

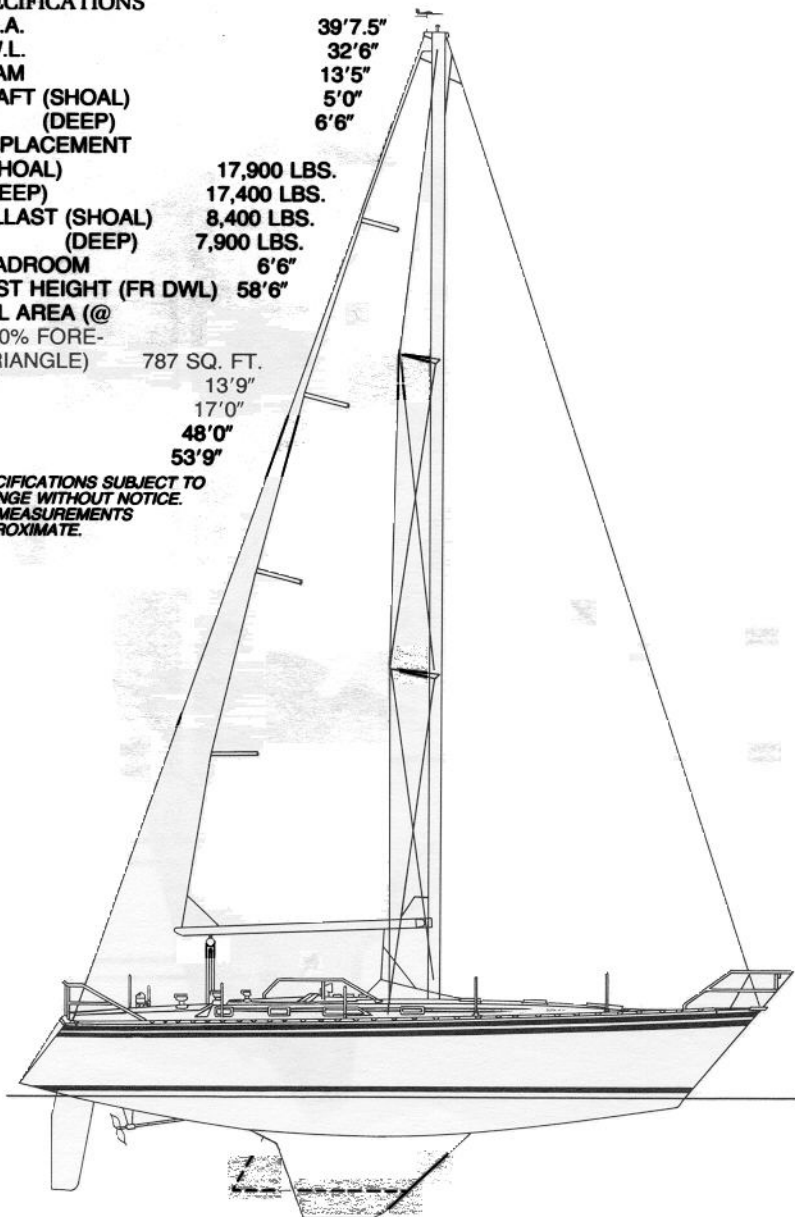
LEGEND[®]40

PROFILE

SPECIFICATIONS

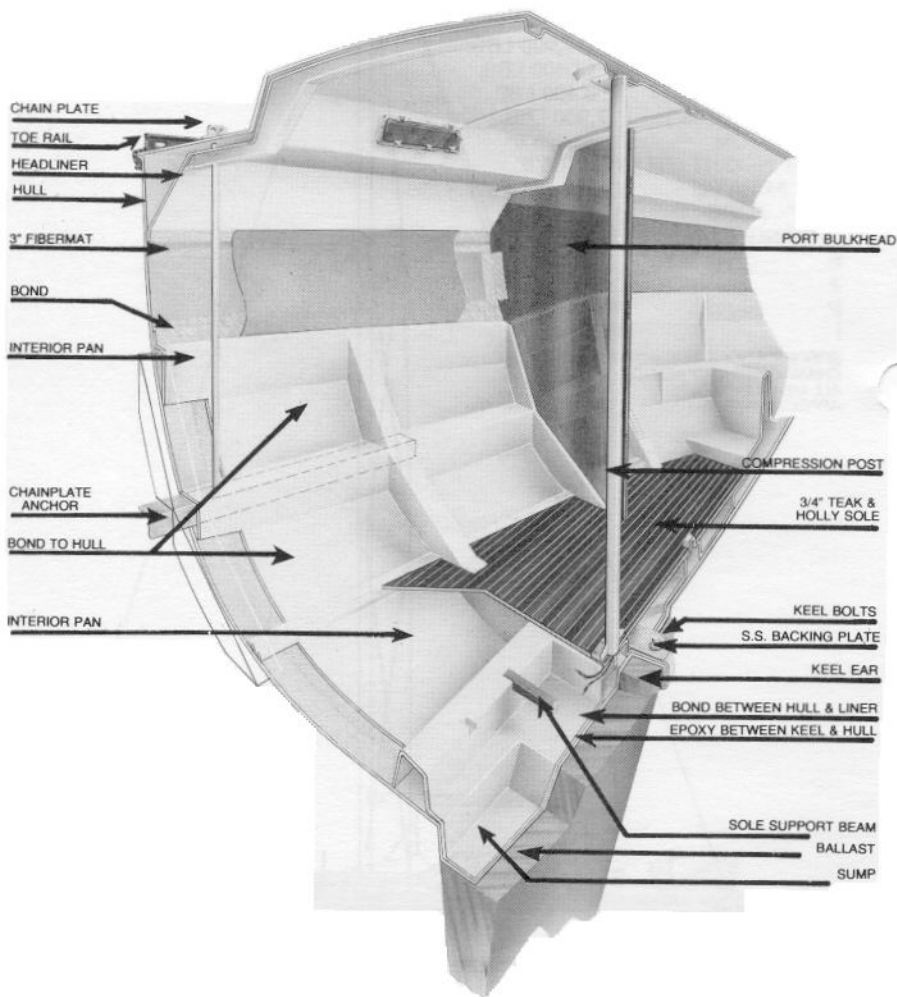
L.O.A.	39'7.5"
L.W.L.	32'6"
BEAM	13'5"
DRAFT (SHOAL)	5'0"
(DEEP)	6'6"
DISPLACEMENT (SHOAL)	17,900 LBS.
(DEEP)	17,400 LBS.
BALLAST (SHOAL)	8,400 LBS.
(DEEP)	7,900 LBS.
HEADROOM	6'6"
MAST HEIGHT (FR DWL)	58'6"
SAIL AREA (@ 100% FORE-TRIANGLE)	787 SQ. FT.
E	13'9"
J	17'0"
P	48'0"
I	53'9"

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
ALL MEASUREMENTS APPROXIMATE.*



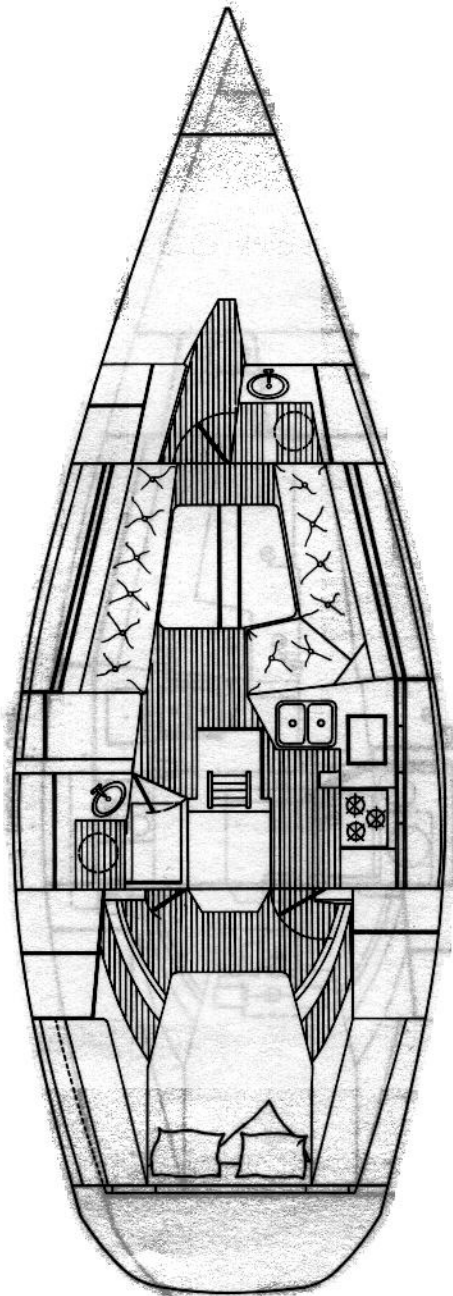
LEGEND⁴⁰

CONSTRUCTION DETAIL



LEGEND 410

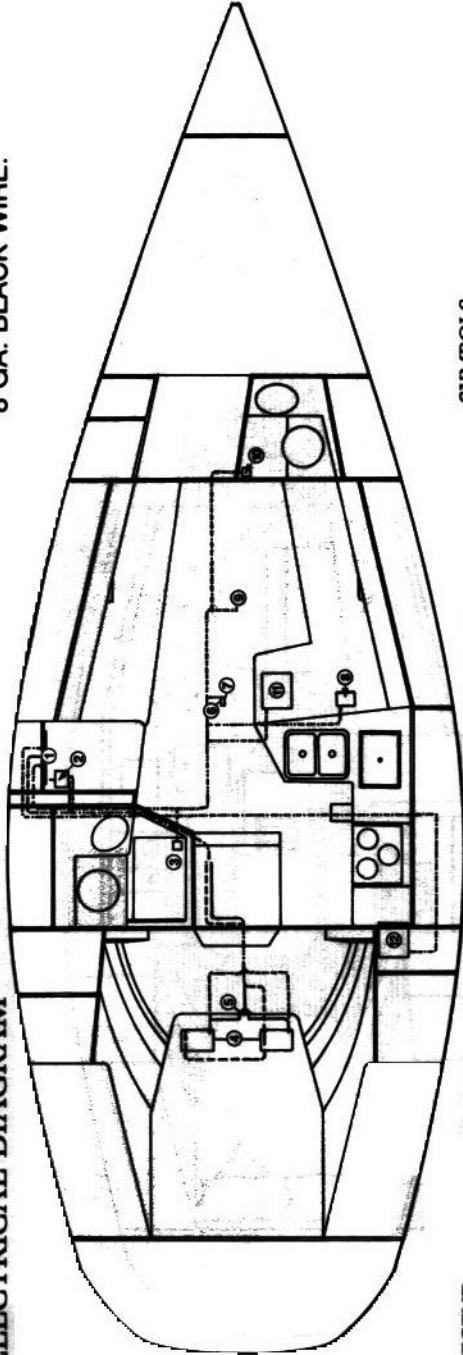
INTERIOR



LEGEND® 40

ELECTRICAL DIAGRAM

NOTE: CHAINPLATES AND MAST ARE
GROUNDED TO FORWARD
KEEL EAR BOLTS WITH
8 GA. BLACK WIRE.



LEGEND

1. SWITCH PANEL
2. BATTERY CHARGER
3. AFT SHOWER SUMP PUMP (ELECTRIC)
4. 85 AMP BATTERIES
5. SAFETY MAIN SWITCH
6. AUTOMATIC FLOAT SWITCH

7. BILGE PUMP
8. PRESSURIZED WATER PUMP (ELECTRIC)
9. MAST COMPRESSION
10. FORWARD SHOWER SUMP PUMP
11. WATER HEATER
12. NORCOLD REFRIGERATOR

SYMBOLS

- 4 GA. RED BATTERY CABLE
- 4 GA. BLACK BATTERY CABLE
- - - WIRE HARNESS 'A'
- · - WIRE HARNESS 'B'
- · · WIRE HARNESS 'C'
- · · · 16 GA. WIRE
- · · · · 10 GA. WIRE
- · · · · · 14/3 BOOT CABLE



LEGEND® 415

ELECTRICAL DIAGRAM

Continued

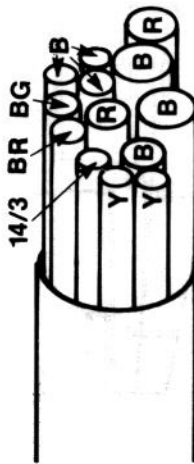
WIRE HARNESS "A"

SYMBOLS	COLOR	GAUGE	APPLICATION
10/3	WHITE	10	GENERATOR POWER
12	RED	12	GENERATOR (HOT)
12	BROWN	12	GENERATOR (START)
12	GREY	12	GENERATOR (OFF)
8	RED	8	CHARGER TO BATTERY
8	RED	8	CHARGER TO BATTERY
8	RED	8	CHARGER TO BATTERY



WIRE HARNESS "B"

SYMBOLS	COLOR	GAUGE	APPLICATION
Y	YELLOW	16	SUMP PUMP (HOT)
Y	YELLOW	16	SHOWER SUMP PUMP (HOT)
BR	BROWN	12	ELECTRIC BILGE (HOT)
BG	BEIGE	12	ELECTRIC BILGE INLINE FUSE
B	BLACK	12	ELECTRICAL BILGE (COMMON)
B	BLACK	10	PRESSURIZED WATER PUMP (COMMON)
R	RED	10	PRESSURIZED WATER PUMP (HOT)
R	RED	8	REFRIGERATION (HOT)
B	BLACK	8	REFRIGERATION (COMMON)
14/3	WHITE	14	WATER HEATER 14/3 BOAT CABLE
B	BLACK	8	GROUND TO KEEL
B	BLACK	16	SUMP PUMP (COMMON)
B	BLACK	16	SHOWER SUMP PUMP (COMMON)



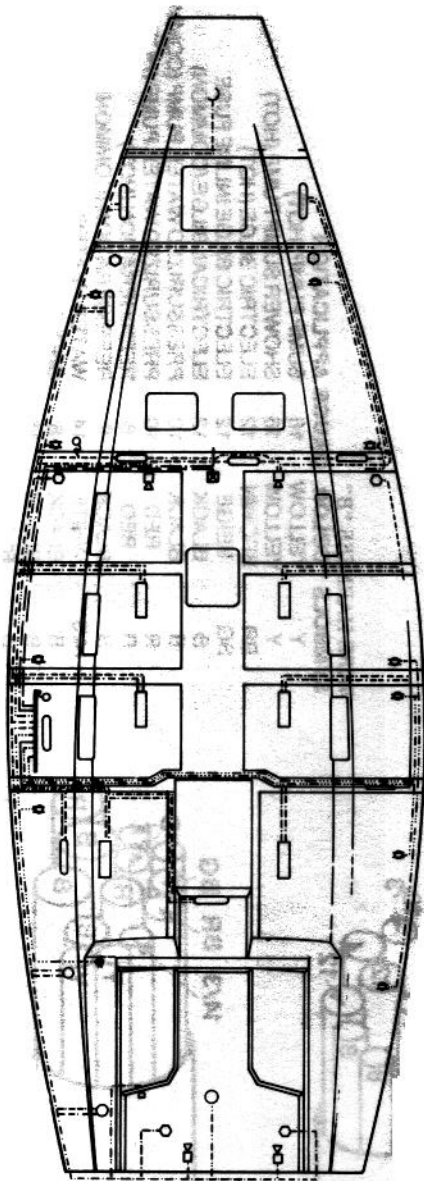
WIRE HARNESS "C"

SYMBOLS	COLOR	GAUGE	APPLICATION
B	BLACK	4	BATTERY CABLE, BATTERY TO PANEL (DC-HOT)
R	RED	4	BATTERY CABLE, PANEL (DC-COMMON)



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WIRING THRU HEADLINER DIAGRAM



SYMBOLS

- CABIN LIGHTS (SMALL DOME)
- CABIN LIGHTS (LARGE DOME)
- SPEAKERS
- ⊞ SWIVEL LAMPS
- DOUBLE LIGHTS
- FLUORESCENT LIGHTS
- ⚡ 110V RECEPTACLES

⊞ 110V SHORE POWER INLET

○ MAP LIGHT

○ BOW & STERN LIGHTS

○ COMPASS LIGHT

— WIRE HARNESS "D" (STARBOARD SIDE)

- - - WIRE HARNESS "E" (PORT SIDE)

· · · WIRE HARNESS "F" (AFT)

— · · · 16 GA. WIRE

- - - 10/3 BOAT CABLE

· · · · · 14/3 BOAT CABLE

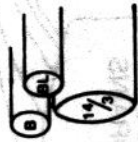
— · · · GRAY DUPLEX WIRE

— · · · · · MAST WIRE HARNESS

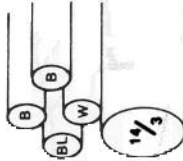
— · · · · · DEPTH/KNOT HARNESS

LEGEND® 40

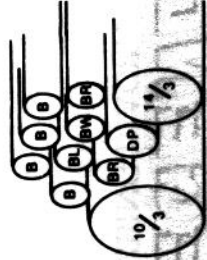
WIRING THRU HEADLINER DIAGRAM *Continued*



WIRE HARNESS "D"			
SYMBOLS	COLOR	GAUGE	APPLICATION
B	BLACK	16	DC LIGHTS (COMMON)
BL	BLUE	16	DC LIGHTS (HOT)
14/3	WHITE	14	AC 110V RECEPTACLE



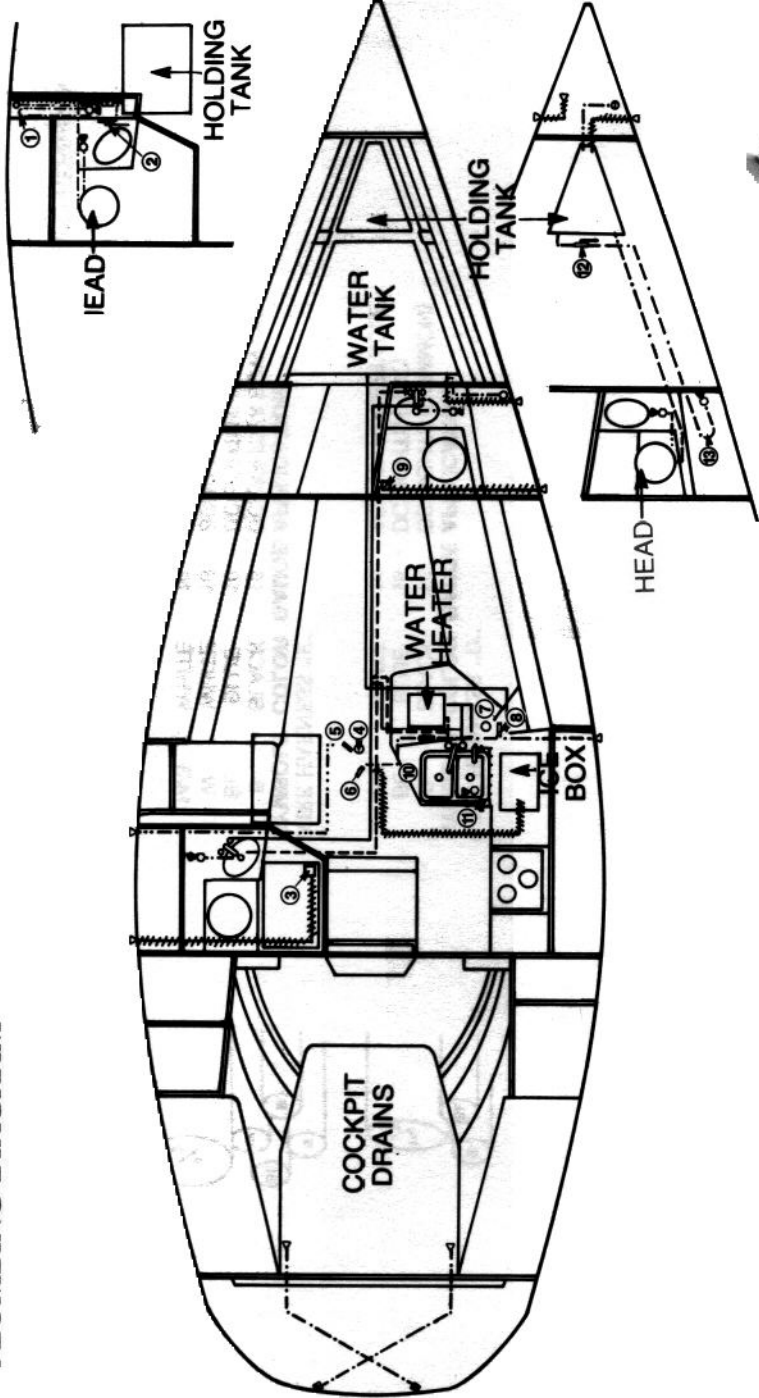
WIRE HARNESS "E"			
SYMBOLS	COLOR	GAUGE	APPLICATION
B	BLACK	16	DC LIGHTS & BOW LIGHT (COMMON)
BL	BLUE	16	DC LIGHTS (HOT)
W	WHITE	16	BOW LIGHTS (HOT)
14/3	WHITE	14	AC 110V RECEPTACLE



WIRE HARNESS "F"			
SYMBOLS	COLOR	GAUGE	APPLICATION
B	BLACK	16	DC LIGHTS, STERN LIGHT & SPEAKERS (COMMON)
BL	BLUE	16	DC LIGHTS
W	WHITE	16	STERN LIGHT
BR	BROWN	16	SPEAKERS
DP	GRAY	14	COMPASS LIGHT
14/3	WHITE	14	AC 110V RECEPTACLE
10/3	WHITE	10	AC SHORE POWER

LEGEND®40

PLUMBING DIAGRAM



LEGEND 40

PLUMBING DIAGRAM

Continued

LEGEND

1. VENTED LOOP
2. MANUAL WASTE PUMP
3. ELECTRIC SHOWER SUMP PUMP
4. ELECTRIC BILGE PUMP
5. 1" CHECK VALVE
6. NAVY STRAINER
7. WATER PUMP

8. WATER FILTER
9. ELECTRIC SHOWER SUMP PUMP
10. MANUAL BILGE PUMP
11. SALTWATER FOOT PUMP
12. MANUAL WASTE PUMP
13. VENTED LOOP

SYMBOLS

- △ PLASTIC THRU-HULL
- ▲ BRONZE THRU-HULL
- ◊ VENT
- ∩ GATE VALVE
- ∩ THRU-HULL SCUPPER TUBE
- WATER FILL PLATE
- ⊖ WASTE PLATE

- POLYBUTYLENE TUBE (COLD WATER)
- - - POLYBUTYLENE TUBE (HOT WATER)
- · - · 1/2" SHIELDVAC HOSE
- · · · 1/4" SHIELDVAC HOSE
- · · · · 1" SHIELDVAC HOSE

- ~~~~ 3/4" SHIELDVAC HOSE
- · · · 1 1/2" SHIELDVAC HOSE
- · · · · 3/4" BLACK WATER HOSE
- · · · · · 5/8" WATER HOSE (WHITE W/BUE TRACER)

Welcome To THE HUNTER MARINE FAMILY

Congratulations on your new sailing yacht manufactured by Hunter Marine. We have engineered and constructed your boat to be as fine a yacht as any afloat. In order to get the best performance and most enjoyment from your boat you should be familiar with its various elements and functions. Please take the time to study this manual and its recommendations for trouble-free sailing pleasure.

We stand behind the quality of your boat with a warranty which you should also review. **To insure your warranty is valid, please fill out the attached card and send it to us within ten (10) days of the purchase date.** Section 15 of the Federal Boat Safety Act requires first owners to be registered. The warranty data should also be recorded in the space below for your own reference.

You also need to fill out and mail the warranty cards on your diesel auxiliary, battery, stove, head, electric water pump and other accessories. These are enclosed in the manufacturers' manuals which are included in your owner's pouch.

OWNER INFORMATION CARD

HULL IDENTIFICATION NUMBER IS ON THE OUTSIDE OF THE TRANSOM—STARBOARD SIDE, UPPER CORNER. THIS NUMBER MUST BE GIVEN IN ALL NECESSARY COMMUNICATIONS.

HULL NO.		DATE DELIVERED TO OWNER	
YACHT NAME			
OWNER NAME			
STREET ADDRESS			
CITY		STATE	ZIP CODE
HOME PORT			
MODEL		SIZE	HULL # / SAIL #
ENGINE MODEL		SERIAL NO.	PROPELLER SIZE
DEALER			
STREET ADDRESS			
CITY		STATE	ZIP CODE
DEALER SIGNATURE			
OWNER SIGNATURE			

- MAST STEP:** A metal fitting that holds the base of the mast in position.
- OUTHHAUL:** A line used to haul the clew of a sail out to the edge of the boom.
- PINTLES:** Pins on the forward side of a boat's rudder, designed to rest in and pivot on the gudgeons secured to the transom.
- REEFING:** To reduce a sail by rolling or folding up part of it.
- RIGGING:** The wire supporting the spars is called standing rigging (stays or shrouds), and the ropes used in setting and trimming sails are known as running rigging (halyards and sheets).
- ROLLER FURLING:** A means of reducing sail on a main or jib by rolling the sail around a rod or wire.
- SHACKLE:** A U-shaped piece of metal with a pin across the open ends.
- SHEET:** A rope used to trim a sail.
- SHROUD:** A length of wire used to support a spar (same as a "stay").
- SLACK:** The opposite of taut (i.e., *slack away or off*—to pay out).
- SPREADERS:** Aluminum tubes that project from a mast in a traverse direction in order to keep a stay at proper tension and to help hold the mast erect.
- STAY:** A length of wire used to support a spar (same as a "shroud").
- STEMHEAD FITTING:** The fitting nearest the bow on the deck where the headstay attaches.
- STEP:** To step a mast is to set it in position.
- TACK:** The lower forward corner of a sail.
- TILLER:** A piece of wood connected with the rudder head. By this the rudder is moved as desired.
- TOPPING LIFT:** A wire and/or rope that attaches to the top of the mast and fastens to the end of the boom. Its purpose is to hold the end of the boom up when the mainsail is lowered.
- TRIM:** To trim sails. To put them in correct relation to the wind by means of sheets.
- TURNBUCKLE:** A device used to maintain correct tension on rigging.

A copy of Chapman's *Piloting, Seamanship and Small Boat Handling* is provided with your Hunter Marine boat as part of the standard equipment. Any questions regarding the meaning of terminology used in this manual may be referenced in your Chapman's.

HUNTER MARINE LIMITED WARRANTY

Hunter Marine warrants to the first-use purchaser for a period of twelve (12) months from the date of sale any part manufactured by Hunter to be free of defects caused by faulty workmanship or materials under normal use and service.

During this period Hunter Marine will replace any part judged to be defective by Hunter Marine free of charge at its plant or at the option of Hunter, by an authorized Hunter Marine dealer. Transportation costs are the responsibility of the first-use purchaser. The labor cost reimbursement will be based on a labor allowance schedule established by Hunter Marine and, where not applicable, on a reasonable number of hours as determined by Hunter Marine. All repairs and replacements must be approved in advance by an authorized Hunter Marine representative.

The warranty does not cover:

- (1) Paint, window glass, gel coat, upholstery damage, plastic finishes, engines, engine parts, propellers, shafts, controls, instruments and equipment not manufactured by Hunter Marine.
- (2) Boats or parts which have been altered or subjected to negligence or misuse.
- (3) Commercially used boats.

This warranty is expressly in lieu of any and all other remedies and expressed warranties. Any implied warranties, including the warranties of merchantability and fitness are limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so that the above limitation may not apply to you.

Any consequential damages which may be incurred are excluded and the liability of Hunter Marine and the purchaser's remedy shall be limited to repair or replacement of any part or party judged defective by Hunter Marine. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation exclusion may apply to you.

The purchaser acknowledges that no other representations were made to him with respect to the quality and function of the boat.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

This warranty shall not be effective unless the Hunter Marine warranty card and pre-delivery service record are completed and returned to Hunter Marine within ten (10) days after the date of sale to the first-use purchaser.

PRE-DEPARTURE CHECK-LIST

- Check bilge for excess water.
- Check weather conditions and tides.**
- Check food supply.
- Foul weather gear.
- Linen, sleeping bags.
- Fuel.
- Water.
- Sunscreens and sunglasses.
- Tools.
- Docking and anchor gear.
- Check radio operations.
- Navigation charts and instruments.
- Float plans to a friend or Coast Guard. (See next page.)**
- Fuel for stove.
- Cooking and eating utensils.
- Check battery water level.
- Oil level, tight V-belts.
- Check for loose electrical connections in engine room.
- Secure tools or any loose equipment in engine room so as not to get fouled in engine.
- AC systems off; electrical cord stowed.
- Doors and drawers secured.
- Check steering lock to lock.
- Check mast for rigging irregularities and tightness.
- Halyards and sheets are clear and ready to run.
- No lines or other obstructions near the propeller or bow.
- Anchor ready to run.
- Check lifelines for tightness.
- Turn on fuel and water lines.
- Stow all loose gear.
- Open engine cooling water intake thru-hull valve.

FLOAT PLAN

1. Name of person reporting and telephone number: _____

2. Description of boat: _____

NAME _____ TYPE _____

MAKE _____ LENGTH _____ REGISTRATION # _____

HULL COLOR _____ STRIPE COLOR _____ DECK COLOR _____

OTHER DISTINGUISHING MARKS _____

3. Persons aboard: _____

NUMBER _____

NAME _____ AGE _____ PHONE # _____

ADDRESS _____

NAME _____ AGE _____ PHONE # _____

ADDRESS _____

NAME _____ AGE _____ PHONE # _____

ADDRESS _____

4. Engine: _____ TYPE _____ H.P. _____ FUEL CAPACITY _____

5. Safety equipment: PFDs Flares Mirror Flashlight
 Food Water EPIRB Raft/Dinghy

6. Radio: _____ TYPE _____ FREQUENCIES _____

7. Trip expectations: _____

DEPARTING AT (APPROX. TIME) _____ ON (DATE) _____ FROM (LOCATION) _____

GOING TO (LOCATION) _____ RETURNING (DATE) _____ IN NO EVENT LATER THAN (TIME & DATE) _____

8. Automobile: _____ LICENSE # _____ STATE _____

MAKE _____ COLOR _____ PARKED AT _____

9. If not returned by _____, call the Coast Guard or:

at: _____

CLOSING UP YOUR BOAT AFTER SAILING

When leaving your Hunter or Legend at the dock for more than a short time, it is a good idea to review the following check list to make sure everything is in order. This will help protect the various parts of your boat and add considerably to their attractiveness and usable life.

- Fold and bag headsails and stow below.
- Furl mainsail and cover, or remove and also bag.
- Remove and stow all portable deck hardware such as snatch blocks, winch handles, etc.
- Secure the boom to the topping lift and set it firmly amidships with the mainsheet purchase. (It is also a good idea to rig a line from the steering wheel or tiller to a convenient cleat to keep the rudder from swinging back and forth with the motion of the water.)
- Attach the shackle ends of all halyards to convenient fittings and take up slack.
- Cleat and coil halyard tails and permanent sheets, hanging them off the deck to promote drying.
- Coil and stow all other lines.
- Cover the winches and steering pedestal when leaving the boat for several days or more.
- Close all fuel lines and gate valves.
- Turn off the electrical system.
- Pump the bilge.
- Check air vents, secure ports and hatches, and swab the deck, particularly if you have operated on saltwater.
- Make a final check of mooring lines, chafing gear, fenders, etc.

FOR SAFE BOATING

BE PREPARED

Take a safe boating course from the Coast Guard. You can call 800-336-BOAT for information on courses in your area.

Carry all safety equipment required by federal and state law. Federal requirements are discussed in "Federal Requirements for Recreational Boats" which can be acquired from U.S. Coast Guard Office of Boating, Public, and Consumer Affairs, Washington, D.C. 20593. State requirements will come from your local State Boating Administration. The Coast Guard also recommends a first-aid kit, a pump or bailer, a transistor or weather radio, extra fuel, a paddle, anchor and line, and extra drinking water; also, if not a requirement, flares.

Get a Coast Guard Auxiliary Courtesy Examination. This is a free, confidential safety inspection. Call your local Coast Guard Auxiliary for details.

Be familiar with the use of distress signals and PFDs.

AVOID FIRES

Handle fuels carefully,

Read the engine owner's manual for proper fuel-system maintenance and inspect your engine's fuel system periodically.

Heed fire extinguisher regulations and keep them in good condition.

While refueling:

- a. Fill the portable tanks on the dock.
- b. Tie the boat securely.
- c. Extinguish cigarettes and all flames on the boat. Turn off all engines and electrical equipment.
- d. Keep the hose nozzle in contact with the fuel can or fill.
- e. Wipe up all fuel spillage.
- f. Ventilate the engine and fuel compartment.
- g. Check boat for fumes.

BEFORE GETTING UNDERWAY

Leave a float plan. (See example on page I-5.)

Perform pre-departure check list. (See check list on page I-4.)

Check the weather: do not venture out if the weather is threatening.

WHILE UNDERWAY

PFDs should be worn by children and non-swimmers **at all times**. *Everyone should wear them if conditions become hazardous.*

Do not operate a boat if intoxicated, fatigued or stressed. These human factors cause 50 percent of all boating accidents.

Keep a good lookout. This is especially true of sailboats. Keep a watch to leeward under the headsail. Keep away from swimmers, divers and skiers.

Obey state and federal laws. Know your local laws and "rules of the road."

Respect bad weather: try to get to shore if the weather turns bad. Get and carry a radio with a NOAA "weather band" on FM 162.40-162.55MHZ.

FOR SAFE BOATING (Continued)

IF TROUBLE OCCURS

Radio for help. Use the emergency VHF channel (i.e., 156.8MHZ).

Put on PFDs immediately.

Stay with the boat. In cold water, huddle together to prevent hypothermia.

FLOAT PLAN

Make copies of the example on page I-5 and use one before each trip. Fill it out and leave it with a reliable person who will notify the Coast Guard or other rescue organization if you fail to return on time. Do not forget to cancel the float plan upon your return.

BRIEF GLOSSARY OF SAILING TERMS

- BATTEN:** A thin wooden or plastic strip placed in a pocket in the leech of a sail to help hold its form.
- BLOCK:** Pulley consisting of a frame in which is set one or more sheaves or rollers. Ropes are run over these rollers.
- BOOM:** Spar at the foot of the mainsail.
- BOOM VANG:** Tackle secured to the bottom of the boom about three feet aft of the gooseneck. The other block attaches to an eye at the base of the mast. The vang's purpose is to keep the boom steady and horizontal while sailing.
- CHAINPLATES:** Strips of metal fastened to the boat's hull or deck designed to take the stress of stays.
- CLEVIS PIN:** A small stainless steel pin that has a hole in one end for a cotter pin and is used to secure stays to chainplates and mast fittings.
- CLEW:** The aft-most lower corner of a sail.
- COTTER PIN:** A straight or circular split metal pin used to hold a clevis pin in place.
- DOWNHAUL:** A device used to tighten the luff of a sail.
- FAIRLEAD:** An eye used to lead line in the direction desired.
- FOOT:** The lower edge of a sail.
- GOOSENECK:** A metal device that secures the boom to the mast.
- GUDGEON:** A metal socket attached to the transom to receive the pintle of the rudder.
- GUNWALES:** The upper edge of a boat's side where it meets the deck.
- HALYARD:** A line for hoisting (or raising) the sails.
- HEAD:** The upper corner of a sail.
- HEADBOARD:** The fitting at the head of a sail with a hole in it to receive the main halyard.
- HEADSTAY:** The foremost stay on a sailboat. A jib is set on a headstay.
- JIB SNAPS:** Small fittings that are attached to the luff of a jib which secure the jib to the headstay.
- JIBE:** The action of the mainsail when shifting from one side of the boat to the other when heading downwind.
- JIFFY REEFING:** (*see "reefing"*) A quick method of reefing the mainsail, sometimes with one line.
- LEECH:** The aft edge of a sail.
- LUFF:** The forward edge of a sail.
- MAINSHEET:** The line used to trim a mainsail.
- MASTHEAD FITTING:** The fitting at the top of a mast.

II. General Handling & Operation

A. Diesel Engine

An engine owner's manual is supplied with your boat and should be read thoroughly. The manual contains technical specifications, running instructions and maintenance schedule on lubricants and fluids. For long engine life, follow routine maintenance schedules.

You should check engine oil, transmission fluid and coolant levels. Water, rust, scale and dirt will cause serious damage to the injectors on diesel engines. You should check your filters frequently and change when necessary.

If you start your engine, run it a minimum of 15 minutes to bring it up to operating temperature. This insures that any condensation is evaporated. Your engine should "run-out" at $\frac{3}{4}$ throttle at least once a month to clean out carbon build-up and moisture.

STARTING:

1. Visually check engine compartment to see that the throttle linkage, shifting controls, electrical connections and fuel lines are properly secured.
2. *Before each start* check oil in engine and transmission.
3. Insure that engine shut-off cable is properly secured and operating.
4. Place the shift lever in the neutral position.
5. Move the throttle or "fuel" lever forward to approximately the half-speed position.
6. Insert the starter key and turn to the "on" position.
7. Press the starter button and hold until engine starts, then release. The buzzer and/or light should then go off.
8. Back the throttle off to an idle position (700 to 800 rpm); allow cold engine to warm up a minimum of five minutes.
9. Check that the lube oil pressure warning light and the charge lamp go off. If any of the warning lamps do not go off above 1,000 rpm, the engine is malfunctioning and should be stopped immediately. Consult your nearest engine dealer.

NOTE: To stop engine at any time, pull "engine stop" lever all the way out. Before stopping, however, it is a good idea to idle the engine in neutral for about five minutes, then race it in the full-throttle position for a moment, then return to idle and stop the engine.

CAUTION: Do not turn safety main switch to "off" while engine is running. This can seriously damage the alternator.

MOTORING:

When engine is warm, you may move the "shift" lever either forward to

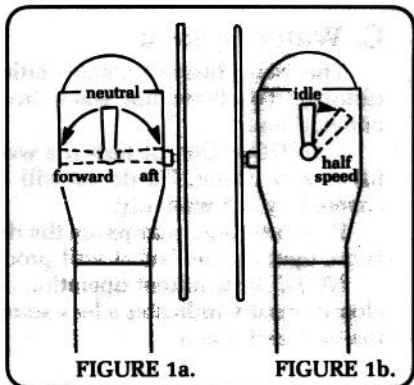


FIGURE 1a.

FIGURE 1b.

go ahead or aft to move in reverse.

CAUTION: Your rigging will conduct electricity. Always check for overhead high tension wires before proceeding. Once clear, you may increase your speed in a reasonable and safe manner as desired.

IMPORTANT: Do not shift from forward to reverse or back without first lowering engine rpm to idle. When sailing, it is best to start the engine before the sails are lowered. This way, it is still possible to maneuver if the engine should not start.

B. Electrical System

Your Hunter is fitted with an electrical system designed for both AC (AC not available on the 26.5 and smaller) and DC. While in port, you can operate any tool, appliance or other device designed to function on regular house current (120V) simply by plugging your dockside power cord into a convenient outlet on shore and turning your AC main breaker on.

CAUTION: Do not allow your dockside power cord to come in contact with the water. Never operate any AC power tool or other electrical equipment while you or the device are in contact with the water.

When leaving port, disconnect the dockside power cord and turn the main DC breaker on. This allows you to use the ship's lights and other equipment designed to operate on direct current. Keep in mind that your DC power source is a 12-volt battery and, just as with your automobile, it must be charged regularly by operating the engine. Unless a state of charge is maintained, there may not be enough power to operate the starter motor. Dangerous situations can result if the engine cannot be started when needed.

Make a regular visual check of battery(ies) to insure proper water level and inspect terminals for signs of corrosion. If your boat sits for long periods without use, it is often a good idea to remove the battery(ies) and attach them to a trickle charger to keep them fully charged and ready to use.

C. Water System

The water heater operates either on 120 volts AC or when the engine is running. To obtain hot water from the engine, it must run a minimum of one-half hour.

CAUTION: Do not turn the water heater on until you are sure the tank is filled with water. To do so will destroy the heating element, which is not covered by the warranty.

Pressure water pumps are the demand type. Once the circuit breaker switch is on, opening the faucet will produce water flow.

NOTE: Intermittent operation of the freshwater pump while all faucets are closed usually indicates a leak somewhere in the lines. Trace the lines to locate the leak and repair.

D. Stove

Follow the operating instructions supplied with the unit installed with your boat.

E. Toilet

IMPORTANT: When not in use, lever must be left in the "dry" position to prevent flooding.

Before using, place the lever in the "wet" position and pump slowly to partly fill and wet the inside of the bowl. Return to "dry" position.

After using, return the lever to the "wet" position for flushing and pump until the bowl is thoroughly cleaned. Continue with several more full strokes to flush discharge lines. Return lever to the "dry" position and pump slowly until bowl is empty.

F. Pumps

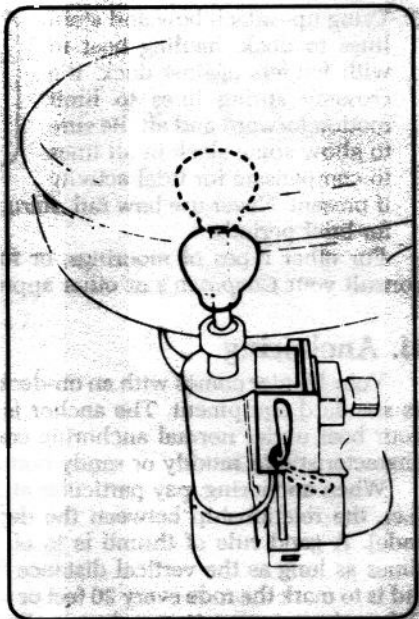
All pumps should be checked frequently to insure proper operation. *This is an especially important regular maintenance item since functioning of a pump could save your vessel from serious damage at some future time.*

Inspect all hoses for chafing and dry rot. See that hose clamps are tight.

Check that pump impeller area is clean and free of obstructions.

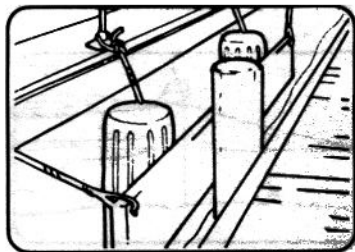
Inspect electrical wiring for corrosion.

Make sure float switch moves freely and is making an electrical connection.



G. Docking

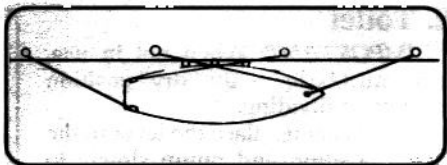
Docking your boat should be handled carefully to avoid potential damage. Under normal wind and water conditions, the following considerations should be made:



1. Whenever possible, your approach should be made against the prevailing wind and current to assist in stopping the boat. Where these conditions are contrary, the strongest should be used to determine approach.
2. Approaching the dock—dock lines and fenders should be at ready, loose gear stowed and decks cleared. Determine the direction of wind and current, and, once you decide which side of the boat will

be against the dock, rig dock lines and fenders on the appropriate side. One dock line should be attached to the bow cleat, another to the stern cleat opposite the side that will lie against the dock. **NOTE:** If the boat is to lie against a piling, rig a fender board across two or more fenders.

3. Tying up—attach bow and stern lines to dock, hauling boat in with fenders against dock. Rig crossing spring lines to limit motion forward and aft. Be sure to allow some slack in all lines to compensate for tidal activity if present. Never use bow rail, stern rail or stanchions to secure vessel, even for brief periods.



For other types of moorings, or for abnormal wind or water conditions, consult your *Chapman's* or other approved boating guide.

H. Anchoring

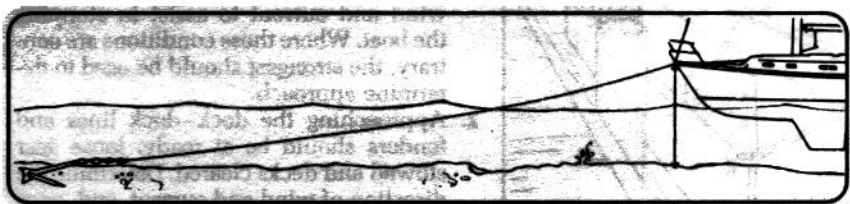
Your Hunter comes with an on-deck anchor well and a burying-type anchor as standard equipment. The anchor is selected to suit the size and weight of your boat under normal anchoring conditions, and provides its best holding characteristic in muddy or sandy bottoms.

When anchoring, pay particular attention to the scope of your anchor rode (i.e., the relationship between the depth of the water and the length of the rode). A good rule of thumb is to allow a scope of about 7:1 (a rode seven times as long as the vertical distance from the bow to the bottom). A helpful aid is to mark the rode every 20 feet or so with knots or other types of indicators. Before dropping anchor, make sure the bitter end is secured to the cleat in the anchor well.

Also, be sure to consider wind direction, currents, mean low tide depths and other local conditions when anchoring, as well as the positions of any boats already anchored nearby.

CAUTION: Anchoring in unusual water and/or weather conditions will require additional precautions. Consult your *Chapman's* or other approved guide for suggestions.

To weigh anchor, motor or sail (under main only) slowly forward. When at a point directly above the anchor, a quick tug should free it from the bottom. Take care not to damage the topsides when hauling the anchor aboard. It is good practice to thoroughly clean the anchor prior to placing it in the anchor well.



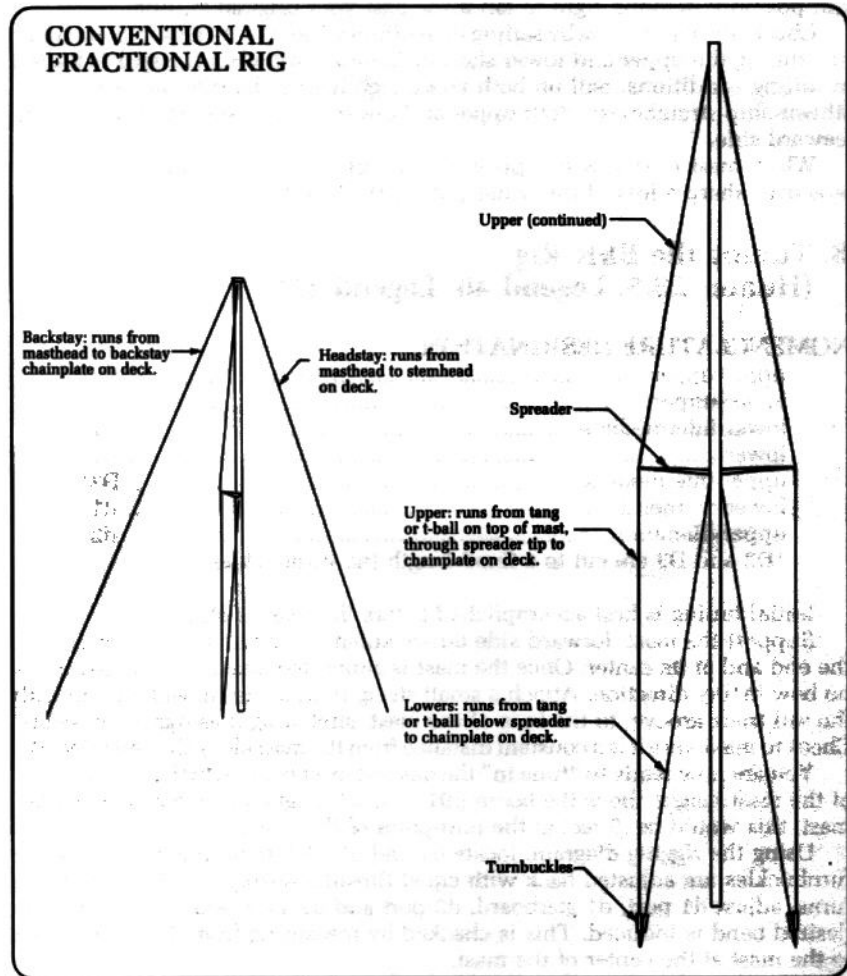
III. Sails & Rigging

A. Tuning the Conventional Fractional Rig (Hunter 23, Hunter 26.5, Hunter 333, Legend 35, Legend 37)

TUNING THE RIGGING:

After raising your mast, attach the headstay, backstay, upper shrouds and lower shrouds. Set the headstay turnbuckle at half open and then tighten backstay turnbuckle to medium tension.

To center the mast athwartships, start with only slight tension on the upper and lower shrouds. Check that the mast is centered in the boat by measuring



from the masthead to the chainplates with a steel tape measure hoisted completely up the main halyard. Adjust the upper shroud until the measurements port and starboard are exactly the same. Now the spar is plumb athwartships, tension both uppers equally, counting turnbuckle revolutions as you go. Tighten uppers until you have approximately one inch of "prebend" fore and aft in the mast. This is achieved because the swept spreaders will push the middle part of the mast forward as you increase tension of the uppers.

Now tighten the lower shrouds evenly, making sure the mast remains straight athwartship. Sight up the luff groove to assure this straightness. Lower should end up almost as tight as the uppers. (The uppers should always be the tightest.) Both the Legend 35 and Legend 37 are equipped with double spreaders. The three shrouds should be made progressively tighter toward the top of the rig; the uppers should be the tightest of all. Tighten backstay to a taut position: perhaps eight to ten turns past your original tension.

Check the mast tuning by sailing in medium winds (10-12 knots). Sometimes fine tuning the upper and lower shrouds is necessary when the spar is loaded in sailing conditions. Sail on both tacks, sighting up the luff groove to check athwartship straightness. Both upper and lower shrouds should be taut on the leeward side.

When mast tuning is complete, install cotter pins in all turnbuckles and tape over sharp edges of the cotter pins with chafe tape.

B. Tuning the B&R Rig (Hunter 28.5, Legend 40, Legend 45)

NOMENCLATURE DESIGNATION:

upper-upper D3*
lower-upper V2
lower-intermediate V1
lower D1
upper-intermediate D2*
lower-diamond d1
upper-diamond d2

*D2 and D3 are cut to a fixed length (no turnbuckles).

Initial tuning is best accomplished before the mast is stepped.

Support the mast, forward side down, about one-quarter of its length from the end and at its center. Once the mast is supported, make certain that it has no bow in any direction. Attach a small string from the masthead, in line with the sail track groove, to the base of the mast, stretching it as tight as possible. Check to make sure it is a constant distance from the mast along the entire length.

You are now ready to "tune in" the desired mast bend, which is one percent of the mast height above the boom (.01 × mast height above boom). On a 50' mast, this would be .5 feet at the mid-point of the mast.

Using the rigging diagram, locate d1 and d2. Before tuning, make sure the turnbuckles are adjusted back with equal thread showing. Carefully counting turns, adjust d1 port, d1 starboard, d2 port and d2 starboard evenly until the desired bend is induced. This is checked by measuring from the string down to the mast at the center of the mast.

It is important to make sure the mast is straight athwartships at this time.

You are now ready to step the mast.

Step the mast with all shrouds loosely attached.

Adjust the forestay and backstay to obtain the desired mast rake. The mast should be vertical or raked aft. The more rake, the greater the weather helm. The forestay and backstay should have a reasonable amount of tension on them.

Adjust V2 (port and starboard) evenly until they are tight. You should finish with approximately equal amounts of thread showing on each turnbuckle.

Using the jib halyard, check the mast for athwartship plumb. Pull the halyard out to the side of the boat and below the shear. Repeat the procedure on the opposite side. If you find a big difference (more than 1/2 inch), adjust turnbuckles an equal amount in opposite directions until the mast is straight.

Adjust V1 (port and starboard) using the above procedure.

Repeat the procedure for D1 (port and starboard).

Your mast should now have the original "pre-bend" and be straight athwartship.

Check the mast tuning by sailing in medium winds (10 to 12 knots). Sail on both tacks, sighting up the luff groove to check athwartship straightness. Shrouds should not be loose on the leeward side. (This is especially important with the B&R rig.) Follow the progressive shroud tightness routine described in the tuning instructions for the conventional rig. When mast tuning is complete, install cotter pins in all turnbuckles and tape over sharp edges of the cotter pins with chafe tape.

B&R RIG

D3 upper upper:
runs from upper tang
to upper spreader tip.

Upper spreaders

V2 lower upper:
runs from upper
spreader tip through
lower spreader tip to
chainplate on deck.

D2 upper intermediate:
runs from tang below
upper spreaders to
lower spreader tips.

d2 upper diamond:
runs from upper
spreader tip to tang
above lower spreader.

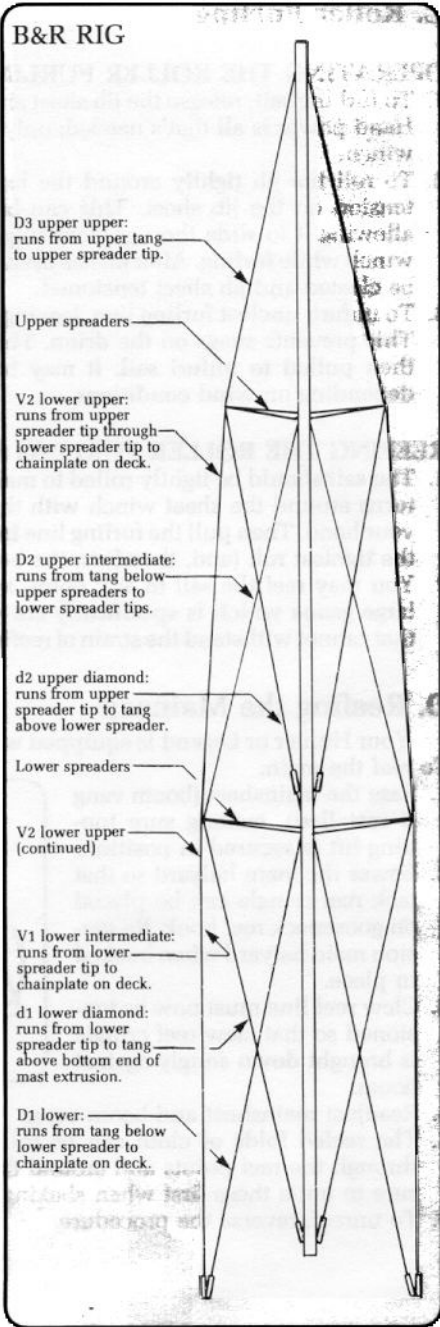
Lower spreaders

V2 lower upper
(continued)

V1 lower intermediate:
runs from lower
spreader tip to
chainplate on deck.

d1 lower diamond:
runs from lower
spreader tip to tang
above bottom end of
mast extrusion.

D1 lower:
runs from tang below
lower spreader to
chainplate on deck.



C. Roller Furling

OPERATING THE ROLLER FURLING:

1. To furl the sail, release the jib sheet and pull in on furling line from cockpit. Hand power is all that's needed; only special situations necessitate using a winch.
2. To roll the jib tightly around the headstay, it is advisable to keep some tension on the jib sheet. This can be done by holding the jib sheet and allowing it to slide through your fingers or by leaving two turns around a winch while furling. After jib has been completely furled, furling line should be cleated and jib sheet tensioned.
3. To unfurl, uncleat furling line, leaving one turn around the cleat for friction. This prevents snags on the drum. The jib sheet on leeward side of boat is then pulled to unfurl sail. It may be unrolled part-way or all the way, depending on wind conditions.

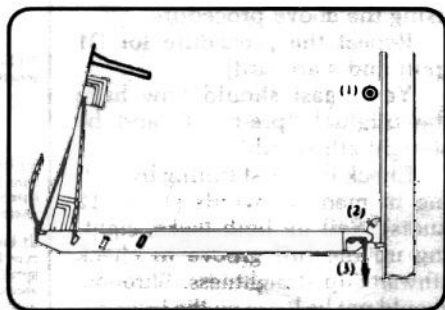
REEFING THE ROLLER FURLING SAIL:

1. The sail should be tightly rolled to maintain optimum sail shape. Leave two turns around the sheet winch with the tail of the jib sheet held loosely in your hand. Then pull the furling line in against tension of jib sheet to achieve the tightest roll (and, therefore, the best sail shape).
2. You may reef the sail to any point. Most any sail may be reefed except a large genoa which is specifically cut very full and has a lightweight cloth that cannot withstand the strain of reefing. (Consult a sailmaker if in doubt.)

D. Reefing the Mainsail

Your Hunter or Legend is equipped with an easy-to-use jiffy reefing system. To reef the main:

1. Ease the mainsheet (boom vang if installed), making sure topping lift is secured in position.
2. Lower the main halyard so that tack reef cringle can be placed on gooseneck reef hook. Re-tension main halyard when hooked in place.
3. Clew reef line must now be tensioned so that clew reef cringle is brought down snugly against boom.
4. Readjust mainsheet and boom vang.
5. The reefed folds of cloth can be rolled up and secured with short lines through the reef points and around the folds and boom. **IMPORTANT:** Be sure to untie these first when shaking out the reef.
6. To unreef, reverse the procedure.



E. Sail Care and Storage

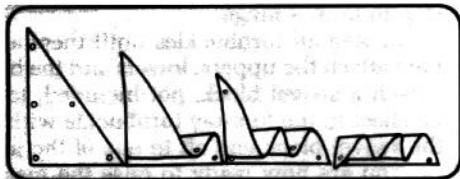
Your Hunter or Legend comes with Dacron mainsail and 110% genoa jib. To extend the life of your sails and maintain their best performance:

1. Never use them in wind ranges that exceed their capabilities.
2. Never let them luff for extended periods of time.
3. Rinse your sails in freshwater whenever possible if you sail in saltwater. Tub wash them every few seasons to keep them bright and attractive. **CAUTION:** Do not machine wash. Use a mild detergent in warm water, and *remove all detergents completely with a thorough rinsing.*

For oil and grease stains, use commercial cleaning solvents. Should a yellow stain develop, bleach with oxalic acid and rinse thoroughly. Rust stains should be soaked in a warm solution of two parts hydrochloric acid per 100 parts water, rinsing thoroughly.

After rinsing your sails, spread them and allow to dry thoroughly before bagging. This is a good time to inspect them for minor damage.

When dry, fold according to diagram. First spread sail on flat surface, then fold in a smooth, accordion pleat from the foot to the head. Next, roll the folded sail from the tack to the clew and slide carefully into bag.



At the end of each season, it is good practice to have your local sailmaker inspect your sails for signs of wear and tear.

F. Care of Standing Rigging

The stays and shrouds on your Hunter or Legend are highly durable stainless steel to insure years of reliable service. To protect your standing rigging, keep it clean and, whenever possible, rinse thoroughly with freshwater. Check occasionally for "fish hooks," strands of wire that have broken and curled outward. These can snag sails and inflict painful cuts in bare hands. Broken strands indicate the wire is deteriorating and should be replaced.

Also inspect turnbuckles regularly and replace any missing cotter pins. Occasional lubricating improves both the life and the function of the turnbuckles.

G. Care of Running Rigging

To protect your running rigging (sheets, halyards) from damage, wash with cold water (and a mild detergent, if necessary), especially after exposure to saltwater. Rinse thoroughly and coil. Hang the tail ends of halyards off the deck to promote drying. Sheets should also be hung to dry.

Inspect all lines periodically for fraying and other damage. Lines showing substantial wear should be replaced.

H. Stepping the Mast On the Hunter 23

Hunter Marine recommends that you walk through the following seven steps and assign each person their respective task and positions during the stepping of the mast. Sailing is a fun and safe sport when the crew operates as a team. Good luck and smooth sailing.

IV. Maintenance

A. Engine, Transmission and Drivetrain

ENGINE:

Follow the fuel and lubrication requirements in the Engine Manual. Check the engine oil level before and after operation and use quality motor oil (refer to Engine Manual). Be certain the proper amount of oil is in the crankcase at all times.

Engine alignment: The engine should be aligned by experienced marine service personnel. Final alignment should be done after launching, with all normal gear aboard. A description of the procedure follows:

The coupling flanges must come together evenly at all points, a feeler gauge is used to check the gap. If adjustment is necessary, the engine is tilted up or down and/or side to side until the flanges meet equally. Severe vibration will result from misalignment and can cause strut bearing and shaft damage.

Alignment should be checked again after several weeks of use. (Refer to this manual's alignment drawing.)

TRANSMISSION:

Follow the lubrication requirements of the Engine Manual. The oil level should be checked immediately after operation.

DRIVETRAIN:

The shaft log (stuffing box) should be inspected periodically.

The stuffing box is held to the shaft log tube by a rubber tube secured by hose clamps. The clamps should be tight and no water should leak from this location. A slight drip from the stuffing box at the shaft exit is necessary (four drops a minute) and normal.

To adjust, loosen the lock nut, tighten gland nut one-quarter turn, and retighten lock nut. If excessive water flow persists after adjustment, replace the packing and then adjust as above.

B. Steering

The manufacturer's instructions for maintaining pedestal steering system should be followed closely. Wires should be periodically inspected for proper tension. Lightly oil all wire.

C. Electrical Systems

The electrical system is a 12-volt, negative ground installation. The owner should periodically inspect battery(ies) and cables for signs of corrosion, cracks, and electrolyte leakage.

D. Plumbing Systems

All pumps should be checked frequently to insure proper operation. This

is an especially important regular maintenance item since proper functioning of a pump could save your vessel from serious damage in the future.

Inspect all hoses for chafing and dry rot. See that hose clamps are tight. Check that the pump impeller area is clean and free of obstructions.

Inspect electrical wiring for corrosion. Make sure float switches move freely and are making an electrical connection.

The owner should become familiar with the layout of the water and waste systems by walking through the boat with the diagrams provided in this manual. It is especially important that the owner knows all thru-hull valve locations and inspects for leaks frequently.

General Thru-hull List (*varies from boat to boat—see diagrams in section VI*)

- 1) Engine cooling system
- 2) Galley sink
- 3) Head sink
- 4) Head toilet (water intake)
- 5) Holding tank discharge
- 6) Scupper drains

E. Fuel System

The owner should inspect the condition of fuel lines for cracks or leaks. A primary source of fuel-related problems is water in the system. The owner should seek out only well maintained fueling facilities and make sure fuel fill caps are tightly secured after filling. Check and maintain fuel filters periodically.

F. General Care

CLEANING FIBERGLASS SURFACES:

Fiberglass surfaces should be cleaned regularly. Normal accumulations of surface dirt can be removed simply by occasional rinsings with water. If your boat is operated in salt water, more frequent rinsing will be required. To remove stubborn dirt, grease or oil, use a mild detergent and a soft brush. Rinse with clean fresh water.

It is also a good idea to wax the fiberglass once or twice a year to maintain a deep, glossy appearance. Your local marine supply should be able to provide an appropriate wax.

FIBERGLASS REPAIRS:

Your Hunter or Legend dealer can supply you with the proper gel coat used to repair any hairline cracks or chips.

1. Using a mild detergent solution, clean repair area completely of wax, dirt or oil, and dry completely.
2. To patch "spiderweb" or hairline cracks, begin by widening the crack so that it will hold putty. This is most easily done with an electric drill or router equipped with a V-shaped grinding bit. Also, cut one-quarter inch or so beyond the end of each crack to relieve any stress.
3. Brush away all dust from the crack.
4. Mix gel coat with filler powder to form a creamy consistency. Mix more than enough patching compound to do the job and stir to a smooth blend.

Temperatures should be in the 60s or above, or a heat lamp should be used for application.

5. Using a putty knife, work the mixture firmly into the crack to eliminate air bubbles. Leave an excess of about one-sixteenth of an inch above the surface of the crack to allow for shrinkage. Wet sand and buff (with compound) the repaired area.

TEAK CARE:

Teak wood is an extremely durable wood with a high oil content. To maintain that durable quality it should be given a coat of teak oil once a year or more in northern climates and twice a year or more in tropical climates.

Teak can be allowed to weather out, as seen on many boats, but this will eventually lead to cracking and splitting.

If you wish to maintain your teak with varnish, resin or urethane, a sealer should be applied after cleaning and sanding. Complete finishing procedures can be obtained from your marine finish products manufacturer or supplier.

FABRIC CARE:

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote airflow around each cushion.

WINCH MAINTENANCE:

Follow the maintenance instructions prescribed by the winch manufacturer.

GENERAL HARDWARE MAINTENANCE:

Check all fittings regularly to be sure screws are tight. Occasionally lubricate all moving parts on such fittings as blocks, turnbuckles and cam cleats, as well as the locking pins of snatch blocks, track slides, spinnaker poles, etc.

Inspect chocks, cleats and fairleads for roughness and smooth with fine-grained emery paper if necessary.

Also, replace any missing or damaged cotter pins in turnbuckles and shackles, and either tape them or use protective covers manufactured for that purpose.

V. Storage/Winterization

IMPORTANT: Winter storage is recommended to be done in one of the following three ways, either: 1) by blocking the boat via a cradle; or 2) with chained stands on level ground; or 3) by storing the boat in the water with a bubbler system to prevent icing. Damage to your boat, including engine misalignment caused by twisting, is not covered by the warranty.

A. Sails

Sails and synthetic lines should be washed and dried thoroughly. Sails should be properly folded and stowed in a dry, well ventilated place. Many sailboat owners send their sails back to the sail manufacturer at the end of each season. The sailmaker will check the stitching and sailcloth for wear and store the sails until the start of the next season.

B. Electrical

Remove battery from boat. (Refer to Engine Manual)

C. Cushions

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote airflow around each cushion.

D. Hatches

Hatches and floorboards should be left open a crack to provide ventilation for the whole boat. However, it is prudent to loosely cover any open hatches with a tarp or plastic sheeting.

E. Water System—Water Heater

WATER SYSTEM:

Open a faucet and allow the pump to empty the tank. Then add approximately two gallons of *non-toxic* anti-freeze solution to the tank and repeat the pumping out procedure.

A second method is to disconnect the hoses at the pump, allowing them to drain. Find the lowest point in the system and disconnect the fitting. Open all faucets to allow the lines to drain. If possible, use a short piece of hose on the faucet to blow through the lines to clear all water.

WATER HEATER:

Open valve and drain fully. Leave valve open during lay-up time.

F. Toilet and Holding Tank

Drain and flush toilet. Using automotive anti-freeze (ethyleneglycol) in a 50/50 mixture with water, pump through toilet and into holding tank.

G. Engine

1. Drain the cooling water completely out of the engine and flush the line thoroughly with freshwater. Don't use high pressure through the line.
2. Remove the fuel completely from all fuel lines.
3. Disconnect the main battery cables from the battery terminals.
4. To prevent corrosion inside the cylinders, pour a little lubricating oil into the suction pipe while turning the engine. Enough oil to reach the intake/exhaust valve is sufficient.
5. Put the piston at top dead center of compression stroke so that the intake/exhaust valves are completely closed.
6. Apply a thin anti-corrosion treatment to the plating and exposed painted surfaces.
7. The engine should be in a well ventilated area, and protected from any kind of dampness.
8. Put a dust cover over the engine.
9. Check your operation manual for engine diagram and for "Manufacturer's Recommended Winterizing Procedures."

H. Outboard Engine

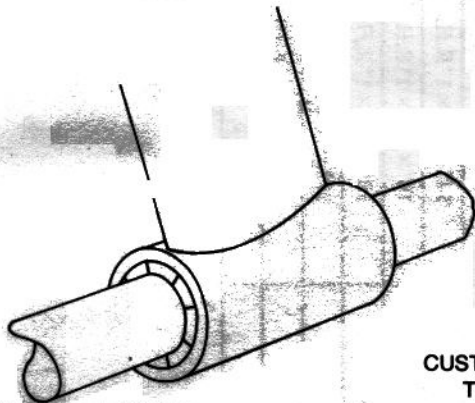
1. Take it home and store it in a safe place. Be *very careful* storing the gas tank as the gasoline is very flammable.

ENGINES & PROPELLERS

MODEL	ENGINE	TRANSMISSION	STANDARD 2-BLADE PROPELLER
Hunter 23, 26.5	Outboard Motor		
Hunter 28.5	Yanmar 2GM20F Diesel	2.62:1	14" x 12" x 1" R.H.
Hunter 333	Yanmar 2GM20F Diesel	2.62:1	15" x 11" x 1" R.H.
Hunter 35	Yanmar 3GM30F Diesel	2.61:1	18" x 11" x 1" R.H.
Hunter 37	Yanmar 3HM35F Diesel	2.14:1	17" x 10" x 1" R.H.
Hunter 40	Yanmar 4JHSE Diesel	2.14:1	17" x 10" x 1" R.H.
Hunter 45	Yanmar 4JHTE Diesel	2.17:1	18" x 15" x 1" R.H.

ALIGNMENT DIAGRAM

Step 1

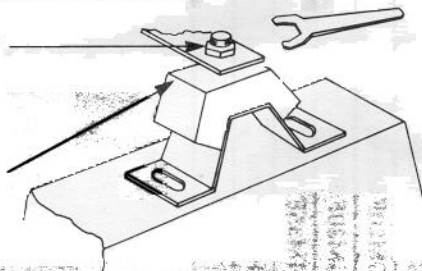


**CUSTOM BEARING
THRU-STRUT**

Step 2

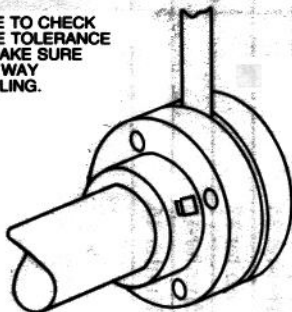
**ENGINE VERTICAL
ADJUSTMENT**

**ENGINE HORIZONTAL
ADJUSTMENT**



Step 3

**USE FEELER GAUGE TO CHECK
COUPLING GAP. THE TOLERANCE
SHOULD BE .004". MAKE SURE
TO CHECK ALL THE WAY
AROUND THE COUPLING.**



**NOTE: CHECK COUPLING GAP
WITHOUT COUPLING
BOLTS IN PLACE.**