



HUNTER®

MARINE CORPORATION

AN EMPLOYEE OWNERSHIP COMPANY

We Go The Distance



# *27 the **EDGE*** *Operator's Manual*





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# HUNTER 27 theEDGE OPERATOR'S MANUAL

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# 1. WARRANTY REGISTRATION FORM

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## WELCOME TO THE HUNTER MARINE FAMILY

Congratulations on ownership of your boat theEDGE, manufactured by Hunter Marine. We have engineered and constructed your boat to the high standards of Hunter Marine, the NMMA, and the ABYC. In order to experience the best performance and most enjoyment from your boat you should be familiar with its various elements and their functions. For your boating pleasure and safety, please take time to study this manual.

Hunter stands behind the quality of your boat with a warranty, which you should review. To ensure the validity of your warranty, please complete the attached card and send it to us within ten (10) days of the purchase date. Section 15 of the U.S. Federal Boat Safety Act requires registration of a boat's first owner. The warranty data should also be recorded in the space below for your own reference.

In addition, please complete the warranty cards for your engine, stove, head, electric water pump and other accessories. These are enclosed in the manufacturers' manuals that are packaged with your Operator's Manual. This manual has been compiled to help you operate your boat properly and safely. It contains details of the boat, equipment supplied or fitted, systems, and information on operation and maintenance. Please read it carefully, and familiarize yourself with the boat before using it. If this is your first sailboat, or you are changing to a type of boat with which you are not familiar, please ensure that you obtain proper handling, safety and operating experience before you assume command of the boat. Your dealer, national sailing federation or yacht club can advise you of local sea schools or competent instructors, such as the ASA ([www.ASA.com](http://www.ASA.com)) or US Sailing ([www.USSailing.org](http://www.USSailing.org)). In addition, the US coast guard can be contacted for important boating and safety information at <http://nws.cg.navy.mil>.

**PLEASE KEEP THIS MANUAL IN A SAFE PLACE AND TRANSFER TO THE NEW OWNER IF YOU SELL THE CRAFT.**

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### OWNER INFORMATION CARD

THE HULL IDENTIFICATION NUMBER IS LOCATED ON THE STARBOARD AFT SIDE OF THE HULL OR TRANSOM. THIS NUMBER MUST BE PROVIDED IN ALL NECESSARY CORRESPONDENCE.

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

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## 2. LIMITED WARRANTY

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Hunter offers a limited warranty on every Hunter boat sold through an authorized Hunter dealer. A copy of this warranty is included here, and in your User's Manual. If for some reason you are not able to understand, read, or view this manual, please contact your local dealer for a replacement copy.

We stand behind the quality of your boat with a warranty, which you should review. To ensure the operation and validity of your limited warranty, please complete the attached card and send it to us within ten (10) days of the purchase date. Section 15 of the U.S. Federal Boat Safety Act requires registration of a boat's first owner. The warranty data should also be recorded in the space below for your own reference.

The following warranties apply to all 2012 Model Year boats produced by  
HUNTER MARINE CORPORATION:

### **LIMITED ONE-YEAR WARRANTY**

Hunter Marine warrants to the first-use purchaser and any subsequent owner during the limited warranty period that any part manufactured by Hunter will be free of defects caused by faulty workmanship or materials for a period of twelve (12) months from the date of delivery to the first-use purchaser under normal use and service. During this period, as the sole and exclusive remedy, Hunter's obligation under the warranty is limited to the repair or replacement of any such defective part.

### **LIMITED FIVE-YEAR HULL STRUCTURE AND BOTTOM BLISTER WARRANTY**

Hunter warrants to the first-use purchaser and any subsequent owner during the limited warranty period that the hull of each boat will be free from structural defects in materials and workmanship for a period of five (5) years from the date of delivery to the first-use purchaser under normal use and service.

This limited warranty applies only to the structural integrity of the hull and the supporting pan/grid or stringer system. Hulls, pan/grid or stringers modified in any way or powered with engines other than the type and size installed or specified by Hunter are not covered by this limited warranty. As the sole and exclusive remedy, Hunter's obligation under the warranty is limited to repair or replacement of any such defective part.

Hunter also warrants to the first-use purchaser and any subsequent owner during the limited warranty period that the boat will be free from gelcoat blistering on underwater surfaces of the hull, excluding the keel and rudder, for a period of five (5) years from the date of delivery to the first-use purchaser under normal use and service. During this period, Hunter will supply or reimburse an authorized Hunter dealer for all of the parts and labor required to repair a blistered underwater surface of the hull. The labor cost reimbursement will be based on the Labor Allowance Schedule established by Hunter from time to time; however, if the repair is performed by a non-Hunter dealer, the repair cost must be authorized by Hunter in advance and be based on a reasonable number of hours as determined by Hunter. Hunter will not pay transportation, hauling, launching, bottom paint, storage, dockage, cradling rental, rigging and derigging, or other similar costs. It is recommended that the repair be done during a seasonal haul-out for service or storage.

**PLEASE KEEP THIS MANUAL IN A SAFE PLACE AND HAND OVER TO THE NEW  
OWNER IF YOU SELL THE CRAFT**

## 2. LIMITED WARRANTY

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You should also complete the warranty cards for your engine, stove, head, electric water pump and other accessories. These are enclosed in the manufacturers' manuals that are packaged with your Operator's Manual.

**HUNTER EXPRESSLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. NEITHER HUNTER NOR THE SELLING DEALER SHALL HAVE ANY RESPONSIBILITY FOR LOSS OF USE OF A BOAT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, OR CONSEQUENTIAL DAMAGES.**

### VOIDED WARRANTIES

The following circumstances will void the bottom blister limited warranty:

1. If the gel-coat has been sanded, sandblasted, or subjected to abrasion or impact.
2. If the instructions provided in the Hunter Operator's Manual are not followed according to Hunter's required bottom preparation procedures.

### RESTRICTIONS APPLICABLE TO WARRANTIES

These limited warranties do not cover:

1. Paint, sealants, adhesives, window glass, Gelcoat, upholstery damage, plastic finishes, engines, engine parts, bilge pumps, stoves, blowers, pressure water pumps, propellers, shafts, rudders, controls, instruments, keels and equipment not manufactured by HUNTER. Any warranty made and issued by the manufacturer of such items will be, if and where available, provided to the first use purchaser.
2. Problems caused by improper maintenance, storage, cradling, blocking, normal wear and tear, misuse, neglect, accident, corrosion, electrolysis or improper operation.
3. Boats used for commercial activities including charter.



## 2. LIMITED WARRANTY

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THESE LIMITED WARRANTIES ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND ARE EXPRESSLY IN LIEU OF ANY AND ALL OTHER REMEDIES AND WARRANTIES EXPRESSED AND IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER ARISING BY LAW, CUSTOM, CONDUCT, OR USAGE OF TRADE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN THE EVENT THAT IMPLIED WARRANTIES ARE FOUND TO EXIST UNDER THE LAW OF A PARTICULAR STATE, NOTWITHSTANDING THE EXCLUSION CONTAINED HEREIN, THE DURATION OF ANY SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE LIMITED WARRANTY STATED HEREIN. THE PURCHASER ACKNOWLEDGES THAT NO OTHER REPRESENTATIONS WERE MADE TO HIM OR HER WITH RESPECT TO THE QUALITY OR FUNCTION OF THE BOAT. ANY ORAL STATEMENT OR PRINTED MATERIAL ADVERTISING THE BOAT WHICH SPEAKS TO ANY PERFORMANCE CHARACTERISTIC OF THE BOAT OR ANY OF ITS COMPONENTS SHALL BE CONSIDERED AND CONSTRUED AS AN ESTIMATED DESCRIPTION ONLY AND SHOULD NOT BE RELIED UPON AS AN EXPRESS WARRANTY OR AS THE BASIS OF THE BARGAIN FOR THE BOAT OR ANY OF ITS COMPONENTS.

ANY CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES WHICH MAY BE INCURRED ARE EXCLUDED AND PURCHASER'S REMEDY IS LIMITED TO REPAIRS OR REPLACEMENT OF ANY PART(S). SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL OR INDIRECT DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.



## 2. LIMITED WARRANTY

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### OWNER INFORMATION CARD

THE HULL IDENTIFICATION NUMBERS IS LOCATED ON THE STARBOARD AFT SIDE OF THE HULL OR TRANSOM. THIS NUMBER MUST BE PROVIDED IN ALL NECESSARY CORRESPONDENCE.

HULL NO. \_\_\_\_\_

DATE DELIVERED TO OWNER \_\_\_\_\_

YACHT NAME \_\_\_\_\_

OWNER NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE/COUNTRY \_\_\_\_\_ ZIP CODE \_\_\_\_\_

HOME PORT \_\_\_\_\_

ENGINE MODEL \_\_\_\_\_ SERIAL NO. \_\_\_\_\_ PROPELLER SIZE \_\_\_\_\_

DEALER PHONE \_\_\_\_\_ PHONE \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE/COUNTRY \_\_\_\_\_ ZIP CODE \_\_\_\_\_

CUSTOMER SERVICE / WARRANTY \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **2. LIMITED WARRANTY**

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### **WARRANTY REGISTRATION**

These limited warranties shall not be effective unless the HUNTER Warranty Registration Form and Pre-Delivery Service Record, which are furnished with each new boat, are filled out completely and returned to HUNTER within ten (10) days of delivery.

Return of the Warranty Registration Form to HUNTER, signed by both Dealer and Owner, is critical. Warranty coverage cannot be initiated until the completed form is received at HUNTER.

All repairs and/or replacements will be made by an authorized Hunter dealer, or at the option of Hunter, at the Hunter plant. If the repairs are of such a nature that the warranty work must be performed at the HUNTER plant, transportation costs to and from the HUNTER plant shall be paid by the owner. The labor cost reimbursement will be based on a Labor Allowance Schedule established by HUNTER and where not applicable, on a reasonable number of hours as determined by HUNTER. Any repairs and replacements must be approved in advance by an authorized HUNTER service representative.

### **TRANSFER OF LIMITED WARRANTIES**

For 1995 and later hull numbers, the limited warranties will be transferred to a subsequent purchaser of the boat if:

- 1.** A notice of the transfer of ownership of the boat is given by the subsequent purchaser in writing to Hunter within thirty (30) days of the transfer.
- 2.** The notice shall include the name, address and telephone number of the subsequent purchaser, the date of purchase, the hull number and the name of the seller of the boat.

Hunter will mail to the subsequent purchaser notice of the expiration dates of the limited warranties (see form letter, attached). The transfer of the ownership of the boat will not extend the expiration dates of the limited warranties.

## 2. LIMITED WARRANTY

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### SAMPLE FORM LETTER

March 12, 2008

Mr. John Smith  
1456 Joy Street  
Sarasota, FL 34266

Dear Mr. Smith,

Thank you for providing written notice of transfer of ownership. We are pleased you have selected a Hunter sailboat, and we will make every effort to assure Hunter ownership will be a satisfying experience for you.

Based on the information you have provided, we are pleased to notify you of the expiration dates of the limited warranties:

- The limited **one-year** New Boat warranty expires (d)\_\_\_\_\_.
- The limited **five-year** Hull Structure and Bottom Blister warranty expires (d)\_\_\_\_\_.

Should you require assistance at any time during ownership, we encourage you to contact your Hunter dealer or to call us directly at 386-462-3077.

Please confirm the information at the bottom of the page and advise us if any corrections are required.

\_\_\_\_\_  
Customer Service Manager

-----  
Hull No: HUN\_\_\_\_\_ Model:\_\_\_\_\_

Telephone: (H)\_\_\_\_\_ (B)\_\_\_\_\_

Date of Purchase:\_\_\_\_\_

Purchased From: Name:\_\_\_\_\_

Address:\_\_\_\_\_

City/State\_\_\_\_\_ Zip\_\_\_\_\_

Country\_\_\_\_\_

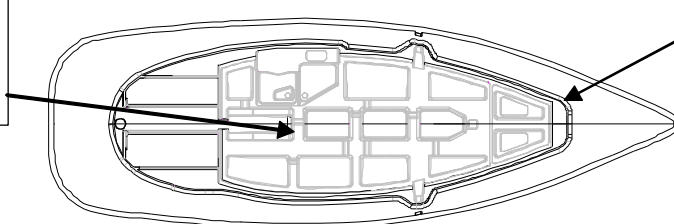
( ) Private Owner

( ) Dealer

## 2. LIMITED WARRANTY

### GRAPHIC EXPLANATION OF WARRANTY COVERAGE

Internal fiberglass pan and fiberglass grid system are covered by the five-year limited warranty.



All fiberglass tabbing, overlays, adhesives, epoxy and secondary bonding are covered only by the one-year limited warranty. They are not covered by the five-year limited warranty.

Footnote 1. All wooden bulkheads, modular components, floors, floor supports, paneling, trim, coring materials, faceplates, countertops, fiberglass tabbing, overlays, secondary bonding, sealants, adhesives, gaskets and epoxies are covered only by the one-year limited warranty. They are not covered by the five-year limited warranty.

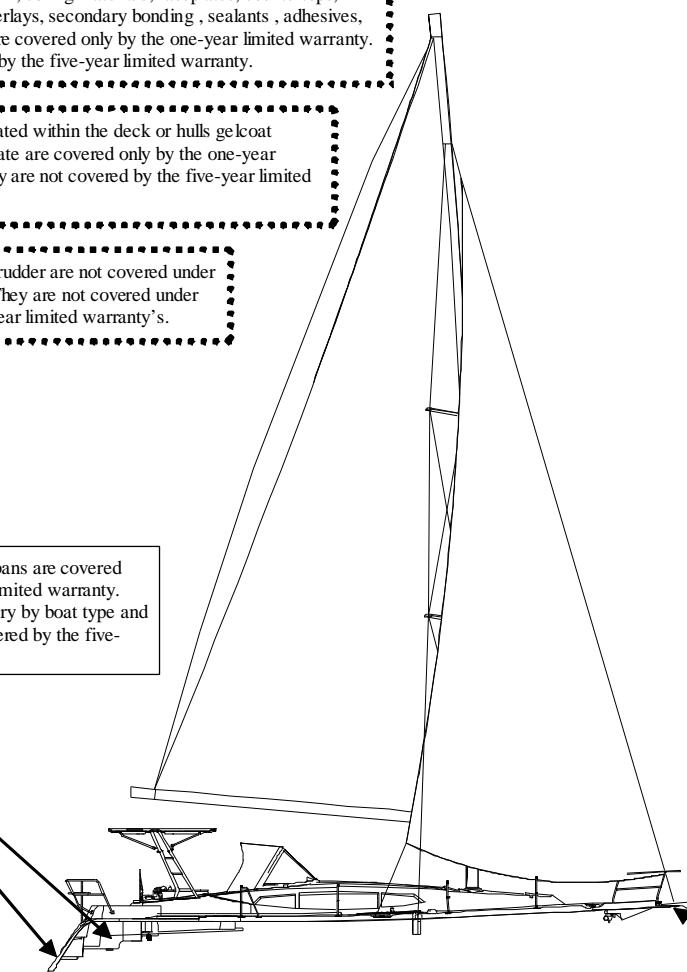
Footnote 2. Voids located within the deck or hulls gelcoat surface or build laminate are covered only by the one-year limited warranty. They are not covered by the five-year limited warranty.

Footnote 3. Keel and rudder are not covered under the blister warranty. They are not covered under the one-year or five-year limited warranty's.

Deck and deck floor-pans are covered only by the one-year limited warranty. Floor-pan sizes will vary by boat type and size. They are not covered by the five-year limited warranty.

Internal fiberglass pan and fiberglass grid system are covered by the five-year limited warranty.

Rudder, keel and centerboards (small boats) are excluded from all warranties. Keel and centerboard leaks at the attachment point are excluded from all warranties.



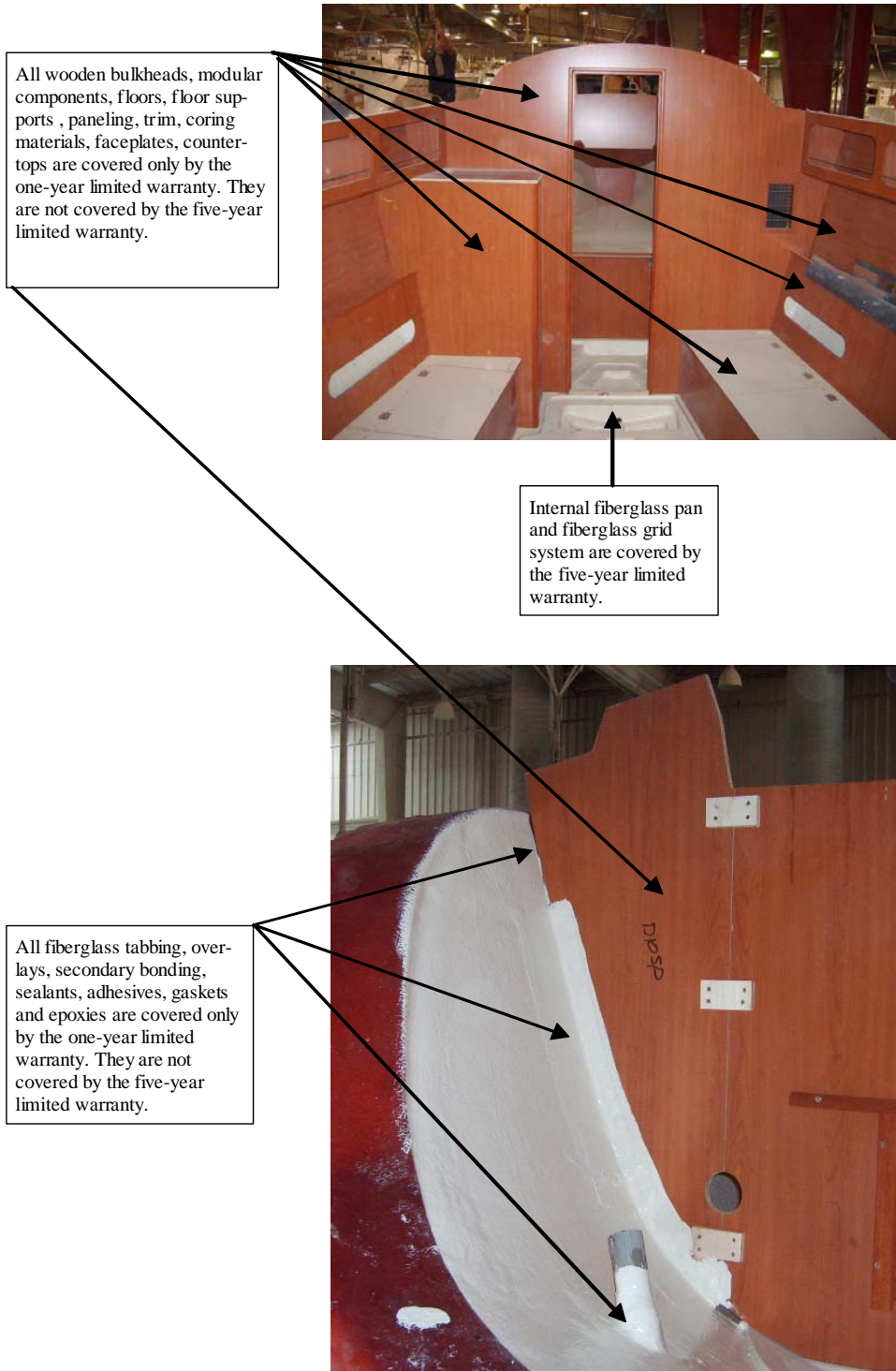
Hull to deck joint adhesives, epoxies and sealants are covered only by the one-year limited warranty. They are not covered by the five-year limited warranty.

The fiberglass hull component is covered by the five-year limited warranty. Installed items such as (but not limited to) ports, shafting, thru-hulls, vents and struts are not covered by the five-year limited warranty. The rudder and keel are excluded from all warranties.

## 2. LIMITED WARRANTY

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### GRAPHIC EXPLANATION OF WARRANTY COVERAGE



### 3. CERTIFICATION

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#### CE CERTIFIED

Hunter sailboats are manufactured in the United States and are certified by the IMCI to be in compliance with the relevant parts of the Recreational Craft Directive 94/25/EC from the European Parliament. The CE mark means the boat meets or exceeds the applicable current International Organization for Standardization (ISO) standards and directives as stated on the CE certificate supplied with your craft. The builder's plate, affixed to the boat, describes various parameters involved in the design of the boat. Please refer to it regularly when operating the boat.

Following are the Design Categories, established by the Recreation Craft Directive, which are to be considered a guideline of use application as per the Recreation Craft Directive's criteria. Hunter Marine Corporation does NOT establish these criteria, and the category indicated is only a reference to the assigned category. The safety of the captain and crew of any vessel is not measurable by such categories, and you should not interpret these categories as an indication of your safety in such condition. The skill of your captain and crew, proper preparation, appropriate safety equipment for the given conditions and a well maintained vessel are critical to safe sailing.

#### CE CRAFT DESIGN CATEGORIES

Category A- "Ocean":

Craft designed for extended voyages where conditions may exceed wind force 8 (Beaufort Scale) and include significant wave heights of 4m or more; for vessels that are largely self-sufficient.

Category B- "Offshore":

Craft designed for offshore voyages where conditions include winds up to and including wind force 8 and significant wave heights up to and including 4m may be experienced.

Category C- "Inshore":

Craft designed for voyages in coastal waters, large bays, estuaries, lakes and rivers, where conditions up to and including wind force 6 and significant wave heights up to and including 4m may be experienced.

Category D- "Sheltered Waves":

Craft designed for voyages on small lakes, rivers and canals, where conditions up to and including wind force 4 and significant wave heights up to and including 0.5m may be experienced.

For additional information, contact: International Marine Certification Institute (IMCI)  
Treves Centre, rue de Treves 45  
1040 Brussels, Belgium  
FX: (32) 2238-7700

#### NMMA CERTIFIED

Hunter sailboats are judged by the National Marine Manufacturers Association (NMMA) to be in compliance with the applicable federal regulations and American Boat and Yacht Council (ABYC) standards and recommended practices in effect at the time of manufacture.

For additional information, contact: National Marine Manufacturers Association  
200 E. Randolph Dr., Suite 5100  
Chicago, IL 60611  
PH: (1) 312-946-6200 FX: (1) 312-946-0388

## 4. BRIEF HISTORY

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<p><b>WARREN R. LUHRS</b> HUNTER MARINE'S OWNER AND FOUNDER</p>
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Warren Luhrs was born in East Orange, New Jersey in 1944 into a family with an established tradition in the maritime and transportation Industries. His great-grandfather, Henry, was a railroad and clipper-shipping pioneer in America, while his great-uncle John helped build the famous St. Petersburg to Moscow railroad for Czar Alexander II.

Henry Luhrs owned shares in twenty-two different ocean-going vessels – barks, brigs, and schooners - and was the principal owner of the bark Sophia R. Luhrs, named for his wife. He was also a partner with Albert Sprout, who managed the shipyard where the Sophia R. Luhrs was built in Melbridge, Maine.

Warren Luhrs' father, Henry, worked at a small boat manufacturer in Morgan, New Jersey, and later started his own company, continuing the Luhrs' family sea tradition during the great depression. During World War II he repaired boats and installed ice sheathing on the bows for the Coast Guard.

After the War, Henry built 27-foot fishing boats and in 1948 began to construct custom-built pleasure craft. He then turned to skiffs and in 1952 incorporated as Henry Luhrs Sea Skiffs, where he constructed lapstrake sea skiffs using assembly-line techniques. Henry personally "shook down" his prototypes on family trips up the Hudson River to Lake Champlain.

The sea skiff is a class of boat that has been very popular, owing to its seaworthiness. It features a sharp bow, which reduces pounding in surf or choppy seas, and a hull whose forward section is rounded below the waterline to increase stability in rough water or a following sea. Such skiffs can either be smooth sided or of a lapstrake construction.

Inspired by Henry Ford, Henry Luhrs aimed to give the average man the opportunity to enjoy the luxury of boating by building an affordable and reliable boat. He was both designer and engineer, and his progressive new models exhibited his talent for innovation. He successfully changed the line of the bow from straight to curve at a time when the industry trend was a straight square effect, and he is believed to be the first designer-builder to popularize a small boat with a fly bridge.

In 1960, Luhrs acquired the Ulrichsen Boat Company of Marlboro, New Jersey. It was here that Luhrs' Alura fiberglass division was located. In 1965, Henry sold his company to Bangor Arrostock Railroad, which was to become the recreational conglomerate Bangor-Punta. It was also during this period that Silverton of Tom's River, New Jersey was purchased by John and Warren Luhrs.

Today, Warren R. Luhrs and his brother John own the Luhrs Group of marine manufacturers, which consists of Silverton Marine, Mainship Motor Yachts, and Luhrs Fishing Boats with its Alura division, as well as Hunter Marine, which exclusively manufactures sailboats.

In January of 1996, the Luhrs family transferred a portion of the Luhrs Group to its employees through an ESOP program.



## 5. GLOSSARY OF SAILING TERMS

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### A

**Aback:** describes a sail when the wind strikes it on the lee side.

**Abaft:** towards the boat's stern.

**Abeam:** at right angles to the centerline of the boat.

**Aft:** at or near the stern.

**Amidships:** the center of the boat, athwartships and fore and aft.

**Anti-fouling:** a poisonous paint compound used to protect the underwater part of a hull from marine growths.

**Apparent wind:** The direction and speed of the wind felt by the crew. It is a combination of true wind and that created by the movement of the boat.

**Astern:** behind the boat; to go astern is to drive the boat in reverse.

**Athwartships:** at right angles to the fore and aft line of the boat.

### B

**Back:** when a wind backs, it shifts anticlockwise.

**Back a sail:** to sheet it to windward so that the wind fills on the side that is normally to leeward.

**Backstay:** a stay that supports the mast from aft and prevents its forward movement.

**Ballast:** extra weight, usually lead or iron, placed low in the boat or externally on the keel to provide stability.

**Ballast keel:** a mass of ballast bolted to the keel to increase stability and prevent a keel boat from capsizing.

**Batten:** a light, flexible strip fed into a batten pocket at the leech of the sail to support the roach.

**Beam:** 1, the maximum breadth of a boat; 2, a transverse member that supports the deck; 3, on the beam means that an object is at right angles to the centerline.

**Bear away:** to steer the boat away from the wind.

**Bearing:** the direction of an object from an observer, measured in

degrees true or magnetic.

**Beat:** to sail a zigzag course towards the wind, close-hauled on alternate tacks.

**Delay:** to make fast a rope around a cleat, usually with a figure-of-eight knot.

**Bend:** 1, to secure a sail to a spar before hoisting; 2, to moor a boat; 3, a sleeping place on board.

**Bight:** a bend or loop in a rope.

**Bilge:** the lower, round part inside the hull where the water collects.

**Block:** a pulley in a wooden or plastic case, consisting of a sheave around which a rope runs. It is used to change the direction of pull.

**Boot-topping:** a narrow colored stripe painted between the bottom paint and the topside enamel.

**Bottlescrew:** see Rigging screw.

**Broach:** when a boat running downwind slews broadside to the wind and heels dangerously. It is caused by heavy following seas or helmsman's error.

**Broad reach:** the point of sailing between a beam reach and a run, when the wind blows over a quarter.

**Bulkhead:** a partition wall in a boat normally fitted athwartships

### C

**Caulk:** to make the seams between wooden planks watertight by filling with cotton, oakum or a compound.

**Cavitation:** the formation of a vacuum around a propeller, causing a loss in efficiency.

**Center-board:** a board lowered through a slot in the keel to reduce leeway.

**Center-line:** center of the boat in a fore and aft line.

**Center of effort (COE):** the point at which all the forces acting on the sails are concentrated.

**Center of lateral resistance (CLR):** the underwater center of pressure about which a boat pivots when changing course.

**Chain pawl:** a short lug which drops into a toothed rack to prevent the anchor chain running back.

**Chain plate:** a metal plate bolted to the boat to which the shrouds or backstays are attached.

**Chart datum:** reference level on a chart below which the tide is unlikely to fall. Soundings are given below chart datum. The datum level varies according to country and area.

**Chine:** the line where the bottom of the hull meets the side at an angle.

**Cleat:** a wooden, metal or plastic fitting around which rope is secured.

**Clevis pin:** a locking pin through which a split ring is passed to prevent accidental withdraw.

**Clew:** the after, lower center of a sail where the foot and leech meet.

**Close-hauled:** the point of sailing closest to the wind; see also beat.

**Close reach:** the point of sailing between close-hauled and a beam reach, when the wind blows forward of the beam.

**Close-winded:** describes a boat able to sail very close to the wind.

**Coaming:** the raised structure surrounding a hatch, cockpit, etc., which prevents water entering.

**Cotter pin:** soft, metal pin folded back on itself to form an eye.

**Course:** the direction in which a vessel is steered, usually given in degrees; true, magnetic or compass.

**Cringle:** 1, a rope loop, found at either end of a line of reef points; 2, an eye in a sail.

**Centerboard:** centerboard is retractable. The mechanism of centerboard allows the keel to be raised to operate in shallow waters.

### D

**Dead run:** running with the wind blowing exactly aft, in line with the center-line.

**Deviation:** the difference between the direction indicated by the compass needle and the magnetic

## 5. GLOSSARY OF SAILING TERMS

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meridian; caused by object aboard.

**Displacement:** 1, the weight of water displaced by a boat is equal to the weight of the boat; 2, a displacement hull is one that displaces its own weight in water and is only supported by buoyancy, as opposed to a planning hull which can exceed its hull, or displacement, speed.

**Downhaul:** a rope fitted to pull down a sail or spar.

**Draft:** the vertical distance from the waterline to the lowest point of the keel.

**Drag:** 1, an anchor drags when it fails to hold; 2, the force of wind on the sails, or water on the hull, which impedes the boat's progress.

**Drift:** 1, to float with the current or wind; 2, US the speed of a current (rate UK); 3, UK: the distance a boat is carried by a current in a given time.

**Drogue:** a sea anchor put over the stern of a boat or life raft to retard drift.

**Drop keel:** a retractable keel which can be drawn into the hull, when entering shallow waters and recovering on to a trailer.

### E

**Eye of the wind:** direction from which the true wind blows.

### F

**Fair:** well-faired line or surface is smoother with no bumps, hollows or abrupt changes in directions.

**Fairlead:** a fitting through which a line is run to alter the lead of the line.

**Fathom:** the measurement used for depths of water and lengths of rope. 1 fathom = 6 ft. or 1.83m.

**Fid:** a tapered tool used for splicing heavy rope and for sail-making, often hollow.

**Fiddle:** a raised border for a cabin table, chart table etc., to prevent objects falling off when the boat heels.

**Fix:** the position of the vessel as plotted from two or more position

lines.

**Forestay:** the foremost stay, running from the masthead to the stemhead, to which the headsail is hanked.

**Freeboard:** vertical distance between the waterline and the top of the deck.

### G

**Genoa:** a large headsail, in various sizes, which overlaps the mainsail and is hoisted in light to fresh winds on all points of sailing.

**Gimbals:** two concentric rings, pivoted at right angles, which keeps objects horizontal despite the boat's motion, e. g. compass and cooker.

**Go about:** to turn the boat through the eye of the wind to change tack.

**Gooseneck:** the fitting attaching the boom to the mast, allowing it to move in all directions.

**Goosewing:** to boom-out the headsail to windward on a run by using a whisker pole to hold the sail on the opposite side to the mainsail.

**Ground tackle:** general term used for anchoring gear.

**Guard rail:** a metal rail fitted around the boat to prevent the crew falling overboard.

**Gudgeon:** a rudder fitting. It is the eye into which the pintle fits.

**Guy:** a steadying rope for a spar; a spinnaker guy controls the fore and aft position of the spinnaker pole; the foreguy holds the spinnaker pole forward and down.

**Gybe:** to change from one tack to another by turning the stern through the wind.

### H

**Halyard:** rope used to hoist and lower sails.

**Hank:** fitting used to attach the luff of a sail to a stay.

**Hatch:** an opening in the deck giving access to the interior.

**Hawes pipe:** see Navel pipe.

**Head-topwind:** when the bows are pointing right into the wind.

**Headfoil:** a streamlined surround to a forestay, with a groove into which a headsail luff slides.

**Heads:** the toilet.

**Headway:** the forward movement of a boat through the water.

**Heave-to:** to back the jib and lash the tiller to leeward; used in heavy weather to encourage the boat to lie quietly and to reduce headway.

**Heaving line:** a light line suitable for throwing ashore.

**Heel:** to lean over to one side.

### I

**Isobars:** lines on a weather map joining places of equal atmospheric pressure.

### J

**Jackstay:** a line running fore and aft, on both sides of the boat, to which safety harnesses are clipped.

**Jury:** a temporary device to replace lost or damaged gear.

### K

**Keel:** the main backbone of the boat to which a ballast keel is bolted or through which the centerboard passes.

**Kicking strap:** a line used to pull the boom down, to keep it horizontal, particularly on a reach or run.

### L

**Lanyard:** a short line attached to one object, such as a knife, with which it is secured to another.

**Leech:** 1, the after edge of a triangle sail; 2, both side edges of a square sail.

**Leehelm:** the tendency of a boat to bear away from the wind.

**Lee shore:** a shore on to which the wind blows.

**Leeward:** away from the wind; the direction to which the wind blows.

**Leeway:** the sideways movement of a boat off its course as a result of the wind blowing on one side of the sails.

## 5. GLOSSARY OF SAILING TERMS

---

**Lifeline:** a wire or rope rigged around the deck to prevent the crew falling overboard.

**Limber holes:** gaps left at the lower end of frames above the keel to allow water to drain to the lowest point of the bilges.

**List:** a boat's more or less permanent lean to one side, owing to the improper distribution of weight, e.g., ballast or water.

**Log:** 1, an instrument for measuring a boat's speed and distance traveled through the water; 2, to record in a book the details of a voyage, usually distances covered and weather.

**Luff:** the forward edge of a sail. To luff up is to turn a boat's head right into the wind.

**Luff groove:** a groove in a wooden or metal spar into which the luff of a headsail is fed.

**Lurch:** the sudden roll of a boat.

### M

**Marlin spike:** a pointed steel or wooden spike used to open up the strands of rope or wire then splicing.

**Mast Step:** the socket in which the base of the mast is located.

**Measured mile:** a distance of one nautical mile measured between buoys or transits/ranges ashore, and marked on the chart.

**Member:** a part of the skeleton of the hull, such as a stringer laminated into fiberglass hull to strengthen it.

**Meridian:** an imaginary line encircling the Earth that passes through the poles and cuts at right angles through the Equator. All lines of longitude are meridians.

**Mizzen:** 1, the shorter, after-mast on a ketch or yawl; 2, the fore and aft sail set on this mast.

### N

**Navel pipe:** a metal pipe in the foredeck through which the anchor chain passes to the locker below.

**Noon Sight:** a vessel's latitude can be found, using a sextant, when a

heavenly body on the observer's meridian is at its greatest altitude. The sight of the sun at noon is the one most frequently taken.

### O

**Off the wind:** with the sheets slacked off, not close-hauled.

**On the wind:** close-hauled.

**Out haul:** a rope used to pull out the foot of a sail.

**Overall length (LOA):** the boat's extreme length, measured from the foremost part of the bow to the aftermost part of the stern, excluding bowsprit, self-steering gear etc.

### P

**Painter:** the bow line by which a dinghy, or tender, is towed or made fast.

**Pintle:** a rudder fitting with a long pin that fits into the gudgeon to form a hinged pivot for the rudder.

**Pitch:** 1, the up and down motion of the bows of a boat plunging over the waves; 2, the angle of the propeller blades.

**Point of sailing:** the different angles from which a boat may sail; the boat's course relative to the direction of the wind.

**Port:** the left-hand side of the boat, looking forward (opp. of starboard).

**Port tack:** a boat is on a port tack when the wind strikes the port side first and the mainsail is out to starboard. A boat on the port tack gives way to a boat on a starboard tack.

**Position line/ Line of position:** a line drawn on a chart, as a result of taking a bearing, along which the boat's position must be i.e. Two position lines give a fix.

**Pulpit:** a metal guard rail fitted at the bows of a boat to provide safety for the crew.

**Pushpit:** a metal guard rail fitted at the stern.

### Q

**Quarter:** the portion of the boat midway between the stern and the beam; on the quarter means about 45 degrees abaft the beam.

### R

**Rake:** the fore and aft deviation from the perpendicular of a mast or other feature of a boat.

**Range:** 1, see transit; 2, of tides, the difference between the high and low water levels of a tide; 3, the distance at which a light can be seen.

**Rating:** a method of measuring certain dimensions of a yacht to enable it to take part in handicap races.

**Reach:** to sail with the wind approximately on the beam; all sailing points between running and close-hauled.

**Reef:** to reduce the sail area by folding or rolling surplus material on the boom or forestay.

**Reefing pennant:** strong line with which the luff or leech cringle is pulled down to the boom when reefing.

**Rhumb line:** a line cutting all meridians at the same angle; the course followed by a boat sailing in a fixed direction.

**Riding light to anchor light:** an all-around white light, usually hoisted on the forestay, to show that a boat under 50 ft. (15m.) is at anchor. It must be visible for 2 mls. (3 km.).

**Rigging screw:** a deck fitting with which the tensions of standing rigging, e.g. stays, shrouds, etc. are adjusted.

**Roach:** the curved part of the leech of a sail that extends beyond the direct line from head to clew.

**Run:** to run with the wind aft and with the sheets eased well out.

**Running rigging:** all the moving lines, such as sheets and halyards, used in the setting and trimming of sails.

## 5. GLOSSARY OF SAILING TERMS

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### S

**Scope:** the length of rope or cable paid out when mooring or anchoring.

**Scuppers:** 1, holes in the toe rail that allow water to drain off the deck; 2, drain cockpit through hull.

**Seacock:** a valve that shuts off an underwater inlet or outlet passing through the hull.

**Seize:** to bind two ropes together, or a rope to a spar, with a light line.

**Serve:** to cover and protect a splice or part of a rope with twine bound tightly against the lay.

**Serving mallet:** tool with a grooved head, used when serving a rope to keep the twine at a constant and high tension.

**Set:** 1, to hoist a sail; 2, the way in which the sails fit; 3, the direction of tidal current or steam.

**Shackle:** a metal link with a removable bolt across the end; of various shapes: D, U.

**Sheave:** a grooved wheel in a block or spar for a rope to run on.

**Sheet:** the rope attached to the clew of a sail or to the boom, enabling it to be controlled or trimmed.

**Shrouds:** ropes or wires, usually in pairs, led from the mast to the chain plates at deck level to prevent the mast falling sideways; part of the standing rigging.

**Sloop:** a single-masted sailing boat with a mainsail and one head sail.

**Spar:** a general term for any wooden or metal pole, e.g., mast or boom, used to carry or give shape to sails.

**Spindrift:** spray blown along the surface of the sea.

**Spinnaker:** a large, light, balloon shaped sail set when reaching or running.

**Splice:** to join ropes or wire by unlaying the strands and interweaving them.

**Split pin:** see cotter pin.

**Spreaders:** horizontal struts attached to the mast, which extends to the

shrouds and help to support the mast.

**Stall:** a sail stalls when the airflow over it breaks up, causing the boat to lose way.

**Stanchion:** upright metal post bolted to the deck to support guardrails or lifelines.

**Standing part:** the part of a line not used when making a knot; the part of a rope that is made fast, or around which the knot is tied.

**Standing rigging:** the shrouds and stays that are permanently set up and support the mast.

**Starboard:** right-hand side of a boat looking forward (opp. of port).

**Starboard tack:** a boat is the starboard tack when the wind strikes the starboard side first and the boom is out to the port.

**Stay:** wire or rope which supports the mast in a fore and aft direction; part of the standing rigging.

**Steerage way:** a boat has steerage way when it has sufficient speed to allow it to be steered, or to answer the helm.

**Stem:** the timber at the bow, from the keel upward, to which the planking is attached.

**Sternway:** the backward, stern-first movement of a boat.

**Stringer:** a fore and aft member, fitted to strengthen the frames.

### T

**Tack:** 1, the lower forward corner of a sail; 2, to turn the boat through the wind so that it blows on the opposite sides of the sails.

**Tacking:** working to windward by sailing close-hauled on alternate courses so that the wind is first on one side of the boat, then on the other.

**Tack pennant:** a length of wire with an eye in each end, used to raise the tack of a headsail some distance off the deck.

**Tackle:** a purchase system comprising of rope and blocks that is

used to gain mechanical advantage.

**Tang:** a strong metal fitting by which standing rigging is attached to the mast or other spar.

**Tender of dinghy:** a small boat used to ferry stores and people to a yacht.

**Terminal fitting:** fitting at the end of a wire rope by which a shroud or stay can be attached to the mast, a tang or a rigging screw/ turnbuckle.

**Tide:** the vertical rise and fall of the oceans caused by the gravitational attraction of the moon.

**Toe rail:** a low strip of metal or molding running around the edge of the deck.

**Topping lift:** a line runs from the masthead to a spar, normally the boom, which is used to raise it.

**Topsides:** the part of a boat's hull that is above the waterline.

**Track:**

1, the course a boat has made good; 2, a fitting on the mast or boom into which the slides on a sail fit; 3, a fitting along which a traveler runs, used to alter the angle of the sheets.

**Transit:** two fixed objects are in transit when seen in line; two transit give position fix.

**Traveler:** 1, a ring or hoop that can be hauled along a spar; 2, a fitting that slides in a track and is used to alter the angle of the sheets.

**Trim:** 1, to adjust the angle of the sails, by means of sheets, so that they work most efficiently; 2, to adjust the boat's load, and thus the fore and aft angle at which it floats.

**True wind:** the direction and speed of the wind felt when stationary, at anchor or on land.

**Turnbuckle:** see Rigging screw.

### U

**Under way:** a boat is under way when it is not made fast to shore, at anchor or aground.

**Up-haul:** a line used to raise something vertically, e.g., the spinnaker pole.

## 5. GLOSSARY OF SAILING TERMS

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### V

**Veer:** 1, the wind veers when it shifts in clockwise direction; 2, to pay out anchor cable or rope in a gradual, controlled way.

### W

**Wake:** the disturbed water left astern of a boat.

**Waterline:** the line along the hull at which a boat floats.

**Waterline length (WL):** the length of a boat from stem to stern at the waterline. It governs the maximum speed of displacement hull and effects a boats rating.

**Weather helm:** ( opp. of lee helm).

**Weather side:** the side of a boat on which the wind is blowing.

**Wetted surface:** the area of the hull under water.

**Whisker pole:** a light pole used to hold out the clew of a headsail when running.

**Winch:** a mechanical device, consisting usually of a metal drum turned by a handle, around which a line is wound to give the crew more purchasing power when hauling taut a line, e.g. a jib sheet.

**Windage:** those parts of a boat that increase drag, e.g., rigging, spars, crew, etc.

**Windlass:** a winch with a horizontal shaft and a vertical handle, used to haul up the anchor chain.

**Windward:** the direction from which the wind blows; towards the wind (opp. of leeward).

### Y

**Yawl:** a two masted boat with a mizzen stepped aft of the rudder stock/ post.

## 6. EXPLANTATION OF SYMBOLS AND LABELS

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**THIS MANUAL CONTAINS SAFETY PRECAUTIONS THAT MUST BE OBSERVED WHEN OPERATING OR SERVICING YOUR BOAT. REVIEW AND UNDERSTAND THESE INSTRUCTIONS.**

### **DANGER**

**Denotes an extreme intrinsic hazard exists which will result in death or serious injury if proper precautions are not taken**

### **WARNING**

**Denotes a potential hazard exists which can result in injury or death if proper precautions are not taken**

### **CAUTION**

**Denotes a reminder of safety practices or directs attention to unsafe practices which could result in personal injury or damage to the craft or components**

## 7. SAFE BOATING TIPS

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### \*\*\* BE PREPARED \*\*\*

Take a safe boating course. In the U.S., contact your local Boating Industry, such as the ASA ([www.ASA.com](http://www.ASA.com)) or US Sailing ([www.USSailing.org](http://www.USSailing.org)), for course information.

Carry all safety equipment required by the laws that apply to your area. Requirements are generally available from the Coast Guard (<http://nws.cgaux.org>) or your local boating industry.



### CAUTION

#### SAFETY HAZARD

Obtaining and maintaining the necessary safety equipment is the responsibility of the owner. For more information about equipment required, contact local boating authorities

### MINIMUM RECOMMENDED SAFETY EQUIPMENT

- Required life saving equipment, including life vests and throwables.
- First Aid kit
- Anchor with sufficient line and/or chain
- Flashlight with good batteries
- Binoculars
- Appropriate navigational charts
- Flares
- Noise emitting device

- Sufficient food and water provisions
- Sunglasses and block
- Blanket
- Oar(s)

The legally required on-board safety equipment may vary by region or body of water. Please check with local authorities prior to departure for a safety examination.

### LIFE JACKETS

**WEARING** a life jacket may save your life. Keep jackets in a readily accessible place – not in a closed compartment or stored under other gear. Remove them from any packaging and keep throwable floatation devices ready for immediate use.



### WARNING

#### DROWING HAZARD

Children under 12, those physically restricted, and non-swimmers must wear lifejackets at all times. Make sure all passengers are properly instructed in use of life saving gear.

### FIRE EXTINGUISHERS

Approved fire extinguishers are required on most boats, local authorities can provide details. All passengers should know the location and operating procedure of each fire extinguisher. Fire extinguishers are normally classified according to fire type. Be familiar with the type of fire extinguishers required on board.



### WARNING

#### FIRE HAZARD

Understand and provide the type and quantity of fire extinguishers required on your boat. Refer to your boating handbook for extinguisher specifications and quantities required for your boat.



## 7. SAFE BOATING TIPS

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### FLARES

Most boats operating on coastal waters are required to carry approved visual distress signals, therefore check with your local authorities as to which types are required.



#### **WARNING**

##### **FIRE/EXPLOSION HAZARD**

Pyrotechnic signaling devices can cause injury and property damage if not handled properly. Follow manufacturer's directions regarding the proper use of signaling devices.

### ALCOHOL / DRUGS AND BOATING

Drugs and alcohol affect a person's ability to make sound judgments and react quickly. As a responsible boater, you should refrain from using drugs or alcohol (singly or combined) while operating your boat. Operation of motorized vessels while under the influence carries a significant penalty. Drugs and alcohol decrease your reaction time, impair your judgment and inhibit your ability to safely operate your boat.



#### **WARNING**

##### **IMPAIRED OPERATION HAZARD**

Impaired vision or judgment on the water can lead to accidents and personal injury. Operating any boat while intoxicated or under the influence of drugs is both dangerous and illegal.

### BEFORE GETTING UNDERWAY

- Leave a float plan (see example Section 10).
- Perform a pre-departure checklist (see example Section 9).
- Check the weather. Do not venture out if the weather is, or will be, threatening.

### WHILE UNDERWAY

- Keep a good lookout. Keep a watch to the leeward under the headsail. Keep away from swimmers, divers and skiers.
- Know and obey local boating laws.
- Respect bad weather, and be prepared for quickly changing conditions.



#### **WARNING**

##### **COLLISION HAZARD**

Use extra caution in shallow water or where underwater/floating objects may be present. Hitting an object at speed or severe angle can cause serious injury and/or damage your boat.

## 7. SAFE BOATING TIPS

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### BALLAST TANK

The EDGE is equipped with an internal water ballast tank that provides stability and self-righting. The ballast tank must be completely full when under sail and power. If the tank is not completely full, the boat's stability will be reduced and its ability to self-right may be significantly impaired, plus you may experience decreased steering capability. Periodically inspect ballast tank valves to guard against undesired or unexpected water loss. Under no condition should the water ballast tank be filled by reversing the outboard engine. Forced entry of water into the ballast tank may cause permanent damage to the tank.



### **DANGER**

#### **CAPSIZE HAZARD**

**THE WATER LEVEL OF THE BALLAST TANK IS CRITICAL. ENSURE THE BALLAST TANK IS COMPLETELY FULL BEFORE RAISING SAILS, MOTORING ABOVE 6 MPH OR EXCEEDING WAKE SPEED. ANY LEVEL OF THE TANK OTHER THAN COMPLETELY FULL WILL PRODUCE INSTABILITY AND MAY LEAD TO CAPSIZING.**

### CREW SIZE, WEIGHT & LOCATION

The EDGE is weight specified at a maximum crew size of 6 persons which must not exceed more than 1,438 pounds (652kg) including persons, gear and propulsion. Crew placement is important when shifting between sail and power modes. The position of the center board, rudder, mast, sail and engine can contribute to various changes in the vessel's handling when the boat is moving. In the power mode, always ensure the crew is seated within the cockpit and evenly distributed port and starboard. In general, weight should be positioned low and aft, therefore, ensure heavy items are not stored in the v-berth and crew is not positioned on the cabin top or foredeck. In sail mode, crew position will fluctuate based on the crew member's role, wind conditions, tacking, etc.



### **DANGER**

#### **CAPSIZE HAZARD**

**FAILURE TO ADHERE TO THE FOLLOWING GUIDELINES MAY LEAD TO A CAPSIZED VESSEL RESULTING IN POSSIBLE PROPERTY DAMAGE, MAN OVERBOARD SITUATION OR POSSIBLE DEATH.**

**Maximum crew size of 6 persons or 1,438 lbs (652 kg) includes persons, gear and propulsion.**

**In power mode travel, ensure:**

- 1. Crew is off the cabin top and foredeck unless docking at idle speed**
- 2. Engine should be off and boat resting before moving forward to deploy anchor**
- 3. Crew is seated in cockpit and distributed evenly port and starboard**
- 4. Ballast tank should be completely full**

## **8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST**

Dear Hunter Owner,

Attached you will find a list of items and recommendations that we believe should be incorporated into your own ongoing list of preventative maintenance items and safety check points. **THIS LIST SHOULD NOT BE CONSIDERED A COMPLETE SERVICE MANUAL OR THE ONLY ITEMS ON YOUR BOAT IN NEED OF ROUTINE MAINTENANCE, INSPECTION OR ATTENTION.**

You will find that we address commonly found optional equipment items installed on Hunter boats, as well as most standard equipment from Hunter Marine. Owners need to familiarize themselves with individual equipment manuals on all such items, especially aftermarket purchases or optional equipment installed by your dealer or Hunter Marine. This should ensure that you are following the manufacturer's recommendations for proper maintenance and upkeep.

We strongly recommend that all owners complete a Power Squadron course followed with a complementary boat inspection before leaving the dock. To locate a Power Squadron in your area please visit < [www.usps.org](http://www.usps.org) >.

Reviewing and familiarizing yourself with the Chapman's Piloting Manual is also highly recommended for every boat owner. This manual contains demonstrations for safety drills which should be practiced routinely, dealing with adverse conditions, general boat handling and recommended safety equipment. Our opinion is that no boat owner should operate a boat without first reviewing this manual and without having ready access to it while sailing.

We hope that this list will be beneficial to you in your ongoing maintenance and upkeep. Safe boating!

Thank You

Hunter Marine

## 8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST

### OUT OF WATER INSPECTION CHECKLIST

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.

A QUALIFIED TECHNICIAN SHOULD BE USED IF YOU ARE NOT COMPLETELY CONFIDENT IN YOUR ABILITY TO MAKE REPAIRS OR INSPECTIONS.



#### **WARNING**

##### **TRAVEL HAZARD**

Check the ballast tank water intake guillotine valve for proper function prior to any launch procedure. Ensure the ballast tank guillotine valve and vent valve are closed. Failure to do so may cause unexpected results under power or sail.

#### **General**

- ☐ Ballast tank guillotine valve is properly functioning
- ☐ All thru-hulls and valves inspected for corrosion, labels and closed until after launch
- ☐ Bottom paint in satisfactory condition
- ☐ Hull freshly cleaned and waxed (free of gelcoat damage)
- ☐ Mooring, safety lines and fenders onboard and in good condition
- ☐ Inspect start battery and optional 2<sup>nd</sup> battery for proper installation, fully charged and functioning
- ☐ All battery terminals clean and wires secured
- ☐ Inspect outboard engine according to manufacturer's recommendations

- ☐ Transducer(s) are in place and secured properly; throttle/ transmission control handle rotates smoothly
- ☐ Hose clamps on all systems below water line are tight
- ☐ Centerboard(Keel) bolts tight and clean
- ☐ Centerboard(Keel) raising line working properly
- ☐ Boat is free of internal and external water leaks above water line (Failure to stop water intrusion could result in permanent damage or deterioration of structural coring materials, internal wiring and cause mildew and molding)

#### **Mast Assembly**

- ☐ Maintain mast assembly according to manufacturer's recommendations
- ☐ Spreaders securely fastened; mast and spreaders free of corrosion and stress cracks
- ☐ Standing rigging and pins inspected for wear, tear, corrosion and cracking
- ☐ External wiring secured for navigation lights (anchor/steaming lights, bow light and stern light)
- ☐ Optional electronic wind indicator installed per manufacturer's recommendation
- ☐ Optional wind indicator installed and functioning properly
- ☐ Optional VHF antenna installed and working properly
- ☐ Optional headsail furling system installed and inspected per manufacturer's recommendations
- ☐ Running rigging inspected for wear and tear

## 8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST

- ☐ Mast step stand-up blocks secured and operational
- ☐ Main sail, jib sail and flaking system inspected for wear and tear
- ☐ Check condition and operation of sails
- ☐ Specified pre-bend and diagonal tensions attained in mast according to the mast manufacturer's commendations
- ☐ Mast to deck wiring is properly attached

### Anchor System and Ground Tackle

- ☐ Optional anchor secured in bow roller assembly
- ☐ Optional spare anchor onboard and accessible; see Chapman's Manual for recommendations on anchors, anchor lines and drogues
- ☐ Anchor line pays out and retrieves into anchor locker without difficulty
- ☐ Anchor assembly inspected and free of abrasions
- ☐ Anchor locker hatch secures properly with anchor and line in place
- ☐ Anchor locker free of debris inside
- ☐ Anchor locker drain-plate is free of debris

### Steering System

- ☐ Rudder turns easily and correctly with wheel direction
- ☐ Rudder raising system working and functioning properly
- ☐ Inspect rudder for cracks and/or concealed damage
- ☐ Bolts and brackets secured and steering cable functioning properly

### Primary Pumps

- ☐ Optional bilge pump and manual bilge pump functioning properly

- ☐ Electric bilge pump, float switch (discharge hose has anti-siphon loop in place to prevent back flow under sail) operating properly
- ☐ Optional fresh water pumps functioning properly
- ☐ Optional toilet flush pumps functioning properly

### Illumination and Small Electrical Components Check

- ☐ Bow light, cabin lights, stern light, masthead light, chart light illuminating
- ☐ Anchor light illuminating
- ☐ Smoke detectors operational
- ☐ CO detector operational
- ☐ High water bilge alarm functioning properly
- ☐ Optional shore power cord and adapter plug operational
- ☐ Optional 110 or 220 VAC outlets operational – Ground fault circuits functioning
- ☐ Optional 110 or 220 VAC/battery charging systems functioning properly
- ☐ Compass and compass light functioning properly

### Fresh Water Systems

- ☐ Portable water tank and galley faucet water pump functioning properly
- ☐ Optional water tank and shut-off valve functioning
- ☐ All water lines and components purged of air and checked for leaks
- ☐ Sinks and drains checked for leaks and adequate flow
- ☐ Optional cockpit shower operational
- ☐ Optional fresh water system strainer clean

## 8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST

### Head and Holding Tank Systems

- ☐ Portable sanitation head holding tank clean
- ☐ Optional marine head vent clear from tank to atmosphere
- ☐ Optional marine head toilet flushes to holding tanks properly
- ☐ Optional marine head holding tank waste level checked
- ☐ Optional marine head fittings and hoses checked for leaks or signs of cracks

### Galley Systems

- ☐ Optional butane stove operational; refer to manufacturer's manual for proper operation and trouble shooting
- ☐ Optional electric cooler operational and proper temperature attained
- ☐ Galley sink drain plate free of debris
- ☐ Hose clamps tight and secured; no signs of cracks on sink drain hose
- ☐ Galley sink drain ball valve/handle functioning properly

### Deck

- ☐ Swim seats/ladders/grab plate operational
- ☐ Companionway hatches operate properly (recheck this after the boat is in water)
- ☐ Companionway drop-ins fit properly in companionway and line locker
- ☐ Optional canvas properly cleaned and installed
- ☐ Optional cockpit cushions cleaned and installed
- ☐ Lifeline shackles tight and secure
- ☐ Rubrail sealed and secured to hull
- ☐ Load bearing hardware sealed and securely fastened; this includes but is not limited to chainplates, winches and handrail

- ☐ Port/starboard chainplate assemblies are secured and tightened
- ☐ Plexiglass hatches, ports, windscreens and windows adjusted and cleaned
- ☐ All thru deck fittings sealed properly; flipping cap on thru deck fitting functioning properly
- ☐ Topside surface clean and free of damage

### Interior Inspection

- ☐ Drop-in hatches for bunks and floors in place and fit securely
- ☐ Interior steps and grab rails secured
- ☐ Ballast tank access cover secured; no signs of cracks on ballast tank
- ☐ Bilges clean and free of debris (is this possible??)
- ☐ Opening port and hatch screens in place
- ☐ Optional blinds/privacy curtains, shades and interior cushions cleaned and secured
- ☐ Head door open/shut/latch properly
- ☐ Ensure all wires and connection on distribution panels are tight (should be professionally inspected)
- ☐ Optional stereo/CD operational
- ☐ Owner supplied Chapman's Manual onboard and readily available
- ☐ Safety gear onboard, readily available and up to date. See Chapman's Manual and US Coast Guard website at < [www.uscg.mil](http://www.uscg.mil) >for details
- ☐ Operator's Manual onboard
- ☐ User's Manual onboard

### Outboard Engine and Fuel System

- ☐ Review manufacturer's outboard engine manual for operating procedure and maintenance

## 8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li><input type="checkbox"/> <b>Outboard engine mounting bolts in place, tightened, secured and properly torqued</b></li><li><input type="checkbox"/> Crankcase oil at full mark (per engine manual)</li><li><input type="checkbox"/> Transmission fluid/oil at full mark (per engine manual)</li><li><input type="checkbox"/> Seawater intake free of debris</li><li><input type="checkbox"/> Air bled from fuel lines and no sign of fuel leaks at fittings</li><li><input type="checkbox"/> Throttle and outboard engine steering linkages smooth and operational</li></ul> | <ul style="list-style-type: none"><li><input type="checkbox"/> Throttle cable tension set properly</li><li><input type="checkbox"/> Shifter with trim switch functioning properly</li><li><input type="checkbox"/> Shutdown system operational</li><li><input type="checkbox"/> Fuel tank clean, no cracks or damage, shut off valve closed properly</li><li><input type="checkbox"/> Fuel lines clean and free of cracks or damage, hose clamps tightened and secured</li><li><input type="checkbox"/> Starting sequence and alarms correct according to engine manufacturer's recommendations</li></ul> |
|--|---|

Date of inspection: \_\_\_\_\_

Inspection made by: \_\_\_\_\_



## 8. PRELIMINARY CARE AND MAINTENANCE CHECKLIST

### IN WATER INSPECTION CHECKLIST

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.



#### **DANGER**

##### **CAPSIZE HAZARD**

THE WATER LEVEL OF THE BALLAST TANK IS CRITICAL. ENSURE THE BALLAST TANK IS COMPLETELY FULL BEFORE RAISING SAILS, MOTORING ABOVE 6 MPH OR EXCEEDING WAKE SPEED. ANY LEVEL OF THE TANK OTHER THAN COMPLETELY FULL WILL PRODUCE INSTABILITY AND MAY LEAD TO CAPSIZING.

#### **Dockside Inspection of Outboard Engine and Operating System**

- ☐ Review manufacturer's engine manual for proper engine starting procedure
- ☐ Correct idle rpm (per engine manual)
- ☐ Hour meter operational
- ☐ Neutral safety start switch operational
- ☐ No fuel/oil/water leaks on engine
- ☐ Engine seawater flowing properly

#### **Dockside Pre-sail Inspection**

- ☐ Standing rigging tuned statically – all fittings pinned and secured (re-check after sailing)
- ☐ Jib sail installed, optional furling system operational
- ☐ Main sail installed and operates smoothly
- ☐ Main sail flaking system properly adjusted
- ☐ All reefing points in good condition and working properly
- ☐ Topping lift and outhaul operational
- ☐ Sheets/blocks/winches operate correctly and easily under load
- ☐ All line stoppers operational and labeled
- ☐ All electronic equipment calibrated
- ☐ Owner Supplied VHF operational
- ☐ Complete safety package onboard and up-to date (see Chapman's manual and US Coast Guard rules and regulations)
- ☐ Secure and evenly distribute all loose equipment and weight
- ☐ Complementary onboard inspection made by local Power Squadron

Date of inspection: \_\_\_\_\_

Inspection made by: \_\_\_\_\_

## 9. PRE-DEPARTURE CHECKLIST

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theEDGE is designed to operate under sail mode or power mode. You must clearly understand the basic factors directly affecting your chosen mode of travel before departing.

Your boat can not operate at speeds over 6 mph under both auxiliary power and under sail. This will cause significant stability issues and is extremely dangerous.

Depending on your mode of travel, verify the following conditions and their status: rigging, ballast tank, center board, rudder and outboard engine.

1. **Rigging** - when operating your boat under power, the rigging may be installed, setup and secured, but the sails must be down (main and jib sails). Also, it is not recommended to leave the mast on the crutches when powering the boat.
2. **Ballast tank** – when operating your boat under sail and power, the ballast tank must be completely full. If the tank is not completely full, the boats stability will be reduced and its ability to self-right may be significantly impaired, plus you may experience decreased steering capability. Periodically inspect ballast tank valves to guard against undesired or unexpected water loss.

- ☐ Check weather conditions and tides
- ☐ Check food supply
- ☐ Foul weather gear
- ☐ Linen, sleeping bags
- ☐ Fuel
- ☐ Check bilge for extra water
- ☐ Water
- ☐ Sunscreens and sunglasses
- ☐ Tools
- ☐ Docking and anchoring gear
- ☐ Check radio operations
- ☐ Navigation charts and instruments
- ☐ **Float plan to a friend or Coast Guard** (see next page)
- ☐ Fuel for stove

Under no condition should the water ballast tank be filled by reversing the outboard engine. Forced entry of water into the ballast tank may cause permanent damage to the tank. The guillotine valve and vent valve must always be closed when not filling or emptying the tank.

3. **Centerboard** – when operating your boat under power, the centerboard is in the raised position. The lower portion of the centerboard remains exposed and acts as a fin (stabilizer) enhancing directional stability as speed increases. Under sail, lower the centerboard to adjust the center of gravity to provide greater stability.
4. **Rudder** - when operating your boat under power, the rudder is in the raised position. With the rudder fully raised and locked in position, the tip portion of the rudder becomes a fin which provides directional stability of water flow to the outboard engine. When under sail, lower the rudder to allow for proper steering.
5. **Outboard engine** – when operating your boat under power, the outboard engine must be in the down position. When under sail, tilt the outboard engine to the full up position.

- ☐ Cooking and eating utensils
- ☐ Check that the battery is fully operational
- ☐ Oil level, tight Vp-belts
- ☐ Check for loose electrical connections in engine compartment
- ☐ 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 propeller or bow
- ☐ Anchor ready to run
- ☐ Check lifelines for tightness
- ☐ Turn on fuel and waterlines
- ☐ Stow all loose gear

## 10. FLOAT PLAN

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### 1. Name and telephone number of the reporting person:

### 2. Description of boat

NAME	TYPE	
MAKE	LENGTH	REGISTRATION#
HULL COLOR	STRIPE COLOR	DECK COLOR
OTHER DISTINGUISHING MARKS		

### 3. Number of Persons aboard

NAME	AGE	PHONE #
ADDRESS		
NAME	AGE	PHONE #
ADDRESS		
NAME	AGE	PHONE #
ADDRESS		

### 4. Engine

TYPE	H.P.	FUEL CAPACITY
------	------	---------------

### 5. Safety equipment

PFDs	<input type="checkbox"/>	Flares	<input type="checkbox"/>	Mirror	<input type="checkbox"/>	Flashlight	<input type="checkbox"/>
Food	<input type="checkbox"/>	Water	<input type="checkbox"/>	EPIRB	<input type="checkbox"/>	Raft/Dinghy	<input type="checkbox"/>

### 6. Radio

TYPE	FREQUENCIES
------	-------------

### 7. Trip Expectations

DEPARTURE TIME	DATE	FROM
DESTINATION	RETURN DATE	NO LATER THAN

### 8. Automobile:

LICENSE #	STATE	MAKE
COLOR	PARKED AT	

### 9. If not returned by-

Contact the Coast Guard or-

CALL -	AT-
--------	-----

## 11. AFTER SAILING CHECKLIST

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When leaving your Hunter boat at the dock for more than a short time, it is a good idea to review the following checklist to make sure everything is in order. This will help protect the boat's components and add to their attractiveness and usable life.

**REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.**

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li><input type="checkbox"/> Maintain a full ballast tank to provide stability</li><li><input type="checkbox"/> Flake mainsail and cover or remove and bag</li><li><input type="checkbox"/> Remove and stow all portable deck hardware such as winch handles, etc.</li><li><input type="checkbox"/> Secure the topping lift to the boom and secure it firmly with the mainsheet</li><li><input type="checkbox"/> Coil and stow all lines</li></ul> | <ul style="list-style-type: none"><li><input type="checkbox"/> Close all fuel lines (refer to your manufacturer's outboard engine manual for details)</li><li><input type="checkbox"/> Switch off the electrical system; if the boat has the optional battery charger, switch off the main battery switch</li><li><input type="checkbox"/> Pump out the bilge and make sure the optional high water bilge float switch is free of debris</li><li><input type="checkbox"/> Check air vents, secure ports and hatches, and clean deck stainless, especially if you have operated in saltwater</li><li><input type="checkbox"/> Make a final check of mooring lines, fenders, etc.</li></ul> |
|--|---|

## 12. TRAILER LAUNCHING AND RETRIEVING

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.



### **WARNING**

#### **TOWING HAZARD**

Trailer towing can be hazardous. Overloading can cause serious injury or equipment damage. Do not overload your trailer.



### **WARNING**

#### **TOWING HAZARD**

Check the certification decal located near the hitch of your trailer. The Gross Vehicle Weight Rating (GVWR) for your trailer is 5,000 lbs. Total boat weight with all possible Hunter options installed is 4,920 lbs. (including full fuel and ½ water supply). It is your responsibility to ensure any gear or supplies loaded in the boat while under tow does not exceed the total load limit of 5,000 lbs.



### **WARNING**

#### **TOWING HAZARD**

Ensure the tow vehicle has a towing capacity higher than that of the trailer's GVWR. Using an under-rated tow vehicle is dangerous and illegal.



### **WARNING**

#### **TOWING HAZARD**

Tow your boat with the ballast tank empty. If the ballast tank is not empty you will exceed the GVWR limit of the trailer and can cause equipment damage and serious injury.

**THE MAST MAY BE RAISED WHILE THE BOAT IS ON THE TRAILER OR AFTER THE BOAT IS LAUNCHED. MAKE SURE THAT ALL HALYARDS AND REEFING LINES ARE INSTALLED USING THE MESSENGER LINES ALREADY RUN IN THE MAST. MAKE SURE THE CENTERBOARD AND THE RUDDER ARE SECURED AT ALL TIMES.**

**BE SURE TO THOROUGHLY FAMILIARIZE YOURSELF WITH THE TOWING REGULATIONS OF YOUR STATE AND IN ANY OTHERS YOU MAY TRAVEL THROUGH. REGULATIONS VARY FROM STATE TO STATE REGARDING THE TOWING OF BOAT TRAILERS, GOVERNING BOTH THE WIDTH OF THE LOAD AND THE LENGTH OF MAST OVERHANG AT THE REAR OF THE TRAILER. SPECIAL PERMITS MAY BE REQUIRED AND OTHER REGULATIONS MAY APPLY. CONSULT YOUR LOCAL AUTHORITIES FOR MORE INFORMATION.**

### **PRE-LAUNCH PROCEDURES**

1. Ensure the centerboard and rudder are up and secured.
2. Check for damage to the boat caused by towing
3. The engine should be raised so it will not hit bottom during launching.
4. Ensure thru hull ball valves are closed. Ensure the galley sink drain valve and ballast tank guillotine valves are closed. The rudder drum overflow drain ball valves should remain open.
5. Remove trailer tie-down straps and ropes and make sure that the winch snap hook is properly attached to the bow eye and locked in position.
6. Connect the fuel tank, check fluid levels and safety equipment.
7. Disconnect the trailer light plug to prevent shorting the electrical system or burning out a bulb.
8. Loose gear and provisions can be loaded via the swim ladder on the transom.
9. If launching at a dock, attach a line to the bow and the stern of the boat so it will not drift away after launching.
10. Visually inspect the launch ramp for hazards such as a steep drop off, slippery areas and sharp objects.
11. When ready, proceed slowly to the ramp.

## 12. TRAILER LAUNCHING AND RETRIEVING

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### LAUNCHING

1. Drive to the ramp area and back the boat and trailer down the appropriate ramp.
2. Keep the rear wheels of the towing vehicle out of the water. This will generally keep the exhaust pipes out of the water. If the exhaust pipes become immersed in the water, the engine may stall.
3. Set the parking brake and place the transmission in a parking gear ensuring the vehicle will not move.
4. After the boat is in water, turn the winch to payout the towing strap but do not allow the boat to drift away from the trailer.
5. Lower the outboard engine and prepare to start the engine. Make sure the transmission is not engaged at this time. Make sure the lanyard is properly attached to operator.
6. Start the outboard engine and ensure that water is passing through the engine's cooling system. Check with the engine's owners manual for proper operation.
7. Release the winch and disconnect the winch strap snap hook from the bow when the boat's operator is ready. At this point, the boat should launch with a light shove or by backing off from trailer under power.
8. Return the towing vehicle and the trailer to the parking area.
9. Finish any final loading of your boat at the dock.

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## 12. TRAILER LAUNCHING AND RETRIEVING

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### RETRIEIVING

The steps for retrieving the boat from the water are basically the reverse of those taken to launch it.

1. Consider the following conditions which may have changed since you launched your boat:
  - wind direction and/or speed
  - current and/or tide
  - visibility
2. Ensure the rudder and centerboard are raised and secured.
3. Unload the boat away from the launch ramp. CAREFULLY maneuver the boat under power to the retrieving site.
4. Back the trailer down the appropriate ramp. Keep the rear wheels of the towing vehicle out of the water. This will generally keep the exhaust pipes out of the water. If the exhaust pipes become immersed in the water, the engine may stall. Set the parking brake and put the transmission in a parking gear and ensuring the vehicle will not move.
5. Payout the towing strap so the snap hook can be attached to the bow eye. To avoid hitting the bottom, the outboard engine might need to be partially raised when motoring onto the trailer. When properly aligned on trailer, raise the outboard engine to full up position. Winch the boat securely onto the trailer. Confirm the boat's position on the trailer and secure it.
6. If the ballast tank was not emptied under power, open the ballast tank guillotine valve located on the transom and the vent valve located in the port aft hanging locker. Slowly drive the trailer forward and stop to allow time for the ballast tank water to fully discharge.
7. De-rig and unstep the mast if not already completed. BEWARE OF NEARBY POWER LINES WHEN LOWERING MAST. Secure mast.
8. Attach rear straps from to trailer and stern of the boat. Confirm that all gear and supplies are secured before driving.
9. When the ballast tank is fully drained, carefully drive the trailer with the boat aboard out of the

ramp to the washdown area for cleanup and reloading.



## 13. DOCKING AND ANCHORING

### DOCKING

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

1. Maintain a full ballast tank to provide greater stability.
2. Whenever possible, approach the dock against the prevailing wind and current to assist in stopping the boat. Where these conditions are contrary, the stronger of the two should be used to determine approach.
3. When approaching the dock, dock lines should be at the ready, loose gear stowed and decks cleared. Determine the direction of the wind and current and when you decide which side of the boat will be against the dock, rig dock lines and fenders on the appropriate side.
4. To tie up, attach bow and stern lines to dock with the fenders between the dock and boat. 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 a vessel, even for brief periods. **Consult an approved boating guide if you are new to docking or mooring**

### ANCHORING



#### CAUTION

##### SAFETY HAZARD

**Anchoring in unusual water and/or weather conditions will require additional precautions. Consult an approved guide for suggestions.**

Your Hunter comes with an on-deck anchor well and optional anchor. The optional 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, the following should be considered:

1. Pay particular attention to the slope 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.
2. Consider wind direction, currents, mean low tide depths, local conditions and the position of any anchored boats nearby when anchoring.
3. To raise anchor, motor or sail (under main only) forward slowly. When at the point directly above the anchor, a tug should free it from the bottom. **Consult an approved boating guide for additional information.**

# 14. MAST RAISING AND LOWERING SYSTEM

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.



## WARNING

### ELECTROCUTION HAZARD

Make sure that the mast and riggings are clear of all overhead electrical cables when being raised, lowered or maneuvered about the launch area. Contact with an electrical cable can result in property damage, serious injury or death.

## MAST RAISING

### BEFORE STEPPING THE MAST

1. IF RASING THE MAST IN THE WATER, ENSURE THE BALLAST TANK IS FULL.
2. Install lower struts. The lower struts should be secured on the mast and to the base bracket on the deck, but do not tighten down the bolts at this time. Make sure the bolts will remain attached during the entire procedure. The lower strut fasteners will be tightened down after the mast is fully raised.
3. Attach the lower shroud to the turn buckles on chainplate in front of the carriage hole. Install cap shroud turnbuckles on all carriage holes of the chainplate. Make sure turnbuckles are pinned and secured.
4. Confirm that all standing rigging and spreaders are connected and secured to the mast. The spreader mounting bracket bolts should be secured and tightened. Make sure there are no signs of cracks on the mast, shrouds and masthead light wiring harness. Ensure that masthead light is functioning.
5. Confirm that backing shells on top of D2, marine eye terminal on top of forestay and spreader end plugs are secured on the mast.
6. Main halyard, jib halyard, topping lift and shackles should be installed and secured on cleats; do not

allow all halyards hanging loose during the mast raising.

### STEPPING THE MAST

1. Untie the mast from the mast crutches and slide the mast aft on the crutch roller until the bottom of the mast is over the mast step. At this point, the mast will be balanced on the roller only, so do not let it go of the mast base. Remove the safety pin and align the mast base, vang toggle and bottom block. Insert the safety pin and install cotter pin on safety pin. The mast should now be secured to the mast step.

### INSERTING THE GIN POLE

1. Attach jib halyard to the aft thimble on the top of the gin pole. Attach main sheet fiddle block to the bottom thimble of the gin pole. Make sure both attachments to the thimble are secured.
2. Install the gin pole vertically in the hole in the front base of the mast. Attach the lower mainsheet fiddle block (the one with cam cleat) on the U bolt in the anchor-well. Make sure the entire mast raising system is secured and safe for operating.
3. Check to make sure the forestay is not twisted around the jib halyard and the lower shrouds and cap shrouds are not twisted around each other. All shrouds should be outside the life lines, the turnbuckles should be vertical on the chainplate. Recheck that all shrouds, forestays and shackles are properly attached. Make sure the mast is clear of all overhead electrical wiring.

### RAISING THE MAST

1. Tension the halyard with the gin pole in a vertical position (make sure that the jib halyard is being tensioned and not the main halyard). Secure the jib halyard to the cleat on the mast. The mast struts prevent the mast from moving side to side.
2. Raise the mast by pulling in the main sheet through the cam cleat.
3. As soon as the mast is raised, leave the mainsheet jammed and tensioned. Connect the forestay turnbuckle to stem plate; meanwhile, install clevis pin and cotter pin to secure the connection.

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## 14. MAST RAISING AND LOWERING SYSTEM

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4. Tension cap shrouds, lower shrouds and forestay by turning the turnbuckle. Use a tension gauge to check loading tensions on standing rigging. When done, all turnbuckles should have cotter pins installed to keep them from reopening.
5. Check the rig tension.
6. After the mast is secured by all standing riggings, remove gin pole and mainsheet system from the mast raising system.
7. Connect the mast wiring plug to the deck fitting at starboard base of the mast.
5. Attach jib halyard shackle to upper spliced eye at forward end of gin pole.
6. Tension jib halyard (again confirming that it is the jib halyard being tensioned and not the main halyard—check the color coding) so that the pole angles up at the front end approximately 10 degrees. Secure halyard to cleat on side of deck and lock down the line on cleat.
7. Attach bottom end of mainsheet to “U” bolt in anchor locker and top end to the bottom loop at end of the gin pole. Tension mainsheet tackle so jib halyard takes the load off the forestay. Make sure mainsheet is jammed and, for extra security, secure to bow mooring cleat.

### BOOM INSTALLATION

1. Connect topping lift on aft bale of the boom. Attach and install forward end of the boom on the mast goose neck. Install bolt and nut to secure this connection.
2. Recheck all riggings, make sure they are secured and safe for operation.

### MAINSHEET PURCHASE

1. Reinstall the mainsheet on boom and on top of cockpit stainless grab rail; the fiddle with cam cleat should be attached on the grab rail. Ensure the system is secured for operation.

### BOOM VANG INSTALLATION

1. Attach and install the lower fiddle block (with cam cleat) on vang toggle on mast step safety pin. Attach boom vang upper fiddle block on forward bale of the boom. Make sure the shackles are secure for operation.
2. Refer to Section 15 **GETTING READY TO SAIL**.

### MAST LOWERING

1. IF LOWERING THE MAST IN THE WATER, ENSURE THE BALLAST TANK IS FULL.
2. Remove sails, boom vang and boom.
3. Install mast support crutch to transom, if not already done.
4. Horizontally install gin pole.

8. Loosen forestay turnbuckle and remove forestay from stemhead fitting.
9. Check for overhead electrical cables, make sure that no one is standing in the cockpit or under the mast, and confirm that the mast is in all respects ready to lower.
10. Allowing the mainsheet to hook around the bow mooring cleat, unjam the mainsheet and, holding the mainsheet tail in one hand, ease tension on the mainsheet tackle while pushing the mast aft with your other hand. Retaining the deflection of the mainsheet around the cleat, ease the mainsheet further until the mast begins to hinge aft.
11. Continue lowering the mast, remembering that the load on the tackle will increase as the mast is being lowered until it rests in the mast crutch.
12. Disconnect the gin pole and mast electrical wiring so the mast can slide forward.
13. Remove mast step pin and disconnect mast base from step while restraining bottom end of mast and retaining boom vang strap. Replace pin, vang strap and cotter pin.
14. Slide mast forward on mast crutch roller until base of mast rests in bow pulpit support cradle. Secure mast in place at pulpit and at mast crutch. Take slack out of shrouds and secure forestay forward.

## 15. GETTING READY TO SAIL / SAIL MODE

REFER TO THE USER'S MANUAL FOR MORE DETAILS ON OPERATING YOUR BOAT UNDER SAIL.

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.

**THE MAST MAY BE RAISED WHILE THE BOAT IS ON THE TRAILER OR AFTER THE BOAT IS LAUNCHED. (Caution: the boat will be less stable during the launch and retrieve process.) MAKE SURE THAT ALL HALYARDS AND REEFING LINES ARE INSTALLED USING THE MESSENGER LINES ALREADY RUN IN THE MAST. MAKE SURE THE CENTERBOARD AND THE RUDDER ARE SECURED AT ALL TIMES.**

1. The rudder must be in the down position. Lower the rudder inside the helm seat by removing the safety pin to allow the rudder to drop below the safety bracket; replace the pin. Pull the down-haul sheeting until the rudder is completely down then tie the sheeting to the cleat. The rudder trunk overflow drain ball valves (upper and lower ball valves) must be open. These open ball valves will allow draining of excess water built up during operation. If the ball valves are closed, water may overflow the upper rudder bearing and may flood the aft cabin.
2. The centerboard must be in the down position. To lower the centerboard, coil raising line around starboard winch and hold firm, unlock sheet stopper, slowly payout raising line until centerboard is completely down.
3. If not already done, open the ballast tank guillotine valve, located on the stern of the boat, and the ballast tank vent valve, located in the port locker, and begin filling the ballast tank. To verify the tank is full, open the ballast tank access cover under the lower step and locate the Minimum Water Level Mark. When the water level reaches the Minimum Water Level Mark, close the guillotine valve and vent valve.
4. If the rig was not setup on trailer, follow the mast raising instruction section to setup the rigs on boat. After the mast has been raised, attach the forestay turnbuckle to the most forward of the two holes in the stem fitting. Turnbuckle should be about  $\frac{3}{4}$  open. Confirm that the upper and lower shrouds are supporting the mast.

5. Remove the mast-raising pole.
6. Using the main halyard, center the rig in the middle of the boat by first jamming the halyard in a position so that the halyard shackle just contacts a known point on the toe rail adjacent to the mast on the port side. Transfer the halyard to the starboard side and, applying the same amount of tension, see if the shackle contacts the corresponding position on the starboard toe rail. If the shackle falls short, ease the port upper shroud turnbuckle and tension the starboard, always maintaining some tension on each shroud so they are not slack. If the shackle overshoots the mark on the toe rail, ease the starboard upper shroud turnbuckle and shorten the opposite side until the halyard shackle contacts both points on the opposite toe rail uniformly. Turnbuckles are tensioned by turning the center portion counter clockwise and loosened by turning it clockwise. The turnbuckle's upper swage, the one on the wire, should be held with a wrench to prevent it from turning as the turnbuckle rotates.
7. After the mast is centered, check to see if the rake of the mast is approximately one degree aft. This can be measured by hanging plumb line or a weight, such as an adjustable wrench, from the main halyard shackle and adjusting the halyard so the weight is suspended immediately above the deck. With the boat level, this plumb line or weight, should be 22" from the aft of the mast. Adjust the forestay turnbuckle as necessary to achieve this position.
8. Tension the upper shrouds uniformly, alternately taking six turns on one, then the other, until the upper shrouds are tight. The upper shrouds put tension on the forestay and reduce forestay "sag".



### **DANGER**

#### **ELECTROCUTION HAZARD**

**Make sure that the mast and rigging are clear of all overhead electrical cables when being raised, lowered or maneuvered about a launching area. Contact with an electrical cable can result in property damage, serious injury or death.**

9. Check if the mast is straight when looking from the stern of the boat. To "sight" use the main

## 15. GETTING READY TO SAIL / SAIL MODE

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halyard by tensioning it to the mast's base plate. If the mast appears to bow to one side, ease the lower shroud on that side and tension the shroud on the opposite side until the mast appears straight.

10. Once the mast is straight when viewed from the back or front, sight up the mast from the side to see if there is any fore and aft bend. The mast should be bowed forward at the spreaders by approximately 4". Ease or tension the lower shrouds uniformly until this slight amount of bend is achieved. When finished, the lower shroud should be slightly less tight than the main shrouds. If you sail in a predominately heavy air region, slightly more mast bend, in the 5" to 6" range, may be desirable in order to flatten and depower the main sail.
11. After tuning the rig, install cotter pins in all turnbuckles to prevent them from moving while sailing.
12. Install the battens in the mainsail. Attach head of mainsail to main halyard. Attach tack of mainsail to cunningham hook. Attach clew of mainsail on outhaul line.
13. Install the reefing line (the longer of the two) in the boom with the messenger line provided and lead from the sheave through the upper cringle at the back of the sail down to the sliding eye on the bottom of the boom. Pull enough slack into the reef line so that the sail can be fully raised unimpeded by the reef line. Tie the mainsail onto the boom with the sail ties.
14. Attach the jib sheet onto the jib and lead the sheets inside the shrouds to the lead blocks on the deck house top, then aft to the cam cleat on the house top. Tie figure eight knots in the end of the sheets to prevent them from running back through the jams. Shackle the bottom of the jib to the padeye aft of stemhead and hank the jib onto the forestay. Bunch and tie to prevent it blowing overboard before it is ready to hoist.
15. Attach jib and main halyards to their respective sails.
16. Lower the rudder blade to the full down position.. The rudder must be down to achieve the correct balance for the proper helm loading. A rudder, which is not lowered, will load up excessively in severe conditions preventing the helmsman from responding to puffs and thus allowing the boat to "round up". The cleat is provided to retain the blade in the correct position.
17. If sailing off an anchorage. Make sure the anchor is retrieved and stowed properly.
18. Raise sails, beginning with the main and then the jib while motoring into the wind. Once each halyard, beginning with the main, is tensioned, the halyard can be tied down into its respective cleat and the excess line coiled. When the sails are raised, the boat can be turned away from the wind. Once sailing the engine can be turned off and tilted upward to clear the water.
19. When the main is sheeted in confirm that the topping lift is not lifting the boom. The main should be capable of sheeting in hard without the topping lift being tight. With the main sheeted in hard, the topping lift should have eight to ten inches of sag and should be adjusted accordingly. When at dock or at mooring, the topping lift can be readjusted to raise the boom to a comfortable height above the cockpit.
20. Final tuning of the rig will take place when sailing by sighting up the mast while going upwind in about ten to twelve knots of breeze. The mast should maintain its 4" (10.2cm) fore and aft bend, but should also still appear straight transversely with the leeward main shroud still retaining its tension and not going slack. If the leeward rigging does go slack when sailing, apply more tension uniformly to both shrouds by first tightening the leeward rigging and then tension the new leeward rigging the same amount. Continue this procedure, as necessary until the leeward upper shrouds no longer appear slack and forestay sag has been reduced. Removal and reinstallation of the turnbuckle cotter pins will be necessary to make these fine tuning adjustments.
21. Once the upper shrouds are tensioned, again sight up the spar to make sure that the middle of the spar at the spreaders is not falling to leeward or bending to weather. Adjust and uniformly retention the lower shrouds as necessary.

NOTE: Standing rigging will stretch slightly when initially loaded. Therefore, the rigging may have to be further tensioned slightly after a few sails in a

## 15. GETTING READY TO SAIL / SAIL MODE

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strong breeze to compensate for this initial stretch. Once the mast is tuned and initial stretch is taken out, the rig should need retuning only at the beginning of each season.

- 22.** Once done sailing, the sails should be lowered while motoring into the wind, with the jib lowered first and then the main.

## 16. GETTING READY TO POWER / POWER MODE

REFER TO THE USER'S MANUAL FOR MORE DETAILS ON OPERATING YOUR BOAT UNDER POWER.

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.

THOROUGHLY FAMILIARIZE YOURSELF WITH THE CONTENTS OF THE ENGINE MANUFACTURER'S OWNER'S MANUAL. THE FOLLOWING INFORMATION SHOULD NOT BE CONSIDERED A REPLACEMENT OF THE MANUFACTURER'S MANUAL NOR A COMPLETE LIST OF INSTRUCTIONS OR RECOMMENDATIONS.

### OUTBOARD ENGINE

The engine manufacturer's owner's manual is accompanied with the Hunter Operator's Manual. This manual will contain technical specifications, running instructions and a maintenance schedule on lubricants and other important functions. For longer engine life, follow the routine maintenance schedule recommended by the manufacturer.

### FUEL RECOMMENDATIONS

#### **WARNING**

##### **FIRE HAZARD**

Gasoline is extremely flammable and highly explosive under certain conditions. Improper handling of fuel could result in property damage, serious injury or death. Always turn off the outboard before fueling. Never permit anyone other than an adult to refill the fuel tank. Do not fill the fuel tank all the way to the top or fuel may overflow when it expands from sunlight. Remove portable fuel tanks from the boat before fueling and always wipe off any fuel spillage. Do not smoke, allow open flames or sparks or use electrical devices such as cellular phones in the vicinity of a fuel leak or while fueling.

1. Octane: Refer to the manufacturer's manual for minimum to maximum octane rating for the outboard engine.

2. Always use fresh gasoline. Gasoline will oxidize, resulting in loss of octane and volatile compounds, as well as the produce gum and varnish deposits, which can damage the motor.
3. Additives: Do not use any additives other than approved by the engine's manufacturer. Use of other additives can result in poor performance or engine damage.

### BEFORE START-UP

#### **WARNING**

##### **SAFETY HAZARD**

Lanyard **MUST** be securely attached to the operator, and clip **MUST** be installed on key switch. **DO NOT** operate outboard with clip removed from switch, except in an emergency.

Make sure to follow the outboard engine manual instructions for first time starting of the engine. It's recommended that you consult with your local dealer and follow the dealer's recommendations for this procedure.

### RUNNING CHECKS

#### **WARNING**

##### **SAFETY HAZARD**

- **DO NOT** run outboard without a water supply to the outboard's cooling system. Cooling system and/or powerhead damage could occur.
- **DO NOT** run outboard in water when in the up position.
- **DO NOT** run the engine indoors without adequate ventilation or permit exhaust fumes to accumulate in confined areas.
- Engine exhaust contains carbon monoxide which, if inhaled, can cause serious brain damage or death.
- Contact with a rotating propeller is likely to result in serious injury or death. Ensure the engine and propeller area is clear of people and objects before starting engine or operating boat.
- **DO NOT** allow anyone near a propeller, even when the engine is off. Propeller blades can be sharp and can continue to turn even after the engine is off.

## 16. GETTING READY TO POWER / POWER MODE

### System Check Operation

1. Attach emergency stop lanyard.
2. Turn key switch to ON.
3. Observe the System Check self-test function. Warning horn should sound for ½ second and all warning lights should turn on at the same time then turn off one at a time.

### Fuel System

1. Squeeze fuel primer bulb until hard. Observe all fuel hoses and connections. Repair any leaks.
2. Start outboard. Inspect all hoses and connections. Repair any leaks or misrouted hoses immediately

### Emergency Stop / Key Switch

Check emergency stop function. With outboard running at idle, pull safety lanyard from emergency stop switch. Outboard should stop immediately.

### Remote Control Operation

Make sure the control can be easily moved into all gear and throttle settings. Do not shift remote control when outboard is not running.

### Start-in-Gear Prevention

Please follow the manufacturer's manual for performing this "Starter-in-Gear Prevention" procedure.

	<b>WARNING</b>
<b>SAFETY HAZARD</b>	
Make certain that the starter will not operate when the outboard is in gear. The starter-in gear prevention feature is required by the United State Coast Guard to help prevent personal injuries.	

### Tachometer Pulse Setting

1. Confirm accuracy of tachometer reading.
2. Adjust dial on back of tachometer to required setting (the outboard should not be running).
3. Refer to outboard engine manual for settings of tachometer of particular outboard model.

### Water Pump Overboard Indicator

A steady stream of water should flow from the overboard indicator.

### Operating Temperature

An outboard running at idle speed should achieve a temperature based on the engine's thermostatic control. In general, the powerhead temperature should reach at least 104°F ( 40°C) after five minutes of idling. Check that the powerhead reaches idle temperature.

### Idle Speed

Outboard idle speed is essential for proper outboard control and shift function. Make sure the outboard idles within the specified idle RPM range. If the outboard is run on a flushing device, the idle and quality may not be representative of actual "in water" use.

### Break-In

Please refer to the correct break-in procedure in the manufacturer's manual.

### Warm-up

Before cruising, run the engine at a low speed for about three minutes as a warm-up operation to allow the oil to circulate throughout the machine. Otherwise, the life of the engine will be negatively affected. During warm-up operation, confirm that cooling water is discharged from its check port.

### Fueling

When fueling your engine, be sure to use fresh fuel. Fuel that has been in a tank too long can form gum and varnish, which can affect performance. Use oil as recommended by the manufacturer. Two stroke engines require a special oil to be either mixed with gasoline or injected from a remote tank. This lubrication is essential for the operation of the engine.

	<b>WARNING</b>
<b>EXPLOSION/FIRE HAZARD</b>	
<ul style="list-style-type: none"><li>• Store flammable material in safety approved containers. Keep containers in an area designed for that purpose. Never store in a non-vented space.</li><li>• Observe no-smoking while fueling</li><li>• Fill to less than the capacity of the tank. Allow for fuel expansion.</li><li>• Inspect fuel system regularly for leaks.</li></ul>	



## 16. GETTING READY TO POWER / POWER MODE



### **DANGER**

#### **CAPSIZE HAZARD**

**Your boat has been designed for boating under sail OR power mode. Boating under sail and power at the same time may cause the boat to capsize and could result in property damage, man overboard situation or possible death.**

### **MOTOR POWER**

When powering your boat, ensure the following:

1. The ballast tank is completely full. If the tank is full and must be emptied, open the ballast tank guillotine valve, located at the aft end of the boat, and the ballast tank vent valve, located in the port locker, and begin motoring within the docking or boat ramp areas. Do not exceed 6 mph, wake speed or begin emptying before reaching protected waters. After approximately 15 minutes, verify the ballast tank is empty by inspecting the guillotine valve for discharging water. When water no longer flows from the valve, close the guillotine valve and vent valve.
2. Fill the tank when the boat is stationary. The filling process will take approximately 15 minutes in non-moving water. Do not attempt to fill the ballast tank by reversing the boat. This may cause excess pressure in the tank resulting in possible damage. Do not run the outboard engine while filling the tank.
3. Lower ring the sails down and tie them off with the boom properly secured.
4. Put the rudder in the up position. To raise the rudder, simply pull the up-haul line located inside the helm seat. Use the safety pin to lock the rudder on the pivot joint bracket. The rudder trunk overflow drain ball valves (upper and lower ball valves) must be open. These open ball valves will allow draining of excess water built up during operation. If the ball valves are closed, water may overflow the upper rudder bearing and flood the aft cabin.
5. Put the centerboard in the up position with the up-haul locked in the sheet stopper. For greater

control, the centerboard can be in the down position when motoring at speeds less than 6 mph, considering sufficient water depth.

6. Put the outboard engine in the full down position and locked. (Do not operate your outboard engine in the up position).
7. Close and secure the forward deck hatch. It is recommended that all deck ports (windows) be closed.
8. All loose items throughout the boat are securely stored. Ensure no loose items remain on deck.
9. If the boat is equipped with a transducer, make sure the control panel is functioning and monitoring speed and depth.
10. If anchored, make sure the anchor is retrieved and properly stowed.
11. Distribute weight aft, low and centered. Seat the crew within the cockpit and evenly distributed port and starboard. Ensure no one is positioned on the cabin or foredeck. Redistribute storage weight aft of the v-berth area as much as possible.



### **DANGER**

#### **CAPSIZE HAZARD**

**Powering your boat at high speed with rudder and centerboard down may cause the boat to capsize, resulting in property damage, a man overboard situation or possible death.**



### **DANGER**

#### **CAPSIZE HAZARD**

**Powering your boat at high speed in rough water may cause the boat to capsize and could result in property damage, injury, man overboard situation or possible death. Keep the ballast tank full and decrease speed in rough waters.**



### **DANGER**

#### **CAPSIZE HAZARD**

**DO NOT USE MOTOR POWER WITH SAILS UP. Winds could fill the sails and cause the boat to capsize, resulting in property damage, serious injury, man overboard situation or possible death.**

## 17. STOVE AND TOILET

### STOVE

Carefully read and understand the manufacturer's instructions prior to operating your stove. Save the instructions for review and to transfer to subsequent owners.

**USE ONLY THE FUEL RECOMMENDED BY THE MANUFACTURER AND STORE THE FUEL IN AN APPROVED CONTAINER.**

**DO NOT SMOKE WHILE WORKING WITH FUEL. IMMEDIATELY CLEAN UP ANY SPILLED FUEL.**

#### **WARNING**

##### **EXPLOSION/FIRE/ASPHYXIATION HAZARD**

- Open flame cooking appliances consume oxygen. This can cause asphyxiation or death.
- Maintain open ventilation.
- Liquid fuel may ignite, causing severe burns.
- Use fuel appropriate for type of stove.
- Turn off stove burner before filling.
- Do not use stove for comfort heating.
- Use special care with flames or high temperatures near urethane foam. Once ignited, it burns rapidly, producing extreme heat, releasing hazardous gasses and consuming a large amount of oxygen.

#### **CAUTION**

##### **STAINING/PRESSURE HAZARD**

- Avoid adding holding tank deodorant through the bowl. If adding to the bowl, slide valve must be fully opened. Avoid spilling or splashing deodorants on slide valve seals or bowl. Rinse off any spilled or splashed deodorant immediately.
- Atmospheric pressure and temperature changes may cause pressure buildup in lower holding tank. Caution should be used when first opening slide valve.

### TOILET

theEDGE comes standard with a portable, self-contained marine toilet. Please refer to the manufacturers instructions to familiarize yourself with the correct operation of your toilet.

Be sure to keep your toilet secured by connecting it to supplied hold down brackets. Add a holding tank deodorant to the lower unit of the tank, which is the holding tank

Empty the holding tank at an approved permanent toilet facility. Ensure the valve is closed and carry it by the built-in handles. Empty, rinse with fresh water and reassemble the unit.

## 18. PUMPS AND WATER SYSTEM

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.

### PUMPS

All pumps should be checked frequently to ensure proper operation. This is a critical regular maintenance item. Properly operating pumps could save your vessel from costly damage.

Inspect all bilge pump hoses for chafing and dry rot. Ensure all hose clamps are tight. Check that the bilge pump impeller area is clean and free of obstructions. Inspect electrical wiring for corrosion. Ensure that the float switch functions properly.

### WATER SYSTEM OPERATION

theEDGE is equipped with a manual pump water system, incorporating a water tank and a level actuated manual pump. After sitting for sometime, the pump will need a few strokes to prime the system. If you are using water for drinking or washing, be aware of the quality of the water on board and periodically flush the water tank to keep it clean. When storing the boat for the winter, empty the water tank and pump the line dry.



### **WARNING**

#### **SINKING HAZARD**

**Ensure proper bilge pump operation.**



### **CAUTION**

#### **EQUIPMENT DAMAGE HAZARD**

**Take note of the water tank location when adding options or additional features. When installing, ensure fasteners do not violate the tank housing.**

## 19. ELECTRICAL SYSTEM

REFER TO THE DRAWINGS IN THE DESCRIPTION OF MODEL SECTION OF THIS MANUAL FOR ADDITIONAL INFORMATION.

THIS SECTION PROVIDES BASIC INFORMATION TO UNDERSTAND, OPERATE AND MAINTAIN YOUR DC ELECTRICAL SYSTEMS. IT IS NOT INTENDED TO EDUCATE YOU ON REPAIRING OR EXTENDING THE ELECTRICAL SYSTEM.

### BATTERIES

The batteries installed in the boat have been selected for their ability to furnish starting power based on engine starting requirements, as well as their ability to power the DC components attached to the electrical system.

The DC power source is a 12V battery, just as with an automobile, and it must be charged regularly. Some outboard motors include a small alternator which will assist in recharging the battery. If not, you must use a battery charger. Perform regular visual inspections to ensure proper water levels and terminals free of corrosion. If the boat sits for long periods without use, it is recommended to remove the battery(s) and connect them to a trickle charger to keep them fully charged and ready for use.

#### **WARNING**

##### **CHEMICAL HAZARD**

Batteries contain Sulfuric Acid and can cause severe personal injury if mishandled. Avoid contact with eyes, skin, or clothing. In case of contact, flush with water at least 15 minutes. If swallowed, drink large quantities of water or Milk of Magnesia, beaten egg, or vegetable oil and get medical attention immediately.

#### **WARNING**

##### **SAFETY HAZARD**

- Carefully follow safety instructions included with battery.
- Always charge battery in a ventilated location.

### BREAKERS, SWITCHES, AND FUSES

All electrical systems aboard the boat are provided with over-current protection in the form of breakers or fuses. Breakers can be found at the component controls at the 12 Volt Panel or in the battery selector switch panel. The systems that require energizing are given switches.

### LIGHTING SYSTEMS

There are three distinct lighting systems aboard your boat: the interior (Cabin), the exterior and the navigational lighting. The lights are powered from the 12 Volt DC Panel.

### ELECTRIC COOLER (OPTION)

If the boat is equipped with the electric cooler option, the manufacturer's manual will be included and normally found in the cooler. Follow the instructions from the manufacturer's manual on cooler use.

### MAINTENANCE


The electrical system is a 12-volt, negative ground installation. On a weekly basis, you should inspect batteries, terminals and cables for signs of corrosion, cracks, and electrolyte leakage. Battery terminals are to be kept clean and greased. Ensure all connections are clean, tight and covered with a corrosion inhibitor compound. Refer to specific instructions on batteries, wiring diagrams, and electronics.

## 20. ENVIRONMENTAL CONSIDERATIONS

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### FUEL AND OIL SPILLAGE

The spilling of fuel or oil into our waterways contaminates the environment and is dangerous to wildlife. Never discharge or dispose of fuel or oil into the water. It is dangerous and unlawful. Common types of accidental discharge include over-filling the fuel tank and pumping contaminated bilge water into the sea.

 <b>WARNING</b>
<b>EXPLOSION/FIRE/POLLUTION HAZARD:</b> Fill fuel tank to less than rated capacity to allow for expansion. Overfill forces fuel out the tank vents, which can cause explosion, fire, or environmental pollution.

### DISCHARGE AND DISPOSAL OF WASTE

Waste includes all forms of garbage, plastics, recyclables, food, wood, detergents, sewage, and even fish parts in certain waters. We recommend you return with everything from offshore for proper disposal onshore.

Your marine holding tank (if so equipped) must, in many areas, be pumped out by an approved pump-out facility generally found at marinas.

### EXHAUST EMISSIONS

Hydrocarbon exhaust emissions pollute our water and air. Keep your engine properly tuned to reduce emissions and improve performance and economy.

### ANTI-FOULING PAINTS

The use of anti-fouling paints is common for boats maintained in water. Be aware of environmental regulations that may govern your paint choice. These regulations may affect which paint may be used, and also its application or removal. Contact your local boating authorities for more information

 <b>WARNING</b>
<b>EXPLOSION/FIRE/HAZARD</b> Ventilate when painting or cleaning. Ingredients may be flammable and/or explosive.

### CLEANING CHEMICALS

Cleaning chemicals should be used sparingly and not discharged into waterways. Never mix cleaners and be sure to use plenty of ventilation in enclosed areas. Do not use products that contain phosphates, chlorine, solvents, nonbiodegradable or petroleum based products. Common household cleaning agents may cause hazardous reactions. Fumes can last for hours, and chemical ingredients can attack people, property and the environment.

### BOTTOM PAINTING

Choose a bottom paint system that suits the environment in your area.

Follow the procedure recommended by the manufacturer of the paint, while making sure not to void the Hunter Hull Blistering Warranty. The procedure for preparing and applying paint varies between paint manufacturers, but should always include de-waxing, etching and sometimes priming of the surface.

Do not use any sanding, sandblasting or other abrasive preparation of the bottom, as this will void your hull blistering warranty.

### EPOXY BARRIER COAT

Sanding of the gel coat bottom surface will be permitted should a customer wish to have an epoxy barrier coat applied to the hull, (example Interlux Interprotect 1000, 2000, West System or VCTar).

Hunter Marine distinguishes between epoxy barrier coatings and epoxy primer paints. If an epoxy barrier coat is applied to a Hunter vessel, it must be

## 20. ENVIRONMENTAL CONSIDERATIONS

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registered with the Warranty Department prior to application of the product. If the dealer applies bottom paint only, sanding will not be allowed and the no sanding system must be used.

	<b>WARNING</b>
<b>FIRE HAZARD</b>	
Cleaning agents and paint ingredients may be flammable and/or explosive and dangerous to inhale. Be sure to use adequate ventilation and appropriate safety protection (gloves, safety glasses, respiration, etc).	

## 21. OUTBOARD ENGINE MAINTENANCE

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PROPER ATTENTION TO AND MAINTENANCE OF YOUR ENGINE WILL ASSURE YOU MANY HOURS OF PLEASURABLE, SAFE BOATING, AND WILL PREVENT UNNECESSARY ENGINE PROBLEMS. YOU MUST, THEREFORE, BECOME THOROUGHLY FAMILIAR WITH ALL ASPECTS OF THE ENGINES PROPER OPERATION OUTLINED IN THE MANUFACTURERS OPERATOR'S MANUALS.

### **CAUTION**

#### **OPERATIONAL HAZARD**

Take proper care when washing down or cleaning your engine to ensure water does not enter the air in-takes. Water in the air intakes may travel directly to the cylinders, resulting in rust and possible internal engine damage.

Follow the fuel and lubrication requirements in the manufacturer's engine manual. Check oil levels prior to starting, and use lubricants as recommended. Always check fuel lines and connections for possible leaks, which may create a dangerous situation.

ENGINES ARE NOT WARRANTIED BY THE HUNTER CORPORATION; ENGINE WARRANTIES ARE WRITTEN BY THE ENGINE MANUFACTURERS.

### **WARNING**

#### **EXPLOSION/FIRE HAZARD**

Fuel system connections that are too loose or too tight can leak, resulting in possible fuel loss, environmental pollution, explosion or fire hazard.

If you use your outboard in salt water, wash down the exposed drive unit after every use to limit corrosion. Also, it is recommended to completely flush out the raw water cooling system as described in the manufacturer's owner's manual. Regularly check the propeller and drive unit for any damage or other signs of serious wear. Propeller damage will reduce

performance as well as contribute to other potential engine problems.

## **GENERAL INSPECTION RULES**

- 1. Conduct Periodic Inspections for Your Safety -**  
The functions of engine components will degenerate and engine performance will drop based on engine use. If countermeasures are not taken, you may encounter unexpected troubles while cruising at sea. Consumption of fuel or lubricating oil may become excessive and exhaust gas and engine noise may increase. These all shorten the life of the engine. Periodic inspection and service increase your safety at sea.
- 2. Inspect Before Starting -** Make it a daily rule to inspect before starting.
- 3. Periodic Inspections at Fixed Intervals -**  
Periodic inspections must be made after every manufacturer's recommended hours of use. Conduct periodic inspections according to the procedures described in your outboard engine manufacturer's manual. Routine inspection and maintenance is necessary to prolong outboard life. **Outboards used in rental, commercial, or other high hour applications require more frequent inspections and maintenance. Adjust schedule for operating and environmental conditions.**
- 4. Servicing Tools -** Have servicing tools available onboard to be ready for inspecting and servicing the engine and other equipment.
- 5. Tightening Torque of Bolts & Nuts -** Over-tightening of bolts and nuts causes them to come off or their threads to be damaged. Insufficient tightening causes oil leakage from the installation face or issues due to the loosening of bolts. Bolts and nuts must be tightened to the appropriate torque specs. Critical parts must be tightened with a torque wrench to the correct tightening torque and in the right order.

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## 22. PROTECT YOUR RIGGING

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**WITHOUT CAREFUL INSPECTION AND PROPER MAINTENANCE, THE RIG IS SUBJECT TO FATIGUE, WEAR, DISCOLORATION AND, THEREFORE, PRODUCT FAILURE. REMEMBER, REGULAR INSPECTION AND CLEANING WILL INCREASE THE LIFE OF YOUR INVESTMENT AND SECURE YOUR RIGGING.**

To protect your rigging we suggest the following:

1. Always rinse your rigging with fresh water after sailing, especially salt-water sailing. Salt can create corrosion pits, causing cracks and deterioration.
2. Clean with a water-soluble chlorine-free detergent. Nonabrasive cleansers are best for hard white vinyl coated cables.
3. Inspect rigging for stains. Rust stains may indicate stress cracks or corrosion. Remove stains with synthetic or brass pads. Never use steel wool pads.
4. Look for broken wires, a sign of fatigue in rigging. Replace standing rigging if wires are broken.
5. Never mix stainless steel and galvanized metals on cables, fittings, pins, cotter keys, etc. If mixing dissimilar metals, electric currents may conduct between metals causing rapid deterioration
6. After unstopping, make sure to release all standing rigging to avoid bending, crushing and kinking.
7. Store rigging in a dry place. Never store in a plastic bag, which can cause corrosion.

### SAIL CARE

Sunlight is a sail's worst enemy, so **cover the mainsail when not in use**. An ultraviolet guard, fitted down the leech of a roller headsail, will protect the exposed part from the weathering effect of the sun and from dirt and grit. Mildew can be prevented by storing sails dry and by hand washing twice a season. Check all sails regularly for chafe, particularly where they chafe on deck fittings or rigging, at reef points, batten sleeves and the foot of the headsail. Sail batten pockets should also be inspected on a regular basis.

To stow the mainsail, start at the leech and flake it onto the boom, left and right, in about 18-in. (46 cm) folds while pulling the leech aft. Secure with a sail tie

and continue to the luff. Lash to the boom with sail ties or shock cord.

### GENERAL HARDWARE MAINTENANCE

Check all fittings regularly to be sure screws are tight. Occasionally lubricate (use silicone lubricants) 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 cleat and fairleads for roughness or smoothness 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 them or use protective covers manufactured for that purpose. Grease winches annually at a minimum.

### WINCH MAINTENANCE

Follow the maintenance instructions prescribed by the winch manufacturer. We recommend a minimum of an annual cleaning and light greasing.



## 23. TRAILER MAINTENANCE

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### **WARNING**

#### **TOWING HAZARD**

Trailer towing can be hazardous. Overloading can cause serious injury or equipment damage. Do not overload your trailer.



### **WARNING**

#### **TOWING HAZARD**

Check the certification decal located near the hitch of your trailer. The Gross Vehicle Weight Rating (GVWR) for your trailer is 5,000 lbs. Total boat weight with all possible Hunter options installed is 4,920 lbs. (including full fuel and ½ water supply). It is your responsibility to ensure any gear or supplies loaded in your boat while under tow does not exceed the total load limit of 5,000 lbs.



### **WARNING**

#### **TOWING HAZARD**

Ensure your tow vehicle has a towing capacity higher than the trailer's GVWR. Using an under-rated tow vehicle is dangerous and illegal.

### **BEFORE USING YOUR TRAILER**

Check all bolts and nuts for tightness, including the lug nuts for the wheels.

1. Check to ensure that all lights are working properly.
2. Always maintain the tires at recommended air pressure.
3. For improved tire life, have your tires spin balanced by a qualified tire service center.
4. When the trailer is hitched to your vehicle, remove the two-speed winch handle before departing.
5. Always check hitch, safety chain connection and boat tie downs prior to departing.

### **PROTECTING AND MAINTAINING YOUR TRAILER**

Before launching your boat, we recommend the light harness be disconnected from your vehicle and allow enough time for bulbs to cool. This will greatly extend the life of your bulbs.

1. The trailer has a galvanized frame, however, some parts, including the brakes, axles, hubs, springs, U bolts, and plates, are not galvanized. Most of these parts have been sprayed with a high gloss black rust resistant paint, plus a clear coating. After launching (especially in salt water locations), rinse your trailer, including the painted components. As a continuing measure to protect your trailer, periodically refinish and repaint surfaces that show signs of rusting.
2. Periodically and regularly check your wheel bearings for sufficient grease and tightness. The more launching you do, the more likely for the need to regrease these bearings.

### **WINCH MAINTENANCE**

1. Periodically grease the gears of your winch with an all-purpose grease.
2. Regularly check the winch cable for signs of wear or damage and replace immediately if needed.

### **WIRING AND LIGHTING**

1. Be sure your vehicle is equipped with the proper lighting connections to avoid overloading circuits.
2. At least once a year, remove light lenses and spray metal components with WD40 or apply a light coating of petroleum jelly.
3. Always carry spare light bulbs.

### **BEARINGS AND HUBS**

## 23. TRAILER MAINTENANCE

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Check wheel bearings periodically with the following procedure:

1. Leave the trailer connected to the tow vehicle with brake set and wheels chocked. (Trailer must be on level ground).
2. The first step in jacking up your trailer is to block the wheel on the opposite side, both front and back.
3. Position the jack on the frame as near to the wheel as possible with supporting-stands installed properly.
4. Proceed to spin the wheel and listen for any noise. Feel the wheel for any roughness in its rotation. If your trailer is equipped with brakes, be certain that the brake shoes are not dragging. A quiet and smooth rotation indicates that the bearings are in good shape. If a noise or grinding sound is evident, the wheel bearing may need an adjustment. To check if an adjustment is needed, grip the edge of the wheel to see if it rocks, or can move. If the wheel moves at all, an adjustment is necessary. Please contact your local dealer for proper procedure. **ALL WORK SHOULD BE DONE BY A QUALIFIED MECHANIC.**

2. If you must park your trailer outdoors, install a boat cover that is tight enough for adequate protection but not air tight.
3. Service or repack wheel bearings according to manufacturer's instructions.
4. Jack up the trailer and place blocks under the trailer frame to take most of the weight off trailer springs and tires.
5. Loosen tie-downs and winch line, but be sure the boat is resting properly on hull supports.
6. If the boat has a drain plug, remove it and elevate the trailer tongue slightly (just an inch or two) to allow water to drain out and keep the boat dry. Tie the plug to something obvious, like the steering wheel, so you will remember to replace the drain plug before you take your next trip.
7. While boat is in storage, it is a good time to touch up rust spots, nicks and chips and replace damaged tie-downs, winch line, wiring, etc.
8. Lubricate all moving parts such as rollers, winch, etc.

### TIRE PRESSURE

The recommended air pressure can also be found on trailer's certification plate and it will be found molded on the tire. If the plate is damaged, your local dealer can help you in determining the proper tire and rim size.

### NUTS AND BOLTS

Check on all bolts and nuts for tightness. All bolts and nuts should be checked periodically. Please refer to the Manufacturer's manual for torque specification information.

### TRAILER STORAGE

While in storage, the following steps are recommended to ensure continuous optimal performance:

1. If at all possible, park your trailer rig in a protected area, i.e. garage, carport, etc.

**PROPER MAINTENANCE AND CARE OF YOUR TRAILER WILL HELP ENSURE A MORE TROUBLE FREE HAULING EXPERIENCE.**

## 24. GENERAL CARE

### CLEANING FIBERGLASS SURFACES

Fiberglass surfaces should be cleaned regularly. Normal accumulations of surface dirt can be removed easily by occasional rinsing with water. If you operate your boat 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 fresh clean water. Avoid the plexiglass companionway slider, windshield, deck hatches and fixed ports when using a deck brush, since these surfaces can scratch.

It is 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.



#### **WARNING**

##### **EXPLOSION/FIRE HAZARD**

**Cleaning agents and paint ingredients may be flammable and/or explosive and dangerous to inhale. Be sure to use adequate ventilation, and appropriate safety gear (gloves, safety glasses, respirator, etc.).**

### CLEANING ACRYLIC

Use only mild soap and water to clean acrylics, i.e. windows. Do not use products containing solvents such as ammonia, which is found in many window cleaners.



#### **CAUTION**

##### **DAMAGE HAZARD**

**Use care when cleaning acrylic. Dry cloth and many glass cleaners will scratch. Solvents will attack the surface.**

### VINYL

These patterns, like all fabrics, require a regularly scheduled cleaning program. A thorough cleaning should be administered on a daily, weekly or monthly

basis depending on use and exposure to dirt and/or staining agents. It is important to begin treatment of a stain as soon as possible after a spill. It is advisable to clean these products as soon as the first signs of dinginess occur; otherwise, delaying clean up will require a much greater effort to restore the product to its original appearance.

Regular cleaning requires the use of a mild cleaner such as Murphy's Oil soap and water. In situations where the vinyl has not been washed regularly and there is a build up of dirt, stronger vinyl cleaners such as Simonize's Tuff Stuff or Turtle Wax's vinyl/fabric cleaner are recommended. We do not recommend the use of any other cleaners. The use of cleaners other than those recommended may result in irreparable damage to the product.

In order for the above listed cleaning solutions to work effectively on stubborn stains, please allow time for the cleaning solution to soak in thoroughly. Be sure to remove the cleaning solution before it has time to dry. Regardless of the type of cleaner used, it is necessary to finish up with a thorough rinse using fresh water on a clean sponge or rag. A soft bristled nylon or natural fiber brush can be used to remove built-up dirt and staining agents.

Finally, please remember that all our fabric grain vinyls require a greater cleaning effort to maintain than comparable smooth grain vinyls. These products will provide an attractive and durable alternative to conventional fabrics and vinyls if properly maintained.

### FABRICS

**Leather:** Use mild soap water. Blot dry. Do not scrub as this will stretch and scratch. Wipe with leather cleaner/oil to preserve and help prevent cracks before and after storage.

**Fabric:** Blot dry. Do not machine wash. Use only mild soap and water. Wipe with a clean white cloth. If stain persists, dry clean. Be sure to treat cleaned surfaces with scotch guard. Stretched or loose covers may be steam leaned. If foam is removed, it will restuff more easily if wrapped with thin plastic.

**Storage:** Cover with airflow fabric to reduce dust build up. Do not use plastic, as this will cause cushions to sweat and mildew.

**Cushions:** If wet, prop cushions vertically to promote airflow around each cushion. Cushions can be

## 24. GENERAL CARE

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cleaned by most dry cleaners. **Dry clean only.**

### WOOD MAINTENANCE

Over time, the boat interior may exhibit normal signs of wear and tear and reveal blemishes in the cherry wood finish. To address light to heavy blemishes, we recommend the following items be used within the process:

- 220 sand paper
- Mohawk Satin Top Coat
- Mohawk Sealer
- Cherry Glaze Blended Stick

Begin by sanding the blemish until it disappears. Touch up the area with the cherry blended stick and smooth out with a finger until well blended. If it is a light blemish, conclude the procedure by applying the Mohawk top coat until you achieve the desired look. If it is a heavier blemish, apply the Mohawk Sealer and allow to dry for 20 minutes. Apply any additional coats if necessary, sanding between each coat. Conclude the procedure by applying the Mohawk top coat until you achieve the desired look.

## 25. STORAGE AND WINTERIZATION

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THIS SECTION PROVIDES BASIC RECOMMENDATIONS ON STORAGE AND WINTERIZATION AND SHOULD NOT BE CONSIDERED A COMPLETE OR EXACT LIST. CONSULT YOUR LOCAL DEALER FOR SPECIFIC STORAGE AND WINTERIZATION INSTRUCTIONS. BALLAST TANK SHOULD BE EMPTY TO PREVENT FREEZING OR RUPTURING.

### STORAGE METHODS

Winter storage is recommended to be done in one of the following three ways:

1. Cradle blocking
2. Chained stands on level ground
3. Water with a bubbler system to prevent icing (damage to your boat, including engine misalignment caused by twisting, is not covered by the warranty)

### SAILS

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 sail maker will check the stitching and sailcloth for wear and store the sails until the start of the next season.

### ELECTRICAL

Remove battery from boat (refer to manufacturer's manual) and charge. It is a good idea to also remove the electronics (radio, radar, etc) and store in a safe place.

### CUSHIONS

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote air flow around each cushion. Dry clean only!

### HATCHES

Tenting the deck during storage will help prevent ice from forming and damaging hatches and deck fittings. The installation of a passive vent will help with ventilation while the boat is in storage.

### WATER SYSTEM

Open a faucet and allow the pump to empty the tank. Then add approximately two gallons (7.6L) of non-toxic antifreeze 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 hose on the faucet to blow through the lines to clear all water. A diluted solution with baking soda will help freshen the system.

### TOILET AND HOLDING TANK

Drain and flush toilet. Using non-toxic antifreeze, pump through toilet and into holding tank.

### OUTBOARD ENGINE

Store your engine in a safe place. Refer to manufacturer's manual for specific storing and maintenance.

### DEPARTURE FROM THE BOAT

Invest the time necessary to compile and complete a storage checklist. Addressing overlooked items generally becomes impractical or impossible once later remembered. Primary on this list are items relating to the safety and security of the unattended craft: turning off fuel valves, properly setting electrical switches, pumping out bilges and leaving the switch on automatic (or arranging for periodic pumping). **It is recommended that the power be turned off when leaving the boat.** Other departure checklist items should include securing ports, windows, hatches and doors.

### ROUTINE MAINTENANCE

Routine maintenance checklists should include items based on boat use (usually in terms of engine hours) and on calendar dates (weekly, monthly or seasonal checks).

Boat use items typically include oil level checks/changes and oil and fuel filter changes.

## 25. STORAGE AND WINTERIZATION

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Calendar based items typically include electrolyte levels in batteries, pressure gauges on dry chemical fire extinguishers, and navigation lights.

Check the operation of automatic bilge alarms or pump switches by running water into the boat. Periodically close and open sea cocks several times to ensure their free and easy operation in case they are needed in an emergency. Emergency equipment and supplies should be inspected for any signs of deterioration.

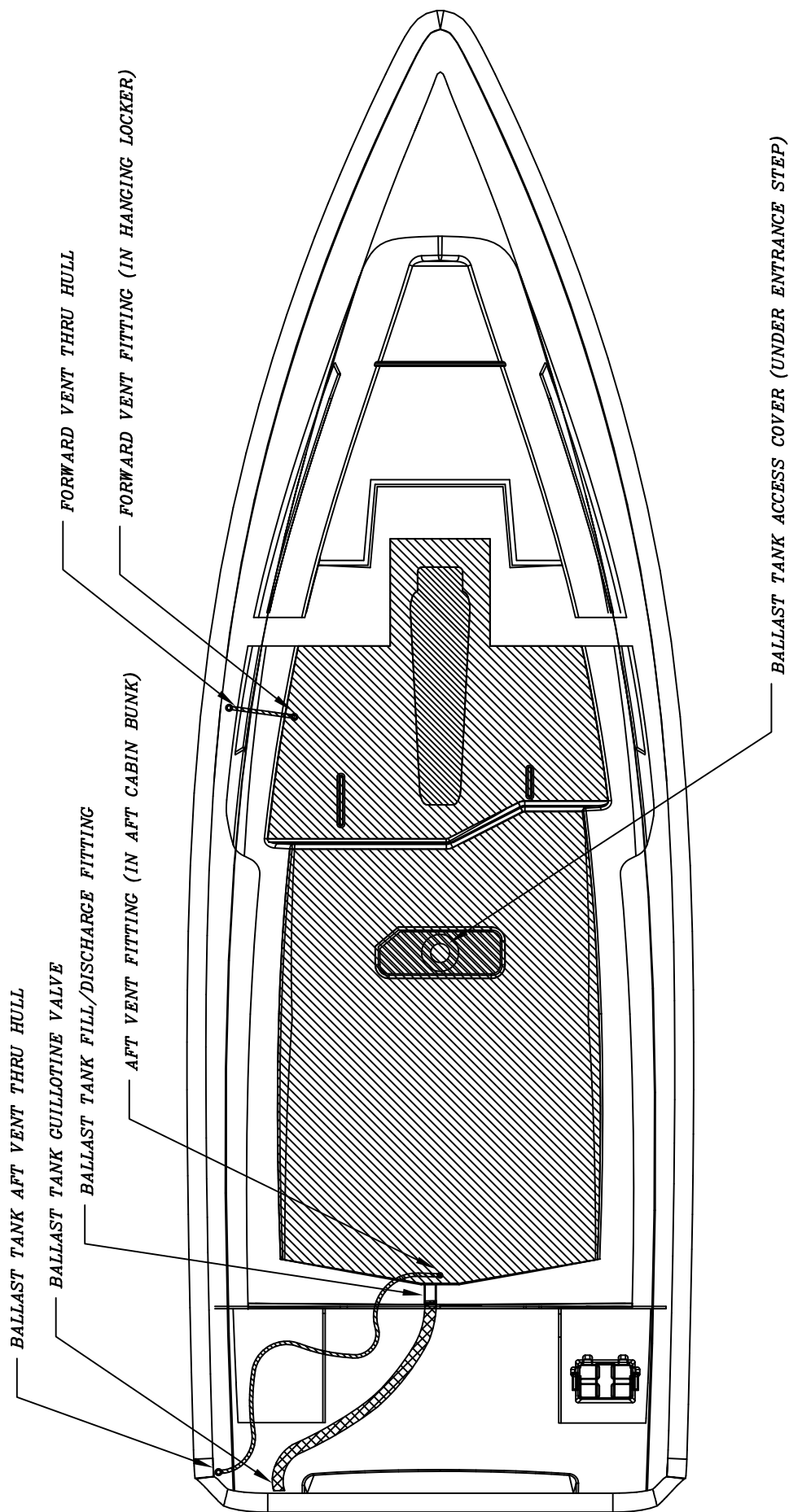
## 26. ELECTROLYSIS AND GALVANIC PROTECTION

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Salt water allows electric current to flow from anodic to cathodic material. For any two distinct metals, their relative positions in the galvanic rating table will determine which loses material (the anode) and which remains largely undisturbed (the cathode). The distance between the two metals on the galvanic table determines the rate of wear. Thus a sacrificial zinc anode is often fitted to the underwater area of a boat to attract any destructive currents away from bronze or steel propeller shafts, for example. An easy place to fit an anode is on the propeller shaft, or covering the propeller nut. The anode should not be painted; this would render it ineffective.

It is not enough to know that your boat does not suffer from electrolysis; a newcomer in the adjacent marina berth may unintentionally allow an unwanted association between metal components.

To prevent electrolysis in seawater, the difference between the voltages of the two adjacent metals should not exceed 0.20 V. For example, zinc and carbon steel can be used together to avoid corrosion; however, lead and active stainless steel are compatible. Metals with a high voltage corrode faster and require a larger area to diffuse the electrochemical reaction.



- NOTE:
1. ALL SHADED AREA ARE PART OF BALLAST TANK.
  2. DO NOT DRILL ON ALL SHADED AREA.



## DIMENSIONS AND CAPACITIES

LENGTH OVERALL	28' 06"	8.69m
HULL LENGTH	26' 04"	8.69m
LENGTH OF WATERLINE (LWL)	23' 04"	7.11m
BEAM (MAX)	8' 04"	2.53m
BEAM WATERLINE	7' 07"	2.31m
DRAFT CENTERBOARD DOWN	5' 11"	1.8m
DRAFT CENTERBOARD UP	1' 06"	0.46m
DISPLACEMENT WITH BALLAST	5540 LBS	2513 KG
BALLAST	1600 LBS	727 KG
MAST HEIGHT FROM WATERLINE	33' 11"	9.42m
SAIL AREA (Actual Area Including Roach and Overlap)	333 SQ.FT.	30.94 SQ.M.
WATER CAPACITY/STANDARD	2.5 U.S. Gallons	9.45 Liters
WATER CAPACITY/OPTION	20 U.S. Gallons	75.7 Liters
HOLDING TANK CAPACITY	12 U.S. Gallons	
STANDARD (PORTA-POTTY)	2.8 U.S. Gallons	10.61 Liters
OPTION ( WITH. MARINE HEAD)	12 U.S. Gallons	45.46 Liters
FUEL TANK CAPACITY (MAX)	2 x 12 U.S. Gallons	2 x 45.42 Liters
BATTERY CAPACITY	DEALER SUPPLIED	
ELECTRICAL VOLTAGES (STANDARD)	12V	
ELECTRICAL VOLTAGES (OPTION)	110V	
OPT. OUTBOARD ENGINE	UP TO 75 H.P.	56.25 kw
MAXIMUM LOADING	6 PERSONS, GEAR AND AND PROPULSION/1,438LBS	652 kg

## STANDING RIGGING

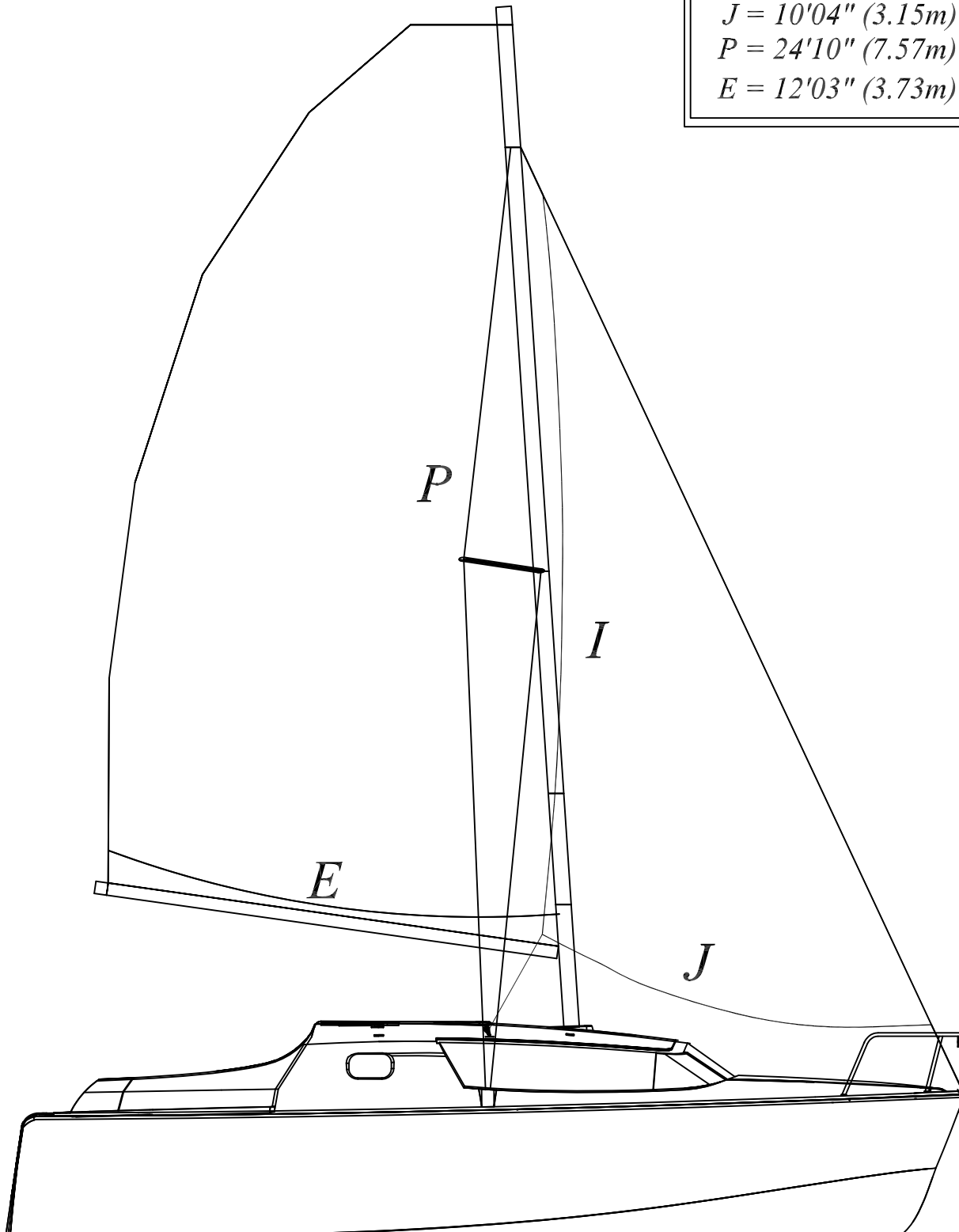
QTY	ITEM	WIRE SIZE	TOP	BOTTOM	WIRE LENGTH (2/3)	PIN SIZE	NOTES
2	Cap shroud	4mm	434 ball	422 turnbuckle	315.35 Inches (8,010 mm)	8mm	2/3 open turnbuckle
1	Headstay	4mm	444 eye	5422 turnbuckle + 5621 toggle	333.66 Inches (8,475 mm)	8mm	2/3 open turnbuckle
2	Lowers	4mm	434 ball	422 turnbuckle	173.82 Inches (4,415 mm)	8mm	2/3 open turnbuckle

**HUNTER 27TE STANDARD  
RUNNING RIGGING SPECIFICATIONS**

**Boat: HUNTER 27 THE EDGE**

**Date: 8/11/08**

#	OPT/STD	ITEM	QTY	SIZE/IN	SIZE/MM	COLOR	END 1	END 2	LENGTH/FT	LENGTH/M
1	STD	MAINSHEET	1	3/8	9.5	WHITE <small>W/ BLUE/RED TRACER</small>	EYE	BARE	47.0	14.3
2	STD	VANG	1	1/4	6.3	WHITE <small>W/ BLUE/YELLOW TRACER</small>	EYE	BARE	20.0	6.1
3	STD	MAIN HALYARD	1	5/16	8	BLUE FLECK	EYE	BARE	65.6	20.0
4	STD	JIB HALYARD	1	5/16	8	RED FLECK	EYE	BARE	65.6	20.0
5	STD	TOPPING LIFT	1	5/16	8	GREY SOLID	EYE	BARE	59.0	18.0
6	STD	JIB SHEET	2	13/32	10	GREEN FLECK	BARE	BARE	55.0	16.7
7	STD	CENTERBOARD UPHAUL	1	3/8	9.5	WHITE	BARE	BARE	12.0	3.7
8	STD	CENTERBOARD CONTROL	1	3/8	9.5	WHITE	BARE	BARE	8.0	2.4
9	STD	RUDDER RAISING LINE	1	1/4	6.3	BLACK	BARE	BARE	14.0	4.3
10	STD	REEF STRING	1	VARIES	VARIES	VARIES	BARE	BARE	32.8	10.0
11	STD	OUTHAUL	1	5/16	8	RED FLECK	BARE	BARE	24.6	7.5
12	STD	REEFING LINE #1	1	5/16	8	BLUE FLECK	BARE	BARE	37.7	11.5

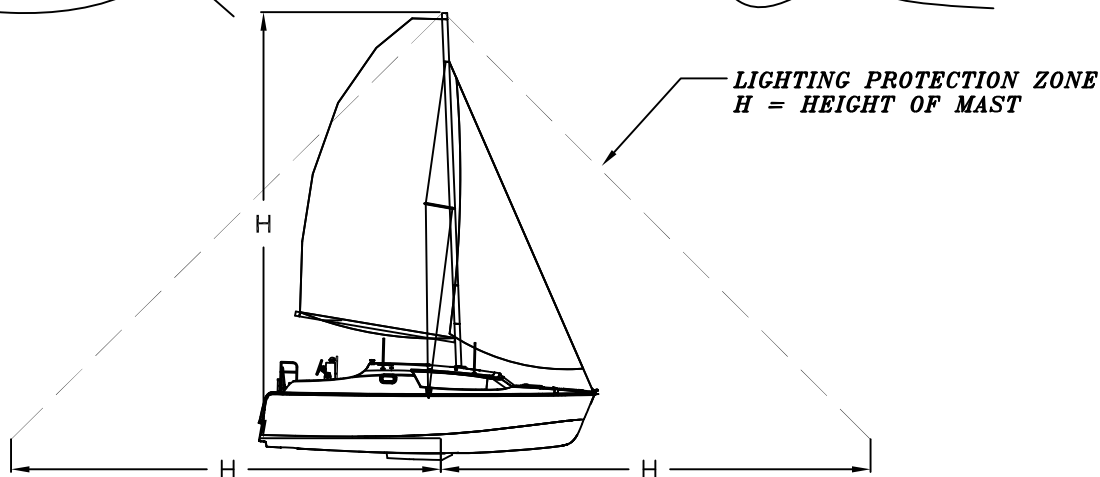
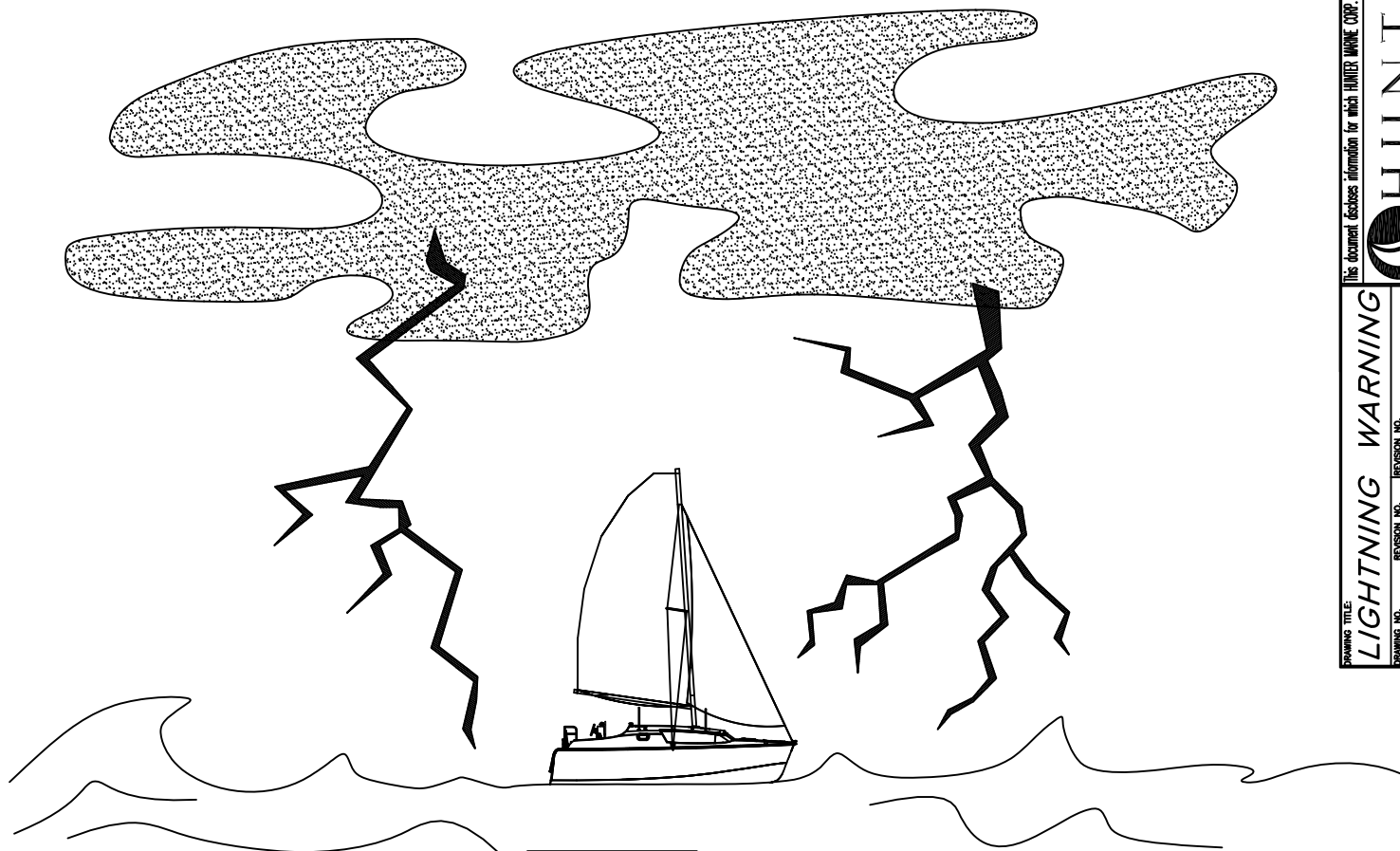


$I = 23'08'' (7.21m)$   
 $J = 10'04'' (3.15m)$   
 $P = 24'10'' (7.57m)$   
 $E = 12'03'' (3.73m)$

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DRAWING TITLE		REVISION NO.		DATE	
STANDARD SAIL PLAN		27TE8060		05/28/08	
DRAWING NO.		None		None	
DRAWN BY:		ENG		05/28/08	





**LIGHTNING STORM WARNING:**

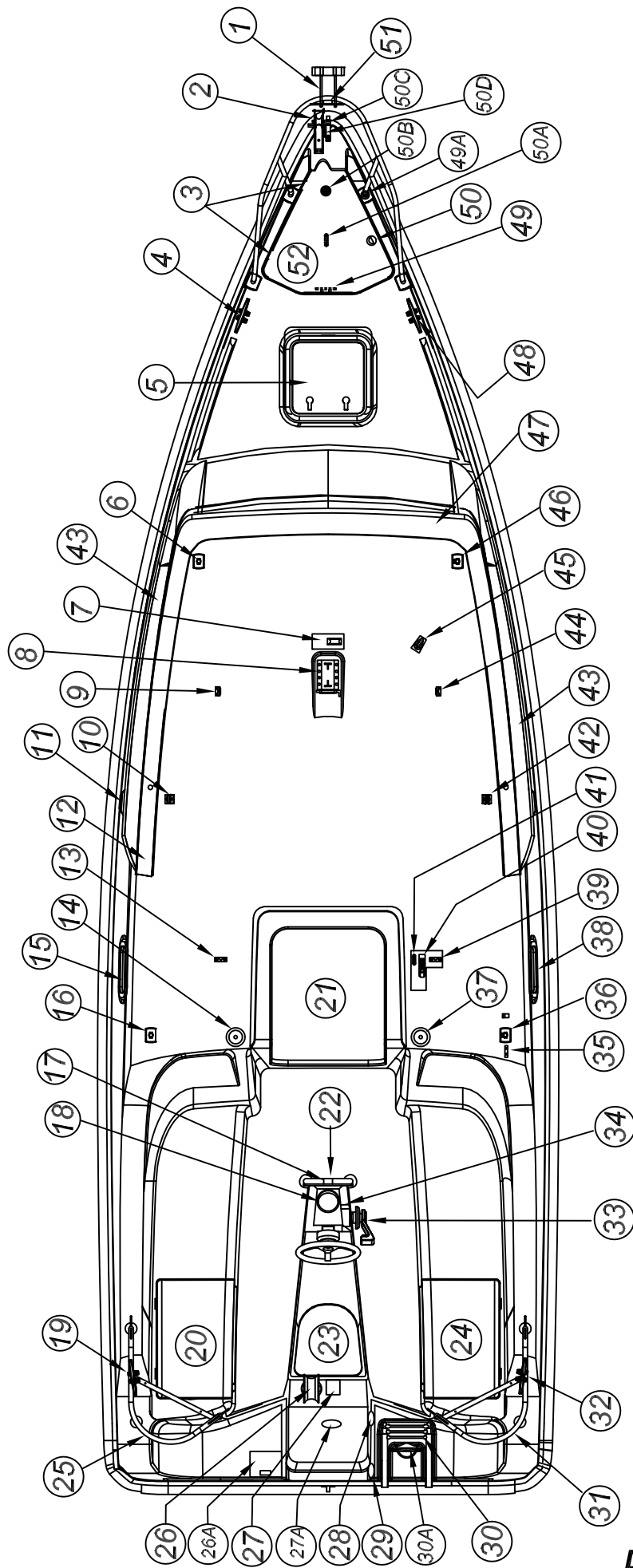
**1. ALL WHIP ANTENNAS SHOULD BE TIED DURING STORM.**

**2. PRECAUTIONS: DURING LIGHTNING STORMS: A. THE SHIPS OCCUPANTS SHOULD TAKE SHELTER INSIDE A CLOSED AREA OF THE BOAT. EXAMPLE: BELOW DECK. B. OCCUPANTS SHOULD NOT HAVE ANY BODY PARTS IN THE WATER. C. AVOID CONTACT WITH ANY COMPONENTS OF THE L.P.S. AND D. AVOID ALL CONTACT WITH ANY METAL OBJECTS.**

**3. IF LIGHTNING SHOULD STRIKE THE SHIP, INSPECT ALL ELECTRONICS, ELECTRIC GEAR, COMPASS AND L.P.S. SYSTEM FOR POSSIBLE DAMAGE. RECALIBRATE AS NECESSARY. NOTE: BEGIN CHECKING ELECTRONICS AFTER THE THREAT OF LIGHTNING HAS PASSED.**

**NOTE: THIS BOAT IS NOT PROVIDED WITH ANY LIGHTNING PROTECTION SYSTEM. SEEK A QUALIFIED ABYC CERTIFIED ELECTRICIAN IF SUCH SYSTEM NEEDS TO BE ADDED TO THE BOAT.**

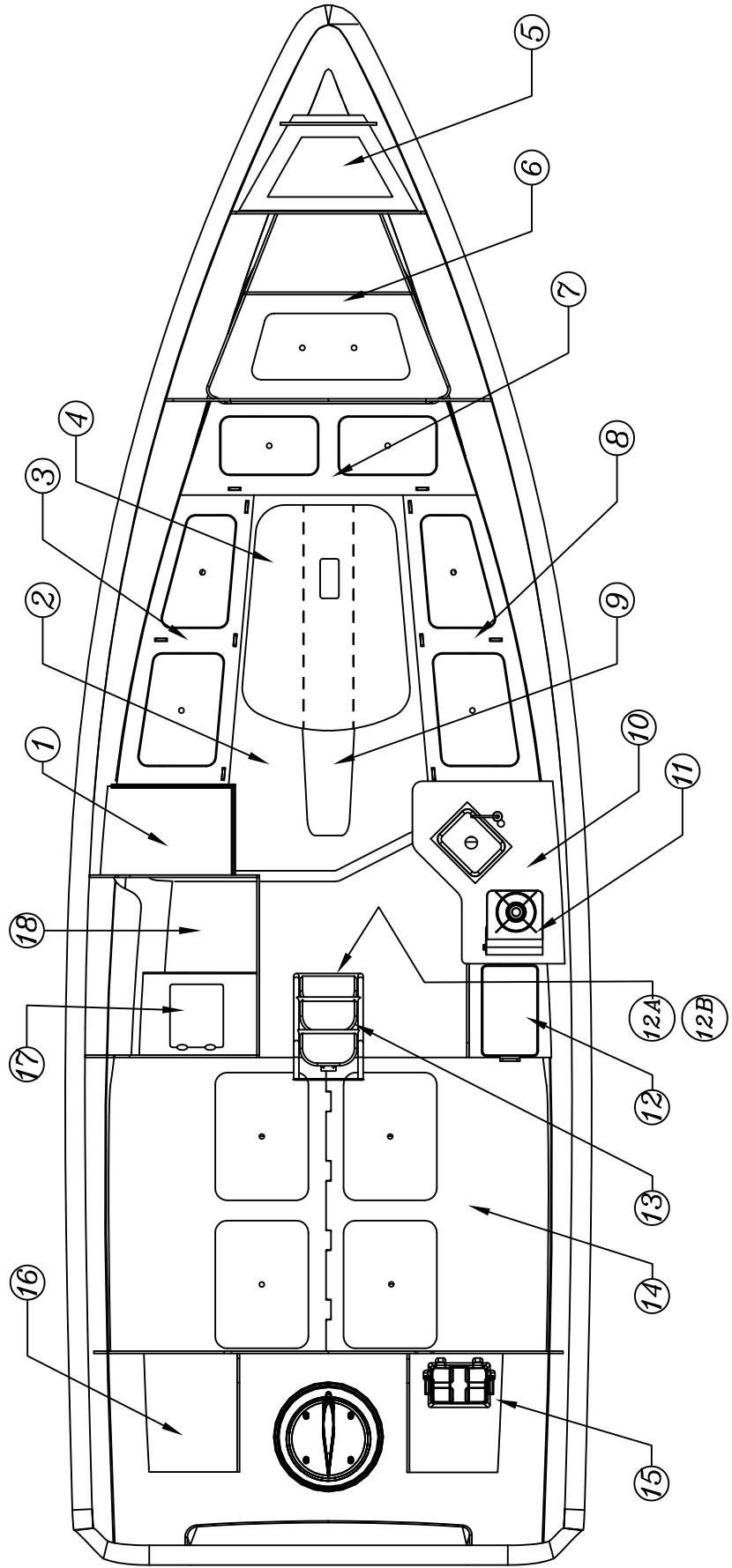
**FAILURE TO FOLLOW PRECAUTIONS MAY RESULT IN SEVERE INJURY OR DEATH**



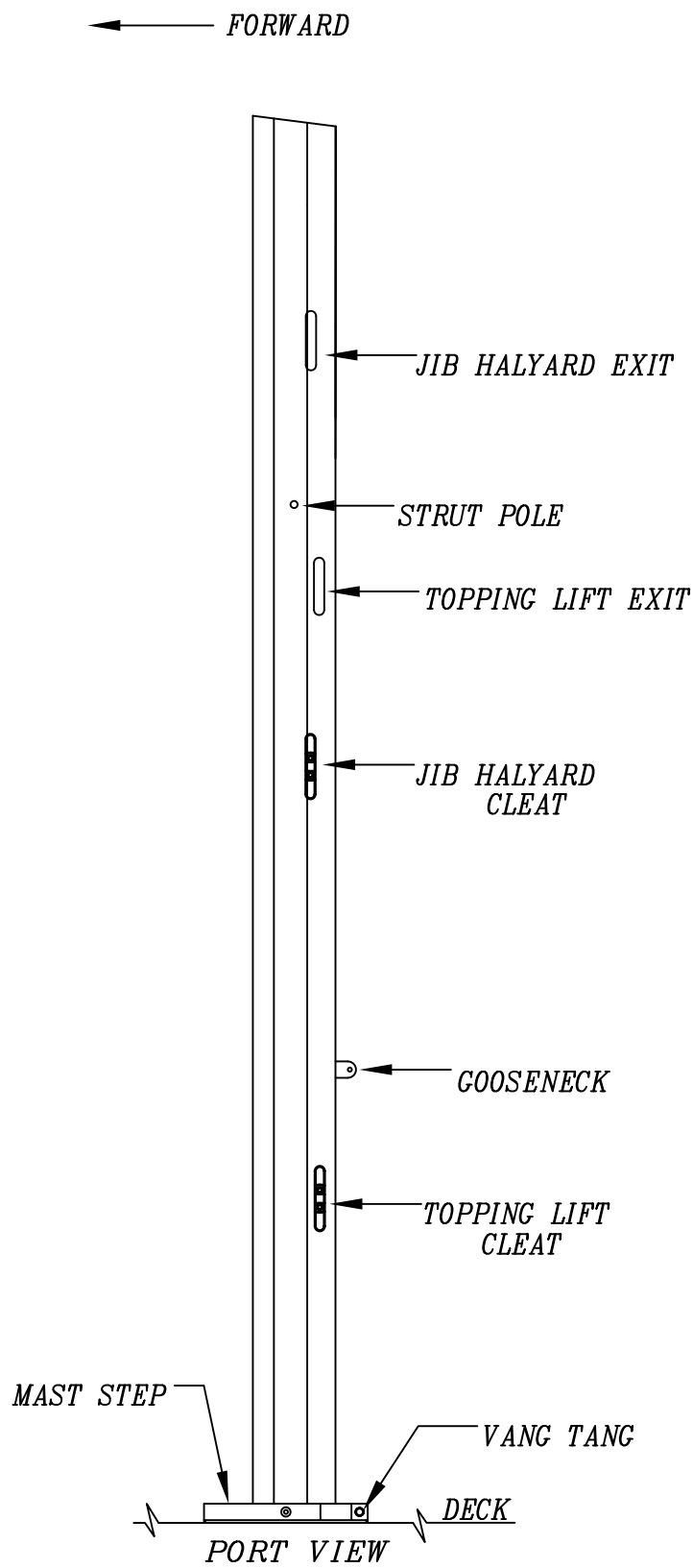
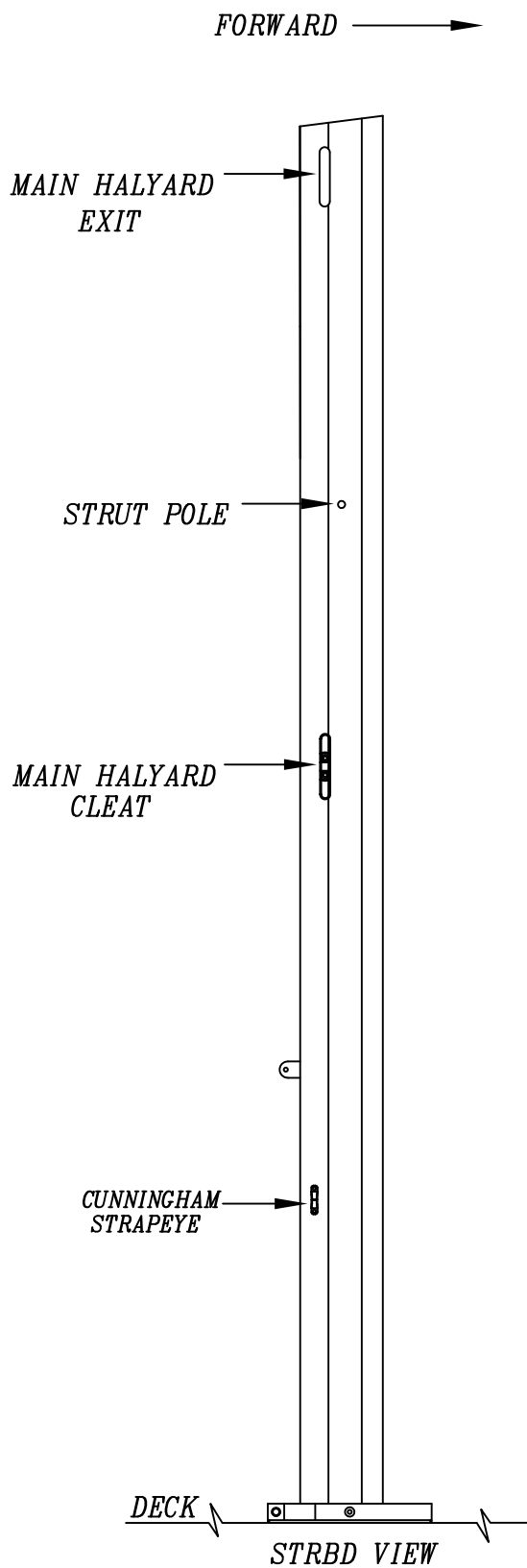
## 27 the EDGE DECK HARDWARE LIST

ITEM	DESCRIPTION
1	MAST FORWARD CRUTCH SUPPORT (ON BOW RAIL)
2	BOW ROLLER
3	ANCHOR WELL LID HINGES
4	PORT FORWARD MOORING CLEAT
5	DECK FORWARD HATCH
6	STANCHION
7	THRU DECK BLOCK
8	MAST STEP
9	MAST PORT LOWER STRUT MOUNT
10	PORT JIB SHEET TURNING BLOCK
11	PORT CHAIN PLATE
12	PORT EYE BROW
13	CAM CLEAT
14	PORT WINCH
15	PORTLIGHT WITH SCREEN
16	PORT AFT STANCHION
17	COCKPIT GRABRAIL
18	COMPASS
19	PORT AFT MOORING CLEAT
20	OUTBOARD FUEL TANK COMPARTMENT
21	COMPANIONWAY HATCH ASSEMBLY
22	STEERING PEDESTAL ACCESS COVER
23	HELMSEAT / RUDDER COMPARTMENT
24	COCKPIT STORAGE COMPARTMENT LID
25	PORT STERN RAIL
26	MAST AFT SUPPORT CRUTCH
26A	STEERING ARM COVER
27	STERN LIGHT
28	INSULATION BOOT FOR ENGINE CONTROL CABLES
29	INSULATION BOOT FOR ENGINE STEERING CABLE
30	SWIM LADDER WITH GRAB PLATE
30A	SWIM LADDER GRABRAIL
31	STARBOARD STERN RAIL
32	STARBOARD AFT MOORING CLEAT
33	OUTBOARD ENGINE THROTTLE / TRANSMISSION LEVER
34	COCKPIT STEERING PEDESTAL
35	JIB FURLING CLEAT
36	STARBOARD AFT STANCHION WITH FURLING BULLSEYE
37	STARBOARD WINCH
38	STARBOARD PORTLIGHT
39	CAM CLEAT
40	SINGLE LINE SHEET STOPPER
41	PAD EYE
42	STARBOARD JIB SHEET TURNING BLOCK
43	DECK STARBOARD FIXED WINDOW
44	MAST STARBOARD LOWER STRUT MOUNT
45	CENTERBOARD RAISING TURNING CHEEK
46	STARBOARD FORWARD STANCHION WITH FURLING BULLSEYE
47	STARBOARD EYE BROW
48	STARBOARD FORWARD MOORING CLEAT
49	ANCHORWELL LINE CLEAT
49A	FURLING LINE TURNING BLOCK
50	ANCHORWELL LATCH
50A	ANCHORWELL "U" BOLT
50B	ANCHORWELL DRAIN PLATE
50C	STEM PLATE
50D	STEM PAD EYE
51	BOW LIGHT (ON BOW RAIL)
52	ANCHOR WELL LID

- |                                   |  |                         |
|-----------------------------------|--|-------------------------|
| 1 MAIN CABIN HANGING LOCKER       | 7 MAIN CABIN FORWARD BUNK                    | 13 ENTRANCE STEP        |
| 2 MAIN CABIN FLOOR (BALLAST TANK) | 8 MAIN CABIN STARBOARD BUNK                  | 14 AFT CABIN BUNK       |
| 3 PORT SALON BUNK                 | 9 CENTERBOARD TRUNK COVER                    | 15 ENGINE START BATTERY |
| 4 DINING TABLE                    | 10 GALLEY                                    | 16 WASTE TANK PLATFORM  |
| 5 ANCHORWELL ACCESS DOOR          | 11 COOKING STOVE (OPTION)                    | 17 PORTABLE TOILET      |
| 6 FORWARD CABIN BUNK              | 12 ELECTRIC COOLER (OPTION)                  | 18 HEAD ROOM            |
|                                   | 12A BALLAST TANK ACCESS COVER                |                         |
|                                   | 12B BALLAST TANK LEVEL INDICATOR (IN ACCESS) |                         |







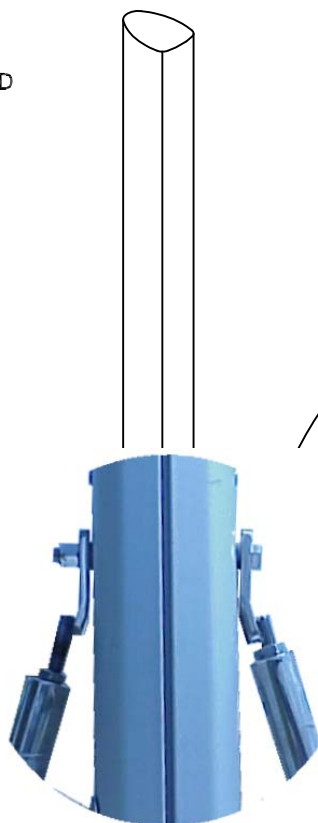
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**HUNTER**

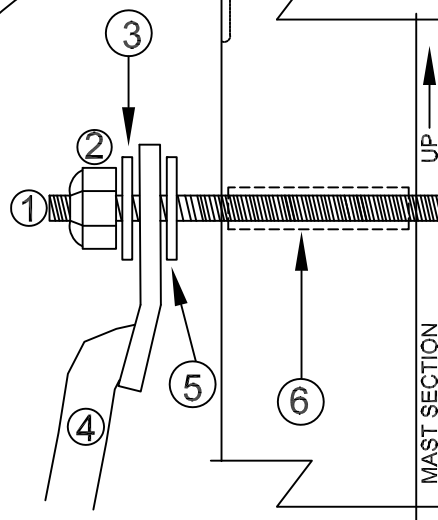
<b>MAST ARRANGEMENT</b>	
DESIGNER: ENG	REVISION NO. None
DRAWING NO. 27TE8065	DATE: 04/17/08

## MOUNTING KITS

- ① 3/8" (9.5 mm) S.S. THREADED ROD
- ② 3/8" (9.5 mm) LOCK NUT
- ③ 3/8" (9.5 mm) S.S. FLAT WASHER
- ④ UPPER STRUT BRACKET
- ⑤ 3/8" (9.5mm) NYLON WASHER
- ⑥ COMPRESSION SLEEVE



UPPER STRUT ASSEMBLY



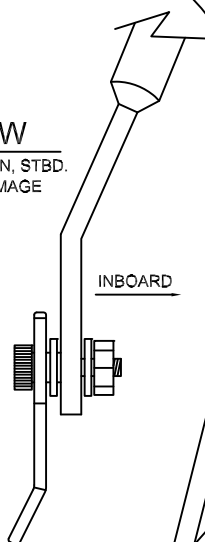
SIDE VIEW

PORT SIDE SHOWN, STBD.  
SIDE IS MIRROR IMAGE

LOWER STRUT ASSEMBLY

SIDE VIEW

PORT SIDE SHOWN, STBD.  
SIDE IS MIRROR IMAGE



INBOARD

### ATTENTION:

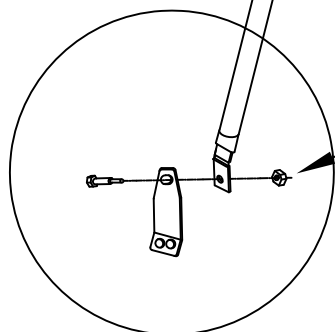
NEVER TRY TO SAIL  
THE VESSEL WITHOUT  
STRUTS IN PLACE AND  
PROPERLY FASTENED.  
SOME PLAY IS DESIRABLE,  
THEREFORE DO NOT OVER-  
TIGHTEN THE LOWER  
STRUT BRACKET.

STRUT MOUNTING PLATES

NOTE: STRUTS MOUNT TO INBOARD  
SIDE OF STRUT MTG. PLATE

SECURE THE STRUT ON BRACKET

STRUT  
BRACKET ASSEMBLY



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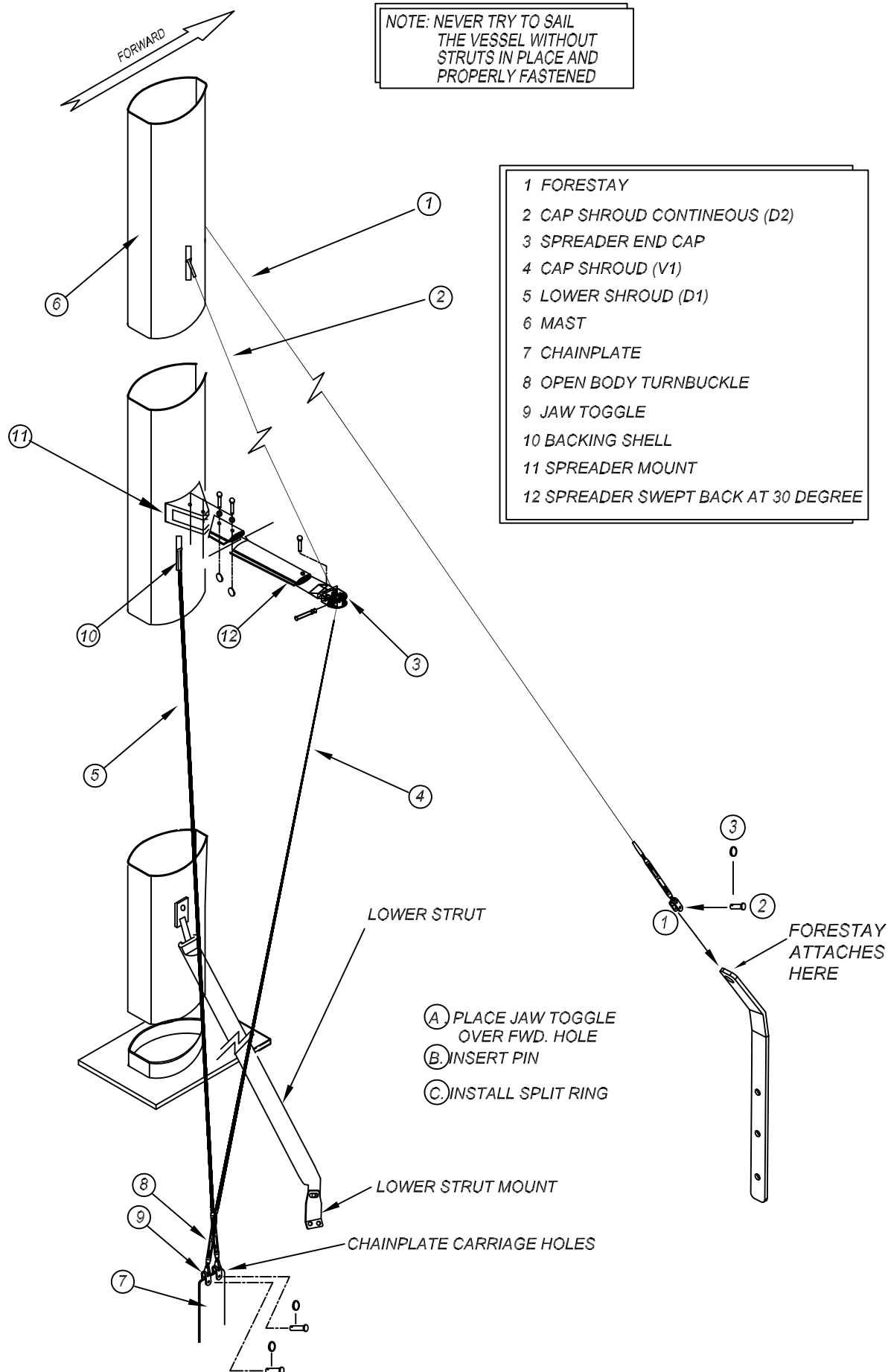
DRAWING TITLE: **STRUT ASSEMBLY**

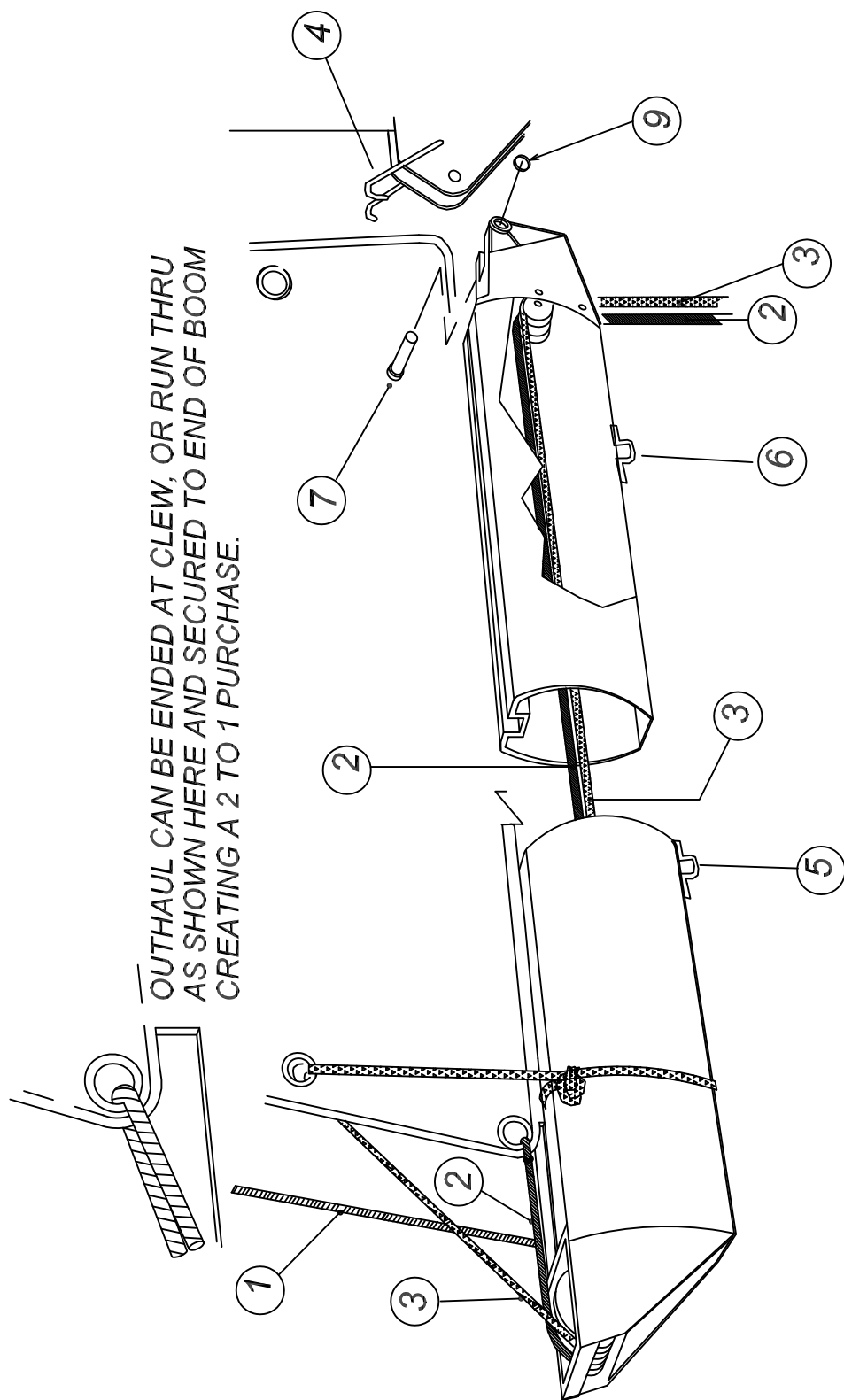
DRAWING NO.: 27TE8066

REVISION NO.: None

DATE: 04/18/08

ENG





OUTHAUL CAN BE ENDED AT CLEW, OR RUN THRU AS SHOWN HERE AND SECURED TO END OF BOOM CREATING A 2 TO 1 PURCHASE.

- ① BOOM TOPPING LIFT
- ② OUTHAUL
- ③ REEF LINE
- ④ RAMSHANK HOOKS (FOR TACK REEF GROMMET)
- ⑤ MAINSHEET PURCHASE BAILE
- ⑥ VANG BAILE
- ⑦ BOOM CLEVIS PIN
- ⑧ RETAINING RING

## **27 the EDGE REEFING INSTRUCTIONS**

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IF THE WIND STRENGTH BUILDS TO THE POINT WHERE THE BOAT HEELS EXCESSIVELY OR UNCOMFORTABLY, YOU MAY REDUCE THE SAIL AREA BY TAKING IN A REEF. REEFING IS EASIEST WHEN DONE ON A STARBOARD TACK (WHEN THE WIND IS BLOWING FROM THE STARBOARD SIDE) SINCE THE JIB SHEET IS ON THE PORT SIDE, AND THE HALYARD WINCH IS THEN FREE. HOWEVER, REEFING CAN BE DONE ON EITHER TACK.

1. FEATHER THE BOAT INTO THE WIND SLIGHTLY TO REDUCE THE HEEL.

2. EASE THE TENSION ON THE MAINSHEET.

3. MAKE SURE THE STARBOARD WINCH IS FREE BY EITHER PUTTING THE BOAT ON A STARBOARD TACK OR BY TAKING THE JIB SHEET AND JAMMING IT IN THE JIB SHEET JAM CLEAT BEFORE REMOVING IT FROM THE WINCH.

4. TRANSFER THE MAIN HALYARD TO THE WINCH, AND TAKE UP FULL TENSION OF THE HALYARD BETWEEN THE WINCH AND THE SHEET STOPPER. THEN UNLOCK THE MAIN HALYARD SHEET STOPPER.

5. LOWER THE MAIN HALYARD UNTIL THE FORWARD REEF CRINGLE ON THE SAIL CAN BE SECURED BY INSERTING THE REEF HOOK THRU LOCATED ON THE BOOM GOOSE NECK THROUGH THE CRINGLE.

6. RETENSION THE MAIN HALYARD UNTIL ALL THE SLACK OR WRINKLES ARE REMOVED FROM THE LUFF.

7. TIGHTEN THE REEF LINE AT THE FORWARD END OF THE BOOM BY PULLING THE LINE DOWN THROUGH THE SHEAVE AND JAM UNTIL THE AFT REEFING CRINGLE IS AGAINST THE BOOM AND THE LINE CANNOT BE TENSIONED ANY FURTHER. THE MAINSHEET AND VANG MAY HAVE TO BE LOOSENERED TO BE ABLE TO ACHIEVE THE PROPER TENSION.

8. JAM THE REEF LINE AT THE GOOSENECK. RETENSION THE VANG AND MAINSHEET ACCORDINGLY. REJAM THE MAIN HALYARD AND TRANSFER THE JIB SHEET BACK TO THE WINCH IF NECESSARY.

9. IF THE WIND CONTINUES TO INCREASE, YOU MAY DROP THE JIB COMPLETELY AND LASH IT TO THE DECK USING A SAIL TIE. THIS WILL ALLOW YOU TO SAIL ON A REEFED MAIN ALONE. IN SOME CASES, YOU MAY FIND IT MORE EFFECTIVE TO DROP THE JIB FIRST, INSTEAD OF / BEFORE YOU TAKE IN A REEF. IT MAY ALSO BE EASIER TO TAKE IN A REEF BY TEMPORARILY LOWERING THE JIB DURING THE REEFING PROCESS.

### **SHAKING OUT A REEF**

1. TRANSFER MAIN HALYARD TO THE WINCH AS EXPLAINED ABOVE.

2. EASE THE MAIN HALYARD DOWN ENOUGH TO REMOVE THE FORWARD REEF CRINGLE FROM THE REEF HOOK ON THE BOOM GOOSENECK.

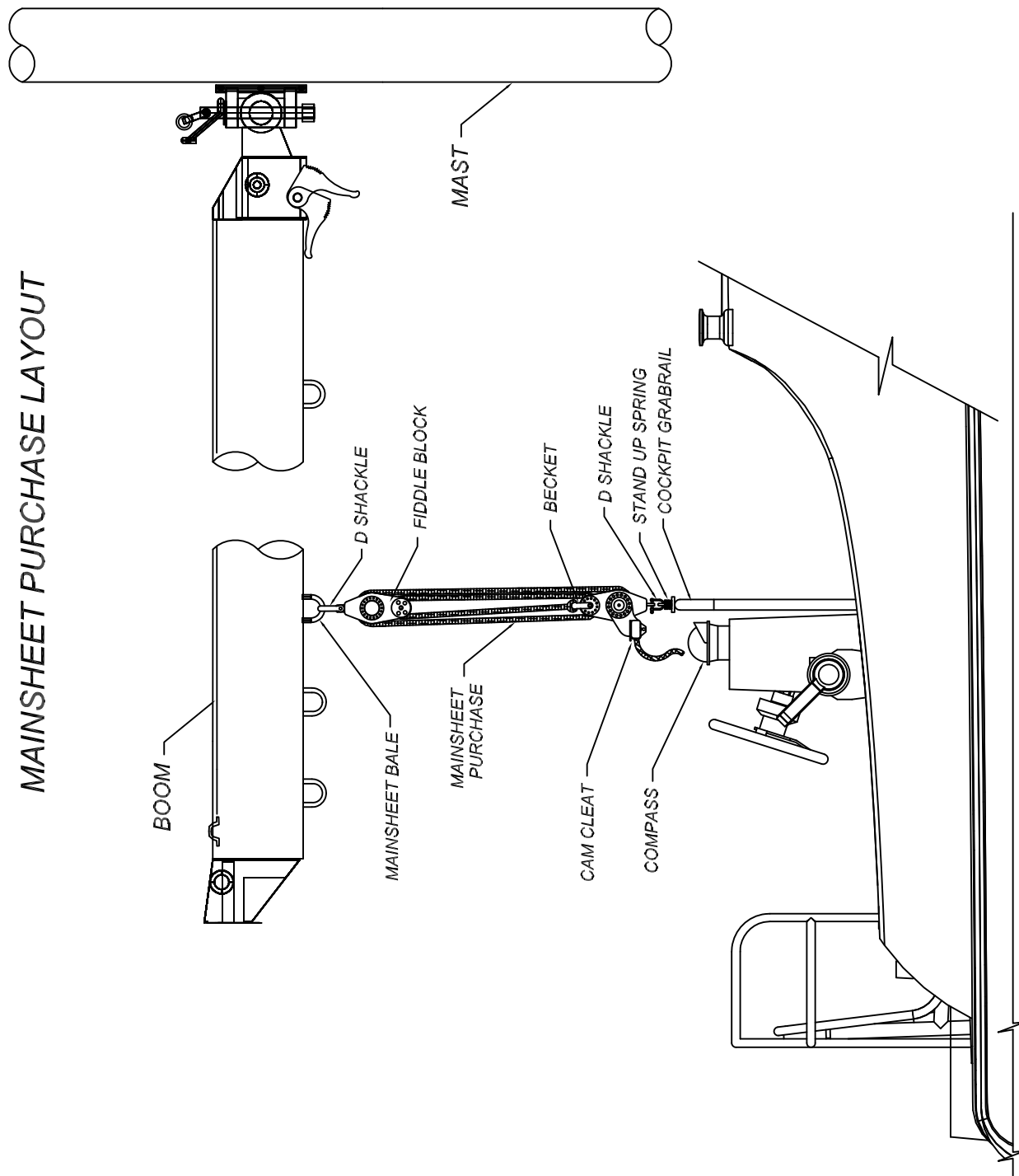
3. UNJAM THE REEF LINE AT THE FORWARD END OF THE BOOM.

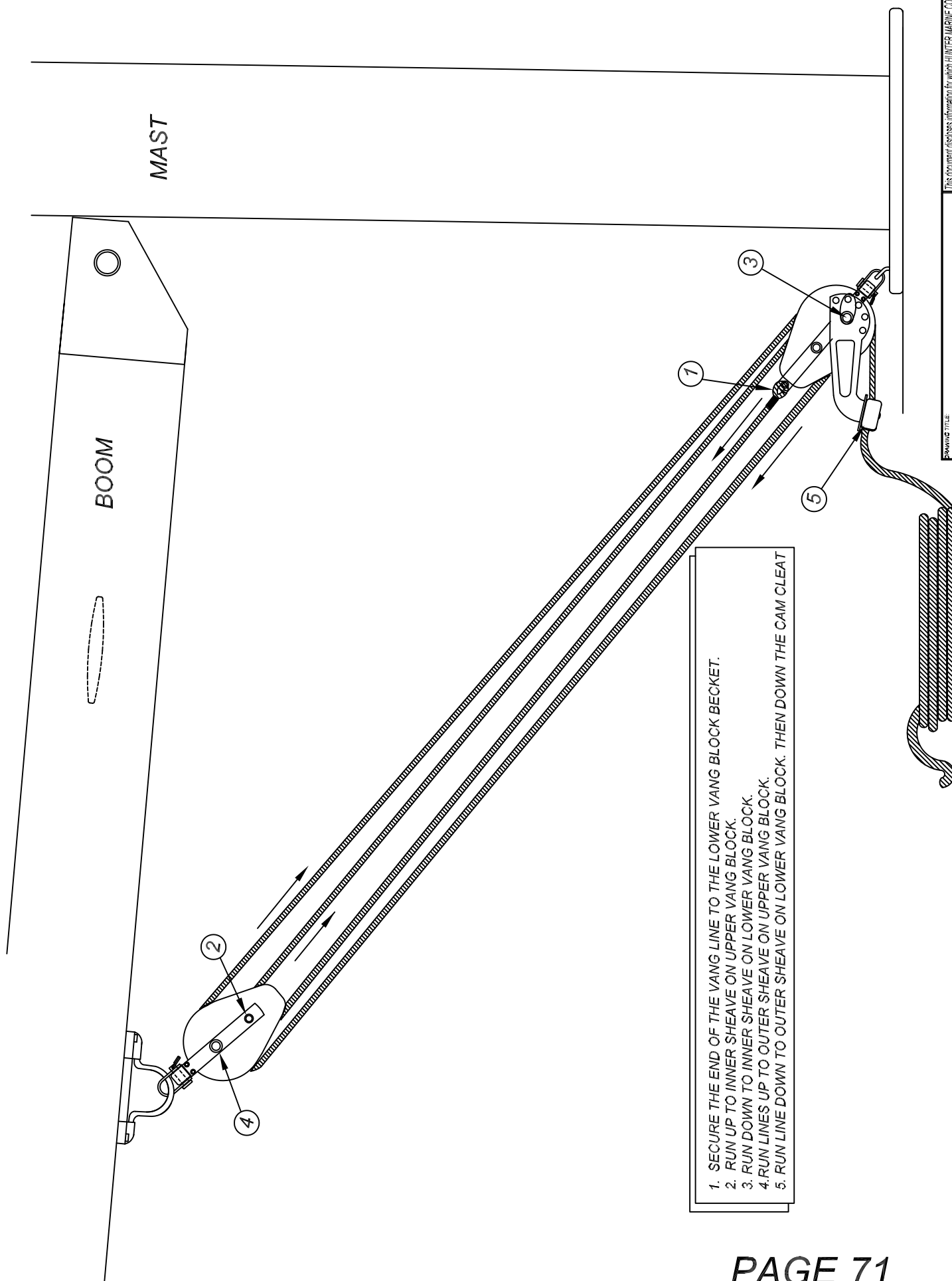
4. RAISE MAIN HALYARD USING THE WINCH. WHILE DOING SO, ENSURE THE REEFING LINE CONTINUES TO RUN THROUGH THE SAIL REEF CRINGLE AND THE FORWARD BOOM JAM.

5. TENSION THE MAIN HALYARD AND REJAM

6. ADJUST THE SHEET AND VANG AS NECESSARY.

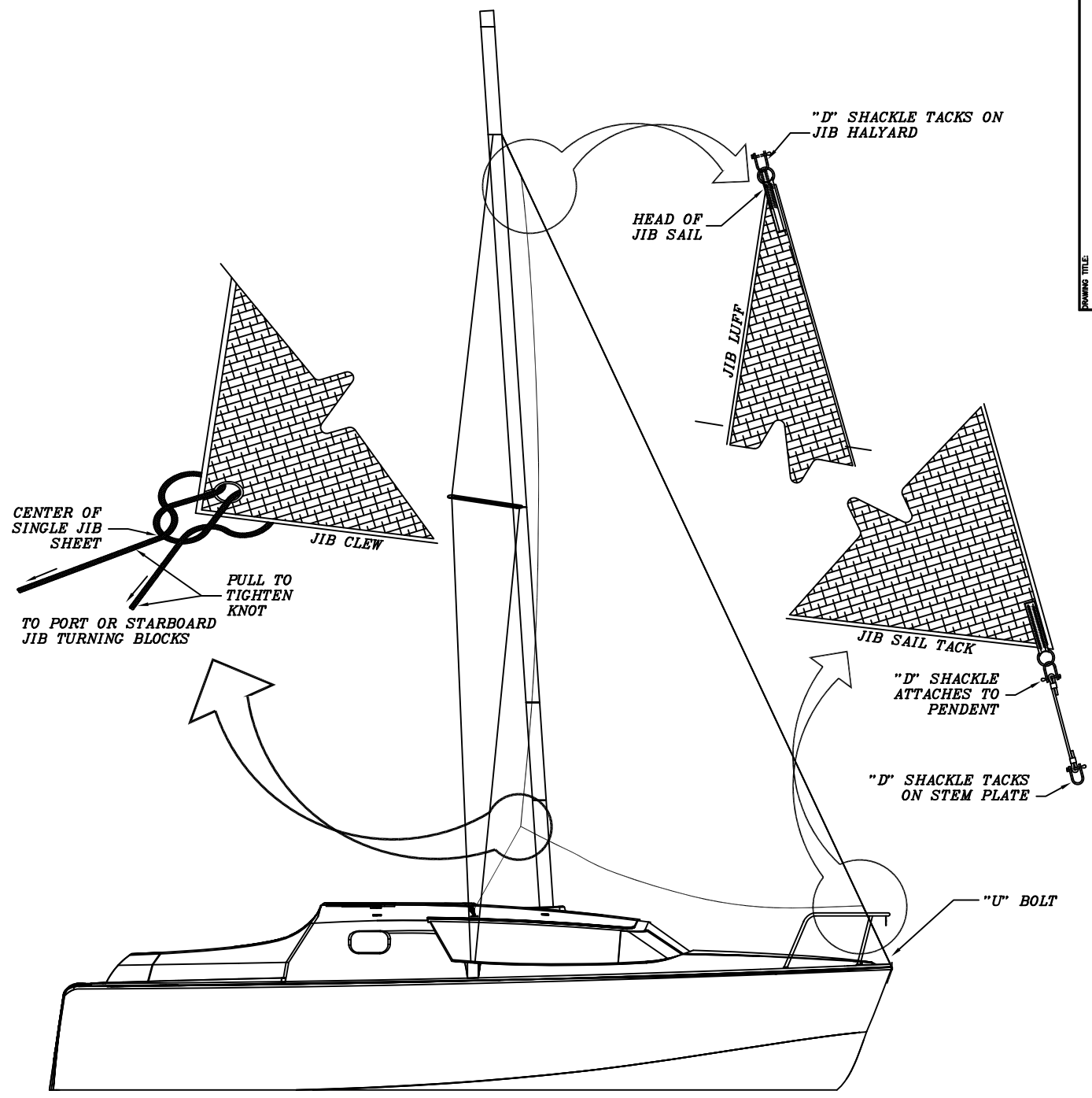
# MAINSHEET PURCHASE LAYOUT



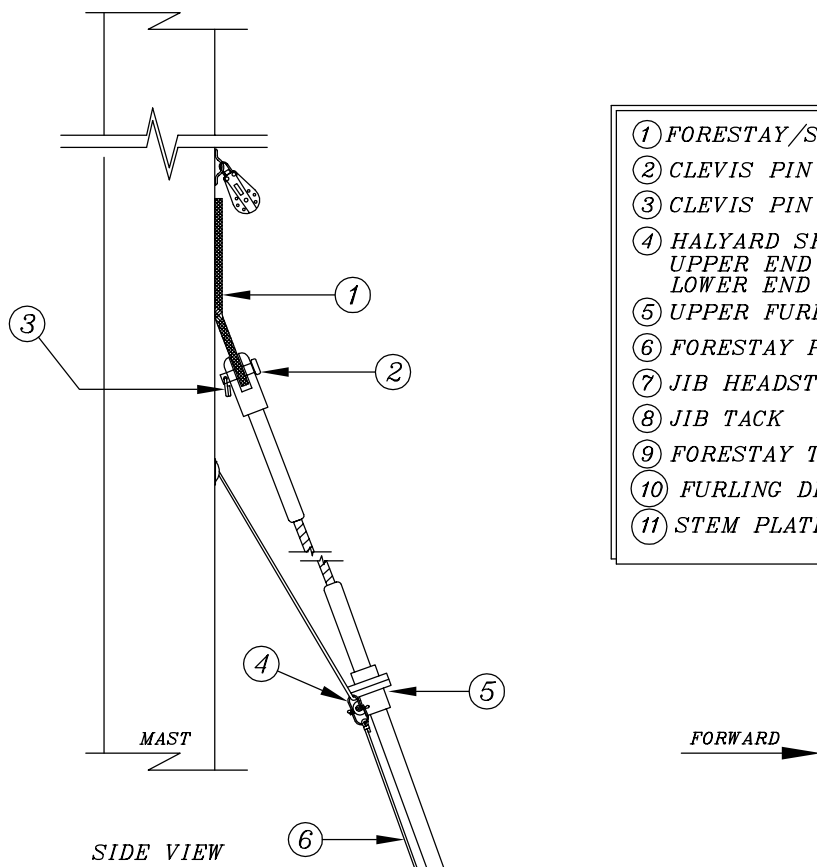


1. SECURE THE END OF THE VANG LINE TO THE LOWER VANG BLOCK BECKET.
2. RUN UP TO INNER SHEAVE ON UPPER VANG BLOCK.
3. RUN DOWN TO INNER SHEAVE ON LOWER VANG BLOCK.
4. RUN LINES UP TO OUTER SHEAVE ON UPPER VANG BLOCK.
5. RUN LINE DOWN TO OUTER SHEAVE ON LOWER VANG BLOCK. THEN DOWN THE CAM CLEAT

DRAWING TITLE: <b>STANDARD JIB SHEET ARRANGEMENT</b>			
DRAWING NO.:	27TE8072	REVISION NO.:	None
DRAWN BY:	ENG	DATE:	04/17/08



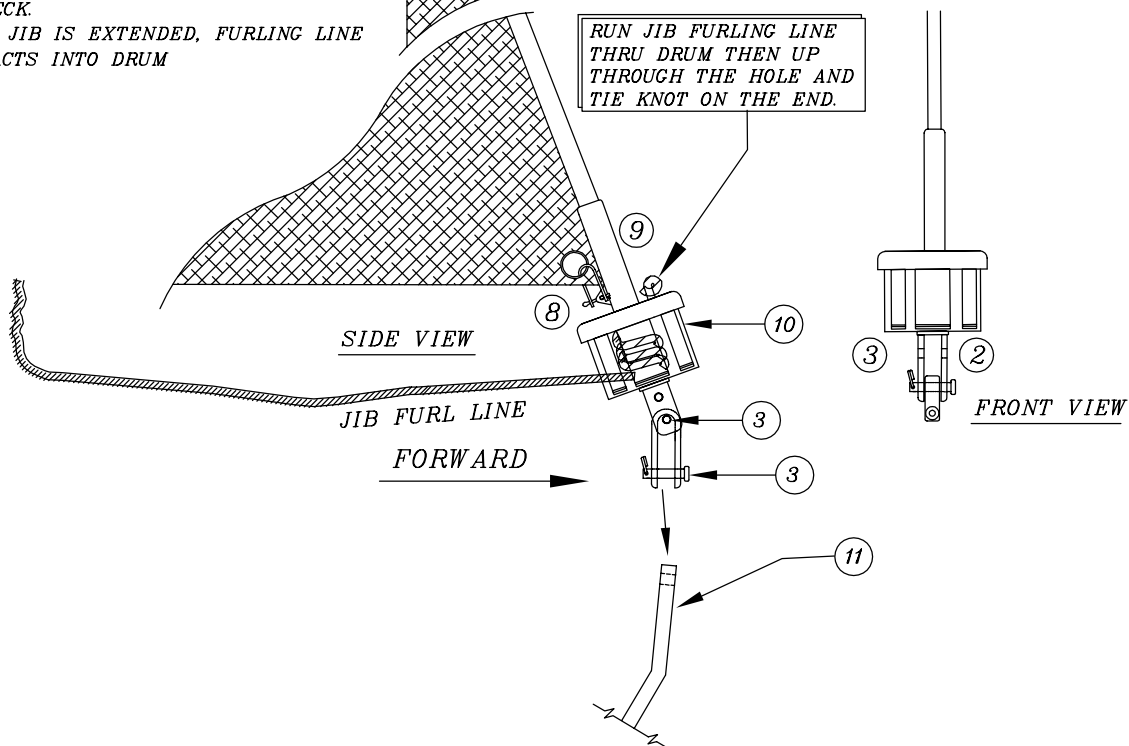




- ① FORESTAY/SHROUD TANG
- ② CLEVIS PIN
- ③ CLEVIS PIN SPLIT RING
- ④ HALYARD SHACKLE  
UPPER END = MARINE EYE  
LOWER END = MARINE EYE
- ⑤ UPPER FURLING SWIVEL
- ⑥ FORESTAY PENDENT
- ⑦ JIB HEADSTAY
- ⑧ JIB TACK
- ⑨ FORESTAY TURNBUCKLE
- ⑩ FURLING DRUM
- ⑪ STEM PLATE

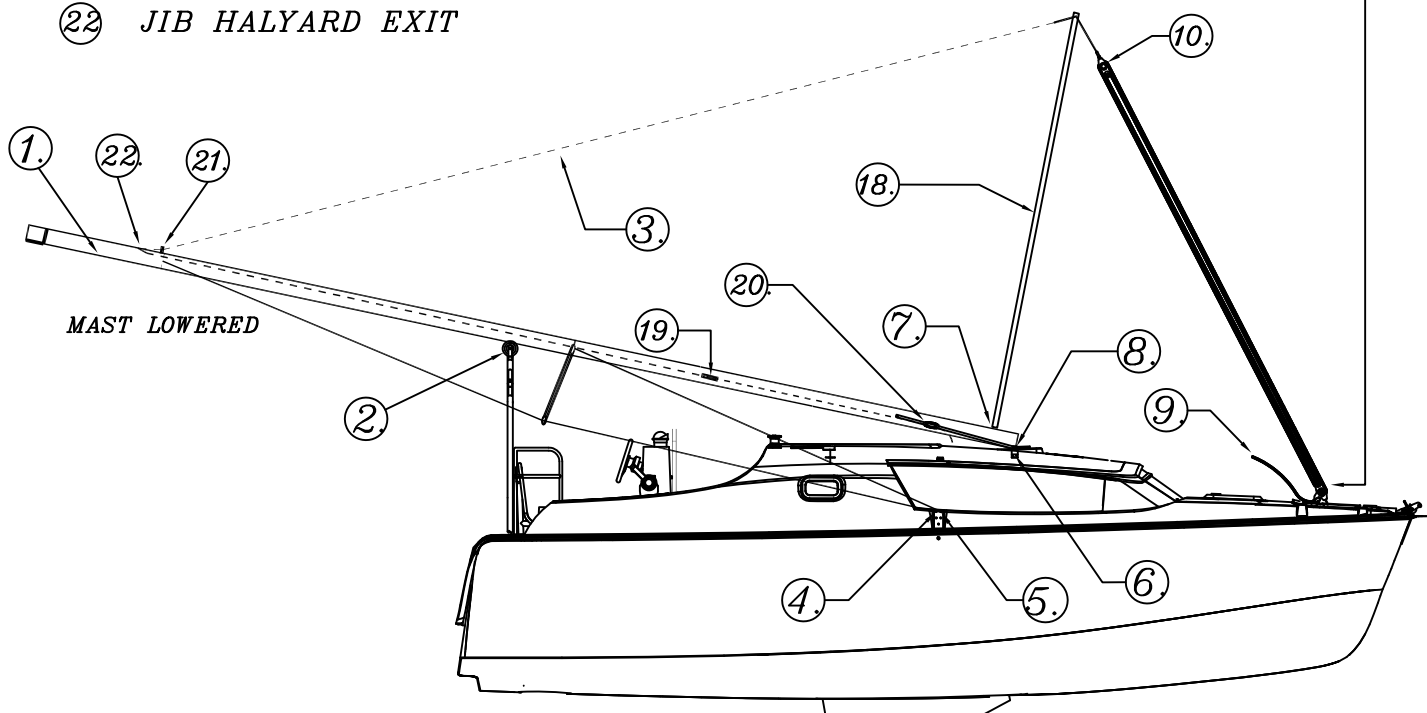
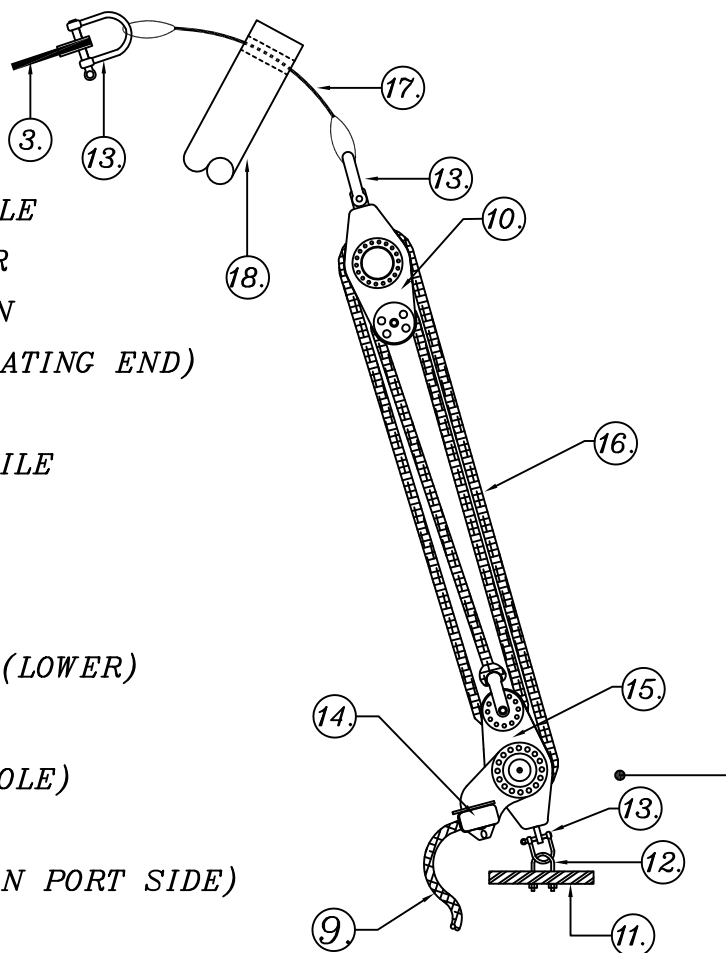
#### JIB FURLING:

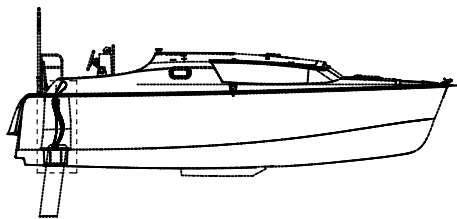
1. JIB IS INSTALLED ROLLED UP
2. FURLING LINE IS EXTENDED ALL THE WAY
3. LEAD FURLING LINE THRU FAIRLEADS ON DECK
4. WHEN JIB IS EXTENDED, FURLING LINE RETRACTS INTO DRUM





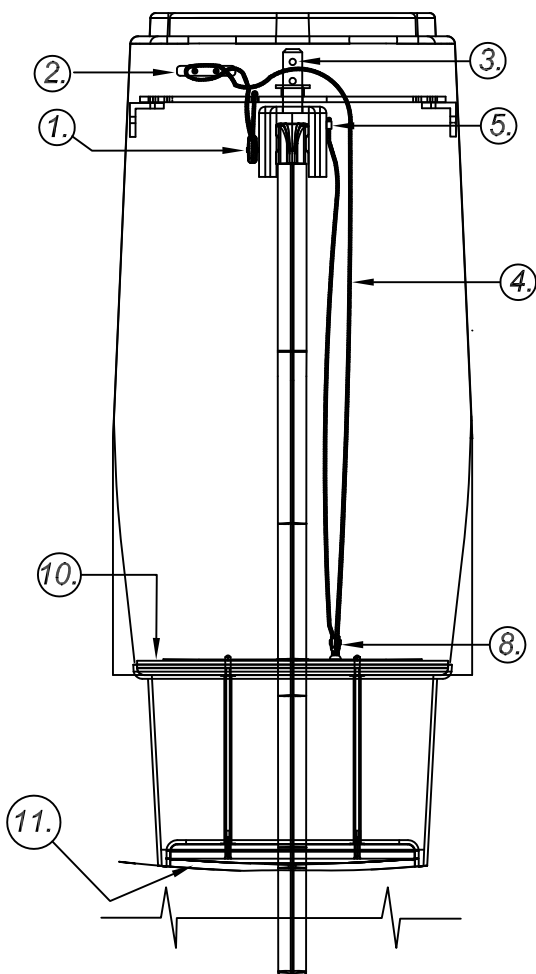
- ① MAST
- ② SLIDE ROLLER
- ③ JIB HALYARD
- ④ CAP SHROUD CARRIAGE HOLE
- ⑤ STRUT MOUNT
- ⑥ LOWER SHROUD CARRIAGE HOLE
- ⑦ MAST RAISING POLE ON SPAR
- ⑧ MAST STEP WITH SAFETY PIN
- ⑨ MAINSHEET PURCHASE (OPERATING END)
- ⑩ FIDDLE BLOCK (UPPER)
- ⑪ ANCHORWELL PLATFORM PROFILE
- ⑫ "U" BOLT IN ANCHORWELL
- ⑬ "D" SHACKLE
- ⑭ CAM CLEAT
- ⑮ FIDDLE BLOCK WITH BECKET (LOWER)
- ⑯ MAINSHEET PURCHASE
- ⑰ THIMPLE (TOP OF RAISING POLE)
- ⑱ MAST RAISING POLE
- ⑲ JIB HALYARD EXIT (LOWER ON PORT SIDE)
- ⑳ CLEAT (PORT SIDE)
- ㉑ EYESTRAP (BELOW JIB HALYARD EXIT)
- ㉒ JIB HALYARD EXIT





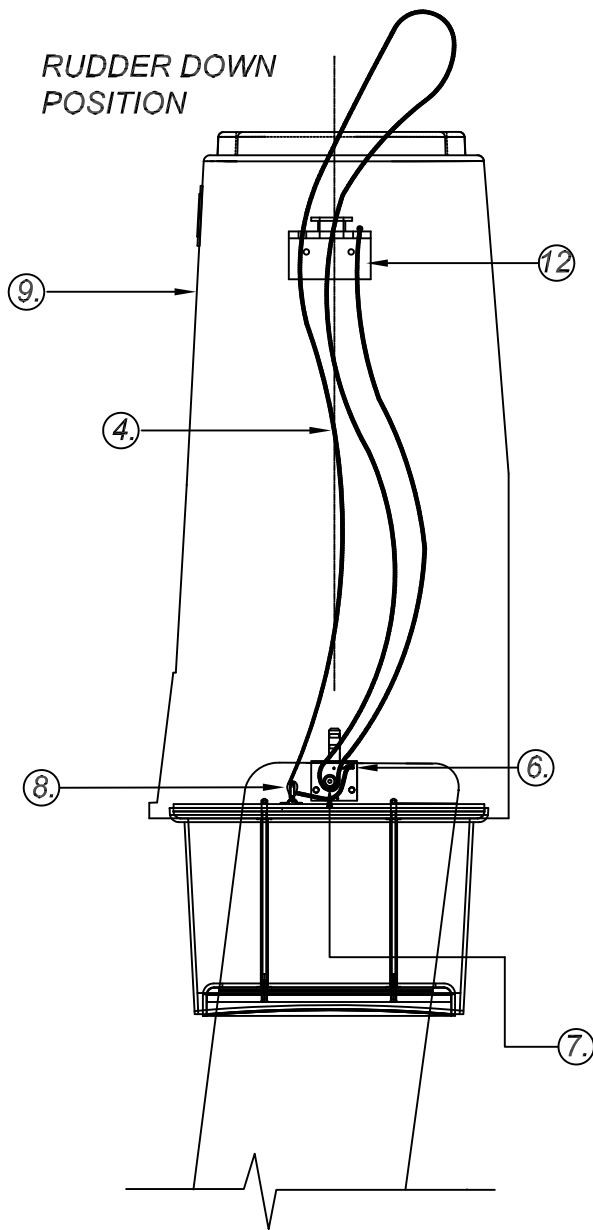
1. UPPER TURNING BLOCK (RUDDER UP POSITION)
2. RAISING LINE CLEAT
3. SAFETY PIN
4. RUDDER RAISING / LOWERING LINE
5. UPPER EYESTRAP
6. UPPER EYESTRAP (RUDDER DOWN POSITION)
7. UPPER TURNING BLOCK (RUDDER DOWN POSITION)
8. LOWER TURNING BLOCK
9. HELMSMAN SEAT BASE
10. RUDDER UPPER BEARING
11. RUDDER LOWER BEARING
12. RUDDER BRACKET ASSEMBLY

RUDDER UP  
POSITION



TRANSOM VIEW

RUDDER DOWN  
POSITION



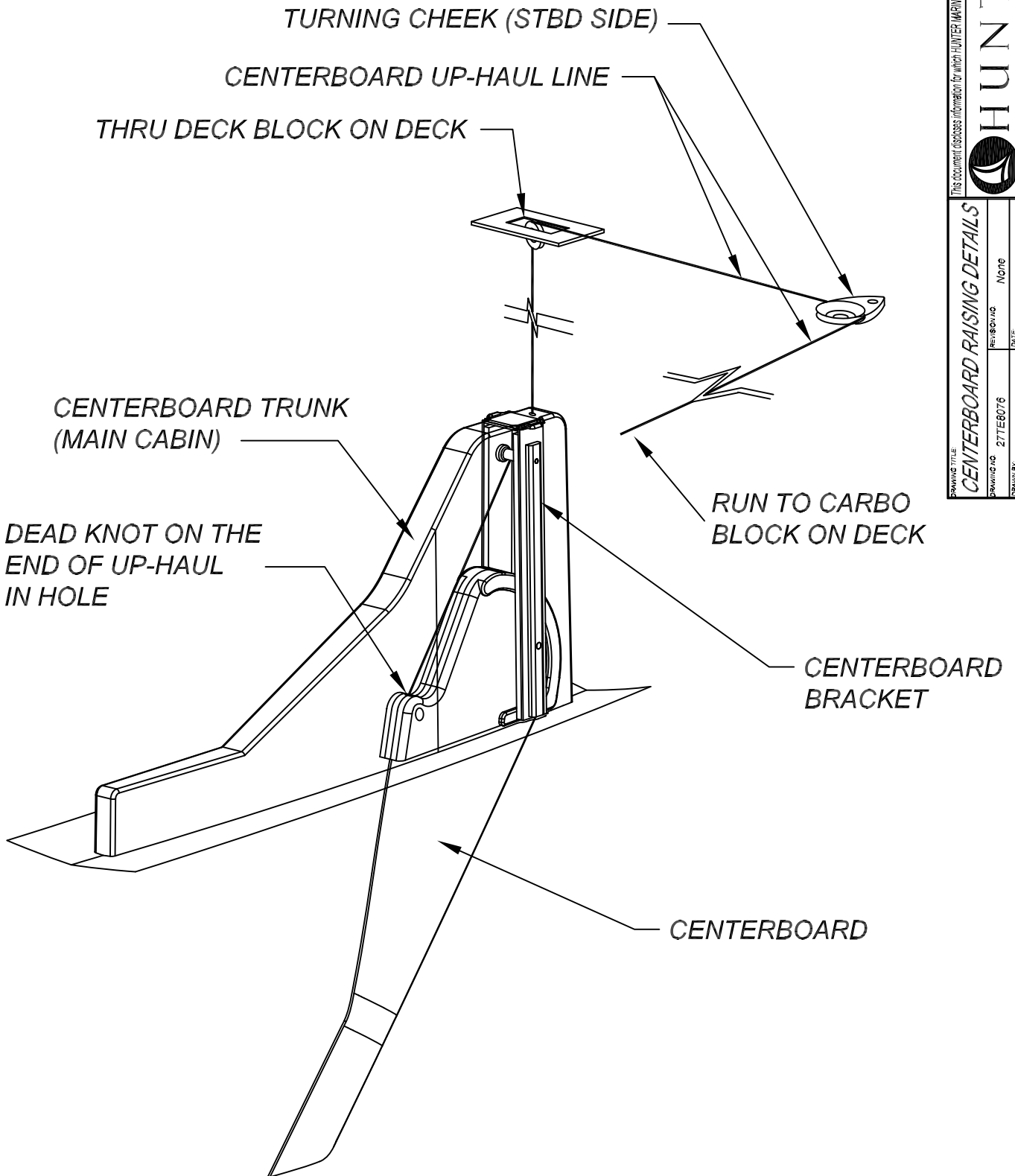
STBD VIEW

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DRAWING TITLE: <b>RUDDER ARRANGEMENT</b>		REVISION NO.	None
DRAWING NO.	27TE8075	DATE:	04/22/08
DRAWN BY:	ENG		



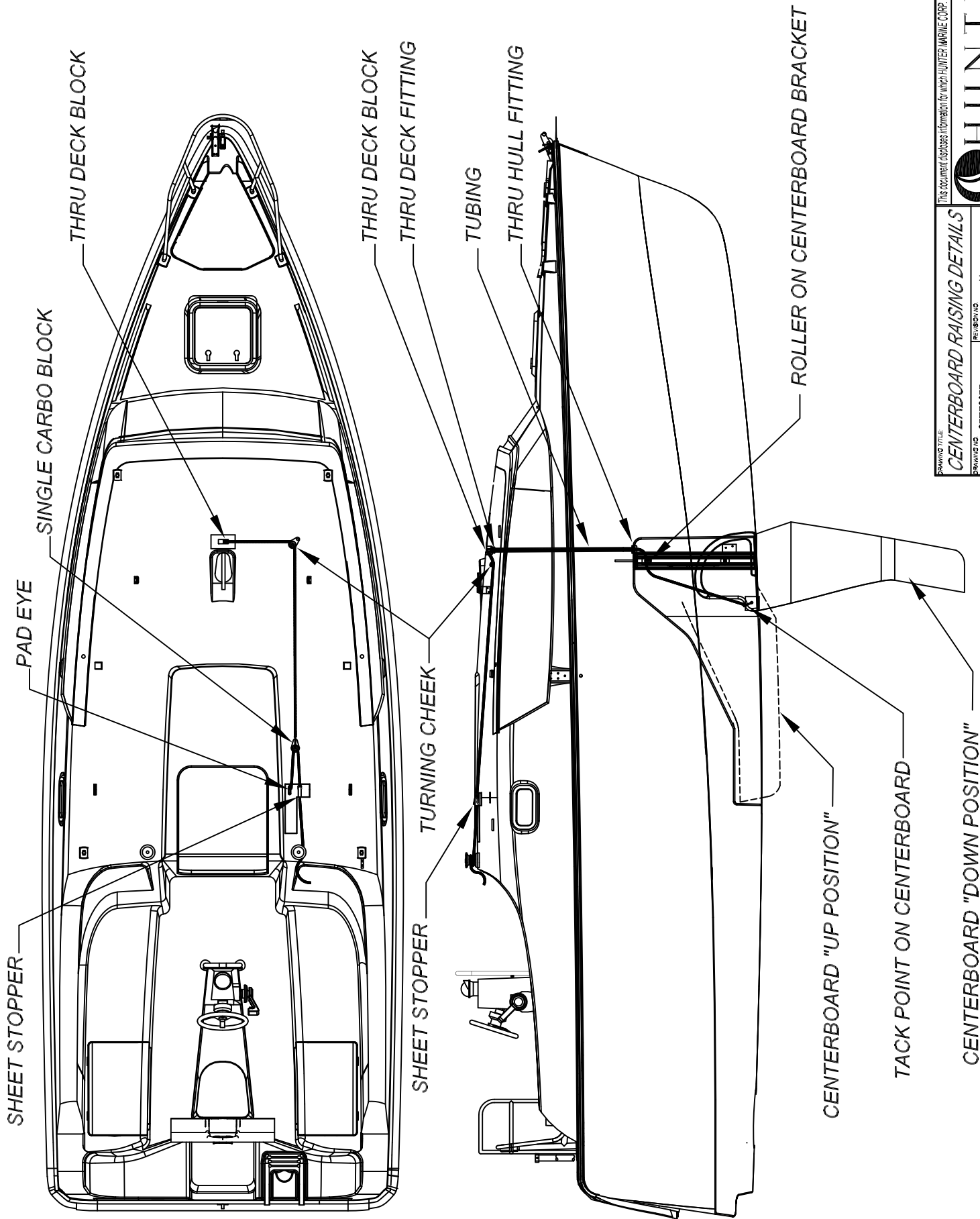
HUNTER



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DRAWING TITLE <b>CENTERBOARD RAISING DETAILS</b>			
DRAWING NO.	27TE8076	REV. NO.	None
DRAWN BY:	ENG	DATE	04/28/08

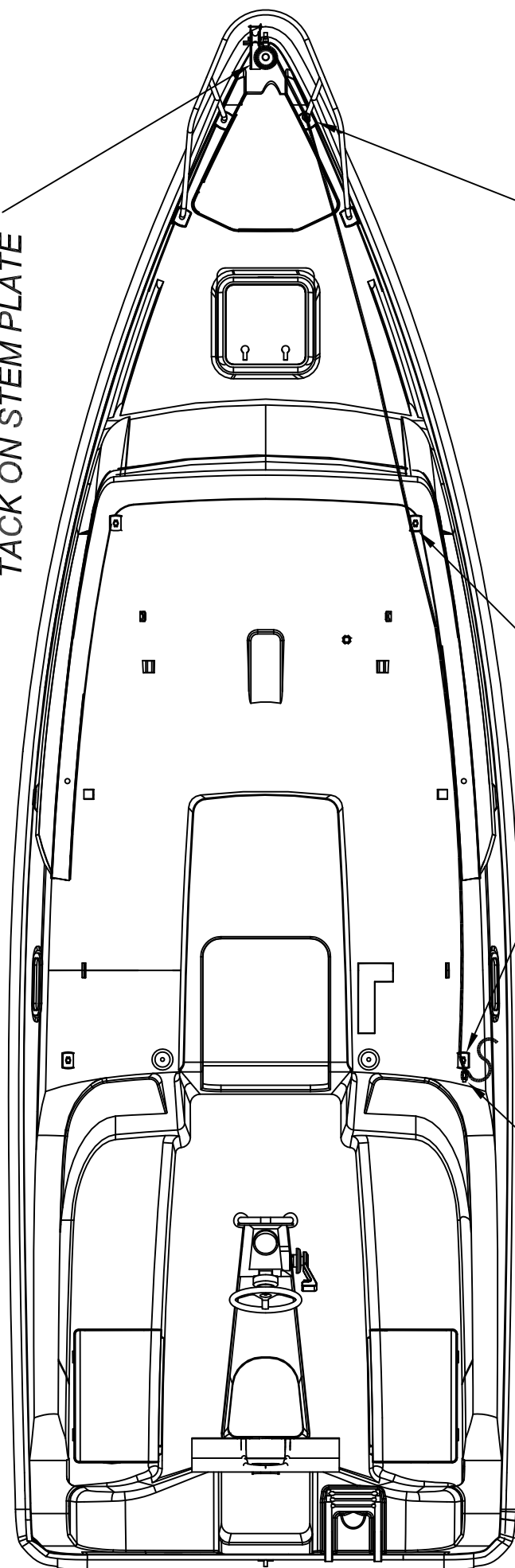


JIB FURLING DRUM ASSEMBLY  
TACK ON STEM PLATE

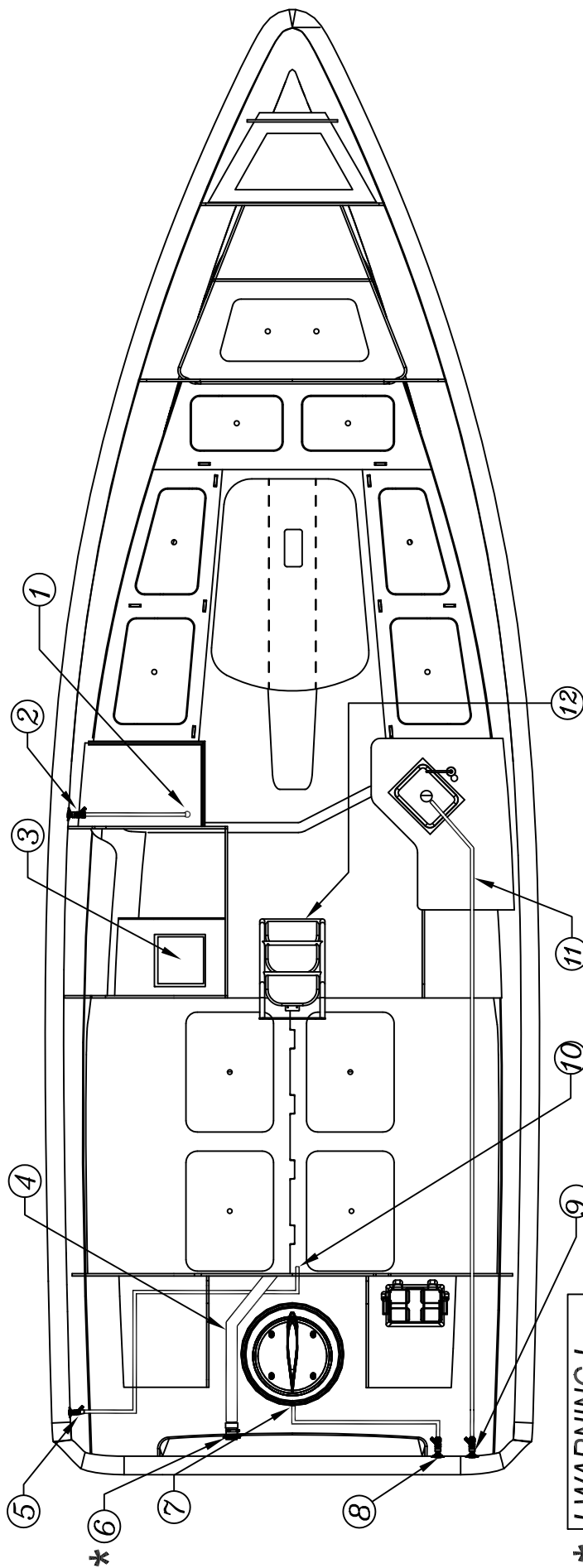
JIB FURL LINE LEAD  
BLOCK (ON BOW RAIL)

JIB LINE RUNS THROUGH  
STANCHION EYE BOCKS

JIB LINE TIES  
OFF ON FURLING CLEAT



1. BALLAST TANK FORWARD VENT FITTING (IN HANGING LOCKER)
2. BALLAST TANK FORWARD VENT THRU HULL FITTING WITH BALL VALVE
3. PORTABLE SANIPOTI TANK
4. BALLAST TANK WATER INLET / DISCHARGE HOSE
5. BALLAST TANK AFT VENT THRU HULL FITTING W/ BALL VALVE
- \* 6. BALLAST TANK CALITIEN VALVE ON TRANSOM
7. RUDDER DRUM OVERFLOW DRAIN FITTING W/ BALL VALVE
8. RUDDER DRUM OVERFLOW DRAIN THRU HULL W/BALL VALVE (TRANSOM)
9. GALLEY SINK DRAIN THRU HULL FITTING (ON TRANSOM)
10. BALLAST TANK AFT VENT FITTING
11. GALLEY DRAIN HOSE
12. BALLAST TANK ACCESS COVER

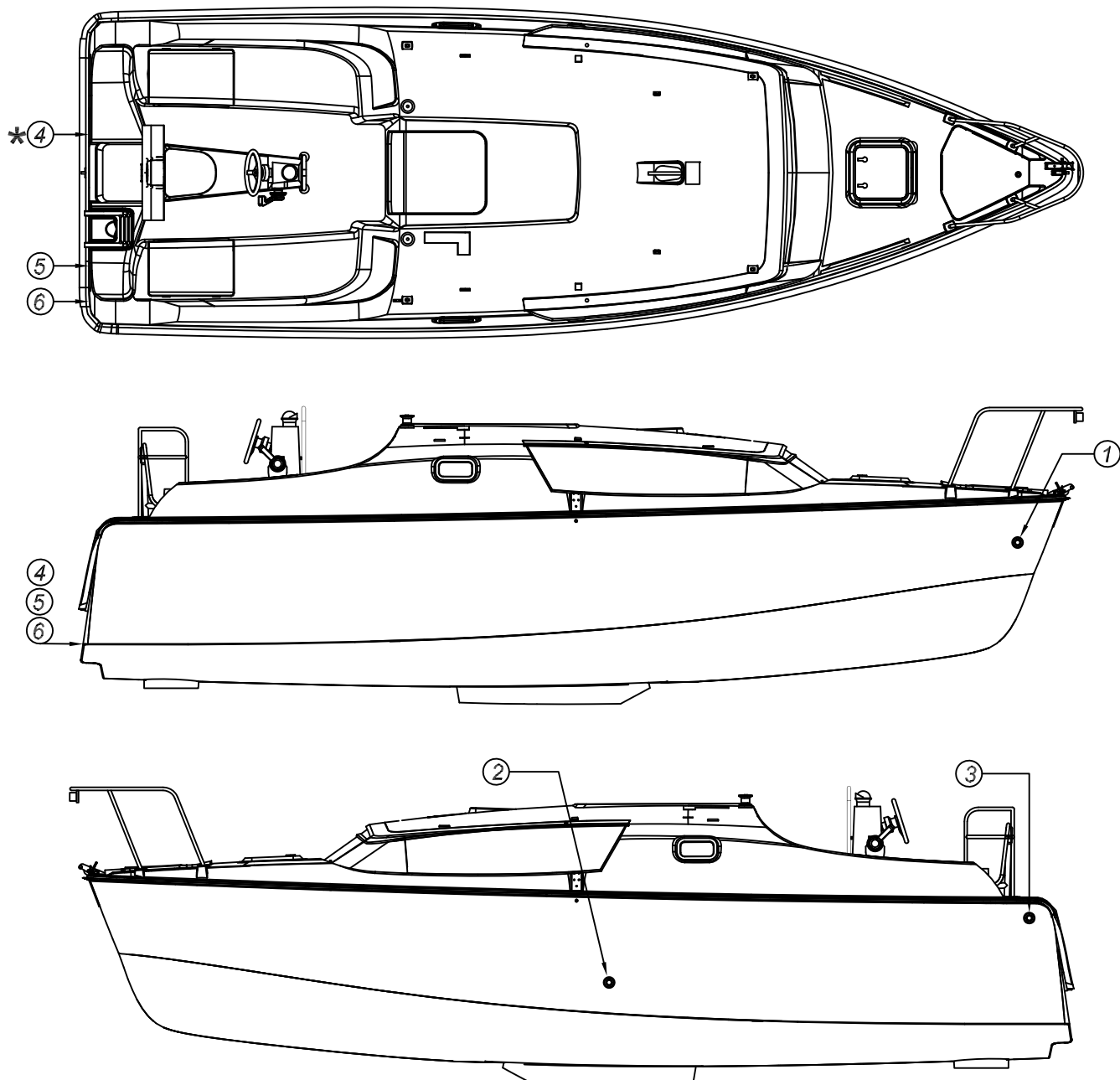


**! WARNING !**

BALLAST TANK GILATIEN VALVE (SEE #4 ABOVE) SHOULD REMAIN CLOSED AT ALL TIMES, UNLESS YOUR BOAT HAS BEEN READY FOR OPERATION UNDER THE BALLAST TANK. FAILURE TO DO SO, COULD LEAD TO A FLOODED AND COULD EVEN SINK YOUR BOAT.



- |                             |   |
|-----------------------------|---|
| ① ANCHORWELL DRAIN          | * ④ BALLAST TANK WATER INLET/ OUTLET GATE VALVE |
| ② BALLAST TANK FORWARD VENT | ⑤ VARA RUDDER DRUM OVERFLOW DRAIN               |
| ③ BALLAST TANK AFT VENT     | ⑥ GALLEY SINK DRAIN                             |



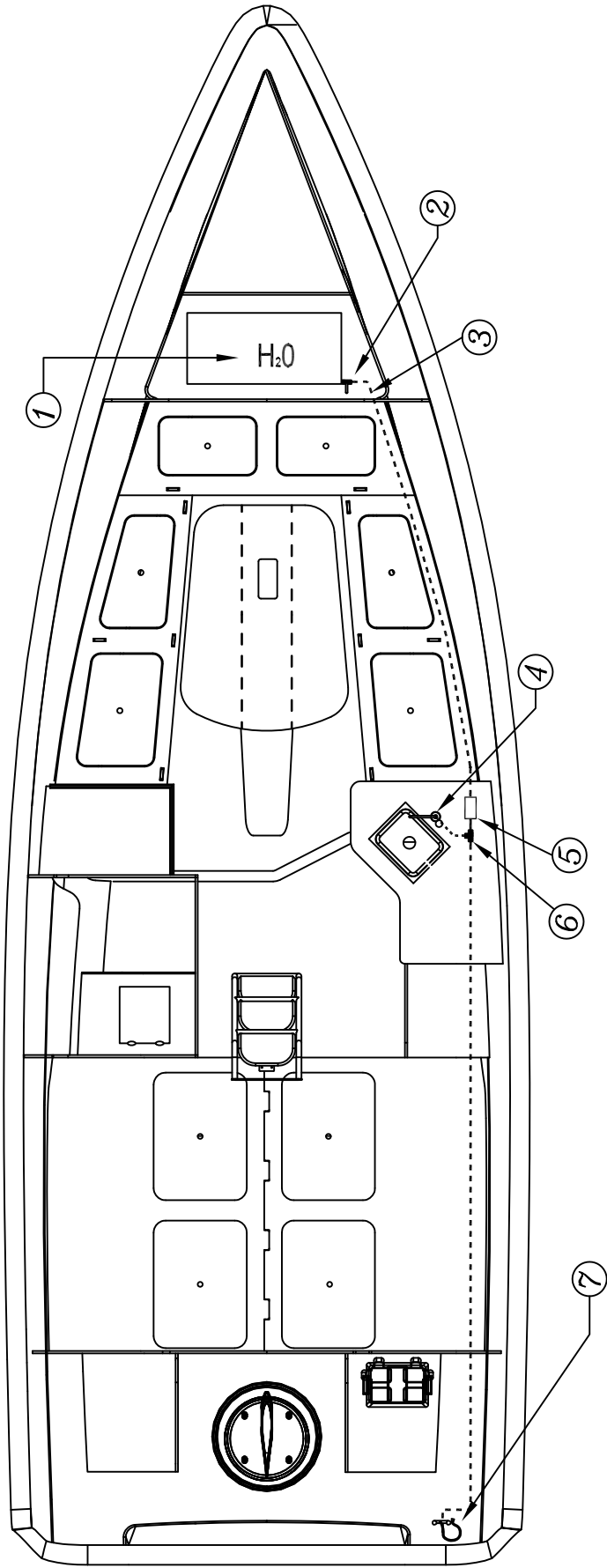
**\* ! WARNING !**

BALLAST TANK GATE VALVE (SEE #4 ABOVE) SHOULD REMAIN CLOSED AT ALL TIMES, UNLESS YOUR BOAT HAS BEEN READY FOR OPERATION UNDER USING THE BALLAST TANK. FAILURE TO DO SO, COULD LEAD TO FLOOD CABIN AREA AND COULD EVEN SINK YOUR BOAT.

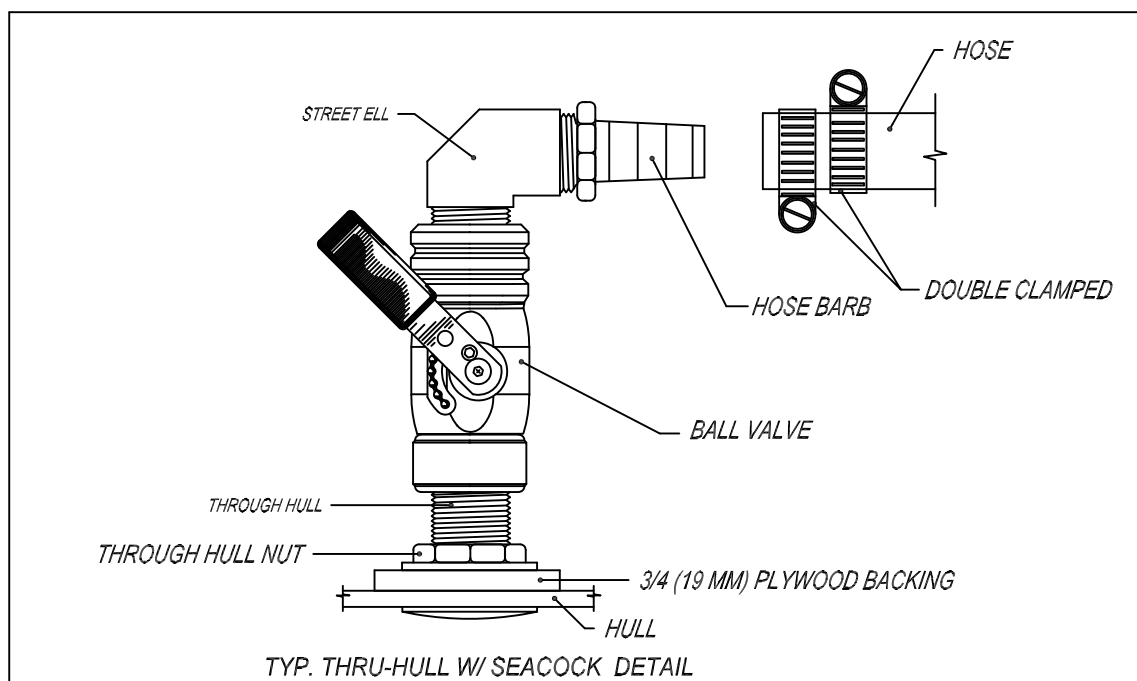
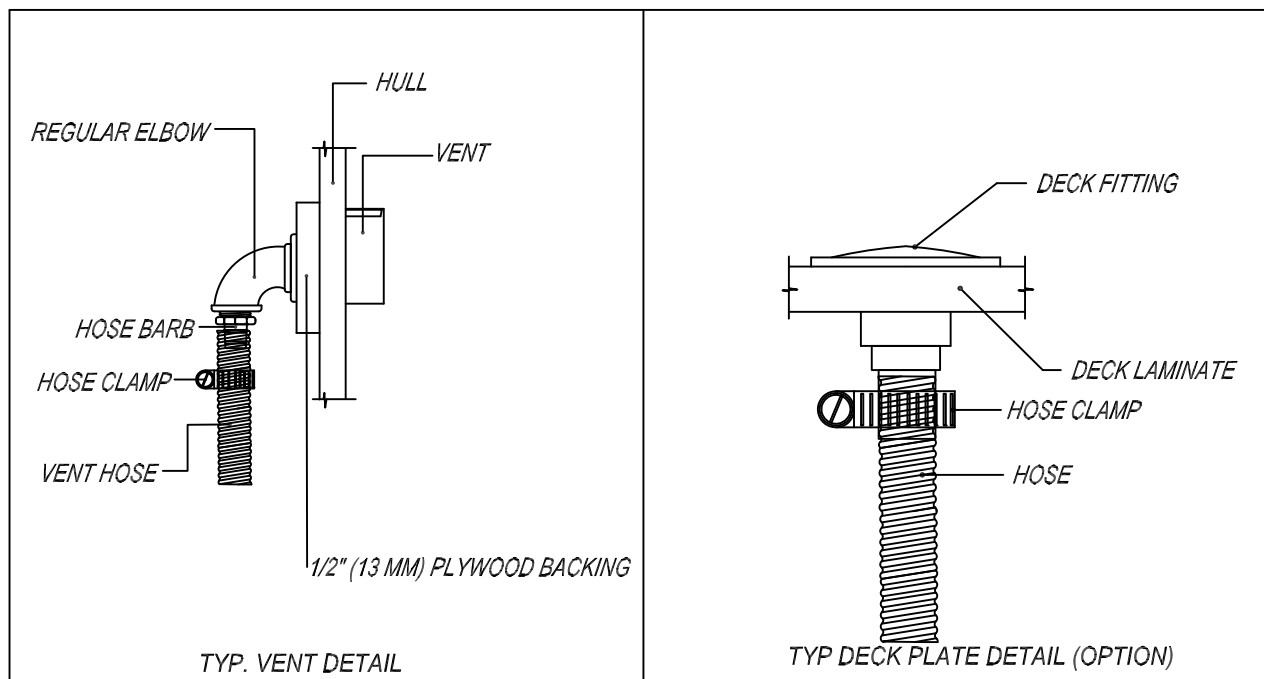


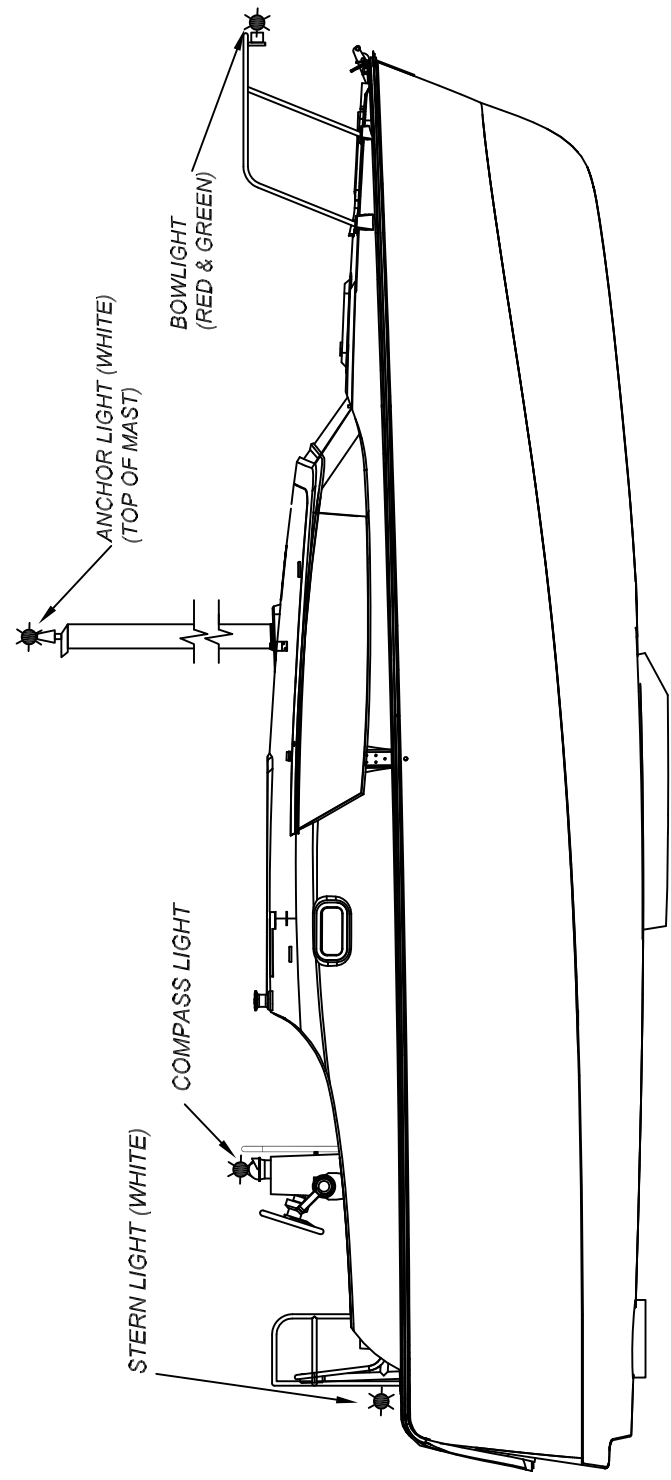
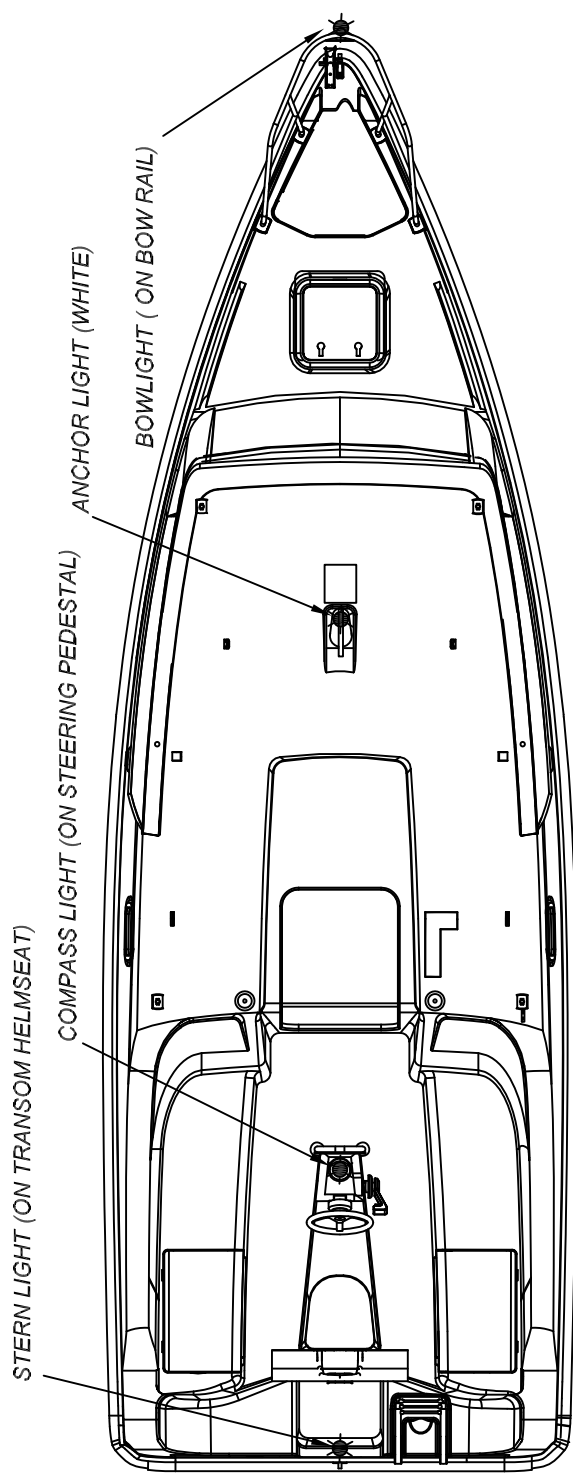
1. OPTIONAL FRESH WATER TANK  
2. FRESH WATER SUPPLY SHUT OFF VALVE  
3. COLD FRESH WATER LINE  
4. GALLEY FAUCET

5. FRESH WATER PUMP  
6. WATER LINE T-FITTING  
7. COCKPIT SHOWER FAUCET (ON DECK TRANSOM)

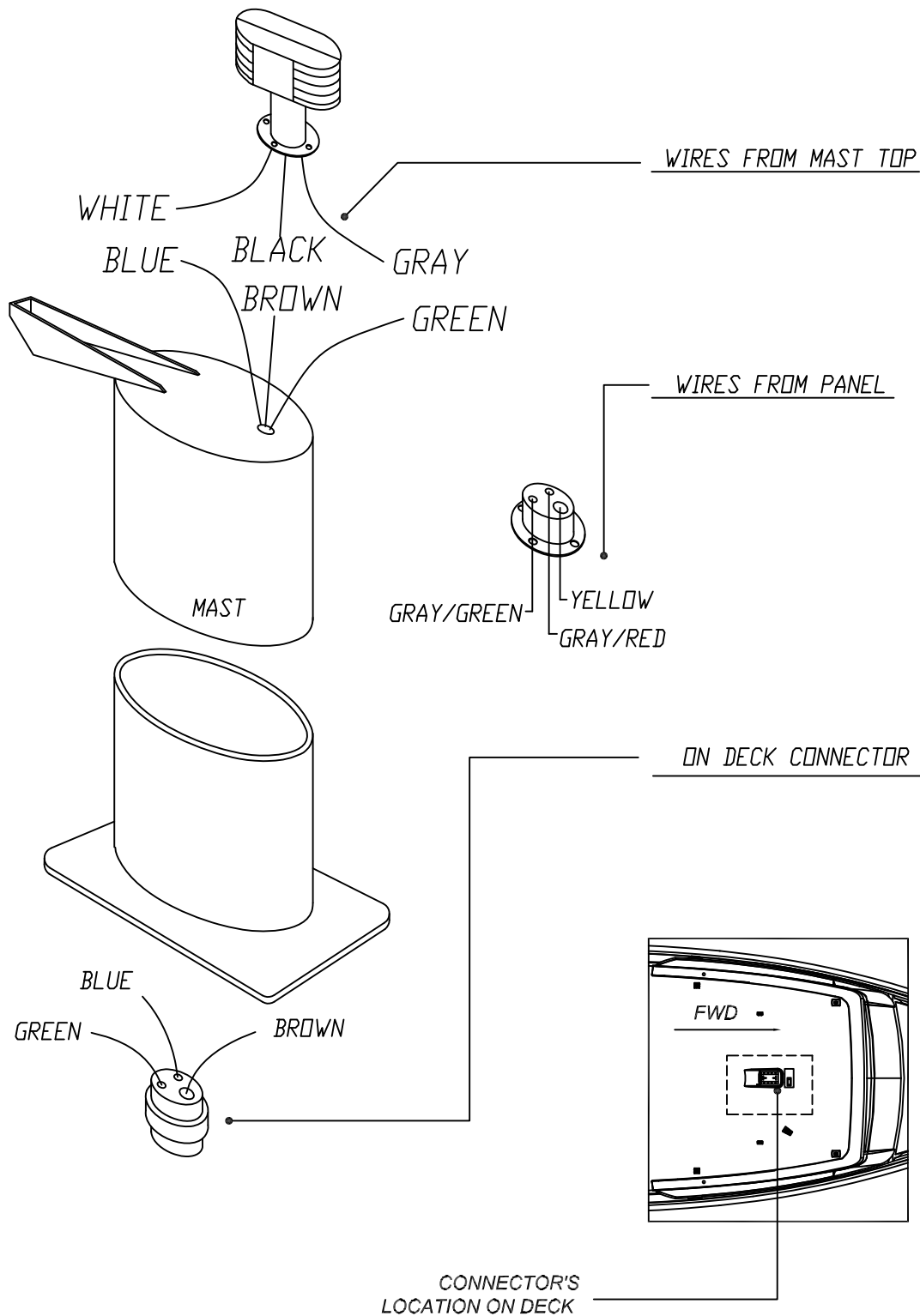


FRESH WATER LINE -----

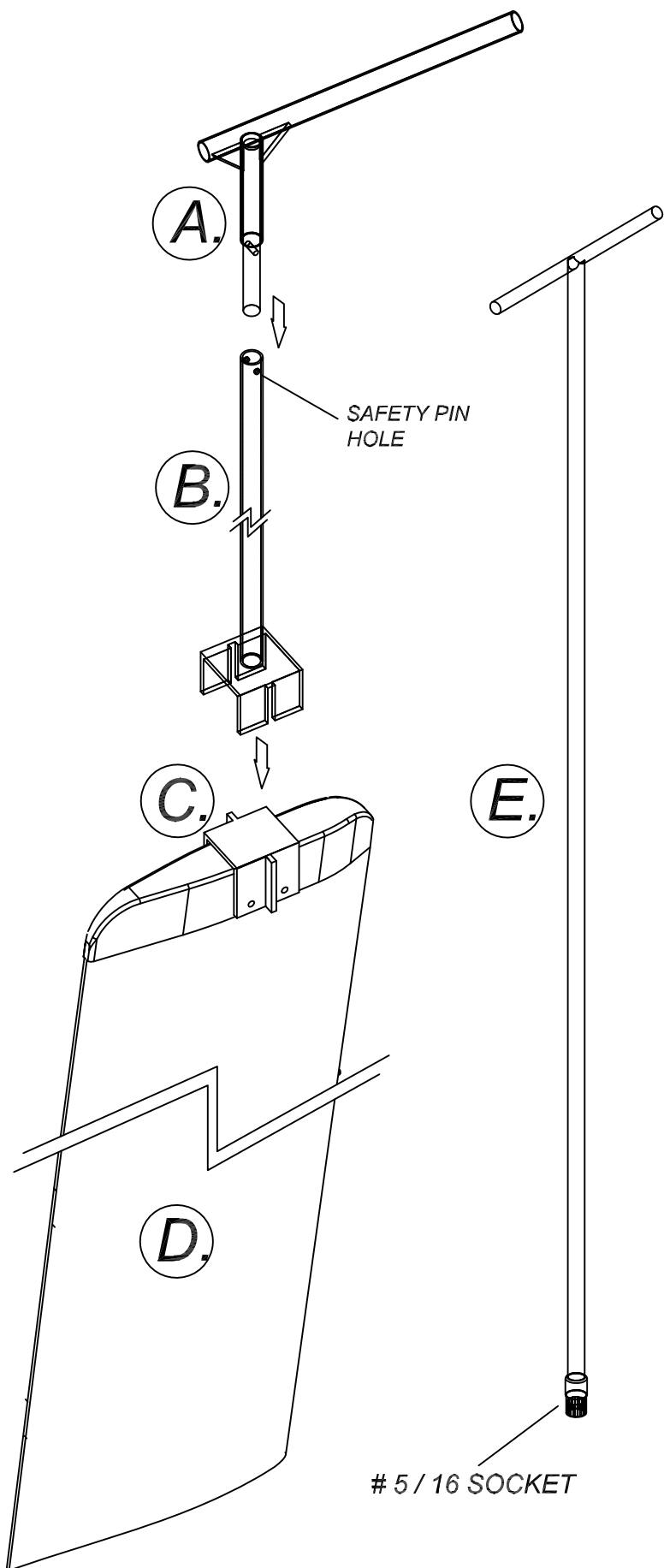




# MAST LIGHT



<b>EMERGENCY TILLER COMPONENTS</b>			
DRAWING NO.	27TE8085	REV. NO.	NONE
DRAWN BY:	ENG	DATE	10/16/08



- A. TILLER HANDLE
- B. TILLER BASE
- C. RUDDER BRACKET
- D. RUDDER
- E. CONTROL ARM RELEASE BAR

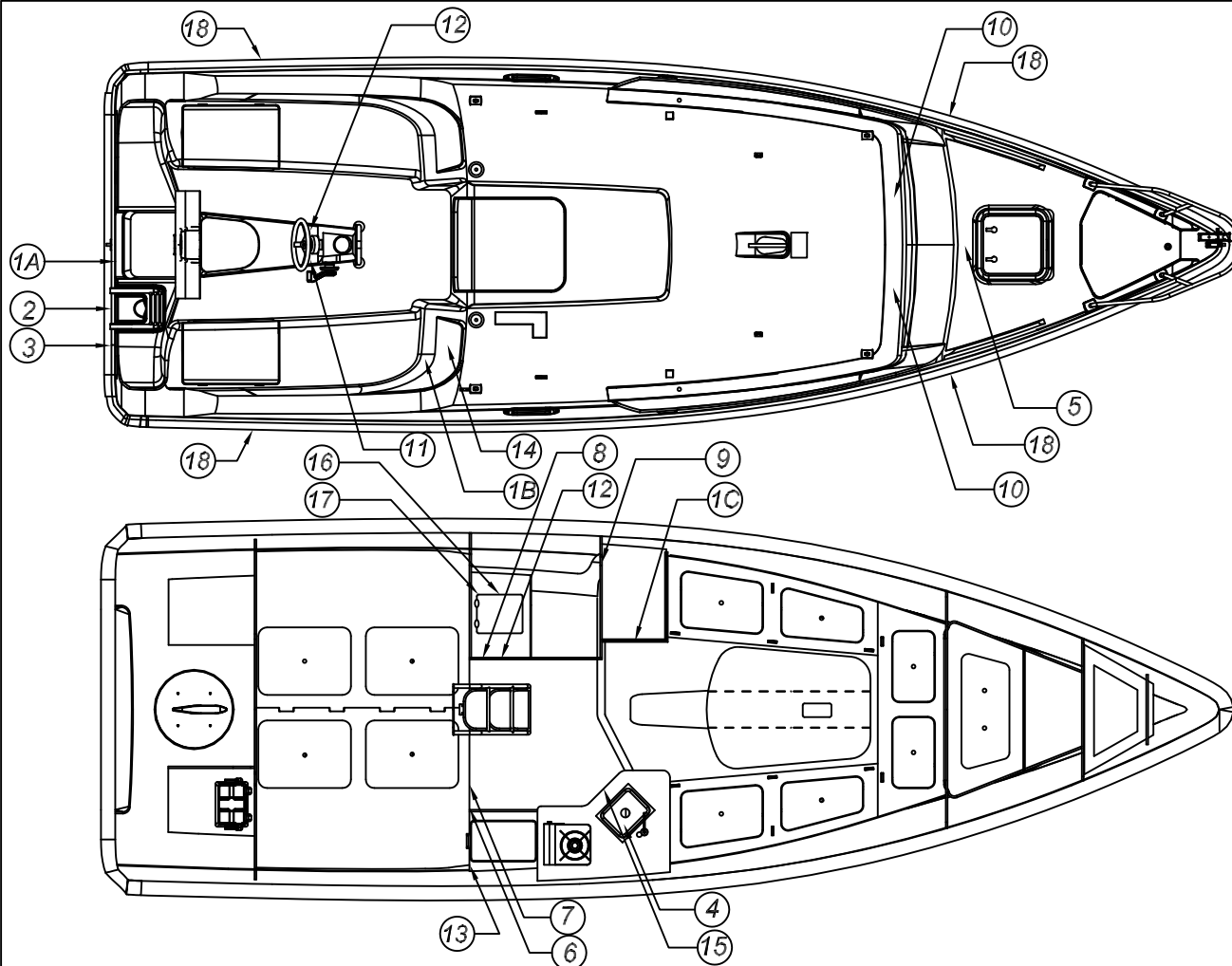
# EMERGENCY TILLER OPERATION

If the situation arises where the rudder assembly is not functioning properly and affecting your steering, Hunter has available an emergency tiller to provide the required maneuverability. The emergency tiller comes standard for European boats and optional for all other destinations.

If your standard steering is experiencing a problem, inspect the rudder's upper bearing, lower bearing and bearing rods for damage or obstruction (see page 73). If the situation can not be remedied, proceed with the following steps to assemble the emergency tiller for low-speed steering.

1. Idle the boat
2. Remove the emergency tiller components from its packet
3. Ensure all parts are present (see Emergency Tiller Components drawing, page 83)
4. Place the rudder in the down position
5. Secure the downhaul line on cleat
6. Locate the drag link mounting bracket on the front section of the upper bearing
7. Loosen the fastener securing the bracket and free the rudder from the steering wheel
8. Remove the lock nut which secures the drag link using the Control Arm Release Bar
9. Check the rudder freely turns
10. Insert Tiller Handle on top of Tiller Base and secure with the safety pin
11. Place the tiller handle assembly onto rudder bracket with keyway slots fitting over bracket tabs

You are now able to manually steer your boat. Proceed to the closest location for standard steering system review and repairs.



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DRAWING TITLE			
<b>LABEL LOCATIONS</b>			
DRAWING NO	27TE8087	REV. NO	None
DRAWN BY	ENG	DATE	01/09/03

LABEL DESC	LABEL ORDER #	QTY/BOAT
①A CARBON MONOXIDE DANGER (TRANSOM)	NW-206-07	1
①B CARBON MONOXIDE DANGER (COCKPIT)	NW-204-07	1
①C CARBON MONOXIDE DANGER (CABIN)	NW-205-05	1
② PROPELLER WARNING	1013750	1
③ LADDER WARNING	1006616	1
④ FIRE EXTINGUISHER LOCATION (LOOSE)	1021157	2
⑤ FIRE EMERGENCY HATCH ESCAPE (UNDERSIDE)	1006609	1
⑥ READ OWNER'S MANUAL	1023829	1
⑦ CRUISE PAC	1006629	1
⑧ CE MAX CAPACITY	1035743	1
⑨ TANK VENT	1035023	1
⑩ NO STEP	1035121	2
⑪ OPERATING PROCEDURES	1035069	1
⑫ BALLAST TANK	1035741	2
⑬ ELECTRIC SHOCK HAZARD	1006595	1
⑭ US COAST GUARD CAPACITY	1035735	1
⑮ SEACOCK ON SINK DRAIN	1013302	1
⑯ HAZARD OF FLOODING (UNDER TOILET LID)	283310	1
⑰ TOILET GARBAGE (UNDER TOILET LID) (VENDOR)	JABSCO MARINE	1
⑱ SLING (PORT/STARBOARD HULL)	1006624	4