

**ELITE  
OWNER'S  
MANUAL**

**324**

## LETTER OF WELCOME

Dear Skipper,

Welcome to the ELITE fleet!

You have joined the select group of sailors who recognize the quality construction and traditional workmanship found in every ELITE yacht.

The ELITE team of managers, supervisors and quality control personnel do their very best through every step of the construction process and strive to build boats of exceptional quality which will provide their owners with many years of sailing pleasure and retain a high resale value.

The enclosed manual has been prepared to assist you in getting to know your new yacht before setting sail for the first time. Although some information contained in this manual will appear of an elementary nature, we strongly recommend that you read it carefully and thoroughly and keep it onboard during the first weeks of use - lack of knowledge can sometimes lead to injuries to yourself or your crew, damages to the boat or even loss of warranty through negligence.

This manual will also help you enjoy your new ELITE more if you are familiar with the design and construction of your yacht and with the equipment used on board.

ELITE boats as all other boats built by KIRIE or under KIRIE license are well known on both continents as quality products that have a good resale value, careful upkeep and maintenance of your ELITE is certainly worth it and will save you valuable time and money.

Any questions you may have can be answered by your authorized dealer as he is a knowledgeable professional and is familiar with your new boat. He will continue to be your most important contact for information about your boat and for any problems, should they develop.

We appreciate your confidence in our product and assure you that with proper care, you should have many years and miles of enjoyable sailing in your new ELITE.

Once again, welcome to the fleet.

Sincerely,

Olivier Poncin  
President  
ELITE YACHTS DE FRANCE, INC.

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## 1. OPERATION

### 1.1 Fiberglass

Fiberglass is one of the most maintenance-free materials utilized today in boat construction. If given proper care and treatment, the gel coat surface will look new for years. If not maintained, it will eventually become dull and chalky.

We recommend that you wash the exterior fiberglass surface of your boat several times each season with a mild soap solution and plenty of warm fresh water. Rinse liberally with fresh water. After the boat has dried, use a good quality fiberglass cleaner in paste form; follow this process with a wax or polish prepared for marine use. A fiberglass cleaner with a very fine abrasive in it may help remove minor scratches and surface wear. Care should be taken, as the continued use of cleaners containing abrasives will gradually erode the gel coat surface. Marine wax will fill small scratches and provide a glossy finish. We suggest you use a wax that does not contain silicone as it gets into the gel coat and is almost impossible to remove should you want to paint the boat at a later date.

Stubborn stains may be removed with fiberglass cleaner in some instances. More difficult stains may be worked out with judicious use of a very mild abrasive powder.

Stubborn tar and petroleum stains can usually be removed with careful application of acetone. (Acetone is a powerful and extremely flammable solvent which is available in most paint and hardware stores. Please be sure to follow the manufacturer's directions.)

Stress or "spider cracks" are a common occurrence on the fiberglass boats of even the most careful boatbuilders and boat owners. Most of the time, these cracks are limited to the gel coat surface and are of a cosmetic nature only, not structural. If you have any doubt about the seriousness of any crack, consult your dealer. Cosmetic repair of gel coated surfaces is not a difficult task and a reasonably handy person with a little practice and study can make adequate repairs. Structural fiberglass repairs are best left to the experts.

If for any reason you wish to paint areas of the boat other than the bottom or boot-top, seek the advice of qualified personnel at a boat yard in your area for information about the latest development in chemically-based paints for fiberglass, and the recommended surface preparation procedure.

Minor repairs of the gel coat surfaces may be done by using one of the following methods:

**SURFACE IMPERFECTIONS:** On imperfections that do not penetrate the gel coat, you may sand them out with #320 wet and dry sandpaper. Finish with 400 and 600 grit paper and hand buff with a fine rubbing compound.

**DEEP SCRATCHES AND FLAWS:** (exposed fiberglass)  
Thoroughly clean the damaged area with acetone to remove dirt, grease, or wax. Tape off the damaged area with masking tape. Thicken a small amount of matching gel coat with talcum powder or cabosil to obtain a putty-like consistency. When ready to apply the putty, thoroughly mix a small amount of hardener into the gel putty. A tablespoon quantity of gel putty will require ONE DROP of hardener to cure to a hard plastic in mild temperatures. Some experimenting will allow you to adjust the amount of hardener to suit your needs. Over-catalyzing (adding too much hardener) results in a rubber-like substance, never permitting a complete cure. Using too little hardener, will also cause an incomplete cure.

Apply the gel putty with a putty knife, filling the scratch or flaw slightly above the surrounding surface. Allow to harden. Sand and buff as previously mentioned for shallow scratches. Clean up hands and tools with acetone before putty hardens.

**CAUTION:** The clear hardener should be handled with great care. Flush skin or eyes with large amounts of water if accidentally splashed.

Be careful of discarding uncured, mixed gel coat material. Once hardener is added, a chemical reaction takes place that generates heat. Large quantities can become very hot. Submerge material in water until cured for maximum safety.

**NON-SKID IMPERFECTIONS:** Repair of the non-skid is similar to that of deep imperfections only that you add small amounts of non-skid grit and dab the gel coat on with the end of a brush with a stippling action.

**GEL COAT BLISTERS:** Below the water line, it is possible for water to get beneath the gel coat and cause it to blister. This occurrence is rare and usually takes the form of small blisters less than 1/4" in diameter. While we try to use the latest materials and techniques in combating this phenomenon, it is not within our ability to guarantee this never happening due to the very nature of the materials used. If you should find yourself with a serious case of the "blisters", contact the factory for the latest recommended repair practices and advice. The successful repair is

difficult and time consuming and the services of an expert repair facility is advised. To minimize the potential of blisters, it is recommended that only light sanding of the bottom be done with 150 grit or finer paper. Coarse sanding will scratch the gelcoat which increases the likelihood of the water penetration. The continued use of epoxy primer and bottom paints is also advised. It is also recommended that the boat be hauled regularly and repainted.

## 1.2 ENGINE

Refer to your Engine Owner's Manual for further information

See drawings :    4.81 - Access  
                     4.82 - Fuel circuit  
                     4.83 - Air cooling



Parts are available at any local distributor or directly through our distributor. You will find that they stock and ship almost every part you may need to effectively repair or maintain your engine. Their name and address is in the vendor list.

The engine installation is best broken down into several systems and a description of each system follows. The systems are electrical, exhaust, hand starting, cooling, fuel, shafting, maintenance and winterization.

#### 1.21 Engine Electrical System

Specifications for all these engines vary, but in general should a starting problem occur, first check the overload fuse or circuit breaker located close to the starter.

Another problem that can occur is a faulty starter switch not making proper contact.

This and other problems should be corrected by a reputable serviceman or authorized dealer. The Engine Owner's Service Manual that is supplied with each boat carefully outlines many of the electrical features included in the engine.

As with all vendor supplied equipment used in the boat, a thorough review of the service manual contents for each piece of equipment will insure a better knowledge of the correct usage, maintenance and repair methods required.

#### 1.22 Exhaust System

The exhaust system is of the wet type. Gases leaving the engine exhaust manifold are mixed with the waste raw water leaving the heat exchanger, by means of an injection elbow. The gas/water mixture then passes through a water lock muffler, located in the aft part of the engine space, and out of the transom via a wire reinforced flexible hose.

Little maintenance of this system is required. It is recommended that every time the engine is started, you look over the transom to see if the cooling water is coming out with the exhaust. If it isn't, not only will the engine block overheat, but the exhaust system will overheat as well. The routing of the exhaust hose should not be changed or problems may develop. For winterizing the exhaust system, a drain plug is fitted to the exhaust muffler allowing it to be drained.

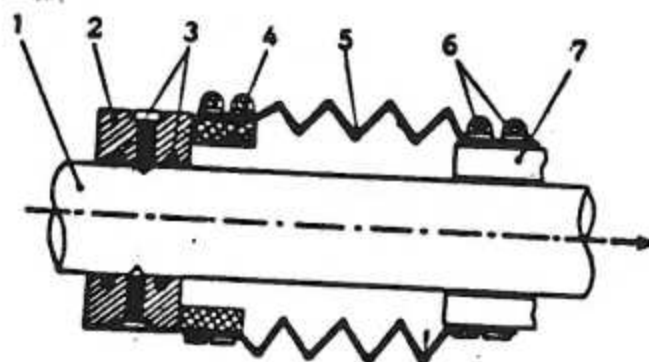
### 1.23 Hand Start

Hand starting a diesel is so difficult that we do not recommend it. Such force is required that injury may result. Intelligent use of the two battery system should eliminate the need for hand starting. In our opinion, it is foolhardy to rely on this feature.

### 1.24 Transmission

When sailing and the engine is not in operation, the transmission must be kept in reverse. Some transmissions overheat if allowed to free-wheel.

#### STUFFING BOX



- 1 Shaft
- 2 Adjusting ring - S.S.
- 3 'O' rings and set screw
- 4 Gasket
- 5 Diaphragm
- 6 Hose clamps
- 7 Stern tube

#### BATTERY SWITCH



#### IMPORTANT :

WAIT FOR ENGINE TO COME TO A FULL STOP BEFORE TURNING OFF.



### 1.25 Cooling System

The cooling water enters the hull through a screened seacock. All inboard diesel engines used by ELITE are either fresh or raw water heat exchanger cooled. An engine mounted sea water pump, pumps raw sea water through a heat exchanger to remove heat from the coolant. The raw water is discharged overboard through the exhaust line as described in the exhaust section. If the engine is started with the seacock closed or, the flow of water is obstructed in another way, damage to the pump's impeller will result. A spare impeller should be carried aboard at all times and is easily changed.

Domestic hot water is generated using the heat exchanger principal. The heated engine coolant is passed through a coil in the hot water tank before it enters the raw water heat exchanger. Domestic hot water can also be generated using the 110 volt AC heating element in the tank.

Overheating of the engine coolant, indicated by an audible alarm buzzer or excessively high readings on the temperature gauge mounted in the engine panel, could be caused by several problems, including:

- \* Cooling water shortage due to blocked intake strainer or closed seacock.
- \* Loss of cooling water due to ruptured hoses.
- \* Loss of cooling water due to leaky gaskets.
- \* Loss of cooling water due to loose hose clamps.
- \* Broken or slipping water pump drive belt.
- \* Defective water pump - check impeller.

Consult the engine owner's manual for further information regarding the operation and maintenance of your diesel auxiliary.

### 1.26 Fuel System

In order to run, a diesel's only requirement is clean, waterfree, airfree fuel and combustion oxygen. There are no spark plugs or ignition requirements. Ninety-five percent of all diesel engine problems result from fuel problems. The engine manual that comes with the engine describes the bleeding procedures (some engines are fitted with self bleeding fuel systems) and every owner should know how to do this. The fuel feed line must be 100% air tight or it will suck in air which eventually will reach the high pressure pump and cause the engine not to start until this air is expelled. All engines are test run here at the plant and are fully bled, however, air may be introduced in trucking or launching and must be bled out once the boat is launched. The fuel system consists of rubber hoses secured with hose clamps and threaded fittings made tight with pipe dope tape

or sealer. The complete fuel line from the pick-up tube in the tank to the fuel pump in the engine must be tight or air will be introduced.

All ELITE engine installations incorporate two fuel filters which also must be air tight. Any time the fuel system is opened up, as when changing a fuel filter, air will be introduced into the system which must be bled out.

Usually, the only other major problems that can occur are caused by dirty or water laden fuel. Water is especially harmful in that its presence in the delicate passages of the high pressure pump will cause rust which may ruin the very costly fuel injection system. The best way to avoid water in the fuel is to keep the fuel tank nearly full at all times. This reduces the air space in the tank, which cuts down on condensation. A water separator which should be periodically checked and drained when necessary, is also provided.

Diesel fuel stabilizer also works, is highly recommended, and can be obtained from your local fuel dealer.

When filling the fuel tank, care must be taken not to overfill it. This will result in excess fuel being expelled out the vent hose and into the ocean which is illegal. Care must also be taken to see that the fuel fill cap is replaced securely so that no water will leak into the tank.

Fuel drawn from a cool underground tank will expand when placed in the warmer ships fuel tank. Therefore, the tank should only be filled to 95% of capacity to allow for expansion.

Diesel fuel, while less volatile than gasoline, is still explosive and extreme care should be taken while fueling or working on the fuel system. Never allow a mechanic to use ether as a starting aid. Ether can cause over pressurizing of the small cylinder on an auxiliary diesel.

#### 1.27 Propeller Shaft

Alignment is very critical and should be checked carefully several times the first year and at the beginning of every season. Alignment can only be accomplished in the water, with the rig tuned. All engine mounts are adjustable up and down and athwartships. If a flexible coupling is fitted, it must be removed when checking alignment.



### 1.28 Winterization

Winterization is best left up to your storage yard. If you do it yourself, you should follow the instructions in the engine manufacturer's owner's manual. The major problem that can arise during winter layup is the danger of the engine water freezing. This can be prevented by either draining the water completely out of the engine and exhaust system, or by treating this water with antifreeze. Refer to the label for the proper mixing instructions for the degree of protection required in your locale. If the antifreeze system is used, the thermostat must be removed to insure that water enters all areas of the block.

### 1.3 Electrical System

Most ELITE yachts are equipped with a comprehensive electrical system designed to meet your present and future needs. The A. C. (alternating current - Shore Power) and D. C. (direct current - Ship's Power) wiring is plastic coated, stranded copper wire with crimped-on connectors or soldered joints as required. The electrical system is basically maintenance free, with only the batteries requiring periodic inspection.

#### 1.31 D. C. - 12 Volt System

Refer to Electrical system drawings :

4.71 - AC

4.72 - DC

CAUTION: NEVER TURN THE BATTERY SWITCH TO THE OFF POSITION WHILE THE ENGINE IS RUNNING. SERIOUS DAMAGE TO THE ALTERNATOR WILL RESULT.

The level of charge of the batteries may be checked with a Battery Condition Meter located in the center of the D.C. Power Panel. The BATTERY TEST SWITCH adjacent to the meter is used to directly connect the meter to the individual batteries. The condition may then read directly from the meter. The BATTERY SELECTOR SWITCH must NOT be in the ALL position and the engine should NOT BE RUNNING or false readings will result.

Fully charged batteries in a static state (meaning that the batteries have not been charged or discharged for at least two hours) should indicate between 12.3 - 12.6 volts on the numerical scale. The gauge needle should be just touching the low end of the green normal segment on the colored scale. If the pointer lies in either the yellow or red low band, indicating between 11 - 11.5 volts on the numerical scale, the battery is about half discharged and should be recharged to ensure its usefulness. If, when the engine is started, the needle does not move up, this indicates that no charge is being delivered to the battery from the engine and the charging system should be checked. When the battery is being charged, the needle should indicate between 12.6 - 13 volts, approximately in the center of the green band. The needle may reach about 13.7 volts (at the high end of the normal green band) towards the end of the charge cycle. If the battery voltage reaches 15 volts (the center of the H1 red band) this indicates that the battery is being overcharged and will be damaged if left unchecked. The voltage regulator is most likely at fault.

When the battery is being discharged (having electrical loads placed upon it) and no charging current applied, it is normal for the pointer to indicate between 11.4 - 12.6 volts,

A FINAL WORD: The above guidelines provided are merely to help you establish what is normal - the usefulness of the meter will depend on your own routine observations which will spot trouble when it occurs.

NOTE: The voltmeter located in the engine instrument panel indicates the engine alternator output, and is not an indication of the state of charge of the batteries.

#### 1.41 - Seacocks

Be certain to open the engine cooling water seacock before starting the engine. The water pump impeller could be damaged and/or the engine and exhaust system damaged by overheating if the engine were to be started with the seacock closed.

Routine maintenance of seacocks calls for disassembly when the boat is out of the water, applying a waterproof grease to all friction-bearing parts and reassembling. When disassembling seacocks, do so one at a time as the components of each seacock are individually fitted to one another by their manufacturer. Your dealer or marina will suggest a good grease available in your locality. Automotive water pump grease may be used.

Seacocks should be worked frequently to keep corrosion from forming, causing them to jam.

Before launching, and regularly throughout the season, you should check to see that all hose clamps are tight and in good condition. Seacocks are designed to provide a positive means of stopping a flow of water into the hull, should a connection fail or hose rupture. These fittings are the single most important safety devices that affect the watertight integrity of your boat. Checking them for ease and effectiveness of operation means making certain that the handles move the full arc that they were designed for, and that sinks, toilets, and cockpits drain easily when filled.

Whenever the boat is left unattended in the water, ALL thru hull fittings should be left in the CLOSED position

Leave all seacocks open when the boat is stored for the winter so there is no freezing damage.

The other seacocks should normally be left in the closed position when you leave the boat. Be sure that you establish a routine of opening and closing seacocks so that you don't overheat your engine or burst hoses in the head. Since the head bowl is near the waterline, particular attention should be paid to the seacocks that serve the head. They should be shut off anytime you are asleep or off the boat. A malfunction in the head or leaving the head intake valve open could cause the boat to flood or sink if undetected. Simply closing the seacocks eliminates this hazard. Set up a routine to do this all the time.

## 1.42 Pressure Water System

Your yacht may be equipped with an automatic on demand type pressure fresh water system. In use, it is quite similar to a typical home water system in that no switches need be turned or pedals pushed in order to get water.

The system is activated by a circuit breaker on the D.C. Panel. Once the system is switched on, the pump maintains a pre-set pressure at all times. When you open one of the faucets, the slight decrease in pressure which results is sensed by the pressure regulator built into the pump. The pump starts and runs until the faucet is shut. The pressure then builds back up and the regulator shuts off the pump.

Refer to drawings Water system

- 4.91 - Fresh water system
- 4.92 - Hot water system

## 1.43 - Hot Water system

BE CERTAIN THE HOT WATER TANK IS COMPLETELY FILLED BEFORE TURNING THE 110 VOLT HEATING ELEMENT ON OR IT WILL BURN OUT THE ELEMENT. Also, be careful not to accidentally activate the high temperature, high pressure relief valve, which projects out from the side of the tank. Once the lever arm has been pulled, the valve will not reset and it must be replaced.

To activate the water system, fill up the tanks and open one valve on the manifold. We suggest you run the pump and open the cold water side of BOTH faucets until a steady flow of water comes out. Close the faucets and repeat on the hot water side. You must be sure to eliminate any trapped air from the system or the pump will cycle rapidly or never shut off.

We hope that we have found any problems here at the plant, but always check the clear hose just below the pump for air bubbles flowing in the line. If air appears, you must find its source, i.e.: a leaking connection, leaking strainer, faulty manifold, or an empty tank.

Also, periodically check for a leak in the pressure side of the system. One indication that something is leaking is the pump coming on at times when no faucet opened. This signifies a loss in pressure which a leak would cause.



#### 1.44 - Toilets

Refer to the head manufacturer's instructions on use of the marine toilet. It is recommended that a minimum amount of flushing water be used on each cycle to maximize the capacity of the holding tank. There is a deck plate conveniently located from which your marina can pump out the tank.

The use of deodorizing chemicals as sold for recirculating toilet systems is recommended to control odor. The tank and head should be winterized by cleaning and treating them with a "Winterguard" type antifreeze. Winterguard is a non-toxic antifreeze which can also be used to winterize your fresh water systems.

#### 1.45 Bilge Pumps

The pump itself is located in the cockpit area and is operated by inserting the (removable) handle into the handle socket. This arrangement allows the pumping of the bilge with all hatches closed; a safety precaution, should you have to pump in severe conditions. Locate the handle, when not in use, so that it is readily accessible in an emergency. Insure that your crew is also aware of its location.

Water is carried from the bilge to the pump by a reinforced plastic hose with a strainer at the bilge end. This strainer should be checked FREQUENTLY and cleaned as needed. The pump discharges water overboard through a fitting located above the waterline near the transom.

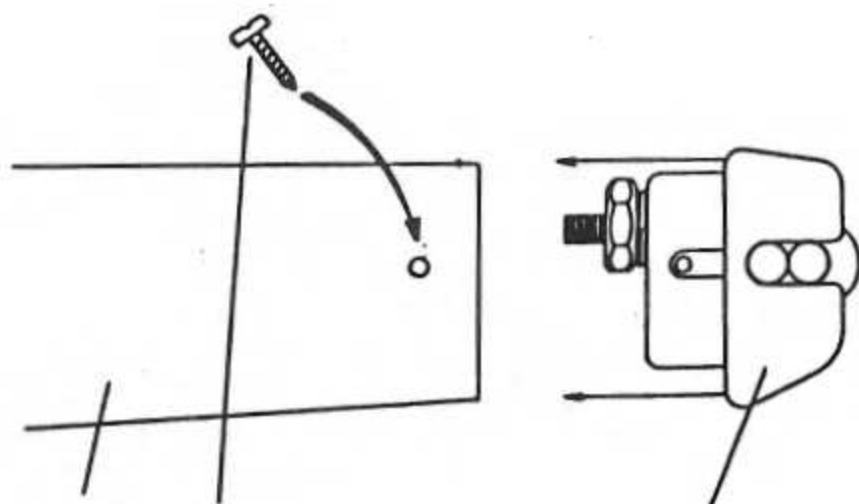
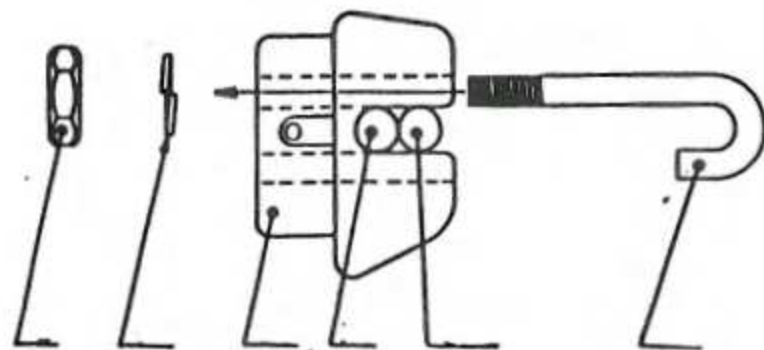
The pump is designed to pump water containing a variety of debris, but can become clogged by excessive solid matter. If the pump should fail to prime itself after several strokes, check to see that the pick-up hose is positioned properly, then check the pump body for debris. The rubber diaphragm may be removed by loosening the screw which holds the stainless steel clamp. Inspect the pump body for foreign material and gently lift the intake and outlet flapper valves to determine that they are clear. Reassemble the pump and continue pumping. The pump may also fail to prime due to a ruptured or leaky hose. This can be checked by holding your hand over the end of the hose to see if suction is felt.

It is wise to pump the bilge before casting off and again on returning to see if the boat is taking on unusual amounts of water.

Refer to drawing : 4.93 - Manual/electric bilge pump

## SPREADER TIPS - ASSEMBLY

(FRANCESPAR)



### 1.5 Spars

Masts, booms on all ELITE yachts are made of high-grade extruded aluminum. All spars are anodized, but unfortunately, anodizing is a semi-permanent process, but still the best means of protecting aluminum. After several years of hard exposure to salt spray and sun, the protective properties may diminish and a paint or film

may need to be applied to the mast. However, anodized spars have been used for many years untreated with no apparent harm.

As a general rule, aluminum masts require minimal care and maintenance. When they are removed from the boat for the winter, they should be thoroughly washed with plenty of fresh water and a mild detergent. After a complete rinsing with fresh water, and after all halyards and lifts have been tied-off, to prevent tangling and fouling, a thorough inspection should commence. Start at the base of the mast. Water will collect here if the drain hole in the mast step has not been kept clear. This may hasten the breakdown of the anodizing and start the corrosion process. If water has collected and caused corrosion, clear the mast step drain hole and refinish the mast base or heel. Waxing will help preserve anodizing.

Proceed up the mast noting any areas that are scratched or abraded. If these are small, they may be covered with a clear lacquer of a mast-kote type product to keep corrosion from starting or spreading. Sometimes, it is recommended that you apply to the mast a good hard wax as this helps to protect it further. As you proceed up the mast, check every cleat and fitting for tightness, and for corrosion which may have begun in the screw holes. Make certain that no bronze, brass or non-stainless steel fastenings are used in the aluminum as these metals are noncompatible with aluminum and electrolytical corrosion will start at once.

Check the tang fittings of the lower shrouds and the base mounts of the spreaders as you proceed up the mast. Carefully check all tangs, straps and fittings at the masthead.

Examine the main and jib halyard sheaves for signs of wear. Insure they turn freely. If you see anything that looks at all unusual, ask your dealer or local boatyard for assistance. Booms should also be inspected as carefully, with particular attention to gooseneck fittings, sheet blocks and bails. The combination deck and mast light should also be inspected. Check the bulb holders for corrosion, and clean contacts if necessary. It is good practice to change the bulbs every year, as a mid-season failure is very difficult to correct. Record bulb sizes and carry spares aboard your boat.

The spreaders that support the upper shrouds should be inspected. They are designed to angle slightly upward to best support the mast in column. The inboard and outboard ends should be covered with chafe tape or spreader boots to prevent tearing sails or halyards. If any damage is sustained during mast stepping or winter storage, replace the spreader. DO NOT sail with defective spreaders, spars or

hardware. We do not recommend that a mast be left stepped all winter, especially in northern climates, where the boat is used for approximately 6 months out of the year. If possible the mast, boom(s) and rigging should be stored under cover during the winter, or layup period, as unnecessary exposure to the elements tends to shorten their life.

#### 1.6 Standing Rigging

Standing rigging consists of shrouds and stays which support the mast in an upright position. Running rigging is used to hoist or trim sails. The condition of the standing rigging and turnbuckles must be checked periodically. A failure of a stay or shroud could result in the loss of the mast. Most failures occur from lack of attention, poor tuning or improper maintenance rather than structural failure.

Before stepping your mast each season, inspect all standing rigging thoroughly. Starting at the top of the mast, systematically check each upper shroud and stay tang and be certain that each clevis pin is secured with the correct size cotter pin with its ends bent over. Wipe down each shroud and stay with bronze wool dipped in a solution of water and mild detergent. The bronze wool will catch any broken wire in the rigging, calling attention to potential trouble; use bronze wool as unlike steel wool, it will not leave particles to rust and soil your sails. Follow the bronze wool with a piece of terrycloth sprayed with a water-dispersing agent.

If you have doubt as to the soundness of a shroud or stay, consult your boat yard or a reputable rigger, and replace if necessary.

Next, see that the spreaders are firmly fastened in place, and that the upper shrouds are locked in place on the outboard end of the spreader

See drawing 4.3 - Standing rigging

During the season, you should completely disassemble and inspect all turnbuckles at least once. DO NOT attempt to do this when sea or wind conditions are placing strain on the mast. The shroud turnbuckles (upper and lower sidestays) may be disconnected and inspected ONE AT A TIME. The remaining shrouds will provide adequate mast support.

Prior to disconnecting headstay and backstay turnbuckles for inspection, special measures to support the mast are necessary. This can be accomplished by using the halyards as temporary stays. Attach the jib halyard to the jib tack shackle; haul it in tight and cleat it. This will temporarily replace the headstay, so that you may disassemble the turnbuckle for inspection. Lead the main halyard aft to a stern cleat and follow the above procedure to check the backstay turnbuckle. DO NOT use the coaming mounted sheet cleats for anything other than sheeting the headsail and then only if the sheet is around the winch first. These cleats are handily mounted, but may pull out of the coaming if the main tension of the sheet is not taken by the winches.

The barrel section of the turnbuckle should be backed off entirely from the top and bottom sections. All threads should be carefully inspected both for wear and damage as well as rust, corrosion, or breakdown of the metal itself. The threads in each end of the barrel should be inspected as well as the threads of the swaged stud attached to the wire, and the lower section incorporating the toggle. Prior to reassembling, lightly lubricate the threaded sections of each component with waterproof grease. The turnbuckle should be assembled so that the threaded section of the upper and lower parts are exposed for the same length in the barrel. This will allow even adjustment.

The turnbuckles on each shroud and stay should be set to approximately 2/3 open before stepping the mast. This will enable the stays to be tensioned easier during the mast stepping operation.

See drawing 4.2 - Deck fitting

During a lightning storm, refrain from touching any metal objects such as shrouds, mast, stanchions, pulpit, etc. as these may attract lightning.

As more and more electrical equipment is added to a boat, it becomes increasingly important to be alert to the threat of electrolysis.



UNDER NO CIRCUMSTANCES TAKE UP THE RIGGING TO BAR TIGHT TENSION. Both the mast and the boat can be severely damaged by excessive tension.

Fine tuning of the rig can be completed after the boat has been sailed, and may have to be done again after the boat has been out in strong winds. When sailing, it is important that the mast remain straight and as nearly in column as possible at all times. While sailing close hauled, sight up the mast track and note any mast curve. Does the mast appear to be falling off to leeward at the top, or does it hook upwind? Repeat this procedure on the opposite tack.

If the masthead is falling off on both tacks, the forward lower shrouds are too tight and the upper shrouds are too loose. If the masthead hooks to windward, the upper shroud is too tight in relation to the lower on the same side. When sailing to windward, the forward lower shrouds bear a greater load than the after lower shrouds; however, the after lower shrouds on the windward side should never be loose. All shroud tuning should be done from the leeward side. If the rig seems to be equally balanced when you begin, duplicate every half turn from side to side.

CHECK TO SEE THAT ALL COTTER PINS OR RINGS ARE IN PLACE AND THAT ALL SHARP EDGES ARE TAPED.

Rigging that has split strands or wire or cracked swage fittings should be discarded and replaced.

## 1.7 Running Rigging

Because of the recent advances made with pre-stretched synthetic fiber line and the age old problem of fish hooks forming in stainless halyards after one season of use, your boat is equipped with pre-stretched dacron halyards. Yachts equipped with running rigging made from this type of material have sailed around the world.

Periodic inspection of the running rigging will point out any areas of excessive chafe. Often the offending item causing the chafe can be corrected. One way to extend the life of the running rigging is to end for end each line, sheet, etc. every year to move the point of wear away from the sheave, winch or turning block. Only experience will dictate when they need replacement.



## Deck Hardware and Chainplates

Most deck hardware on ELITE yachts is either thru-bolted or the fastenings are drilled and tapped into a metal insert in the deck. Aluminum backups are used in some applications, and are visible below the deck or headliner. Some items e.g. access plates, are caulked and screwed down with self-tapping stainless steel screws. After a period of time, items of deck gear can develop leaks. These should be removed and rebedded using a good brand of caulk such as Boatlife "Life Caulk" or Sika "Sikaflex 201 or 231". Care must be taken not to overtighten the fasteners as the strength can be reduced severely. Particular attention should be paid to the chainplate fasteners as they are very critical to the safety of the rig.

## Tuning the Standing Rigging

The purpose of tuning the rig is to adjust the center of effort of the sail plan fore or aft to obtain a slight weather helm in moderate winds, and to keep it straight without hooks to port, starboard, fore or aft. Properly tuning the rig is an important process which should be attempted only by qualified personnel; consult your dealer.

The fore and aft alignment of your mast can be checked by comparing it to a vertical structure such as a radio tower, chimney, etc.. Before checking the mast alignment in this manner, be certain that the boat is in level trim.

See drawing 4.4 - running rigging

## 1.8 Sails

Sails should be protected from chafe by padding spreaders and other gear or by installing chafe patches on the sails themselves. Spreader and shrouds can chafe genoas and other overlapping jibs when those sails are sheeted in tightly and can chafe the mainsail when running before the wind. Topping lifts frequently chafe the leach of the mainsails.

Inspect your sails frequently and take care of chafed stitching or small tears before they become a major problem. A small ditty bag with some thread and a few sail maker's tools on board can come in handy and save you time and money in the future.

Sails should also be protected from sunlight as much as is practicable. Ultra violet light can break down the dacron in the sail cloth and stitching. Sails that are left furled on booms, and forestays without suitable covers are most susceptible to this problem. Suitable sail covers are available from your dealer.

Mildew is no longer the major concern that it was in the days of natural fiber sails. Your new sails should be dry before folding if for no other reason than to prevent the unsightly growth of this dark mold.

In order to retain the shape of your sails, they should be folded after each use. In the case of the mainsail, outhaul tension should be relieved before flaking the sail on the boom.

After the season, sails should be inspected and if necessary, serviced by a competent sailmaker. For appearance's sake, stains should be removed and the sails washed gently with a mild soap and thoroughly rinsed with clean fresh water.

The mainsail has plastic slugs which are inserted into the track on the after side of the mast.

After all the sail slugs are inserted in the track, insert bolt rope at the foot

of the main into the boom sail track.

The sail battens used on your boomed sails are thin fiberglass stiffeners inserted in the trailing edge to support the outward curved leach. When inserting the batten, the thin edge goes into the batten pocket first.

Battens can twist and warp if they are not kept flat. Keep this in mind when storing them. Battens should always be removed when the mainsail is furled. You will find it helpful to have the battens numbered or lettered so that they can be installed in the correct pocket and direction each time.

Jiffy Reefing is used on all boats. REMEMBER: IF YOU ARE THINKING ABOUT WHETHER OR NOT TO REEF, IT'S THE TIME TO DO IT. Being over-canvassed is hard on a crew and boat, potentially dangerous, and will not make the boat go any faster.

Reeve the reefing lines through the reefing cringles. The grommets on the luff and the leach will then become your new tack and clew. Ease off the halyard and pull the tack down to the top of the boom. Make the tack line fast to the cleat on the mast or place the tack reef cringle over the gooseneck mounted reefing hook and take up on the halyard until the luff is set with the proper tension. Next, haul in on the clew line, pulling the clew down and aft.

It is important that during a jiffy reef the main sheet and the vang, should your boat have one, be eased to allow proper tensioning along the new foot of the sail. The key to this type of reefing is to have sufficient tension on the foot of the sail. When the clew has been pulled out and the foot is tight, make the line fast around the cleat on the boom.

There are reef "points"

fitted with "jiffy" reefing. Use 24" lengths of 1/4" line and run them through each reef point. Lead the line through the reef point, under the foot of the sail and tie the reef lines in a REEF KNOT. It is the seamanlike procedure to keep the unused sail out of the way and reduce windage.

To shake out the reef, release the lines through the reef points, stow them and release the reef line through the reefing cringle that is serving as your clew. Then release the reef line or the reefing cringle for the tack, and hoist the mainsail so that the luff is tight. Return the topping lift to its original position. Again, make sure the sheet

and vang have been eased.

Generally speaking, reefing is desirable when you find yourself heeling more than 20 degrees or wish to slow the boat down to keep it manageable in heavy airs. When going off the wind, the boat will probably sail as well running under headsails alone, since the reefed main will usually blanket the headsail. You may wish to leave the mainsail reefed, furled and ready to hoist when you change direction to windward.

see drawing 4.5 Sails and Spinnaker gear operation

## 2. MAINTENANCE

### 2.1 Exterior Maintenance

#### 2.11 SPAR

It goes without saying that removing the spar and storing it inside after the sailing season is over (northern climates in particular) is preferable to leaving the spar stepped or outside. Regardless of where you sail, the spar should be waxed once a season and inspected carefully.

All moving parts on the spar were treated with a teflon lubricant when they were installed. At least once a season, you should do the same.

#### 2.12 STANDING RIGGING

Standing rigging, the fixed rigging supporting your mast, should be inspected frequently to ensure trouble-free sailing.

New rigging will often form a thin layer of rust, especially at the terminal ends. This is caused by impurities surfacing when the wire is cold worked during manufacture. The oxidation should eventually stop forming and when it does, the stain should be removed with an unchlorinated cleanser. If the rusting persists after several cleanings, contact your dealer.

Turnbuckles should be checked to see that there are sufficient threads exposed

## 2.13 LIFELINES, PULPITS AND STANCHIONS

Lifelines, like standing rigging, should receive periodic checks. The terminal ends should be engaged properly in the barrels of the turnbuckles and the lock nuts tight. As the lines stretch, the slack should be taken up. Check all swaging for dents or cracks.

Check pulpits and stanchions for cracks, dents and cracks in the welds. Check that the bases are tight and properly sealed.

Periodically, some of this stainless hardware shows signs of rusting as mentioned in the standing rigging section. This rust can be removed with a rust-remover, your dealer or local marina can recommend a brand to you.

## 2.14 WINCHES AND BLOCKS

The winches installed on your yacht are the finest available. Most problems occur when a proper maintenance schedule is not followed. It is important that your winches be cleaned and inspected at least twice a season or after a two or three week offshore passage. We recommend a high density grease and not an oil for the required lubrication. Check to see that all bolts holding the winch down are tight.

Blocks require little maintenance except periodic washing in fresh water and a light oiling or spraying with a silicone lubricant. Check all aluminum 'T' tracks for signs of lifting or loose fasteners.

## 2.15 MAINTAINING TEAK

As it gets exposed to sunlight and drying conditions,

the woods begin to take on a grey appearance that will eventually lead to surface deterioration of the wood. Teak which is ignored will eventually begin to split and grain will lift.

Contrary to what you may have heard, teak is not a miracle wood that is totally maintenance free. It is easy to maintain. There are a number of excellent teak cleaning and sealing preparations on the market. We suggest that you ask your sailing friends (who have teak you admire) for their suggestions. (Many excellent teak cleaning and sealing products are not available nationwide, so use the best available in your area.)

The teak may also be varnished; put three to six coats on initially; plan to apply another coat at midseason, and a final coat prior to winter layup. Follow manufacturer's directions for the varnish which you purchase (use only quality marine varnish.)

## 2.2 Interior Maintenance

Periodic cleaning is essential to keep the interior of your boat clean and bright. Choose sunny, breezy days for your boatkeeping chores as sun and fresh air are a great help in drying and airing interior cushions, etc. while you continue with chores below; they also contribute to your enthusiasm for the task!

### 2.21 Cushions

The cloth covering the interior cushions may be one of several different materials

We, therefore, recommend that you either have the cushions dry cleaned or clean them with an upholstery shampoo of the spray foam type.

Vinyl interior cushions and cockpit cushions should be cleaned with a vinyl upholstery cleaner. Follow the manufacturer's instructions regarding the use of these products. To prevent the growth of mildew beneath vinyl cabin cushions, elevate them when leaving the boat to allow air to circulate. Remove bunk top traps also, when leaving the boat, to allow the lockers to be aired.



## 2.22 Ice Box

The ice box on your ELITE is designed to drain water from melted ice into the bilge. Because small food particles, juices from meats, etc. may also drain into the bilge, it is wise to use a NAME BRAND bilge cleaner in the bilge as needed or every three to four weeks (depending on how frequently you are using the ice box). Follow the directions for use which accompany the product which you select.

Another alternative is to fit a plastic gallon jug on the end of the ice box hose. Periodically, dump the melted ice water into the sink.

Food items should not be left for long periods of time in a closed ice box without ice. Spoilage, odors, mold and mildew will result. Plan to clean out your ice box (both ice and food items) at the end of each sail or cruise when you are leaving the boat for an extended period of time. Remove the ice box cover to permit thorough drying. Clean up any spillage of food, etc., in the ice box, to prevent a blockage in the drain, and drainage into the bilge.

Clean the fiberglass interior surfaces of your ice box periodically with a sponge dampened with a water and bleach solution (this will help prevent mildew and odors in the ice box).



## 2.23 MISCELLANEOUS

### Curtains

Generally, the curtains  
should be dry cleaned.

### Sinks

Stainless steel sinks may be cleaned with any stainless steel cleaner according to the manufacturer's instructions or with a non-abrasive cleaner and soft cloth or sponge.

### Head

The plastic seat and vitreous china bowl of your head should be cleaned with a non-abrasive cleanser and sponge or soft cloth.

### Interior Wood Surfaces

The interior is finished in Elm wood which has been varnished with 3 coats of two part polyurethane varnish which is sprayed on during the building process.

It is certainly recommended that during the life of your ELITE more coats of varnish, especially around the companionway, should be added.

Lightly sand with #360 grit sandpaper, clean surface thoroughly with denatured alcohol, and apply any polyurethane varnish (one part) you like or your dealer might recommend. DO NOT forget to sand between each coat of varnish.

### General

Dirt, hair, etc. should not be washed into the bilge during any cleaning process as these may plug the bilge pump strainer and prevent it from functioning when needed. Use a dust pan to collect dirt, etc. when cleaning the cabin sole of your boat.

Remove covers of lockers when leaving the boat to allow for adequate ventilation and prevent mildew. Remove excess moisture which may have collected in lockers with a sponge,

and wipe the locker interiors with a dry cloth.

## 2.3

### Winterizing

Winterizing your yacht is a relatively simple procedure. It is assumed that the boat will be dry stored in the following instructions. If you should decide to wet store your boat, be sure to take adequate precautions against water freezing in the engine and plumbing systems of your boat.

#### 2.31 BLOCKING THE HULL

A good boat yard is, no doubt, expert at properly supporting the hull. Check to make sure that the weight of the hull is resting on the keel. The purpose of cradle bulkhead or poppets is to balance the boat in an upright position, not to bear the weight of the boat.

Before hauling out, show the boat yard the profile of the hull so that they will know how to position the lifting straps. The usual locations for the straps of a typical marine lift are just forward of the rudder heel bearing and in the hollow of the fore foot. Alert the boatyard as to the locations of under water fittings and any transducers that may be installed.

#### 2.32 COCKPIT SCUPPERS

Flush with fresh water

#### 2.33 ICE BOX

Clean ice box thoroughly and leave open, as previously described.

#### 2.34 STOVE SYSTEMS

LPG (Liquified Petroleum Gas) and  
CNG (Compressed Natural Gas)

Clean stove thoroughly, including burners. Burn off excess gas in the feed line by closing the

valve on the tank, with a stove burner lit. When the flame is extinguished, the gas in the fuel line has been burnt off. Be sure to turn all valves on the appliance to the OFF position. The first time you use your stove again, monitor the flame closely until all the air is bled out of the lines and a consistent flame is achieved. The tanks can either be left on the boat or taken off. If the tanks are left on the boat, insure that the gas locker drains and/or vents are clear. Consult your boat yard as to their preferred storage practice for LPG/CNG tanks.

## 2.35 ELECTRICAL SYSTEMS

Remove batteries from boat and store in a warm dry location off a cement or stone floor. They should be completely charged before storing or left on a trickle charge.

The balance of your electrical system requires little maintenance. If you wish, each bulb can be removed and the light fixtures given a spray of water dispersant such as "WD40", "CRC", or a similar product. The main switch and fuse panel can also be treated this way to minimize corrosion.

## 2.36 PROPELLER

Examine the propeller for any damage or nicks. If evidence of either is apparent, have the propeller removed and trued.

## 2.37 HEAD

Follow manufacturer's directions closely. Remove any water to prevent from freezing. The holding tank should be empty when the yacht is laid up for the winter. If possible, flush the tank with a mixture of non-toxic antifreeze and water prior to hauling.

## 2.38 WATER SYSTEM

Pump tanks as dry as possible, then add a non-toxic water system winterizer that your local marine hardware store will recommend. (CAUTION: DO NOT use antifreeze or other poisonous substances.) Pump this solution through the entire fresh water AND drainage system.

## 2.39 ENGINE

Follow the instructions laid down in the engine owner's manual, supplied with the ship's papers for winterizing your inboard diesel auxiliary.

Disconnect engine cooling water intake to make sure that no water remains in the line. Reconnect line and secure hose clamps. Remove the drain plug in the muffler and drain.

## 2.310 FUEL TANKS

The best way to store a fuel tank is empty. Partially filled tanks invite condensation. Completely filled tanks leave you with old fuel in the spring and possible gum deposits. Much has been written lately on this subject and new products are being developed to prevent gum deposits. Keep informed and consult your dealer or boatyard for recommendations.

## 2.311 COVERING

It is far better to store a boat under cover than to leave it open to the elements. The teak will fare far better during the winter and the boat will not be subject to the pressure of freezing water, a common cause of gel coat stress cracks. If your boat cover is durable, open a couple of ports to allow air to circulate below decks. ELITE recommends the use of a light colored heat reflecting cover fitted and vented so as to allow adequate air circulation.

## 3. Safety

### 3.1 general

Federal regulations REQUIRE certain safety equipment to be onboard your boat (personal and throwable floatation devices, fire extinguishers, flares, horn, whistle, etc.). Know what equipment is required and have it aboard and properly stowed before you cast off for the first time.

In addition to the equipment requirements outlined here, the U.S. Coast Guard can provide additional information and answer your questions. It is highly recommended that, although not required, certain additional items be kept aboard. This list is not complete; you should have all USCG required gear.

1. An anchor of appropriate size and design and rode of good quality, appropriate size and length.
2. First-aid kit.
3. Compass
4. Paddle
5. Flashlight

6. Up-to-date charts of the waters to be sailed.

#### 7. Flares

Fire extinguishers are not standard equipment they are to be provided by you, the owner. Fire aboard any boat is a serious hazard. It is important to take adequate precautions against fire and to be well prepared to extinguish one quickly and thoroughly should it occur. For this reason, U.S. Coast Guard approved fire extinguishers of the appropriate type and size (check U.S.C.G. regulations) should be installed immediately.

The permanent location of fire extinguishers should be where they are easily accessible (near areas where fires are most likely to occur - engine, fuel tanks, and galley) is important. They should not be located where fire may prevent their use. At least one extinguisher in a cockpit locker (reachable from outside the cabin) and one extinguisher installed below as a minimum.

### 3.2 CHARTS

There is no substitute for complete and up-to-date charts.

The Coast Guard is constantly making improvements on the aids to navigation which change buoy locations, numbers, configurations, etc.. These changes are reported in the respective Coast Guard District's Local Notice to Mariners, and are on display at all NOAA Chart Distributors. Before embarking on any trip outside your home port, make certain that you have the latest editions of the chart, and that they are fully corrected.

### 3.3 FUELING

Appropriate safety precautions are important before, during and after fueling. Before fueling the first time, be familiar with the instructions provided by the engine manufacturer.

1. Fuel docks should be approached at REASONABLE speed without wake. Observe posted speed limits and instructions. Be considerate of others using the docks, and watch for a dockmaster or hand who may give you instructions. Maintain control of your boat at all times and have your dock lines ready for use before you approach in the event that these are unavailable at the dock. Fenders should be in place before you approach the fuel dock.
2. Use bow, stern and spring lines to properly secure your boat.

3. Close and secure all hatches and ports.
4. PROHIBIT SMOKING while taking on fuel on or near fuel docks . Completely extinguish all smoking materials well in advance of approaching the docks; DO NOT recommence until you are well clear of it after fueling and conditions aboard are safe to do so.
5. Extinguish any other open flames aboard and see that all equipment (e.g. engine, stove, cabin heater, radios, and lights-both lanterns and electrical lights, etc.) which may generate heat or sparks of any kind are turned OFF...Turn off all switches for branch circuits so that there are no live electrical circuits. MAIN SWITCH should also be turned off AFTER engine is stopped (to avoid alternator damage).
6. If possible, crew members not involved in fueling should leave the boat.
7. An adequate fire extinguisher (USCG approved for Class B fires) should be readily available in case of emergency.
8. Remove fuel fitting. Be certain that you are putting fuel in the fuel tank. Note the approximate amount of fuel required to fill the tank by looking at the fuel level guage.
9. Be certain (double check) that you are taking on the appropriate fuel, diesel not gasoline. Errors of this type do occur and will result in serious engine damage, if not immediately detected and corrected.
10. Sometimes, if you are in an unfamiliar area, you may want to first take a sample of the fuel you plan to pump on board for visual and smell check to insure that it is diesel and not gasoline.
11. Maintain contact between the nozzle of the fuel hose and the fill pipe rim to prevent generation of static electricity sparks.
12. Fill slowly to about 95% of capacity; do NOT overfill (allowance must be made for thermal expansion of fuel without overflow.)
13. Replace and secure fill fitting after fueling. Carefully clean any spillage. Check fuel tank vents at stern for overflow. Check below decks and in the bilge for fumes or leakage. If fumes or leakage are present, adequately ventilate and clean areas



completely BEFORE PROCEEDING.

14. Open all ports and hatches fully for ventilation.
15. DO NOT fuel during electrical storms; avoid fueling at night or in rough water, except in emergencies when extreme caution must be exercised.
16. Note the diesel fuel is flammable; handle it accordingly in a cautious manner.

### 3.4 Weather Forecasts

The U.S. Coast Guard is in the process of discontinuing the display of weather signals at its stations and other locations along all coasts in favor of the NCAA weather broadcasts which are continuously broadcast on weather channels WX-1 and WX-2 (162.40 MHZ and 162.55 MHZ).

Good seamanship requires attention to the weather forecast before leaving port, and while you are sailing. Tune in to VHF weather, and make it a practice to check the broadcast on a regular basis in case there are changes in the forecast.

### 3.5 Boating Safety Organizations

Every sailor was once a beginner. Very few were born into sailing families and learned at their parents' knees. Therefore, it is to everyone's benefit that there are several fine non-profit organizations that are ready to teach interested persons everything from basic seamanship and piloting to celestial navigation.

Two of these organizations are:

United States Power Squadrons (U.S.P.S.)

United States Coast Guard Auxiliary

### 3.6 Stove Operation

The manufacturer of the stove includes an owner's manual

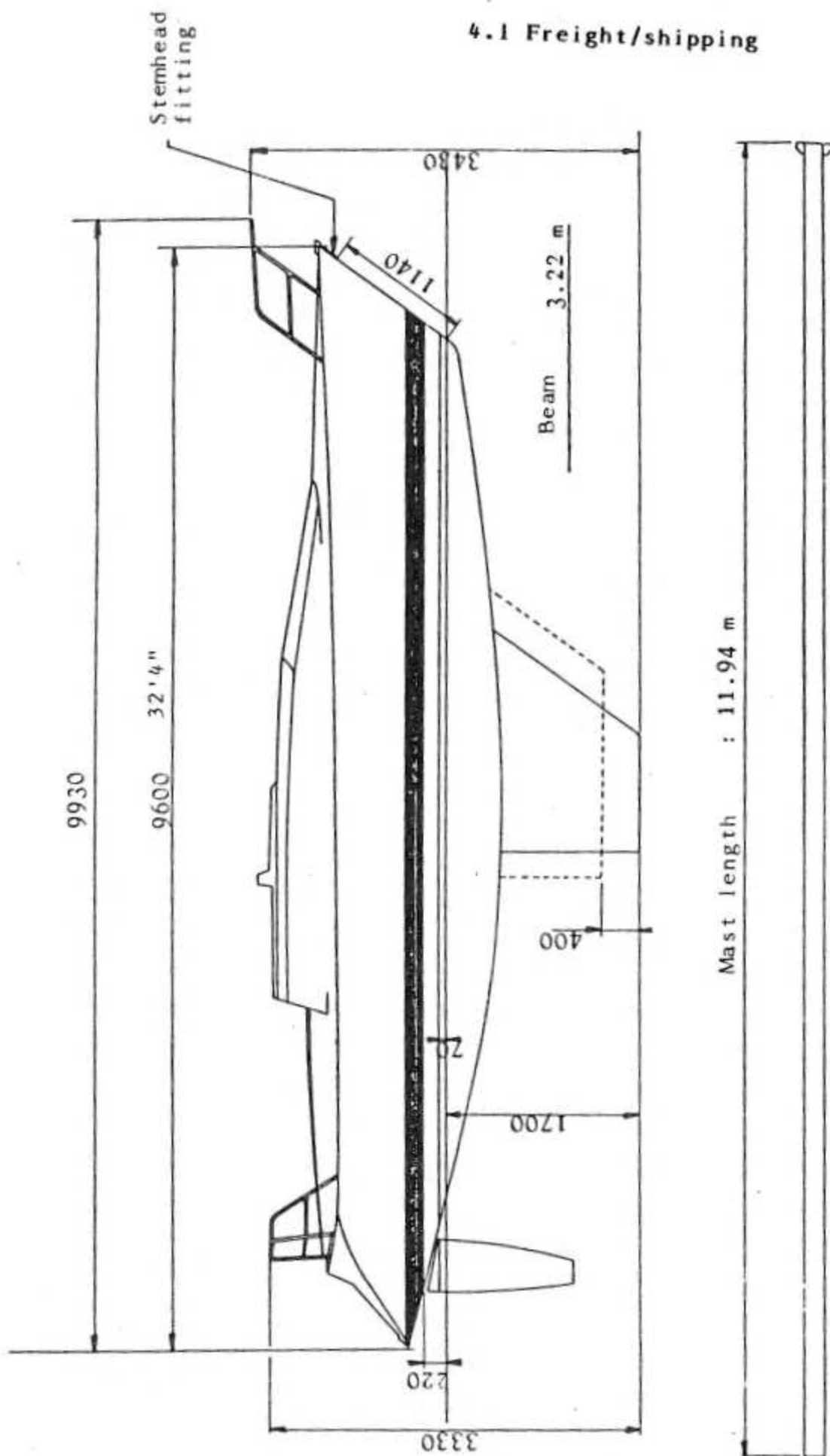
with the appliance. Read it carefully and make sure that everyone who uses the stove understands its operation. Remember, alcohol fires can be extinguished with water or Type B fire extinguishers.

The following precautions refer to all types of stoves. Refer to the owner's manual for specific instructions.

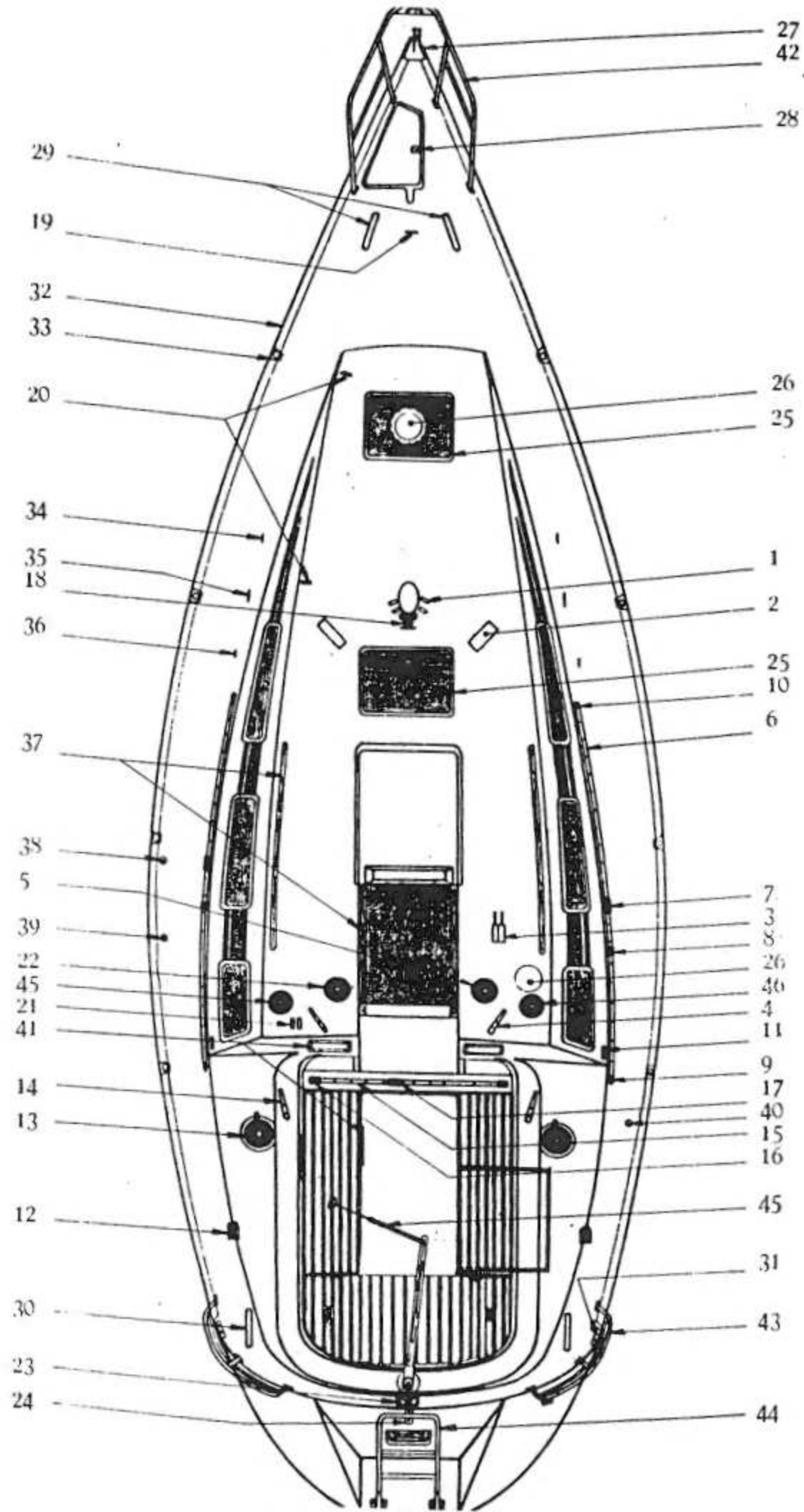
1. Never leave lighted stove unattended.
2. Never leave a stove while it is still hot.
3. Always release pressure in the fuel tank when leaving.
4. Close fuel valve (if applicable) in case of emergency.
5. Exercise caution when priming burners. Improper priming is one of the most common causes of galley fires.



#### 4.1 Freight/shipping



DESCRIPTION	QTY	DIAM.	OVERALL LENGTH	MAST TERMINAL	DECK TERMINAL
FORESTAY	1	7	12 670	EO 70	EO 70/LRT 70
UPPERS	2	6	12 005	EB 60/COQ 3-6	ROCS 60
LOWERS FORWARD	2	6	4 655	EB 60/COQ 3-6	ROCS 60
LOWERS AFT	2	6	4 805	EB 60/COQ 3-6	ROCS 60
INTERMEDIATES	2	5	8 615	EB 50/COQ 2,5	ROCS 50
BACKSTAY	1	7	12 785	EO 70	EO 70



# DECK HARDWARE IDENTIFICATION

DESCRIPTION	NO.	MANUFACTURER OR SUPPLIER	MANUFACTURER OR SUPPLIER REFERENCE	AMOUNT OR QUANTITY
Blocks at foot of mast	1	FRANCESPAR	---	4
Double lead blocks	2	FRANCESPAR	PS 1502	2
Double sheet stopper	3	FRANCESPAR	CN 002	1
Cam cleat	4	BECQUAERT	L 150	2
Sliding hatch	5	BARBAROSSA	B 15	1
Genoa track	6	AMIOT	T 32	2 X 2,5 m
Genoa car	7	AMIOT	61 900	2
Genoa car stop	8	AMIOT	62 300	2
Genoa car end	9	AMIOT	62 100	2
	10	AMIOT	62 200	2
Downhaul clam cleat	11	PLASTIMO	43 37 475	2
Turning block	12	LEWMAR	8214	2
Genoa winch	13	BARBAROSSA	B 41.2 ST	2

# DECK HARDWARE IDENTIFICATION

DESCRIPTION	NO.	MANUFACTURER OR SUPPLIER	MANUFACTURER OR SUPPLIER REFERENCE	AMOUNT OR QUANTITY
Cleat	14	BECQUAERT	L 190	2
Mainsheet traveller	15	AMIOT	Rail 1 n° 2	1 x 1,3 m
Adjustable mainsheet traveller	16	AMIOT	N°2 65 302	2
Mainsheet car	17	AMIOT	N°2 64.801	1
Reefing winch	18	BARBAROSSA	B 9	1
Downhaul bale	19			1
Deadeye fairlead for spinnaker pole	20	PLASTIMO	41 95 271	2
Downhaul clamcleat	21	PLASTIMO	43 37 475	2
Spinnaker winch	22	BARBAROSSA	B 8	1
Adjustable backstay	23	AGECA	RT 80	1
Backstay chainplate	24			1
Opening hatch	25	GOIOT	45.32 50.37	1 1
Ventilator	26	GOIOT VETUS		1 1

# DECK HARDWARE IDENTIFICATION

DESCRIPTION	NO.	MANUFACTURER OR SUPPLIER	MANUFACTURER OR SUPPLIER REFERENCE	AMOUNT OR QUANTITY
Steamhead fitting	27			1
Anchor locker	28			1
Bow mooring cleats	29	DAMADE	320	2
Stern mooring cleats	30	DAMADE	255	2
Chock	31	AMIOT	Chaumard 175	2
Toe rail	32			
Stanchion base	33			8
Lower shroud chainplate	34			2
Shroud and intermediate chainplate	35			2
Aft lower shroud chainplate	36			2
Grap rail	37			2 X 2
Water filler cap	38	AMIOT	Nable alu eau	1
Fuel filler cap	39	AMIOT	Nable alu gasoil	1
Holding tank deck fitting	40	AMIOT	Nable alu waste	1
Opening ports	41	GOIOT		3



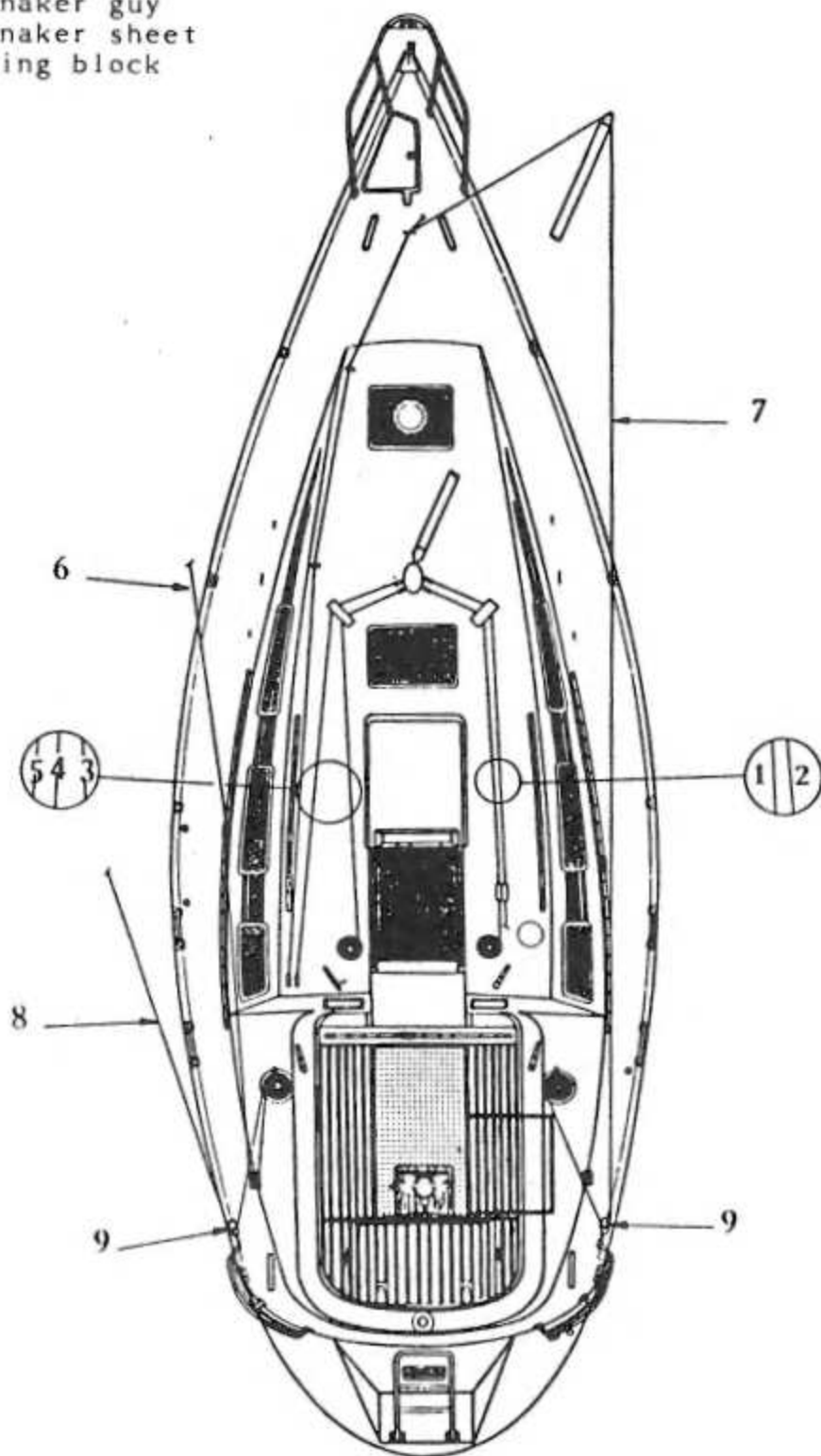
# DECK HARDWARE IDENTIFICATION

DESCRIPTION	NO.	MANUFACTURER OR SUPPLIER	MANUFACTURER OR SUPPLIER REFERENCE	AMOUNT OR QUANTITY
Bow pulpit	42			1
Stern pulpit	43			2
Swim ladder	44			1
Tiller steering w/telescope	45	GRATEAU	STAR	1
Spinnaker winches	46	BARBAROSSA AMIOT	B	2
		BARBAROSSA	250 L	

# RUNNING RIGGING IDENTIFICATION

ITEM	QUALITY	LENGTH	DIAM.	EQUIPMENT	MANU-FACTURER
Main halyard	Polyester France-Olympique	27	10	1 key slot shackles	LANCELIN
Genoa halyard	Polyester France-Olympique	27	12	1 snap shackle	LANCELIN
Topping lift	Polyester	24	6	1 shackle	LANCELIN
Main sheet	Polyester	16	12		LANCELIN
Boom vang	Polyester	4	12		LANCELIN
Outhaul	Polyester		10	1 key slot shackle	LANCELIN
Genoa sheet	Polyester France-Olympic	2 x 14	12		LANCELIN
Spinnaker halyard	Polyester tressé France-Olympique	1 x 29	12	1 swivel snap shackle	LANCELIN
Spinnaker sheet	Polyester Gulf-Stream	2 x 13	12	2 swivel snap shackles 2 SE4 blocks	LANCELIN
Pole topping lift	Polyester Gulf-Stream	53,33' 1 x 16	10	1 swivel shackle	LANCELIN
Pole downhaul	Polyester Gulf-Stream	1 x 9.5 33,33'	12	1 SE2 Block 1 shackle	LANCELIN

1. Mainsail halyard
2. Genoa halyard
3. Spinnaker halyard
4. Pole topping lift
5. Pole downhaul
6. Genoa sheet
7. Spinnaker guy
8. Spinnaker sheet
9. Turning block



### 3. SAILS

#### 3.1 - Standard sails

The ELITE 324 is delivered with the following standard sails :

- Mainsail with three reef points 207 sq.ft
- 150% medium genoa 370 sq.ft
- Storm jib 70 sq.ft.

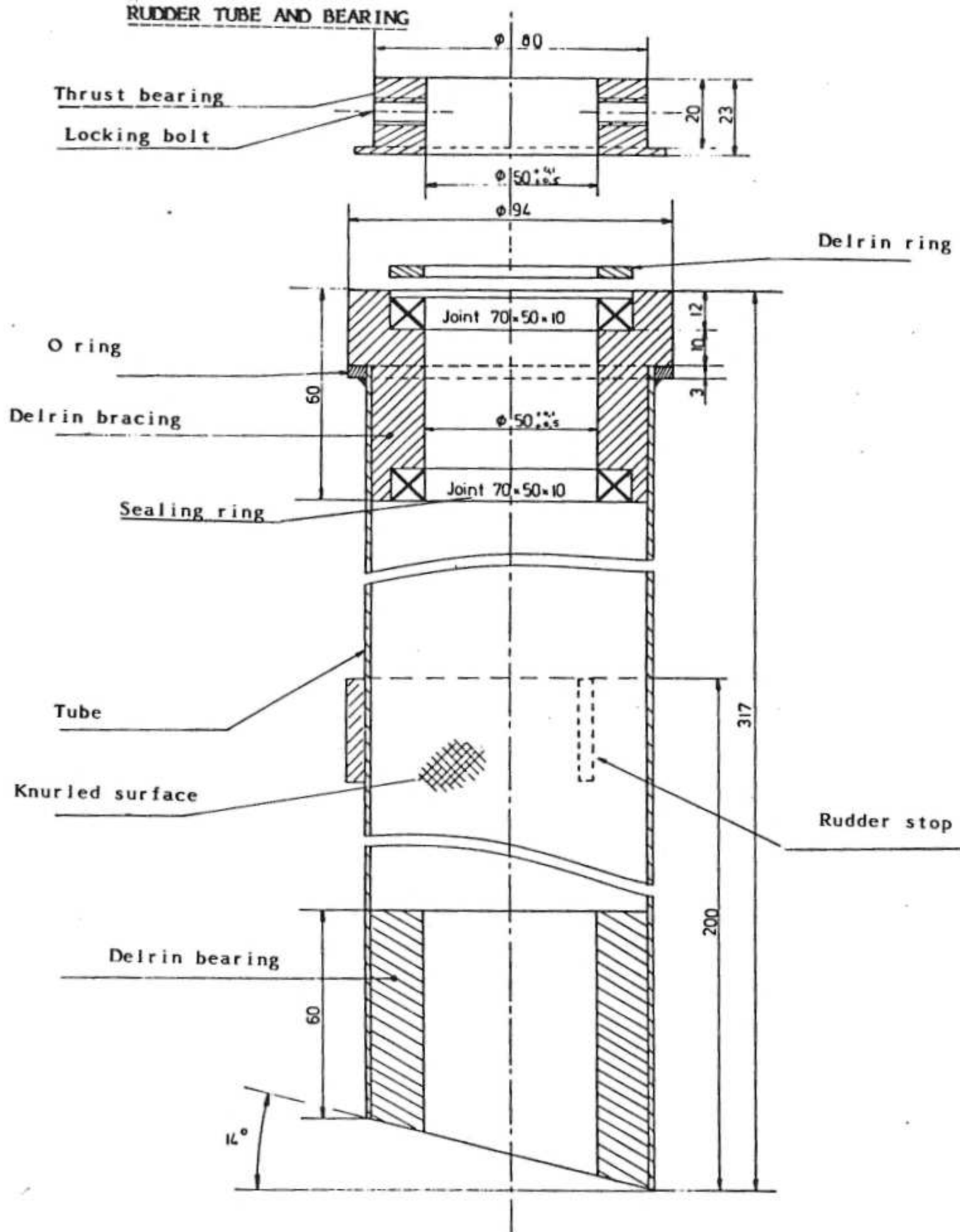
#### 3.2 - Optional sails

- Light genoa 370 sq.ft.
- Intermediate genoa 311 sq.ft
- Working jib 239 sq.ft
- Light spinnaker 0.5 oz. 766sq.ft
- Medium spinnaker 1.5 oz. 766 sq.ft

#### 3.3 - Sail measurements

(see attached)

RUDDER TUBE AND BEARING



List of onboard lighting and intensity

Forward cabin	1 overhead light	2 x 7 watts
Salon	1 overhead light	2 x 7 watts
Galley	1 overhead light	2 x 7 watts
Nav. area	1 overhead light 1 chart light	2 x 7 watts 5 watts
Aft cabin	2 overhead lights	4 x 7 watts
Head	1 overhead light	2 x 7 watts
Forward nav.lights		10 watts
Aft nav. lights		10 watts
Anchor light		10 watts
Compass light		1 watt



## 7.7 - Wiring diagram (see attached)

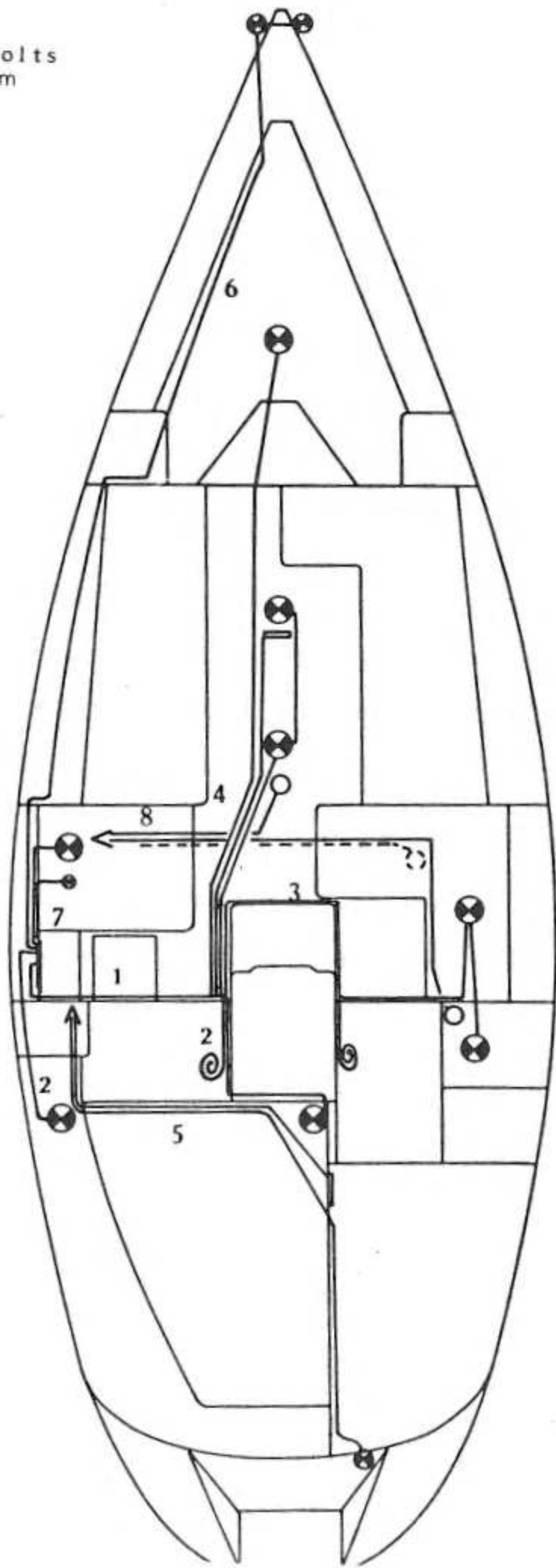
### 7.71 - Identification of diagram

1. Overhead light in aft cabin and head compartment  
Overhead light in galley  
Overhead light in salon  
Overhead light in nav. area  
Overhead light in forward cabin  
Compass light  
Mast lights
2. Overhead light in port aft cabin  
Compass light - port
3. Overhead light in galley  
Overhead light salon  
Overhead light head compartment  
Compass light - starboard
4. Overhead light salon  
Overhead light forward cabin  
Mast lights
5. Nav. lights and engine panel lights
6. Bow nav. lights
7. Overhead light chart table  
Chart light
8. Bilge pump and pressure water system

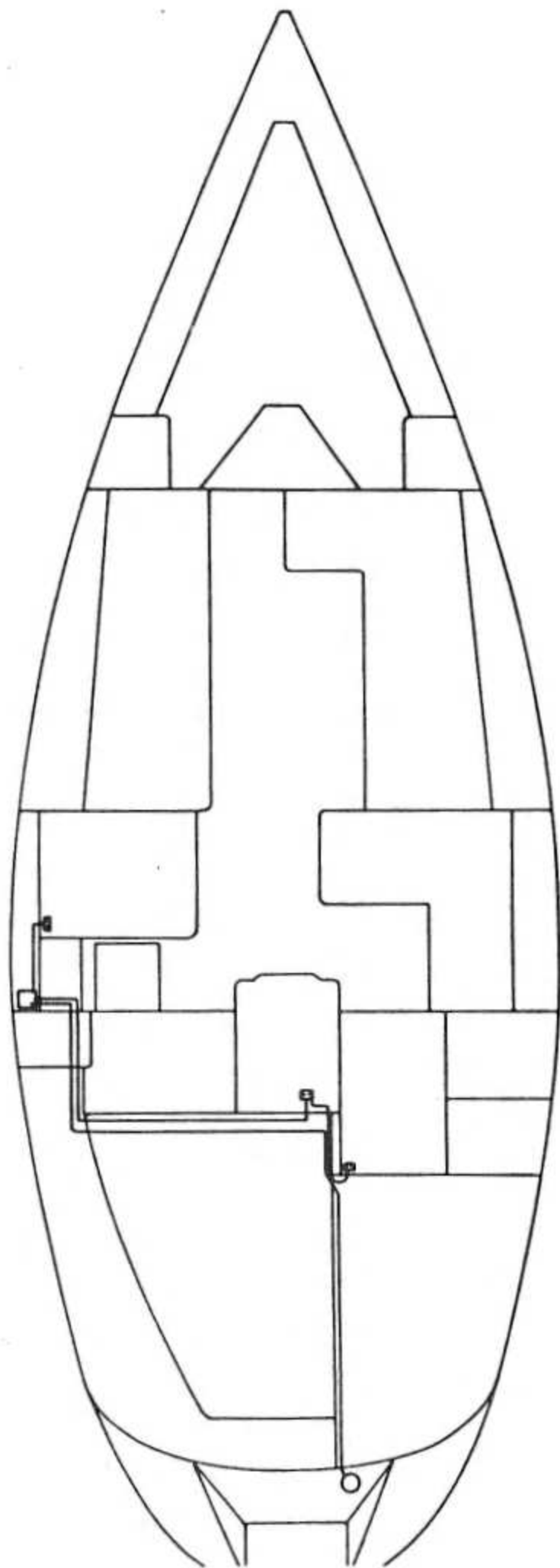
### 7.72 - Wiring colors

Overhead lights	White
Mast lights	Red
Compass	Red
Forward nav. lights	Grey
Aft nav. lights	Grey
Battery switch/Electric panel	Red
Engine panel lighting	Red
Water pump ITT	Violet
Bilge pump ITT	Violet
Bilge pump	Brown

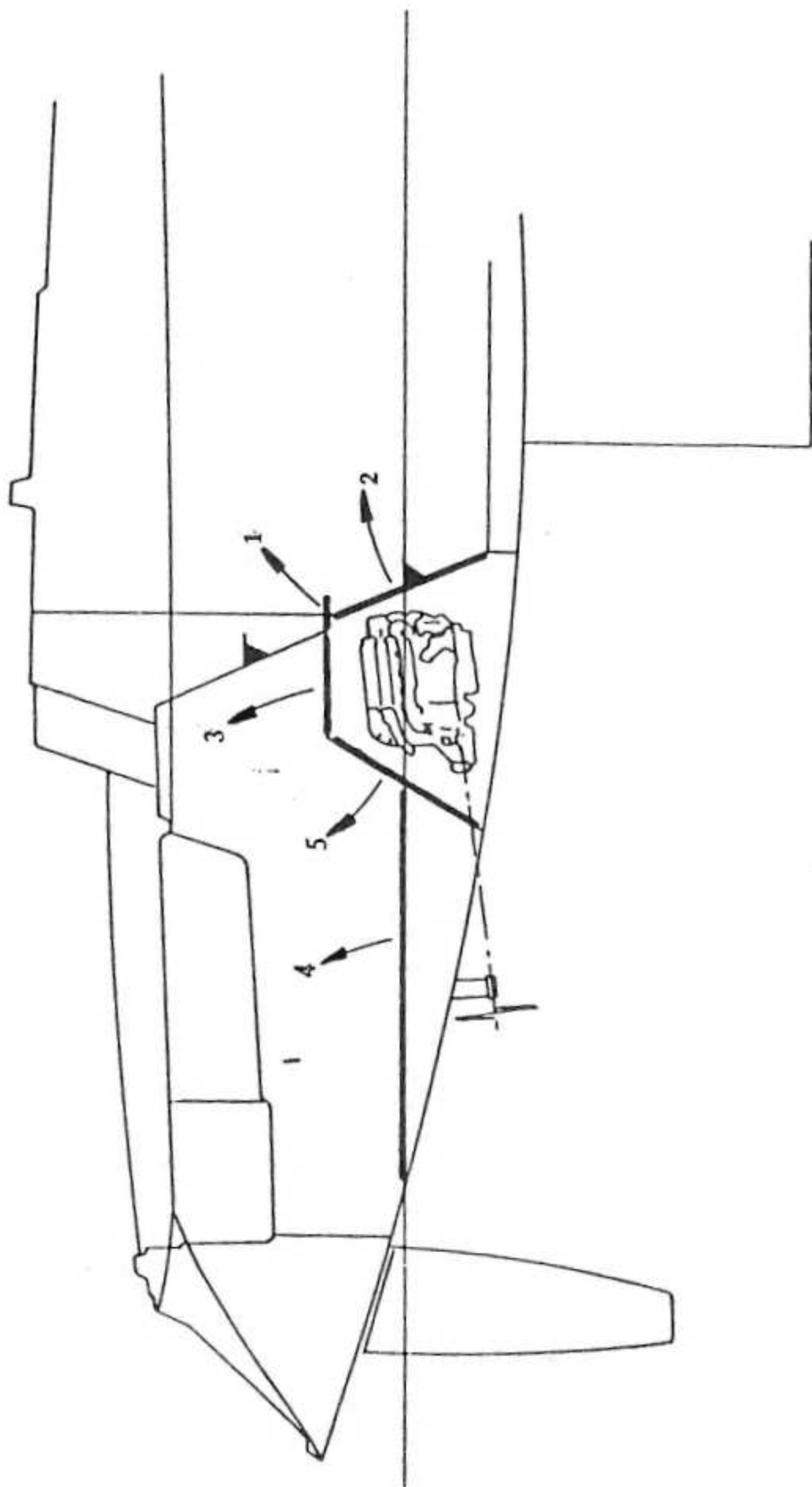
Interior 12 volts  
wiring diagram



110 volt AC wiring

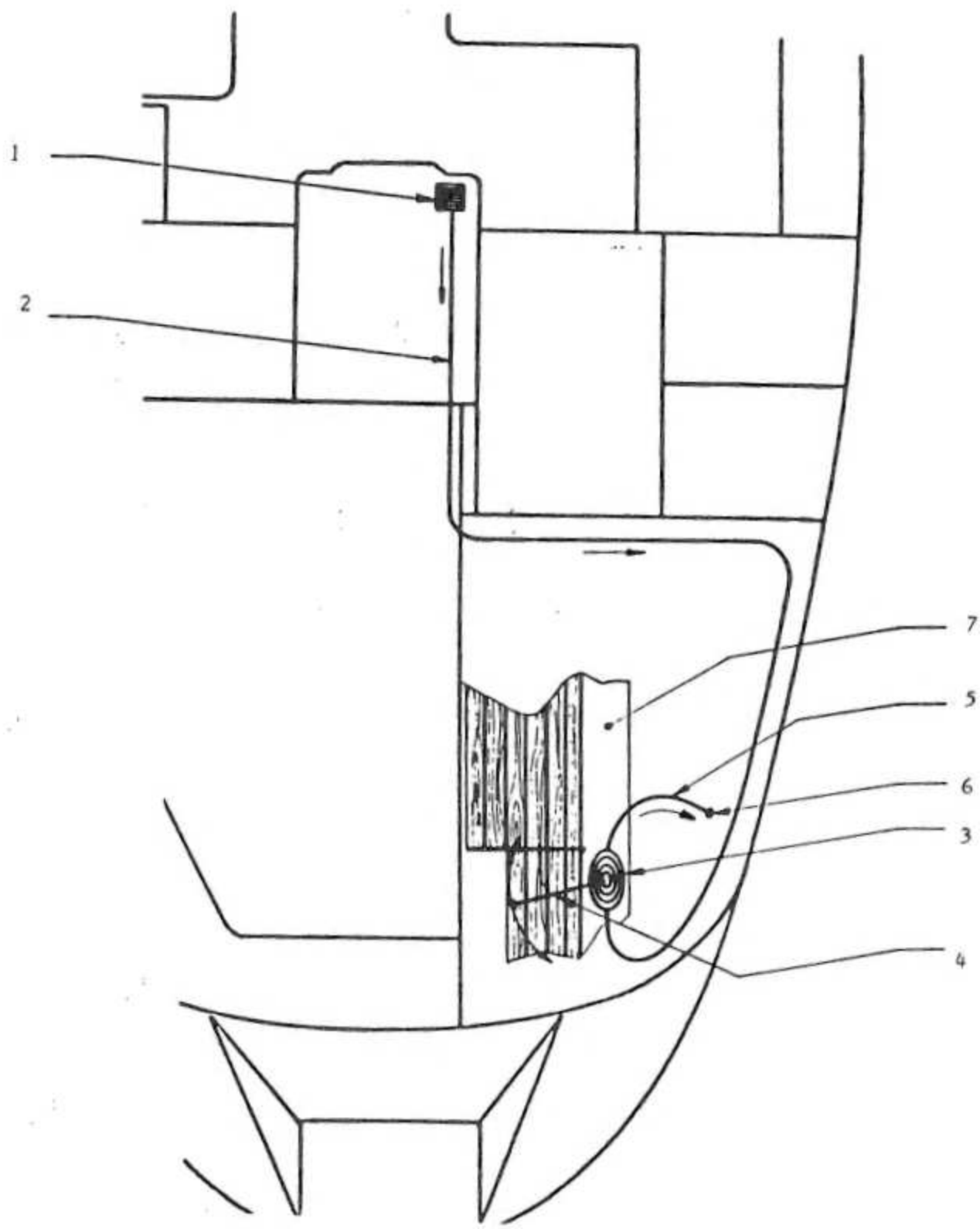


ACCESS PROCEDURE TO ENGINE COMPARTMENT 1 - 5



# Manual bilge pump drainage

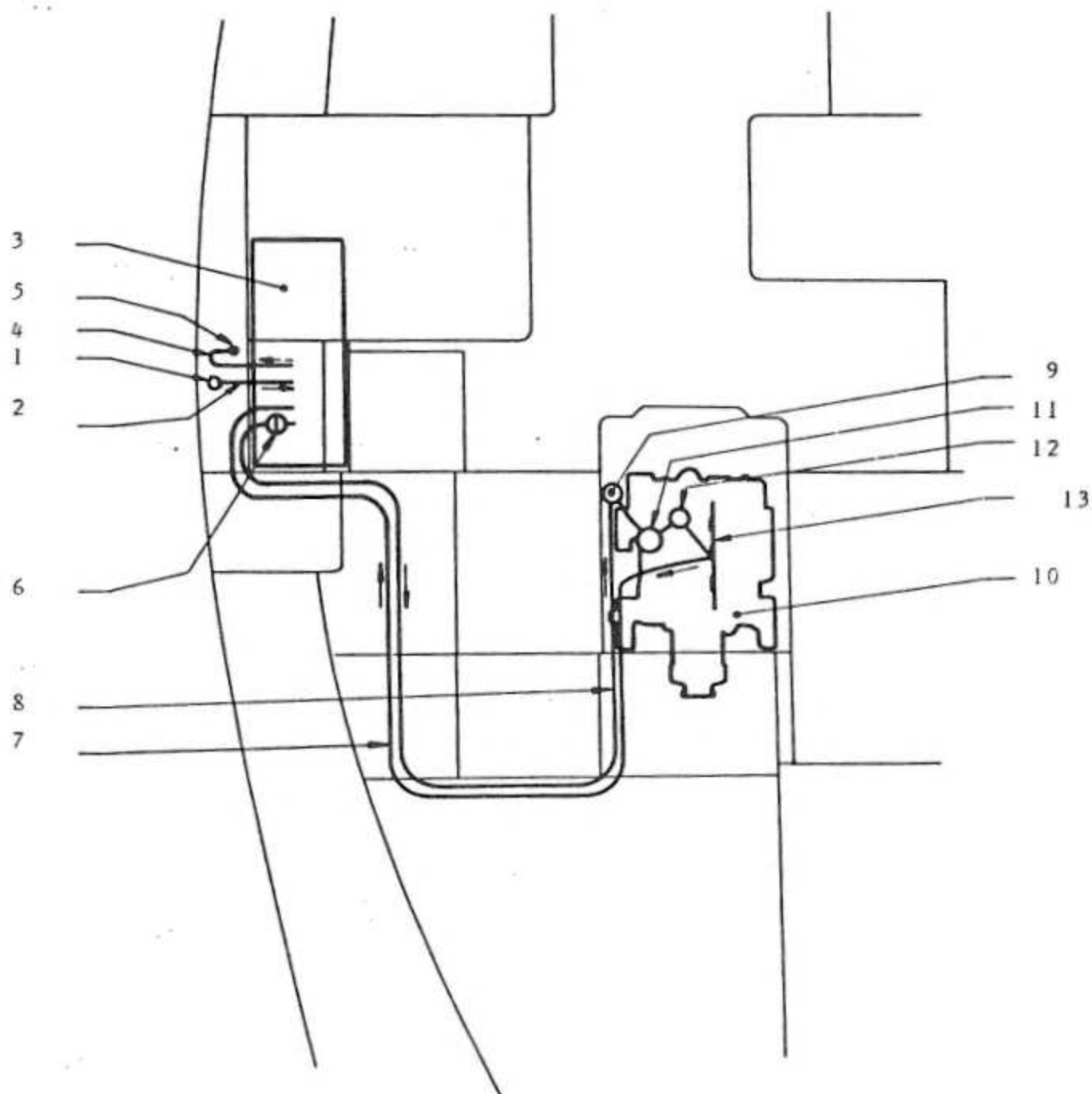
1. Strainer
2. Intake hose
3. Manual bilge pump
4. Pump handle
5. Hose
6. Thru-hull fitting
7. Discharge hose



# FUEL CIRCUIT DIAGRAM

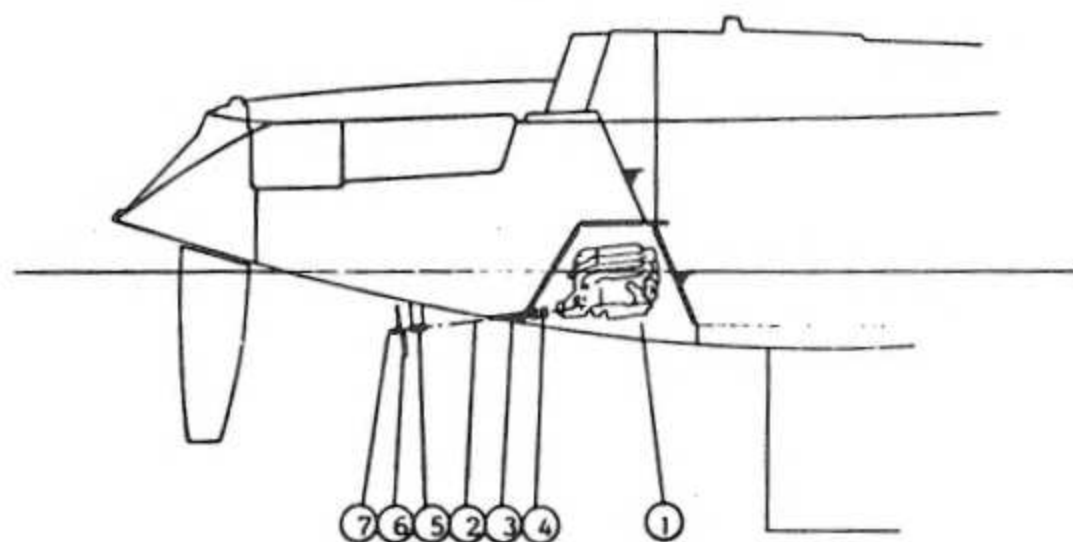
1. Deck fuel fitting
2. Intake hose
3. Fuel tank
4. Vent hose
5. Vent fitting
6. Shut off
7. Return pipe (copper)

8. Intake pipe (copper)
9. Separator fuel filter
10. Engine
11. Fuel pump
12. Engine filter
13. Injectors





## ENGINE INSTALLATION



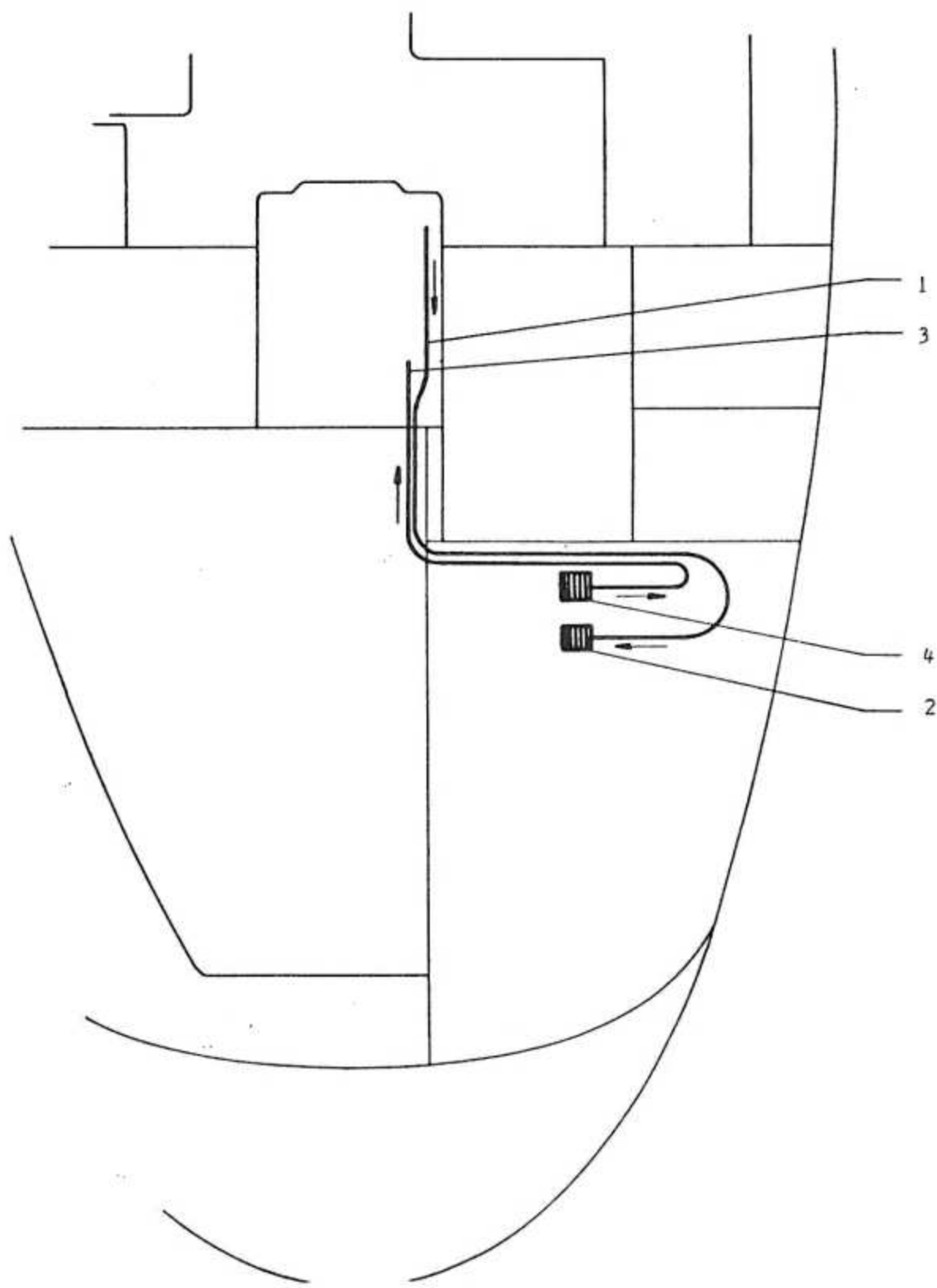
- |   |            |   |              |
|---|------------|---|--------------|
| 1 | Engine     | 4 | Stuffing box |
| 2 | Shaft      | 5 | Strut        |
| 3 | Stern tube | 6 | Propeller    |
|   |            | 7 | Zinc         |

### IMPORTANT

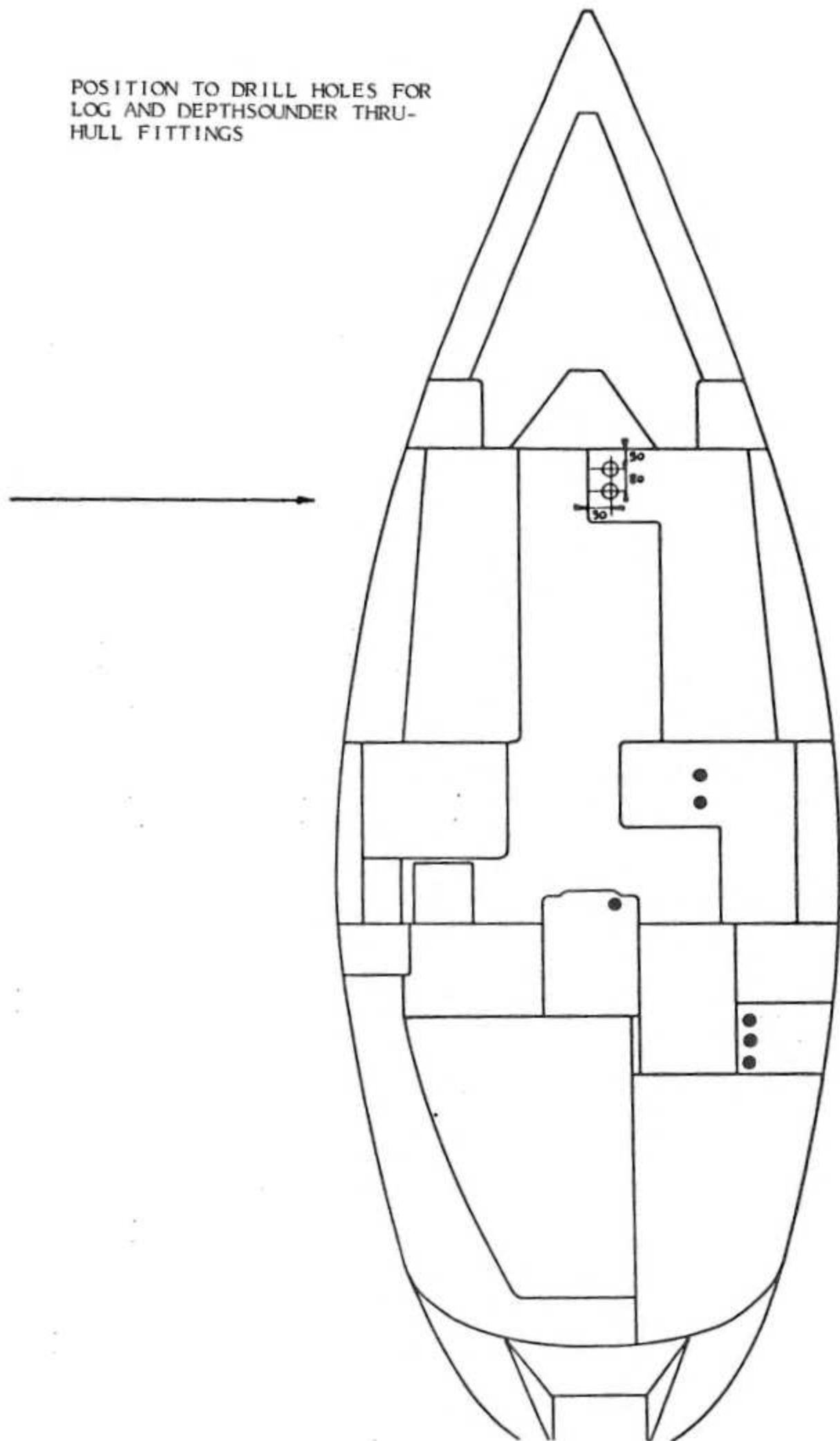
Every time the boat is launched make certain that there is no air in the diaphragm. To remove air pull back the diaphragm until water flushes between the gasket and the stainless steel adjusting ring.

## ENGINE VENTILATION

1. Hot air outlet (low)
2. Hot air outlet (high - cockpit coaming)
3. Cool air inlet (low)
4. Cool air inlet (high - cockpit coaming)

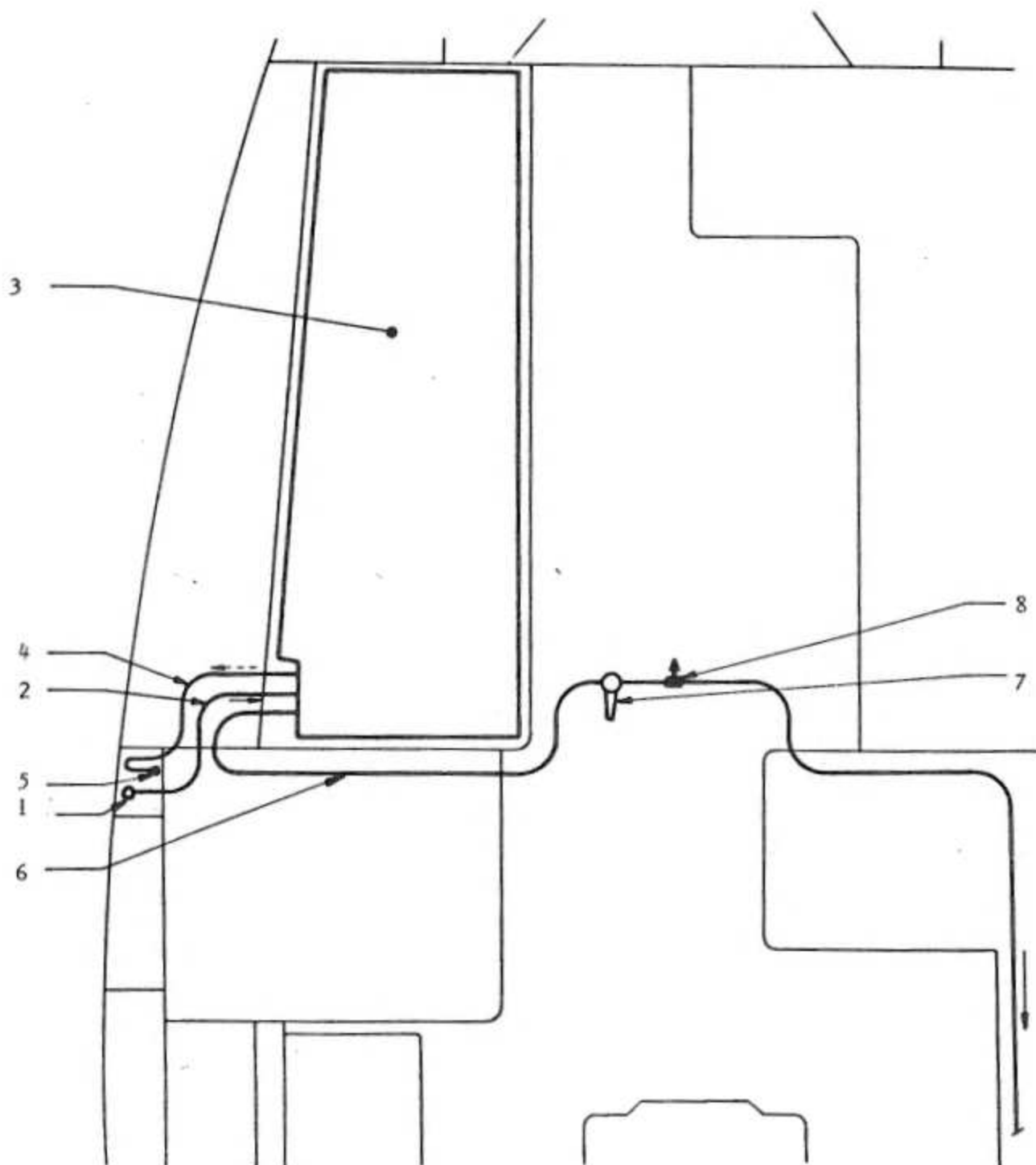


POSITION TO DRILL HOLES FOR  
LOG AND DEPTHSOUNDER THRU-  
HULL FITTINGS

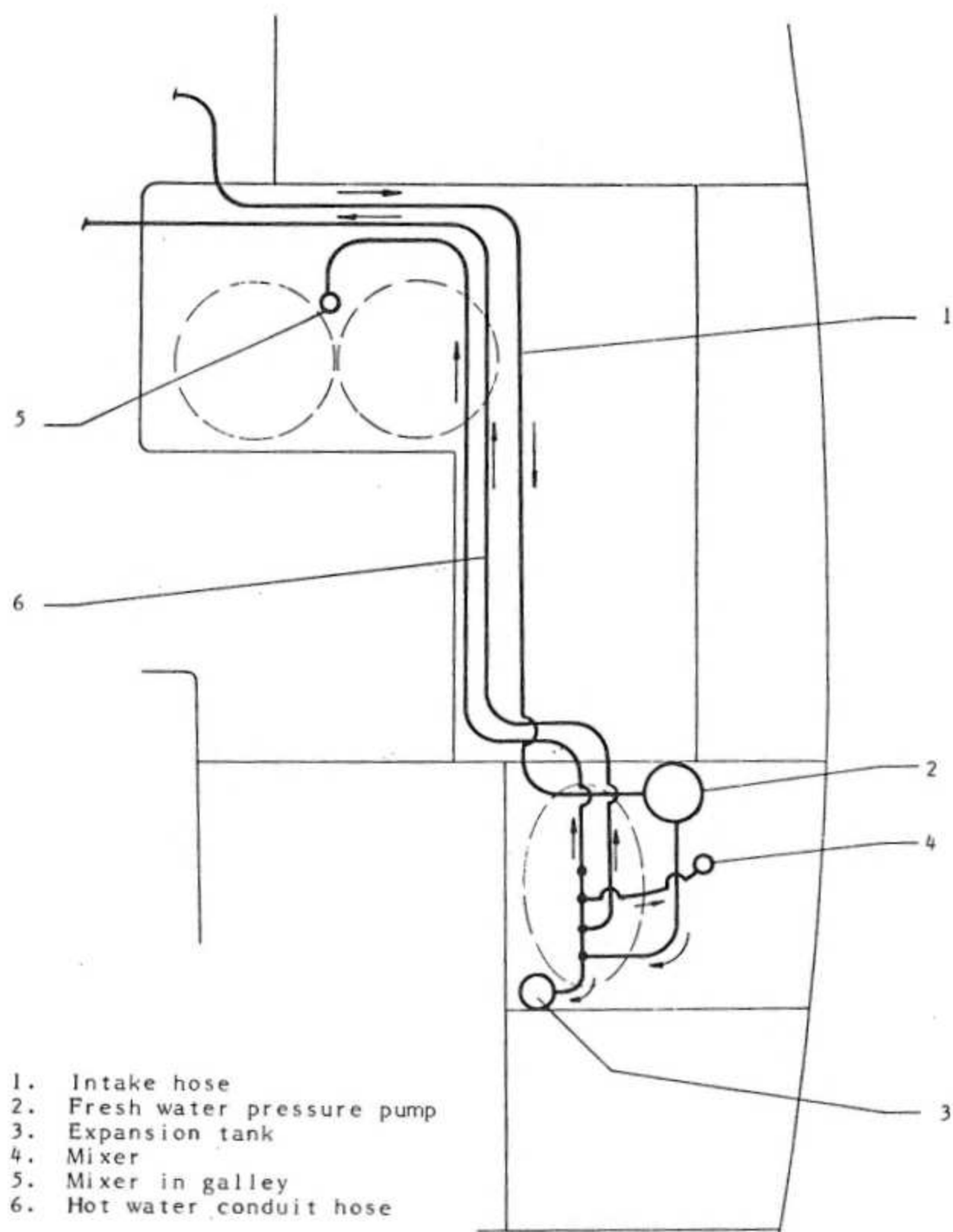


# FRESH WATER CIRCUIT

1. Filler
2. Conduit
3. Water tank
4. Air vent hose
5. Air vent
6. Alimentation hose
7. Shut off valve (1/4 turn)
8. Drain cock



# FRESH WATER CIRCUIT C (continued)

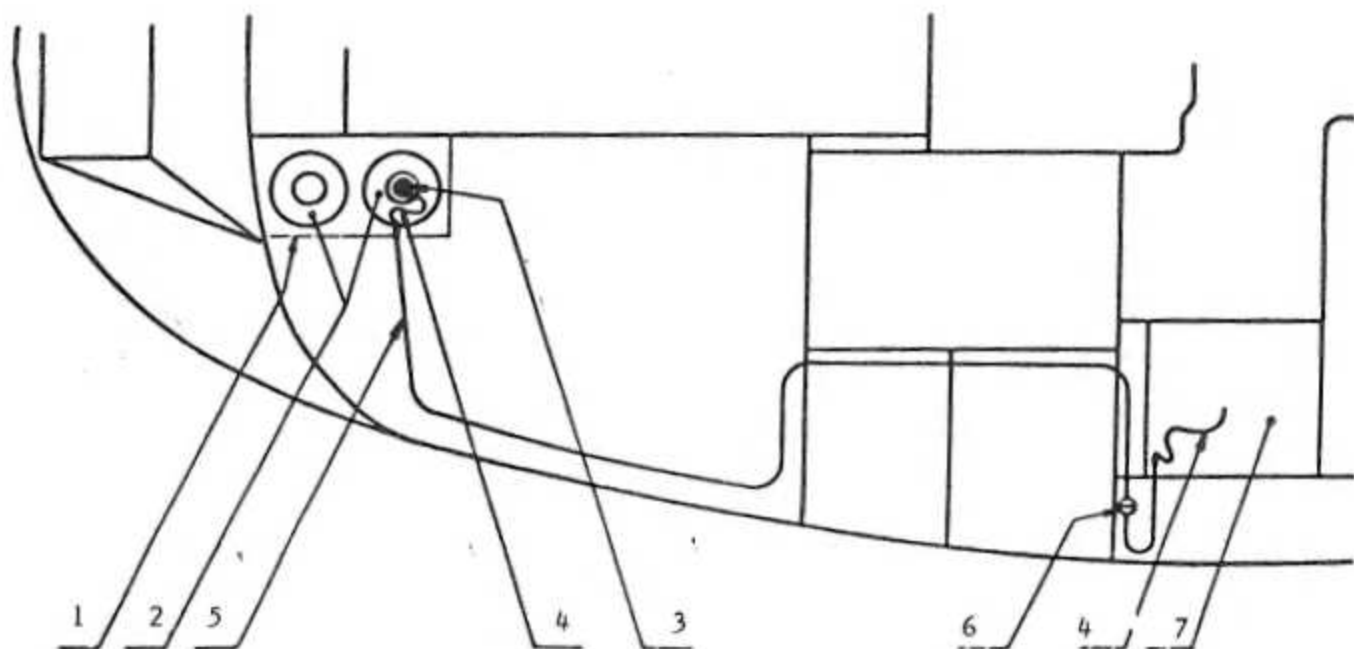


# DISCHARGE CIRCUIT

- 
1. Shower drain
  2. Ice box drain
  3. Wet locker drain
  4. Sump
  5. Discharge hose
  6. Discharge thru-hull fitting
  7. Strainer
  8. Intake hose
  9. Seacock
  10. Filter
  11. Electric bilge pump



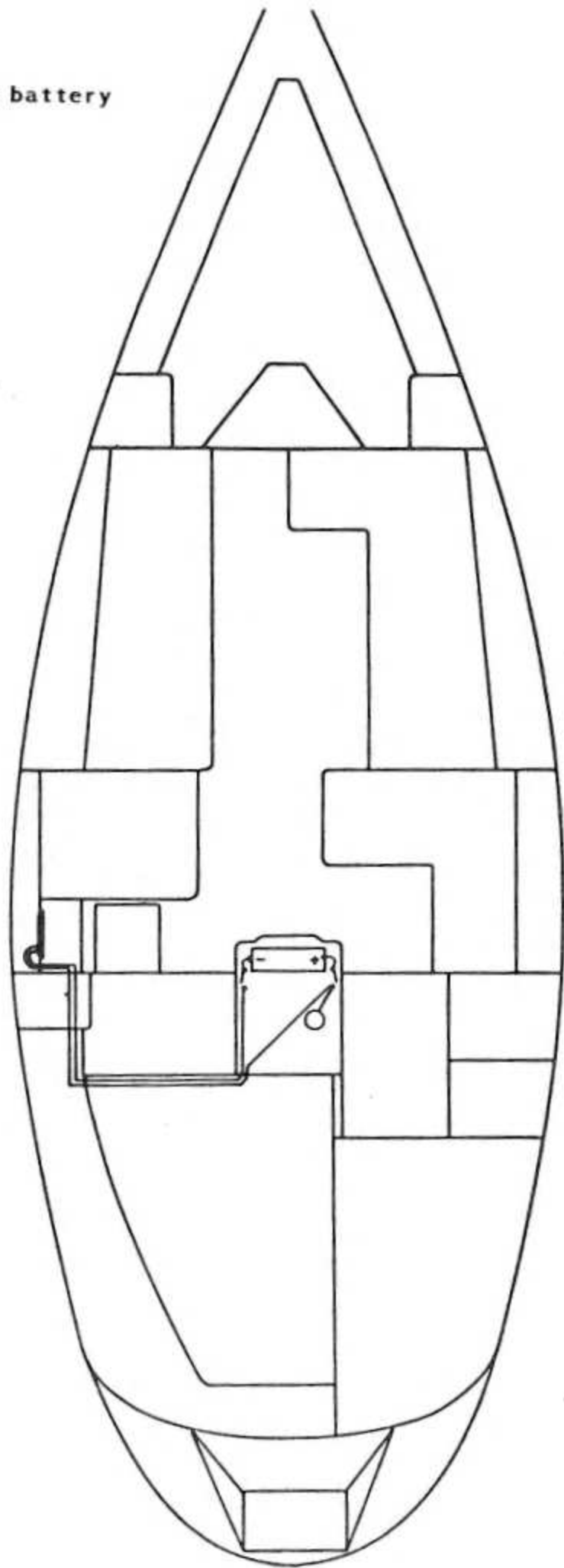
#### 10.4 LPG CIRCUIT



- 1. Locker for LPG tank
- 2. LPG tank
- 3. Safety valve

- 4. Hose
- 5. Copper pipe
- 6. Shut off
- 7. LPG stove

12 volt DC wiring from battery  
to panel



PERIODIC MAINTENANCE - TABLE

	AFTER THE FIRST WEEK	EVERY 2/3 MONTHS	WINTERIZATION	OBSERVATIONS
MAST	CC	CC	CC - CT	GREASE/SILICONE
STANDING RIGGING	CC - CT	CC - CT	CC - G	"
DECK HARDWARE	CT	CC - CT	CC - G	"
WINCHES	CC	CC	CC - G	CHECK EACH MONTH IN WINTER
RUNNING RIGGING	CC	CC	CC	CHECK BULBS
SAILS	CC	CC	CC	
BATTERIES	CC	CC	CC	
LIGHTS	CC - CL	CC	CC - P	
WATER FILTER	CC - CK - CT	CC	CC - CT	
EXHAUST	CC - CT	CC	CC - CT	
ENGINE BED	CC - CT	CC	CC - CL - CT	
ENGINE MOUNTS	CC - CT	CC	CC	CHECK DIAPHRAGM AND RINGS
STERN GLAND	CC	CC	CC - CT	IF VERY COLD AND STORED OUT OF THE WATER GREASE.
ZINC	CC	CC	CC	
PROPELLER	CC	CC - CT	CC - CT	
THRU-HULLS	CC - CL	CC - CL	CC - G	
SEACOCKS	CC - CL	CC - CL	CC - G	
WATER TANKS	CL	CC - CL	P	CHECK FOR PLAY
PLUMBING	CL	CC - CL	P	
RUDDER-STEERING		CC - CT	CC - CT	
BOTTOM RUBBER BEARING		CC - P	CC	
INTERIOR		CC	CC	
EXTERIOR		CC	CC	
ANTI-FOULING		CC	CC	

CC - CHECK CONDITION  
 CL - CHECK FOR LEAKS  
 G - GREASE  
 CT - CHECK FOR TIGHTNESS  
 P - PUMP OUT/EMPTY

**TABLEAU DE COTES DES VOILES**

DESCRIPTION	LEACH (m)	FOOT (m)	LUFF (m)	LP (m)	SAIL AREA @2m
	10,70	3,60			21,70
	12,40	6,04	11,88	5,70	35,30
	12,40	6,04	11,88	5,70	35,30
	12,21	6,48			71,20
	12,21	6,48			71,20
	11,05	5,25	10,45	5,00	27,60
	8,30	4,20	7,20	3,65	15,10
	6,00	2,94	4,50	2,15	6,50

I = 12,34

J = 3,60

P = 10,70

E = 3,60