 Electrical System

BI WEEKLY

Check the electrolyte level in the battery and fill with pure distilled water if required.

TWICE EACH SEASON

Remove, clean, and retighten battery terminals.

Clean battery surfaces with a solution of baking soda.

Apply coating of petroleum jelly to battery terminals.

#### 8.2.7 Steering System

Maintenance of the steering system should be in accordance with the manufacturer's instructions that were provided at commissioning. Basically, the requirements are as follows:

#### MONTHLY

Oil sheave bearings.

#### QUARTERLY

Install the emergency tiller and check its operation.

#### ANNUALLY

Check and oil the steering cable.

Check and oil the roller chain.

Check and grease the pedestal shaft bearing.

## 8.3 Laying up

The most common reason for laying-up a yacht is for winter storage in cold climates. The following paragraphs are oriented to that purpose, but the procedure will also be of value, with winterizing procedures omitted, it it becomes necessary to lay-up the yacht for an extended period in a warm climate.

Improperly winterized equipment can result in expensive repair bills and needless delays at the beginning of the new season. In addition, accumulations of gear left in a poorly ventilated yacht can either corrode or generate a bumper crop of mildew. The owner must ensure that proper lay-up procedures are performed if the yacht is to be ready for recommissioning at the end of the lay-up period.

### 8.3.1 BEFORE HAULING

Consult engine manual instructions for winterizing the engine. Perform the appropriate steps while the boat is still in the water.

If it is intended to disconnect the shaft coupling during haul-out, do so at this time (paragraph 4.4.2.1).

Consult the manufacturer's instructions for winterizing any optional or owner-installed equipment. Perform appropriate procedures before batteries are disconnected.

## 8.3.2 AFTER HAULING

Wash bottom.

Wash topsides, deck, and all other exterior fiberglass surfaces. Wax all except the non-skid surfaces.

Remove all sails; follow sailmaker's instructions in regard to cleaning, and store in a dry place.

Remove all sheets and lines, clean, store in a dry place.

If the mast has been removed from the yacht, remove all stays and shrouds from the mast. Wash the entire stay or shroud assembly, using fresh water and a stiff brush, dry thoroughly, and coil into large non-kinking

coils. Store the coils in a dry place. Wash and wax all spars, coil halyards into non-kinking coils, and lash them to the mast. Store the mast outside with adequate support along its length.

If mast is to remain stepped, remove boom, clean and store as described before; clean shroud/stay end fittings, toggles, etc. using fresh water and a stiff brush: apply a light coating of silicone grease, paying particular attention to the end fittings where they connect to the stays and shrouds.

Clean and lubricate all deck hardware that contain moveable parts. Follow manufacturer's instructions on winches.

Remove all gear such as books, documents, bedding, PFDs, anything moveable that is subject to rust, corrosion or mildew.

Remove all food supplies from lockers and ice chest. Wash out ice chest interior with a weak solution of Clorox. Prop ice chest lid open.

Winterize the hot and cold water system in accordance with manufacturer's instructions prior to disconnecting the batteries.

Stored batteries should be fully charged, and both positive and negative terminals should be disconnected. The batteries may be either left aboard or stored in a cool, dry place.

NOTE: SUB ZERO TEMPERATURES WILL NOT HARM A FULLY CHARGED BATTERY.

Close all manual shut-offs for the propane system.

Winterize the head system in accordance with manufacturer's instructions.

Remove all electronic gear that may require servicing during the winter.

Remove fire extinguishers for weighing, checking, and any necessary recharging. If an automatic fire extinguishing system is installed, return the cylinders to the yacht and re-install as soon as possible.

If security is likely to be a problem, remove easily stolen items such as compasses and radio transmitters; store in a safe place.

If cushions are left aboard, place on edge to encourage ventilation.

Leave all interior lockers and floorboards open to

encourage ventilation.

Ensure that cockpit and deck scuppers are open and free.

If the boat is to be covered, ensure that the cover is installed in such a way as to provide adequate ventilation, and that the cover is not permitted to chafe against portions of the hull.

If the boat is not to be covered, ensure that mechanisms such as winches and steering pedestals are provided with adequate covers.

If the mast is to remain stepped, snub all shrouds and halyards to minimize noise and wear.

#### 8.4 FITTING OUT

Fitting out is the performance of the tasks required to place a yacht into service after a lay-up period. Since it is, in effect, the recommissioning of the vessel, the procedure provided in Section 3 (Commissioning) of this manual should once again be followed along with these additions:

Follow the procedure outlined in the engine manual for placing the engine back in service after lay-up.

Follow manufacturers' instructions for placing the following equipment back in service:

- -pressure water system
- -hot water system
- -head system
- -steering system
- -winches
- -other optional system

If the mast was removed during lay-up, the tuning procedures outlined in paragraphs 3.4 and 3.5 should be performed in addition to the steps in the commissioning procedure.

Make a complete inspection of all standing and running rigging. Look for signs of stress or cracking at fittings; evidence of fraying, chafing, kinking; cotter pins secure and taped. Pay particular attention to the wire-to-rope splice on halyards.

401-683-0700 P-34 #128

PARTS CATALOG

FOR

PEARSON 34

#### PARTS CATALOG

#### ORDERING INFORMATION

This catalog has been sectionalized to facilitate your locating desired parts. Your local Pearson dealer may stock many of these parts. If they do not, they will be happy to accept your order. If it is inconvenient for you to contact your nearest Pearson dealer, you may order directly from Pearson Yachts.

When ordering, please provide us with the following information:

- Boat model and hull number, (ie. Pearson 26 #500).
- 2. Quantity. Specify for each item ordered.
- 3. Part number.
- 4. Description.
- 5. Shipping instructions. In the absence of your specific shipping instructions, we will use our best judgment. However, we cannot be responsible for delays or expense.

MINIMUM PARTS ORDERS: A \$10.00 minimum order is required on all parts orders.

CREDIT: Credit is gladly extended to rated dealers. All other orders will be sent prepaid or COD. We also accept Mastercard and VISA, but the order must total \$20.00. Please provide the card number, expiration date, and a telephone number where you can be reached during normal business hours. If you wish to prepay, please contact us for a firm price quote before sending your remittance.

PRICES: The prices in this catalog are suggested retail prices only, listed for the guidance of our dealers. The actual resale price in different areas may vary due to transportation costs and other conditions beyond the control of the seller. All monies being sent from a foreign country (ie. Canada) must be in American currency. All prices in this catalog are subject to change without notice and are F.O.B., Portsmouth, RI.

SPECIAL ORDER ITEMS: Items that are made especially for you, ie. wood parts, fiberglass parts, cushions, or special orders, cannot be returned. Certain items require a special order, and these items may cost considerably more at the time of purchase than at the printed price. Therefore, we cannot quote until we have a firm commitment for these items.

PACKING: We use every reasonable precaution in packing our parts to reach you in perfect condition with due consideration to type of article and means of transportation. All shipments are made at the risk of the purchaser and we cannot be responsible for shortage, loss, or damage occurring in transit. In the event of such loss or damage, you must advise the carrier within 15 days of receipt of goods and secure the carrier's notation of damage on the freight bill. Promptly thereafter, you must file your claim with the carrier. If any further assistance is needed, please contact us. We will give all reasonable assistance in tracing shipments.

WARRANTY: Every item we manufacture is warranted to be free from defects in material and workmanship. Any item found to be defective will be replaced or an adjustment made provided we are notified promptly upon receipt and, if we request, the item is to be returned to us for examination. Repair and replacement of purchased accessories and components will be handled by us in accordance with the policies and apply to any parts which shall have been repaired, altered, or otherwise serviced at other than duly authorized service facilities. In no event shall our liability for defects of any item exceed its replacement cost to us. Exterior finishes, applied during manufacture of the part, cannot be warranted because of the widely varying effect experienced in various climates.

RETURNED GOODS: All items being returned must have proper authorization. You must contact us for our written permission and Return Authorization Card. On the back side of the card is a printed form. This form should be filled out completely and used as a shipping label. If the label is not exposed, all incoming packages will be REFUSED and returned to sender. No credit for merchandise returned will be granted without the proper authorization from Pearson Yachts.

RESTOCKING CHARGE: Any items being returned for reasons other than exchange will be charged a fee of \$10.00 for restocking.

REFUSED SHIPMENTS: Customers will be charged all shipping, storage, and a 15% handling charge on all refused shipments. No further orders will be processed until previous matters are cleared.

SUBJECT TO CHANGE WITHOUT NOTICE: All prices, part numbers, specifications, terms and policies are subject to change without notice.

Model Introduction
Department
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Part # Complete Assembly		    Quantity	     Description	   Retail   Price
***************************************				
৬	   21256 	   12 ft.	   Hatch gasket, half-round, white	21.53
	21007	1	Alcove molding, white, U-shaped per ft.	.88
	   19065 	   1 	Scalloped hinges, fixed pin, new ea.	     7.10
	10160	1	Scalloped hinges, fixed pin, (forward hatches & sail lockers) ea.	     21.55
	10162	1	Scalloped hinges with loose pin, 4-way vent hatches (P-33, P-35, P-36, P-39, P-43)	       22.67
	10138	! ! 1	Hatch dog with knurled knob	11.26
	9062	1 1	Hasp, sail locker	6.84
	21610	1 1	Snap tite closures for F/G water tank	13.99
	21876	i 1 i	Curtain tape, for aluminum track yd.	
į	11457	1		
į	į	ĺ	,	.83 !
 	10351	1	Clips, holder for track ea.	.16
·	3637	1	Stops, for curtain track ea.	.13
. !	3445	1	Screws, sm, FHSS, #6 x 1/2" ea.	.03
-	21785	2	Bushings for rudders, OLD STYLE, for P-26 up to Hull #1417, and P-30 up to Hull #959 ea.	5 <b>.</b> 67
-	22206	2	Bushings for rudders, NEW STYLE, for P-26OD, P-26 #1417 up, and P-30 #959 up ea.	1.87
	22046	1	Bearing for rudders	1.09
į	į	1 Qt.	j	
			Gelcoat, current colors w/o catalyst	17.00
	1	1 Pt.	Gelcoat, current colors w/o catalyst	12.00

Model Introduction
Department
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Part # Complete	Part #			Retail
Assembly		Quantity	Description	Price
°	21318	1	Rudder post bearing, Uscolite 1", Triton	79.30
	21313	1	Rudder post bearing, Uscolite 1-1/2" for P-33, P-35, P-39	20.54
	21143	1	Cutlass bearing 1", P-39	35.23
	21145	1	Cutlass bearing, 7/8" x 1-3/8" x 3-1/2" for propeller shafts for P-30, P-33, P-35, Triton, Ariel, Commander	30.24
1	10912		Friction catches, brown plastic ea.	.91
[ [	10218	   1	Elbow catches, bronze ea.	2.47
! !	21938	1 1	Teak finger holes ea.	1.30
 	10094	1 1	Drawer slides, white plastic ea.	.10
   	17169	   1	Clevis pins, 5/16 x l (centerboard pin on P-35)	3.25
1	9120		Water fill, 1-1/2" deck plate (new style)	20.05
	18684	1	Light bulb, spreader lights, GE 212-1, old style	1.95
-   	22059	1	Cartridge, water filter, CW3, for FW3 filter	12.90
	19026	1 1	Plastic clean out plates for water tanks	7.02
   	10382	1     1	Double lifeline termination clips for stern or bow rails	13.52
1	10758	1 1	Rings for double lifelines	11.57
1	9033	1 1	Chain, opening port	7.10
 	19031	1	Boarding ladder, stern, stainless steel, all models except P-26, P-260D	1     182.78
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PEARSON YACHTS PARTS CATALOG

Model Introduction

Department

Page 3 Date 3-1-84

Part #   Complete   Assembly	Part # Per Item	    Quantity  	Description	Retail Price
8				
!	18024	[	Vinyl weatherstripping, tan or dark brown per ft.	.42
!	22009	! · !	Mast wedge, white vinyl per ft.	2.94
!	15175	! [	Gasket, window, neoprene per ft.	.36
	22007	1 1	Pearson logo	2.37
·	18664	1	Black plastic connector for pressure system	1.64
	2192	1	Winch base casting 4", P-26, P-28	9.49
	2193	1	Winch base casting 4", P-30, P-35	9.49
	2194	1 1	Winch base casting 4-3/8", P-10M, P-36	8.84
]	2195	1 1	Winch base casting, 4-3/8", P-39	19.24
	2196	1 !	Winch base casting 5-3/8", P-39	19.24
,	2197	1 1	Winch base casting 5-3/8, P-30, P-35	27.56
	2198	1 !	Winch base casting 5-3/8", P-10M, P-36	27.56
		Ú)		
>  		. (jg)	15947 Proved IIII. 3	
1	!		203 - 1938-1975 - Patrion	 
! [ [			Transfer which have	1

Model P-34

Department Carpenter Shop
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Part # Complete Assembly	Part# Per Item	Quantity	Description	Retail Price
3				
	]			
87016		l set	RUNNERS, WEATHERBOARDS	26.73
87017		l set	WEATHERBOARDS	70.85
87019	}	1	DRIP CAP, COMPANIONWAY, trim	13.36
87256		l set	GRAB RAILS, COMPANIONWAY	25.53
				16.98
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Model P-34
Department Rigging Loft
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Part # Complete	Part# Per	Ouantitie	Description	Retail Price
Assembly	Item	Quantity	Description	1.2.00
87700		1	JIBSTAY	110.8
87701		1	BACKSTAY, PERMANENT with boom pennant (87702)	111.6
87703		2	SHROUDS, UPPER	271.3
87704		2	SHROUDS, LOWER	150.0
87705		1	BABY STAY	52.4
87706	<b>!</b> !	1	MAIN HALYARD	142.7
37707		1	JIB HALYARD	153.2
87708		1	TOPPING LIFT	48.2
87709		1	MAIN SHEET	31.4
87710		2	GENOA SHEETS	62.3
87715		1	GATE, STERN RAIL	90.0
87725		1	PENNANT, CENTERBOARD	66.1
87732		1	SPINNAKER HALYARD	94.0
87733	:	1	SPINNAKER POLE LIFT	77.8
87734		2	SPINNAKER SHEETS	180.3
87735		2	SPINNAKER GUYS	184.7
87736		1	SPINNAKER FOREGUY	71.0
87737		1	SPINNAKER POLE SLIDE CONTROL	28.4
87738		1	BOOM VANG	26.0
87741		1	BABY STAY CONTROL LINES	102.3

Model P-34
Department Spar Loft
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Part #	Part#	Γ		
Complete Assembly	Per Item	Quantity	Description	Retail Price
7.1555.1.527				
a	11813	1	MAIN MAST, complete - Isomat	2990.00
	11814	1	MAIN BOOM, fully assembled	964.60
	18862	1	ANCHOR LIGHT	14.04
87463		1	BASE, ANCHOR LIGHT	35.62
:	11753	1	BOOM VANG BAIL PLATE	24.83
	19012	1	BAIL, BOOM VANG	20.64
	1296	1	BLOCK, TRIPLE W/CAM, boom vang	105.59
	1297	1	BLOCK, TRIPLE, boom vang	49.43
			SPINNAKER GEAR ON MAST	
	1113	2	cheek block, car control	30.60
	1123	1	entrance block, spinnaker halyard	28.68
	1177	1	block, pole lift	42.46
	1229	2	pad, cheek block	22.91
	1283	1	block, turning for pole lift	51.12
	19230	1	cleat, clam, vertical	4.91
,	19628	1	cleat, 6", 2-hole, halyard	13.75
	19790	1	cleat, clam	9.88
	22231	1	exit plate, spinnaker halyard	5.67
	11815	1	winch base for #16 Lewmar	83.20
	11816	1	car, spinnaker pole, Isomat	83.20
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Model p-34
Department Small Parts
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Part # Complete	Part# Per			Retail Price
Assembly	Item	Quantity	Description	11100
*				
87616		1	COMPANIONWAY HATCH	239.17
87617	<u> </u>	1	HATCH, COCKPIT SEAT	241.83
87618		1	SEAHOOD	227.47
87619		1	HATCH, ANCHOR WELL	162.86
87623		1	RUDDER, for keel model	782.23
87630		1	HELMSMAN SEAT	161.30
87650		1	CENTERBOARD	502.3
87652	<u> </u>	1	DORADE VENT BOX	100.9
87653		1	RUDDER, for centerboard model	844.8
87654		1	GAS BOTTLE LOCKER, port	93.2
87655		1	GAS BOTTLE LOCKER, stbd.	93.2
87656		1	GAS BOTTLE LID, port	92.2
87657		1	GAS BOTTLE LID, stbd.	92.2
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Model P-34 Department Machine Shop
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Part # Complete	Part# Per		nintion	Retail Price
Complete Assembly	Item	Quantity	Description	
		·		
87502		1	RUDDER SHOE	93.47
87530		2	RUDDER FLAPS	11.73
87552		1	ROD, CENTERBOARD	3.77
87553		2	STRAP, CENTERBOARD	19.16
				***

Model P-34
Department Assembly
Page 1
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Part # Complete Assembly	Part# Per Item	Quantity	Description	Retail Price
	2257	1	STRUT, PROPELLER	188.50
	11789	1	SHAFT, PROPELLER	148.10
	13350	1	WATER BOX MUFFLER	108.83
	14087	1	HOLDING TANK, 14 gallon bag	112.6
	19817	1	EXHAUST FLANGE OUTLET	41.6
	2258	1	MAST COLLAR	57.20
	25099	1	MAST STEP	117.0
	22428	72 ft.	RUBRAIL HOLDER	per ft. 1.0
	22427	75 ft.	RUBRAIL, vinyl	56.5
	25030	1	STEMHEAD	53.6
	18925	7	CABIN LIGHTS	<u>ea</u> . 36.2
	18964	2	DOME LIGHTS	<u>ea</u> . 31.4
	18930	1	RUNNING LIGHTS	71.5
	18946	1	STERN LIGHT	90.0
	18966	1	SWITCH PANEL, ELECTRIC	163.5
	19130	2	LIGHTS, MIRROR	<u>ea</u> . 39.5
	10340	1	LIGHT, CHART TABLE	37.0
	10218	2	ELBOW CATCH, LOCKERS	<u>ea</u> . 2.4
	10934	1	TABLE DOG	28.3
	1197	1	BLOCK, CHEEK	22.5
	1111	1	BLOCK, SWIVEL	41.1

Model P-34
Department Assembly
Page 3
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Part # Complete Assembly	Part# Per Item	Quantity	Description	Retail Price
<b>x</b>	19695	1	BOW RAIL	136.03
	22390	1	MAST BOOT	10.01
			DORADE VENT	
	19010	1	cowl vent, 3"	21.63
,	19011	1	deck plate, 3"	11.36
	22436	1	tube, 4", dorade	11.91
87263	i	1	riser, dorade box	16.98
87652		1	dorade vent box	100.96
			FASTENERS INCLUDE:	.73
	3313 3330 7052 1126 1127 1127 1226 1254 1292 1294 1300 9861 10889 10936 11797 19304 19541 19604 19857	8 6 8 1 1 1 1 2 1 2 1 2 2 1 2 2 1	screw #10 x 3/4, FHSS screw #8 x 3/4, FHSS washers, finish #10, SS  SPINNAKER GEAR  block, foreguy block, full swivel, halyard block, full swivel, baby stay block, snatch, foreguy block, foot, double block, sprecher block, turning, angled block, snatch pad eye chock, spinnaker pole slides, genoa track spinnaker pole bulls eye pad eyes, spinnaker cleat, 7", spinnaker sheets sheet stopper, triple  See Rigging & Spar Loft for additional parts.	31.02 62.66 62.66 105.04 73.38 309.14 34.97 300.30 14.33 51.79 47.27 637.00 2.16 55.43 40.45 132.63

Model p-34
Department Assembly
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Part # Complete	Part# Per				Retail
Assembly	Item	Quantity	Description		Price
	1096	2	BLOCK ON SLIDE, GENOA	ea.	51.25
	10685	1	BILGE PUMP	_	107.30
	19755	1	BOW CHOCK, L.H.		47.32
	19756	1	BOW CHOCK, R.H.		47.32
	19065	4	HINGES, SCALLOPED, hatches	ea.	7.10
	19434	2	PORTS, OPENING, plastic	ea.	63.78
	19603	2	CLEAT, 8", 2-hole, genoa	ea.	22.78
	19711	2			22.93
	1		CLEAT, 8", 4-hole, stern	<u>ea</u> .	
	19605	2	CLEAT, 9", 4-hole, bow	ea.	23.74
	19625	1	DECK PLATE, emergency tiller		10.53
	22443	2	ALCOVE TRIM RING	<u>ea</u> .	20.15
	25045	1	STERN RAIL		176.80
	26021	1	HATCH ACCESS, 10", plastic	•	22.10
,	26025	2	PORT, FIXED, port	<u>ea</u> .	61.10
	26026	2	PORT, FIXED, stbd.	<u>ea</u> .	61.10
87590		l set	MATTRESSES		1490.03
	12379	l set	CURTAINS		255.60
	1162	1	BLOCK, SINGLE		20.57
	1309	1	BLOCK, MAIN SHEET		78.21
	1271	1	BLOCK, FIDDLE, MAIN SHEET		112.40
	17199	1	TURNBUCKLE, 3/8 P x 5/16 S, babystay		17.94
	17203	4	TURNBUCKLE, 1/2 P x 1/2 S, jibstay,	ea.	27.12
	17399	2	backstay & lowers TURNBUCKLE, 1/2 x 7/16, uppers		42.64