Tartan 3700
Owner's Manual

Tartan Marine Company, LLC
1920 Fairport Nursery Rd.
Fairport Harbor, Ohio 44077

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1.0 INTRODUCTION

Congratulations on becoming an owner of a new Tartan yacht. Tartan Yachts is pleased to have you join our "Clan" and wish you the best in your sailing endeavors.

This owner's manual has been prepared to provide you with detailed information for the use and maintenance of your yacht. Enclosed you will find not only items pertaining to Tartan manufactured products, but it also includes individual instruction manuals and warranty registration cards from suppliers of major equipment items used in the construction of your vessel.

It is Tartan's policy to continually improve and modify our products. Therefore, you may find that your Tartan has different details or equipment than shown in this manual. In each case, the new details or equipment have been carefully evaluated to determine that it is consistent with the Tartan commitment to excellence.

Your Tartan is identified by a 12 character Hull Identification Number (HIN) located on a placard at the top right corner of the transom in accordance with U.S. Coast Guard Regulations. Please identify your model and hull number when contacting your dealer or Tartan Yachts for any reason.

- **The first three letters of the HIN identify the builder with code HMD**
- **The next two identify the model (Example: 40)**
- **The next three numbers are the hull number of your yacht (Example: 145)**
- **The last four characters identify the month and year of manufacture (Example: E011 reads E as month and year manufactured (May = E, 0 = 10), 11 as model year.**

It is the responsibility of your Tartan Dealer to commission your yacht in accordance with the Tartan Yachts' commissioning procedure. A copy is included in this manual. Please be sure that the *Commissioning Check List* is completed by your dealer and returned to Tartan, as failure to do so may invalidate your warranty.

Tartan is striving to provide you with the most complete and detailed owner's manual. Your Tartan dealer or the Tartan Yachts Customer Service Department would be pleased to provide you with any information you require that is not in the manual.

RESPONSIBILITY OF THE DEALER:

All Tartan yachts are sold through Authorized Tartan Dealers who have been selected on the basis of their knowledge of yachts and their ability to provide you with the service you deserve. They are experts in their profession who realize that they must provide you with a high level of service and attention when you purchase a Tartan.

Your Tartan Dealer is responsible for the following procedures connected with the purchase and commissioning of your yacht.

- ✓ Preparing a detailed specification list for your yacht, including options, colors and upholstery selections at time of ordering.
- ✓ Inspecting the yacht on delivery for loss and damage in transit and the processing of all claims against the transport company. Should you notice any loss or damage you must notify your dealer within 30 days of arrival, as neither the carrier nor Tartan can honor claims beyond 30 days.
- ✓ Inspecting equipment boxes that come with the yacht to assure that all items are received in accordance with the packing list.

- ✓ Commissioning the yacht in accordance with the Tartan Commissioning Check List. The dealer must check and initial each item on the list, and return the list to Tartan.

- ✓ Activating and checking all mechanical systems under the conditions of actual usage.

- ✓ Stepping the spars and installing all rigging. Tuning and adjustment of the rigging must be carried out under actual sailing conditions. Incorrect adjustments can lead to mast failure.

- ✓ Instructing you on the use of your yacht and all its systems.

- ✓ Providing all necessary assistance and service under the terms of the Limited Warranty on your yacht, including the processing of all claims with Tartan Yachts.

RESPONSIBILITY OF THE OWNER:

For maximum safety and enjoyment of your new Tartan, due regard must be given to the hazards of sailing and to proper maintenance procedures. The following is a partial list of items that are the responsibility of the owner for the safe operation of your yacht. However, this must be considered only a partial list of the safety obligations of the owner to be used as a guideline. Consult your local US Coast Guard and Power Squadron offices for additional information on the safe operation of your yacht

- ✓ Complete the Warranty Registration form and return it to Tartan Yachts promptly.

- ✓ Advise Tartan Yachts of any change of address, or change of ownership, to assist us in maintaining an accurate list of owners for possible future mailings regarding safety information about your yacht.

- ✓ Confirm that all the items that are the responsibility of the dealer as outlined in the previous section are completed by your dealer.

- ✓ Operate your yacht in accordance with instructions provided in all sections of this owner's manual, the individual supplier instruction manuals provided and all applicable US Coast Guard and other regulations.

- ✓ Supervise the maintenance of your yacht by competent marine service personnel in accordance with all instructions provided in this owner's manual, the individual supplier instruction manuals, the US Coast Guard standards, the American Boat and Yacht Council standards and all other applicable standards.

- ✓ Supply and maintain all additional safety equipment on board as required or recommended by the US Coast Guard and International Offshore Racing Council for your size yacht and the nature of the voyage.

COMMISSIONING PROCEDURE:

The proper commissioning of your Tartan is the responsibility of your dealer. This is very important in assuring the satisfactory operation of your yacht. The construction and inspection of each Tartan is completed in the fullest extent possible at the factory. However, further commissioning and inspection is necessary under actual sailing conditions and usage. Also, this commissioning procedure should be followed in subsequent years at commissioning time.

Commissioning List:
The attached Commissioning List must be followed by your dealer in commissioning your yacht. Each item on the list should be checked off by the dealer as the work is completed. Both the dealer and the owner should sign the bottom of the check list to confirm that all items are completed.

Proper Lifting:
The careful placement of the lifting straps used to lift your Tartan is very important to avoid damaging the saildrive unit, and to assure that the center of gravity of the yacht is midway between the straps. Additional

caution should be exercised to avoid placing a strap in contact with a speedometer or depth finder thru-hull fitting.

Standing Rigging:
The careful adjustment of the standing rigging of the mast under actual sailing conditions is critical to avoid mast failure. The rigging should be adjusted to maintain a maximum bend in the lateral direction, and will differ by model in a fore-and-aft direction under all sailing conditions. The wire rigging will tend to permanently stretch over a period of the time as strands bed into one another, so repeated checking of rigging adjustment is necessary. Detailed instructions for tuning the rigging are included in another section of this manual.

Bottom Paint:
Anti-fouling bottom paints must be carefully matched to the type of paint already on the boat to avoid the blistering and peeling common to mismatched paints. See bottom paint instructions 12.4

COMMISSIONING LIST:

The following is a list of minimum commissioning duties to be performed by both the boat owner and the dealer. Additional operations may be required dependent on the model and equipment thereon. It is important to your safety that the dealer completes the attached checklist.

Prior To Launch:

Exterior:

- ✓ Check hull, deck and keel, etc, for shipping damage and repair as needed. Prep bottom and apply bottom paint including centerboard and inside of truck (if applicable).
- ✓ Clean hull thoroughly.
- ✓ Touch up boot and cove stripe where required
- ✓ Wax topsides
- ✓ Check installation of anodes. Refer to your to your engine manual for care and maintenance of anodes.

Interior:

- ✓ Charge and inspect batteries. (NOTE: Batteries are shipped from our plant with only partial charge.)
- ✓ Check hose clamps on ALL thru-hull hoses and tighten as required. Check that engine and head have been de-winterized and that all drain plugs are in place.
- ✓ Check oil level in engine and transmission.
- ✓ Boats with pedestal steering: Emergency tiller fitted and tested; Rudder gater checked for leakage with boat underway.
- ✓ Flush bilge area thoroughly with fresh water and run pumps to flush out excess building dust which settled during the shipping of the boat.

- ✓ Clean bilge pump and sump pump strainers. (This will need to be done quite often in the first several weeks)

Mast Stepping:

- ✓ Attach upper shrouds loosely.
- ✓ Attach backstay, leave turnbuckle extended.
- ✓ Chock mast in partners. Refer to SPARTITE instruction for procedure.
- ✓ Tighten the mast tie down rod(s) if necessary.
- ✓ Attach headstay to stem fitting.
- ✓ Use either main halyard or main boom topping lift to measure from side to side in vessel and tighten upper shrouds so masthead is centered in boat. Before final tightening of upper shrouds, check that proper upward angle of the spreaders has been maintained and go aloft to correct if needed
- ✓ Tighten backstay turnbuckle.
- ✓ Tighten lower shrouds so mast is straight athwartships.
- ✓ Tighten intermediate shrouds.
- ✓ With rigging adjustments completed, install all cotter pins in the turnbuckle threads and re-check that all cotters are in clevis pins and opened to 20°. Tape all cotter pins and unfair edges.
- ✓ Install boom and rig mainsheet and topping lift. Check operation of the boom outhaul.
- ✓ Connect mast wiring to terminals inside vessel and check operation of mast lights and electronics.

After Launching:

- ✓ Check bilge for water.
- ✓ Check that engine exhaust is pumping water.
- ✓ Verify operation of forward, neutral and reverse before leaving the dock.

To Be Done Prior to Turning Vessel Over to Owner:

- ✓ Clean entire deck, including removing excess bedding compound from around fittings, which may continue to ooze for a short time after shipment.
- ✓ Check for deck leaks caused by shipping. NOTE: all boats are thoroughly checked prior to shipment, but fittings can loosen under shipment and handling.
- ✓ Touch up exterior teak finish if applicable.
- ✓ Inspect and tighten engine shifter and throttle controls as needed.

- ✓ Fill water tank(s) and check operation of water system for leaks as well as the hot water if included.
- ✓ Check head operation, holding tank and macerator pump. Operate bilge pump(s). NOTE: if auto pump is installed, adjust switch level and ensure the auto switch is not blocked by bilge hoses. Operate sump pump, shower and drain collection, and on some models sinks.
- ✓ Check operation of all running lights.
- ✓ All fluid levels in engine are to be checked after test run.
- ✓ All gauges should be operational.
- ✓ Operate galley stove and oven (every burner).
- ✓ Adjust lifelines so they are taut.
- ✓ Remove all traces of shipping tape.
- ✓ Operate all winches and lubricate if necessary.
- ✓ Check operation of all thru-hull fittings.
- ✓ Operate all hatches and ensure that no binding occurs.
- ✓ All interior doors, drawers, hatch boards, operated and planed down if necessary after rigging is tensioned. A certain degree of swelling is to be anticipated. (This is not a warranty issue, part of commissioning)
- ✓ Check that all interior lights are operational.
- ✓ Check the hoist on all sails and ensure correct halyard lengths as well as freedom of movement of halyards, etc. Check and adjust operation of reefing system.

After Shakedown Sail:

- ✓ Re-tension all rigging if necessary. Check steering cables if applicable
- ✓ If excess headstay sag is apparent adjust the headstay and/or backstay tension as required
- ✓ Check steering cables if applicable

Again, this manual is intended to help you to know your new Tartan Yacht. It is most important to familiarize yourself thoroughly with all aspects of operating and maintaining your yacht in a safe and efficient manner. Read your manual carefully as well as the booklets supplied by the manufacturers of the components. If any questions arise for which you can't find an answer, your Tartan dealer will be pleased to help you.

It is Company policy that the Tartan line of yachts is continually upgraded and improved. Therefore, you may find your yacht equipped with gear different from that shown in your manual. Any new piece of equipment will be in all cases equal to or better than, its predecessor.

On taking delivery of your yacht, be sure to read and understand the Tartan warranty. Complete the warranty registration and return it to Tartan immediately.

If you are a seasoned sailor much of the manual may be old news but if this is your first boat, we hope this will prove useful. We know that you will have many satisfying and happy hours of sailing in your Tartan Yacht.

Should you need to contact Tartan Yachts please use the following addresses and numbers:

Tartan Yachts

Customer Service
1920 Fairport Nursery Rd.
Fairport Harbor, OH 44077
Phone: 440-392-2628
Fax: 440-354-6162

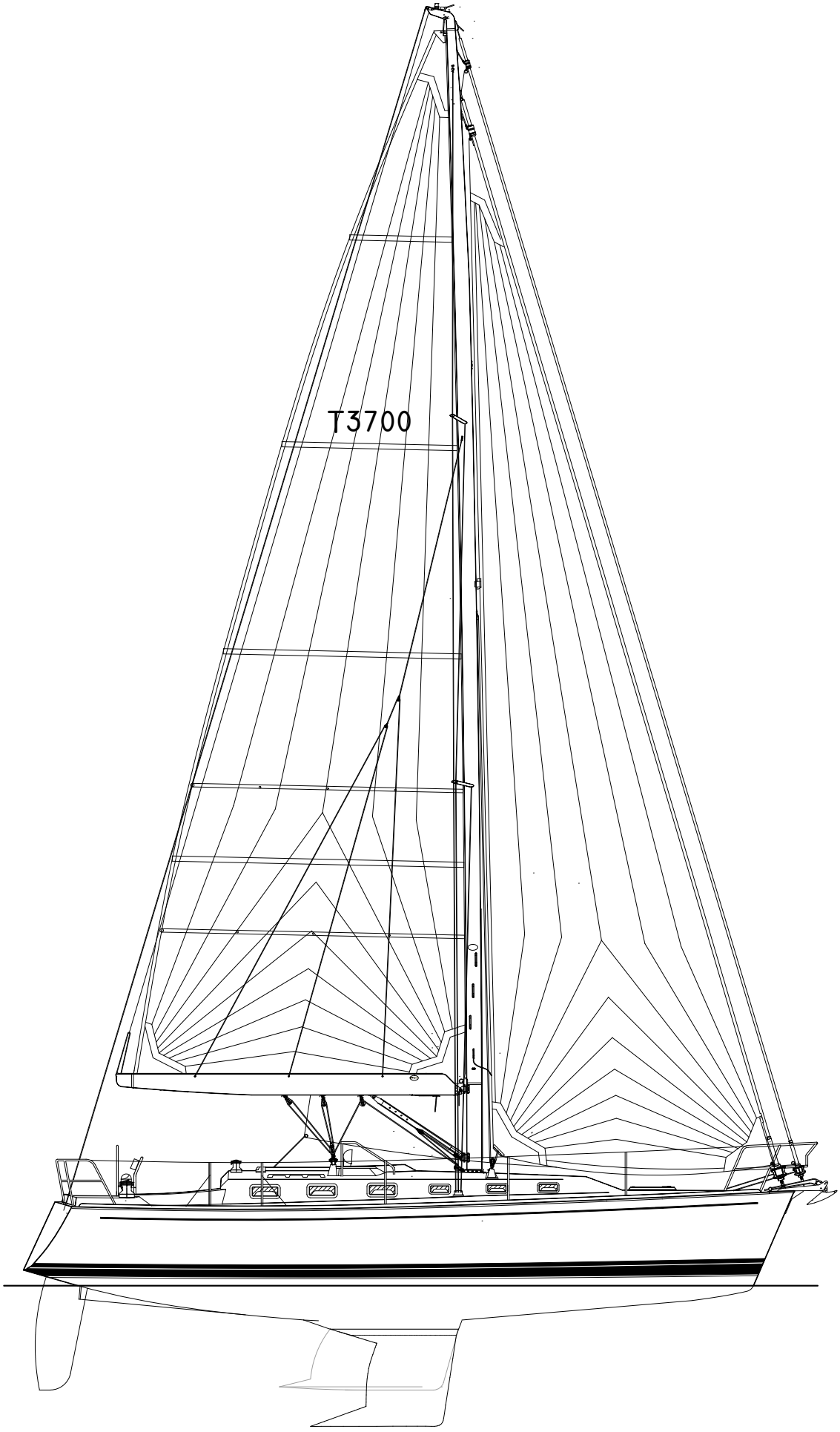
Websites: www.tartanyachts.com and www.tartanparts.com

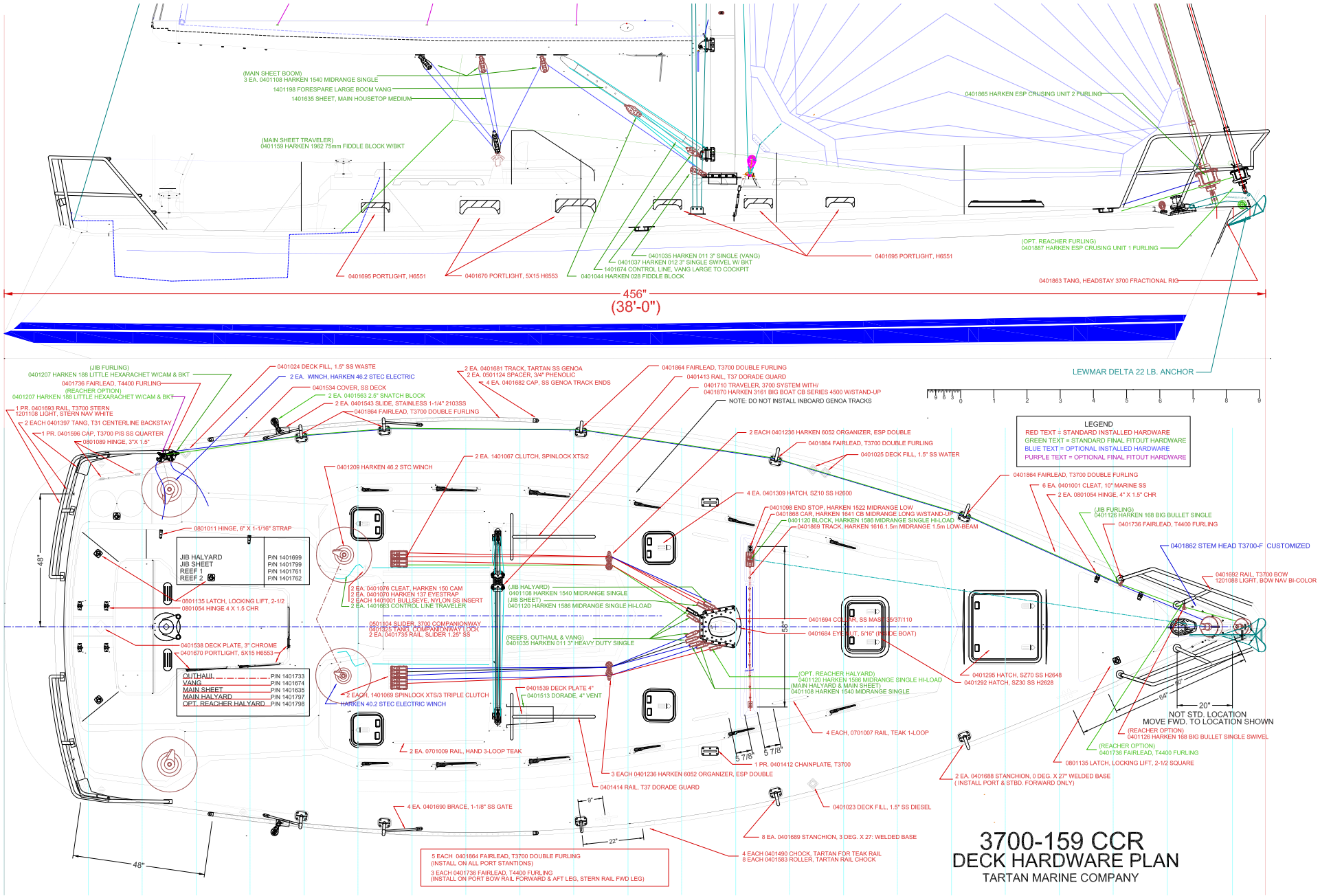
We would like to take this opportunity to thank you for choosing Tartan Yachts and we wish you good sailing.

2.0 ILLUSTRATIONS AND TABLES

Illustrations

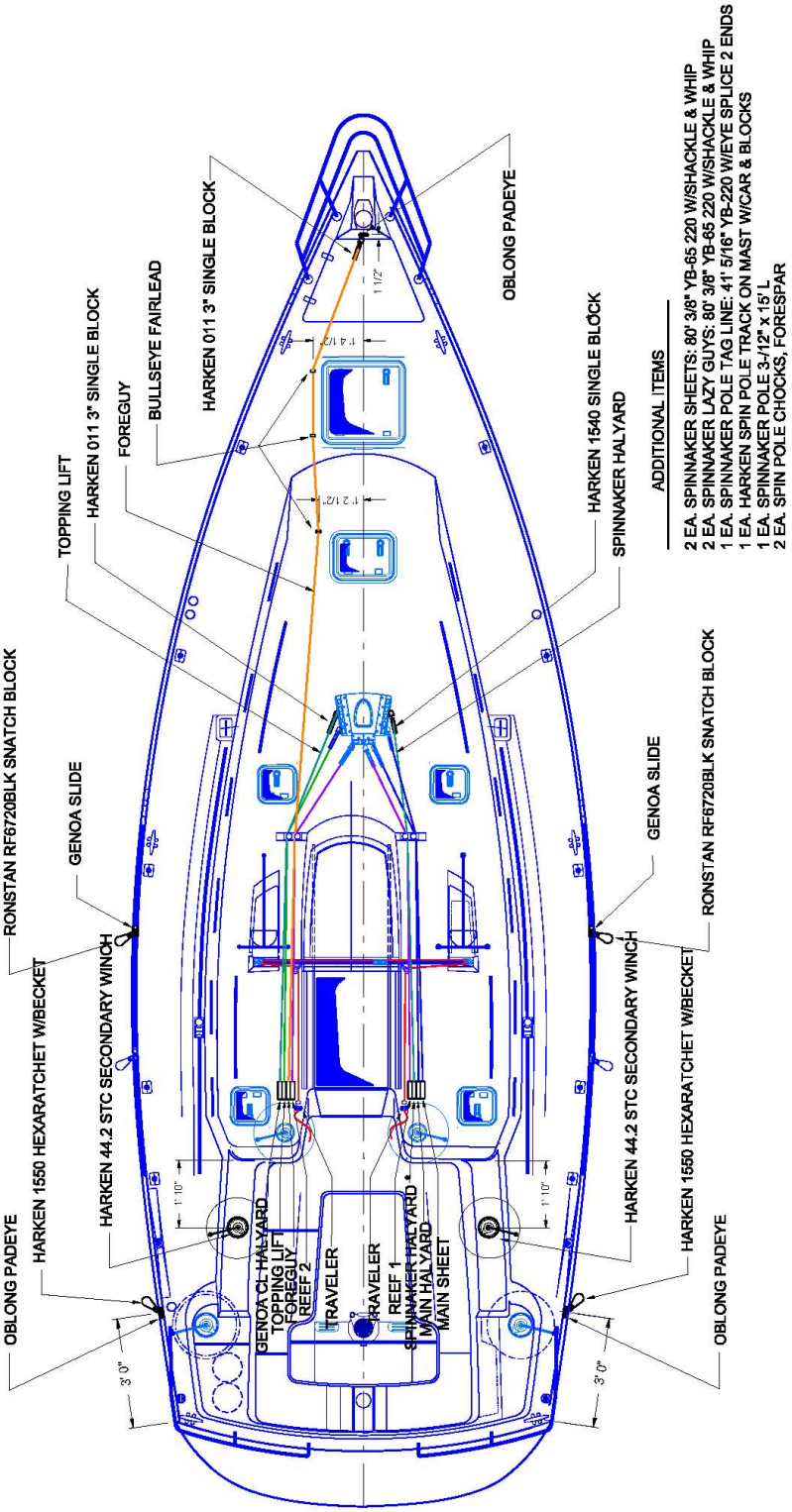
Tables


T3700

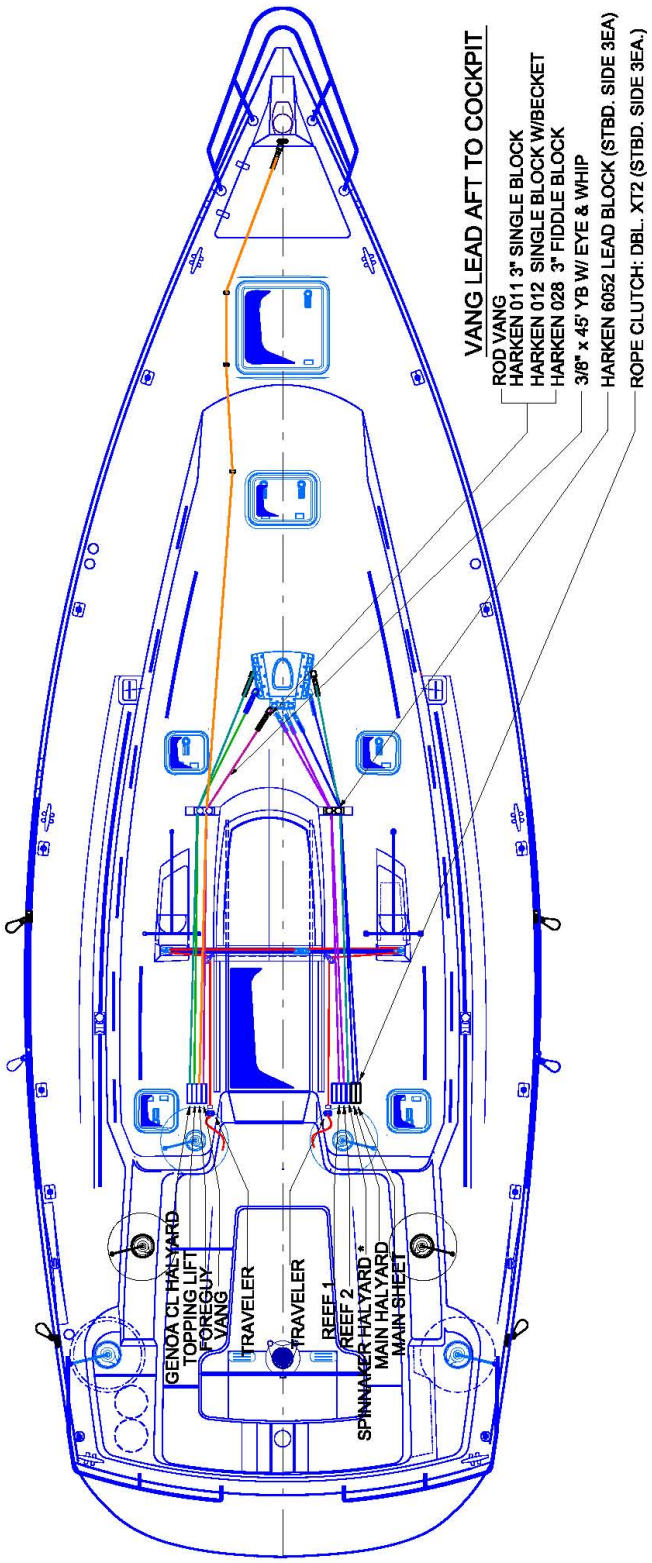


3700-159 CCR
DECK HARDWARE PLAN
TARTAN MARINE COMPANY

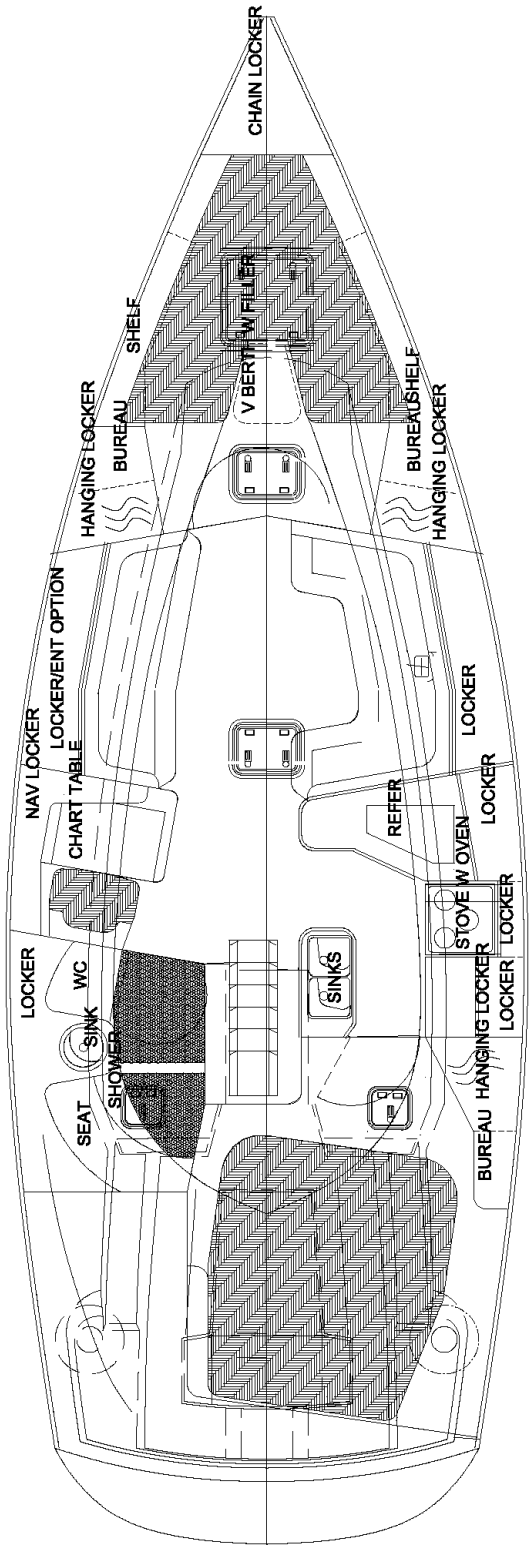
DECK LAYOUT – Spinnaker Gear



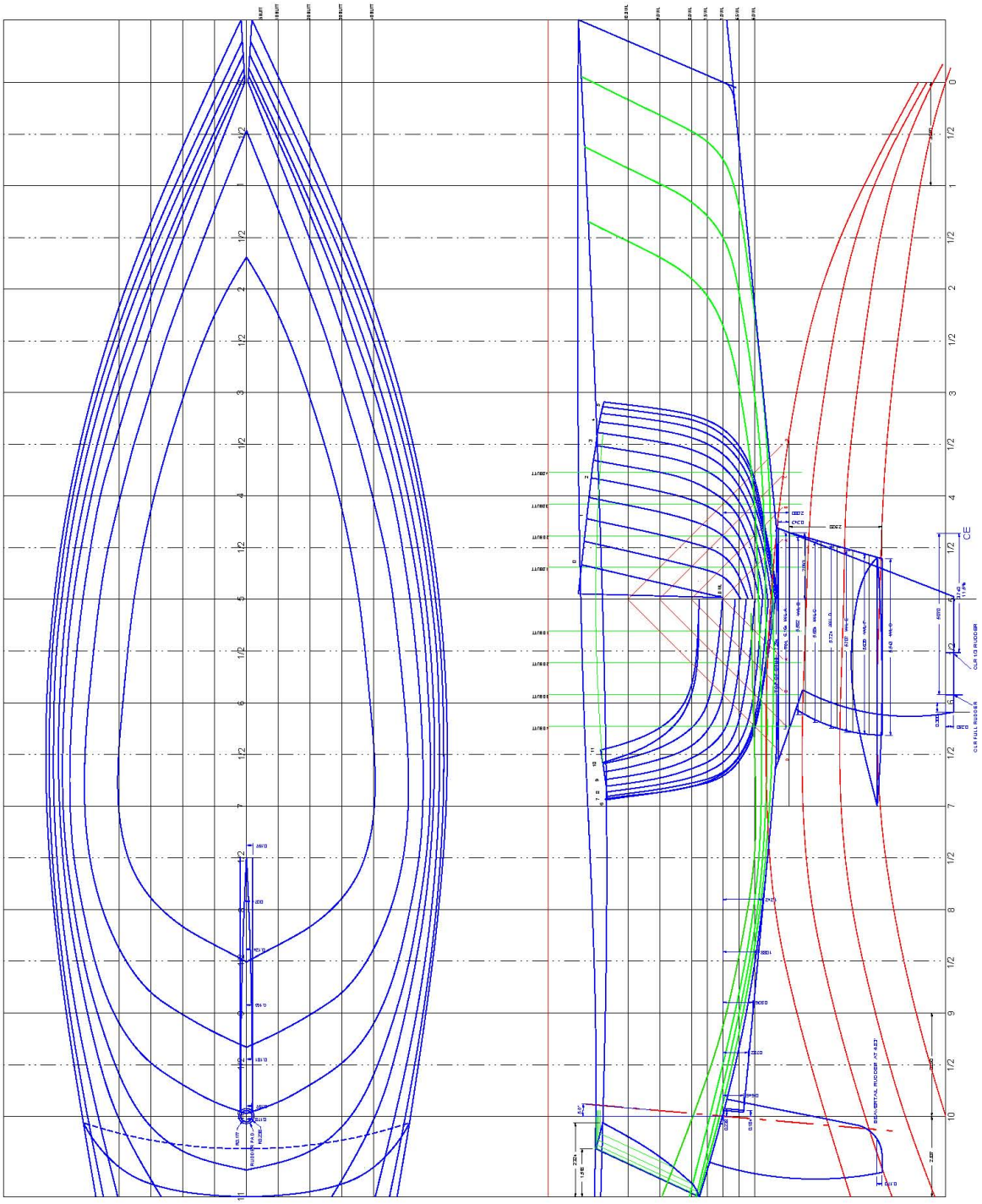
DECK LAYOUT- Vang and Spinnaker Gear



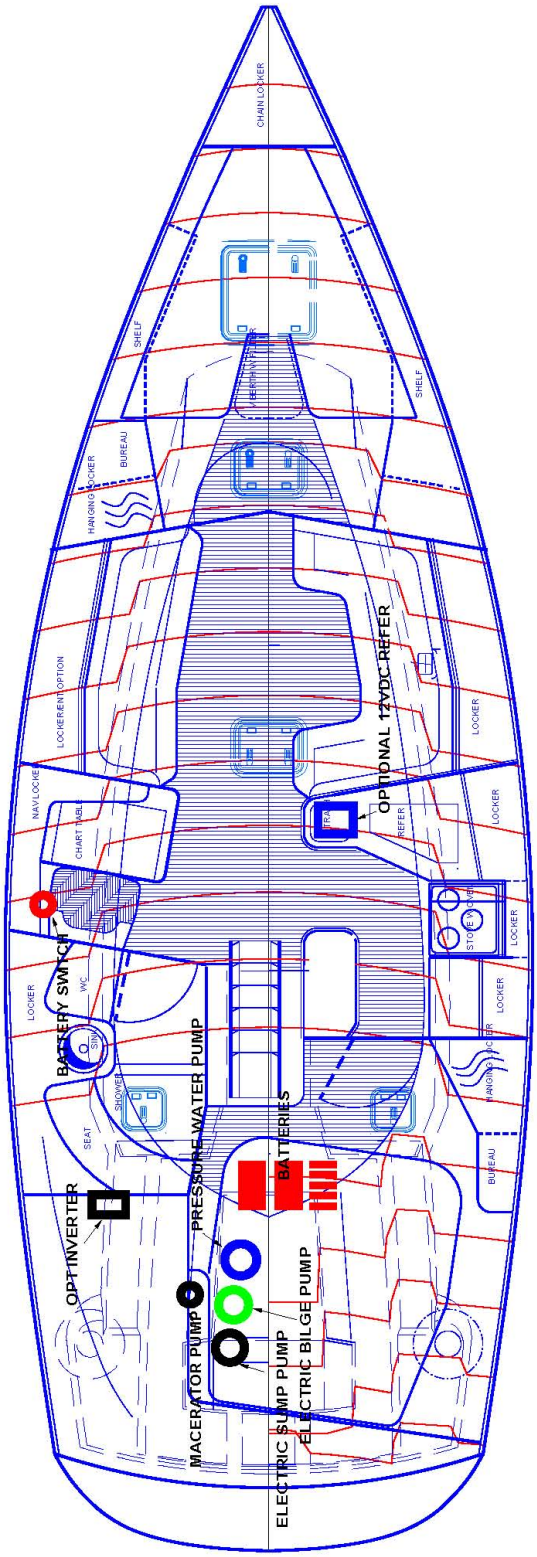
ACCOMMODATION PLAN



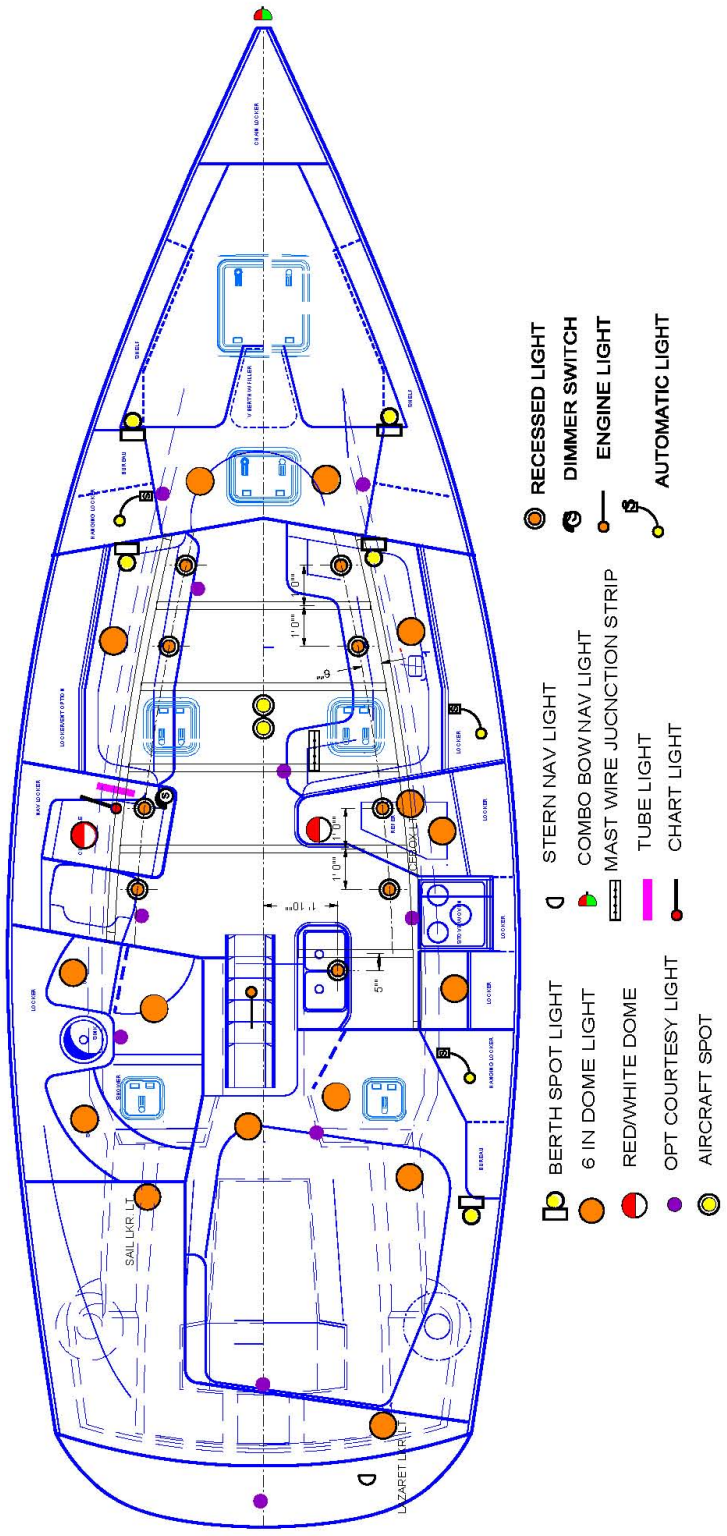
HULL LINES PLAN



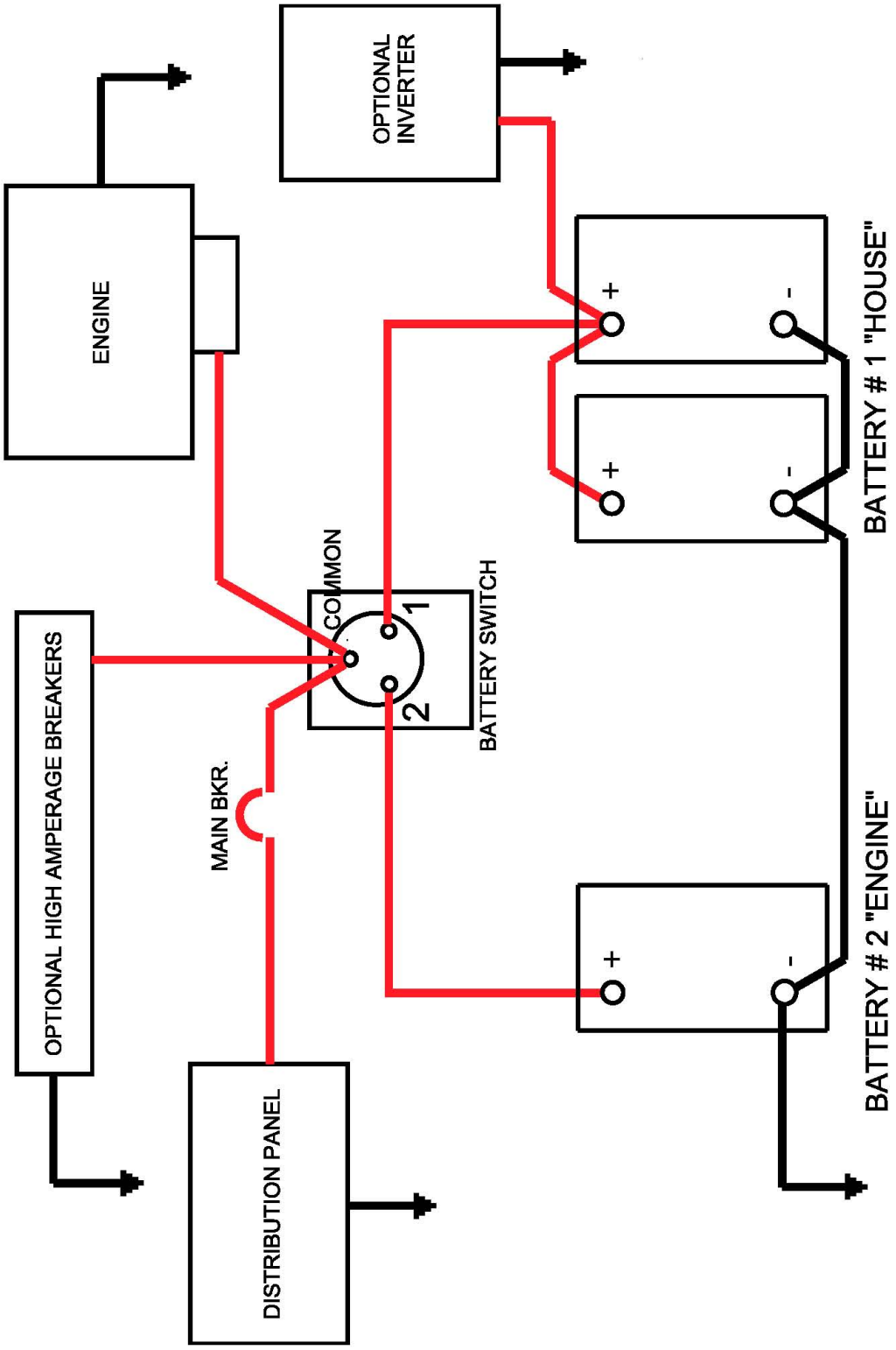
MAJOR MECHANICAL LOCATIONS



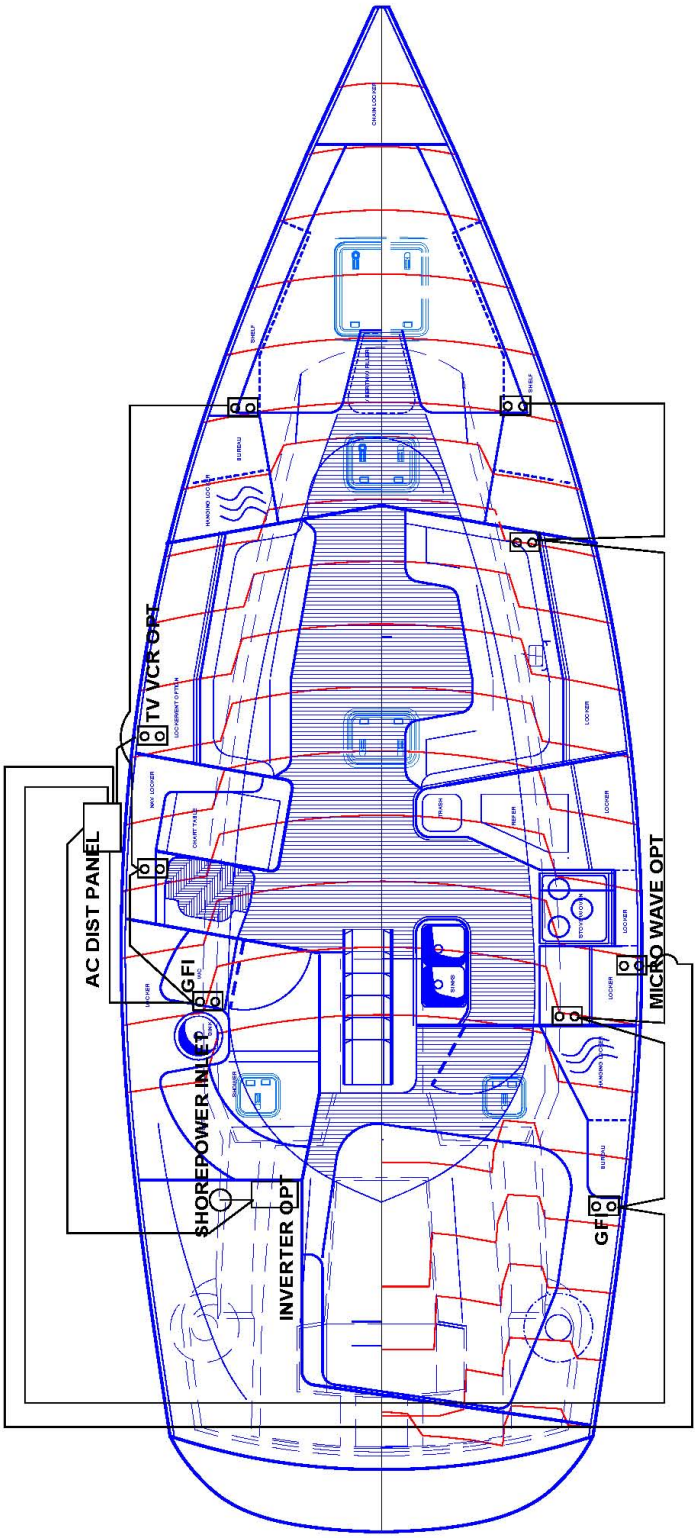
INTERIOR LIGHTING PLAN



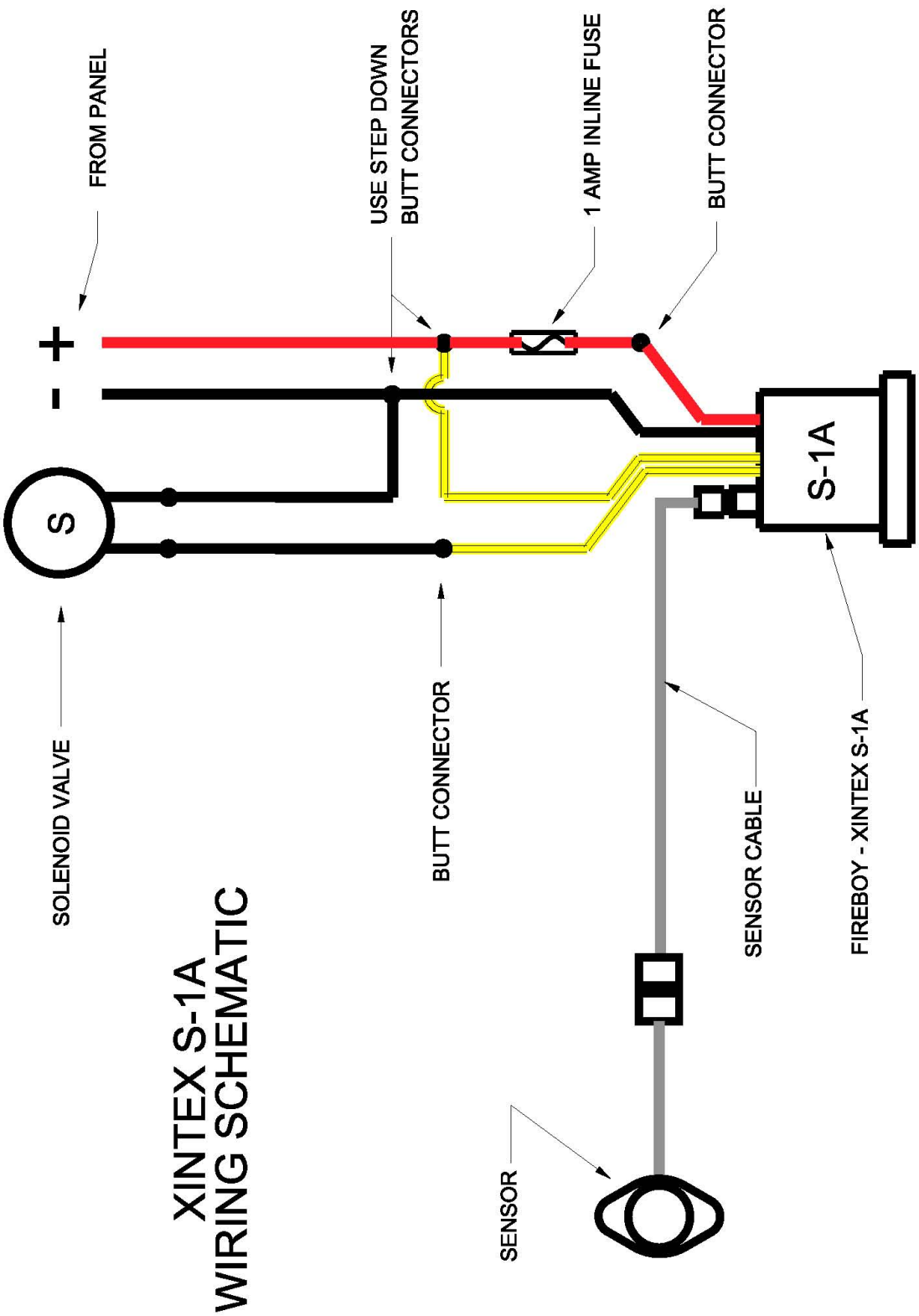
BATTERY WIRING SCHEMATIC



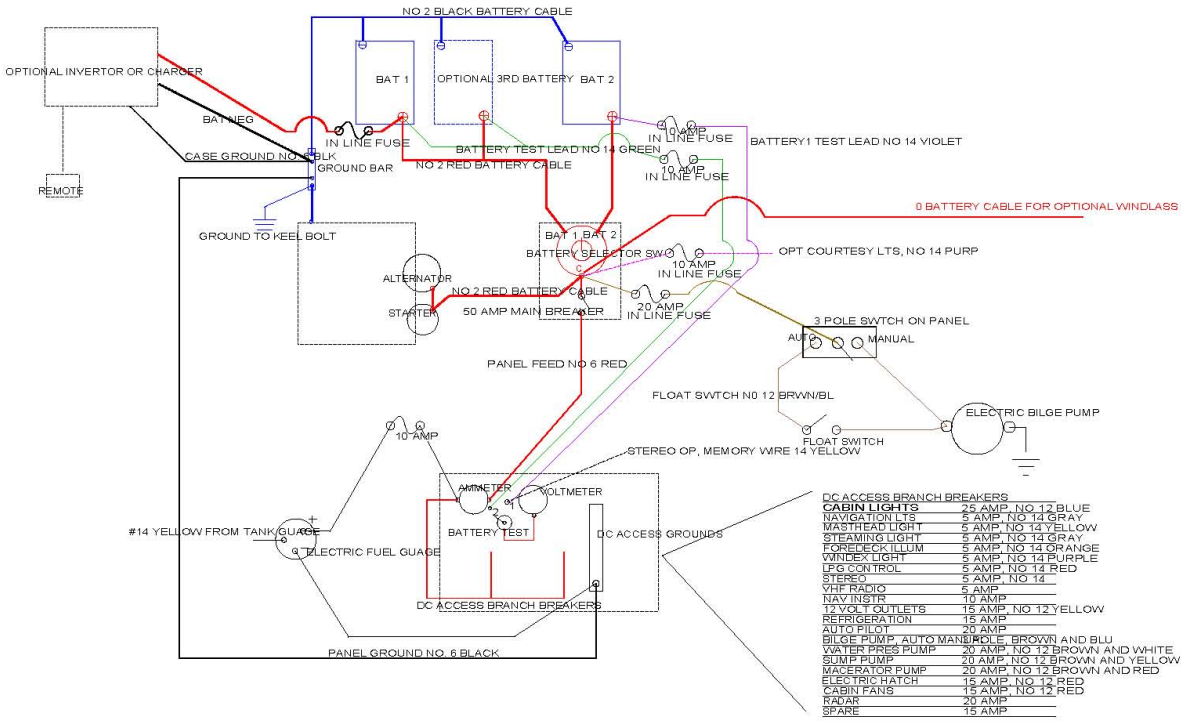
110 VOLT AC LAYOUT



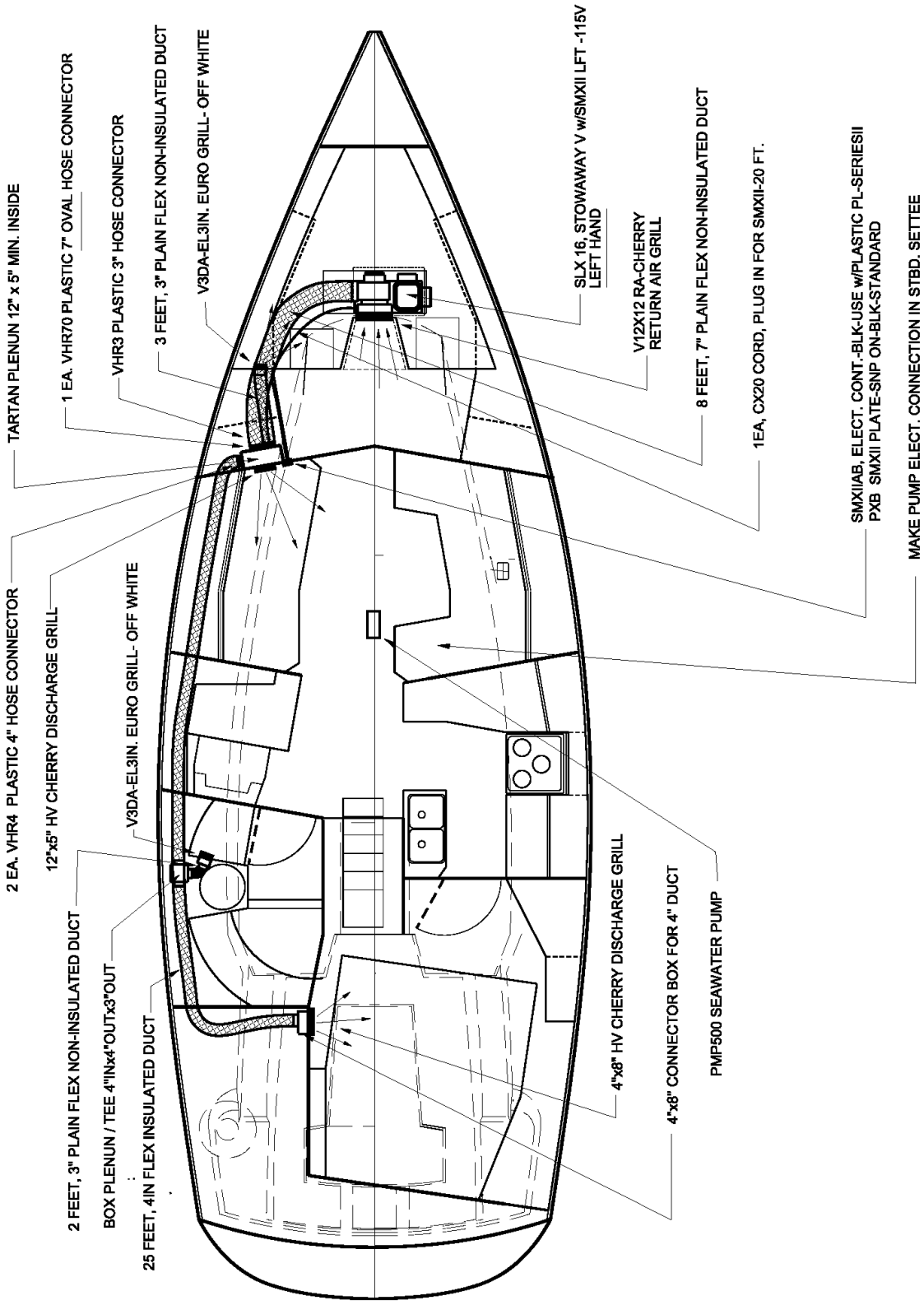
PROPANE LEAK DETECTOR



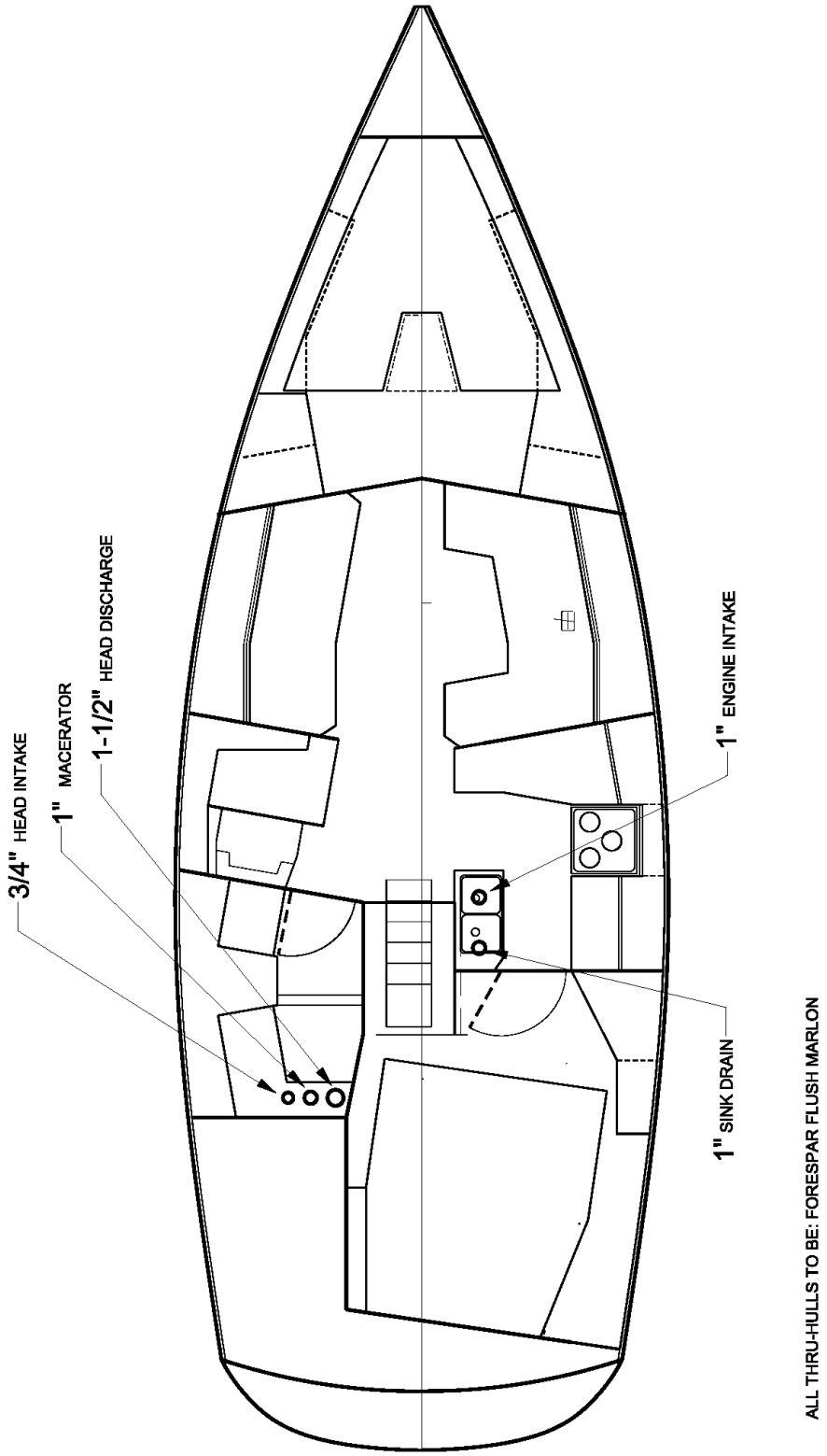
DC WIRING DIAGRAM



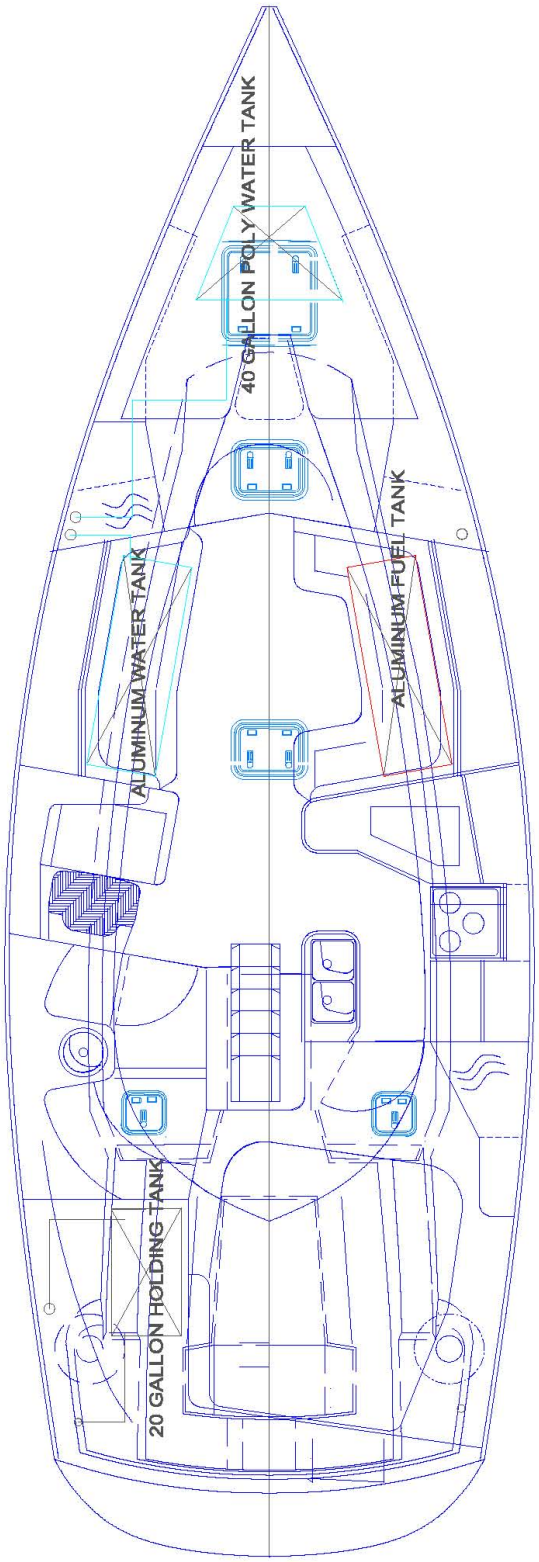
AIR CONDITIONER LAYOUT - Single Unit



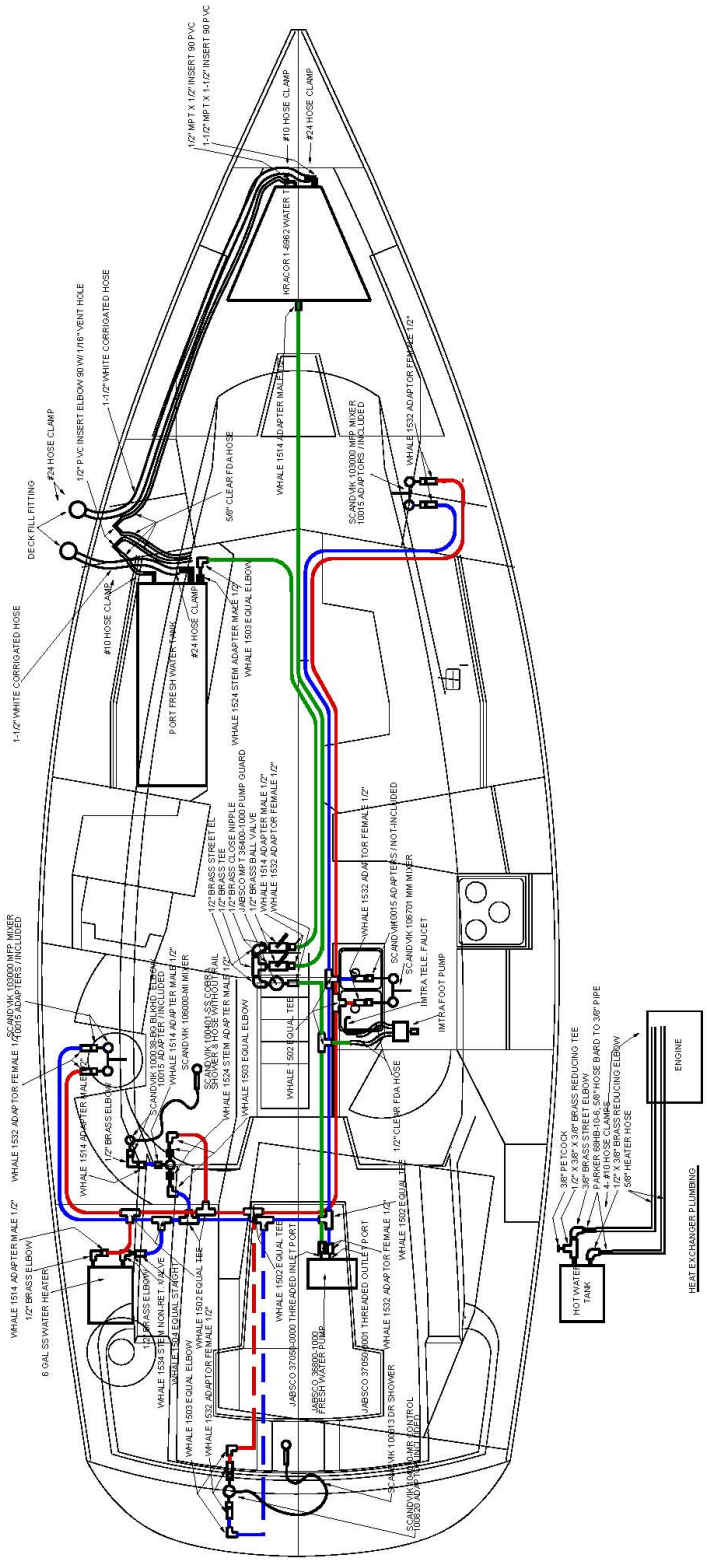
THRU-HULL LAYOUT



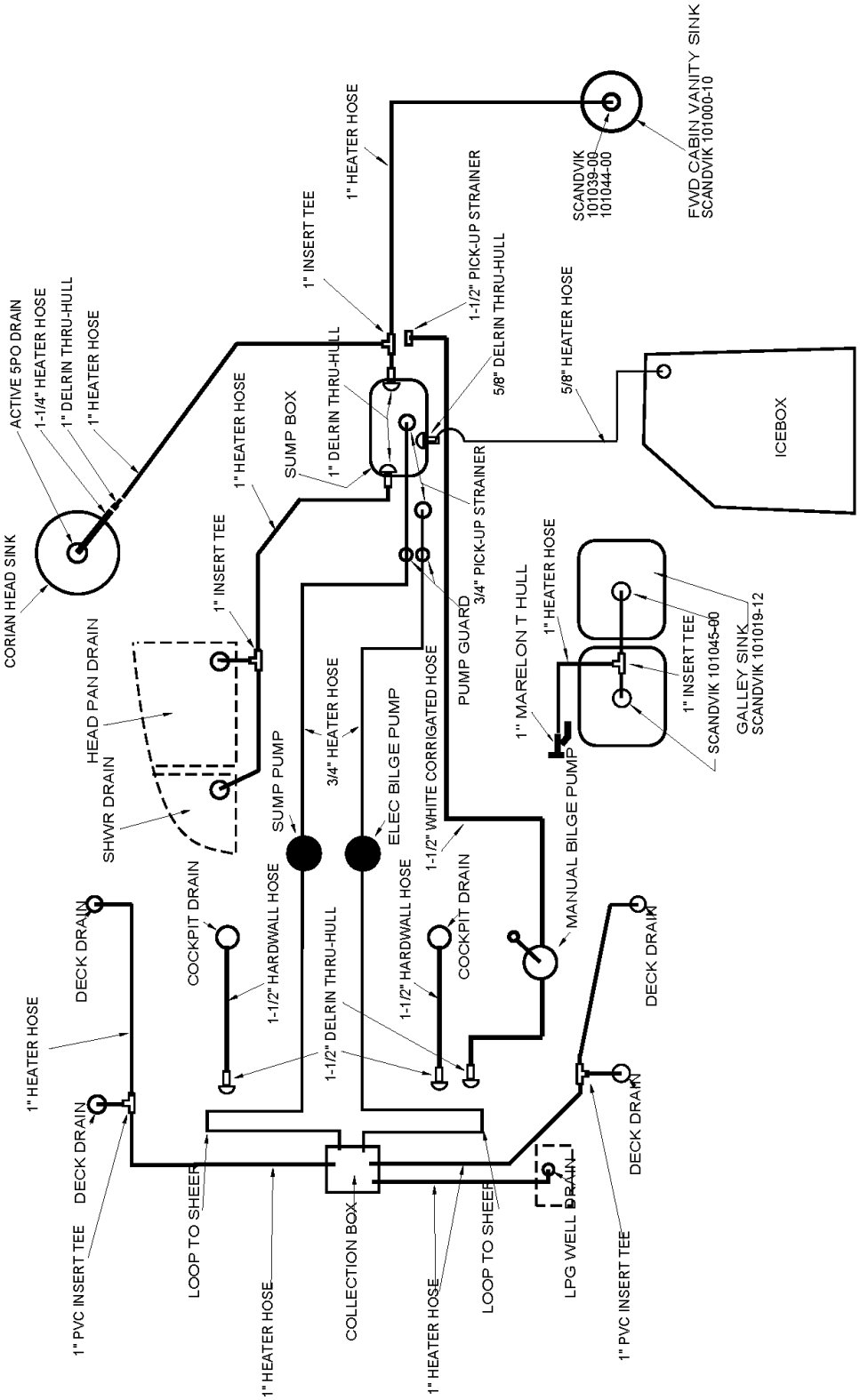
TANKAGE


40 GALLON POLY WATER TANK
ALUMINUM WATER TANK
ALUMINUM FUEL TANK
20 GALLON HOLDING TANK

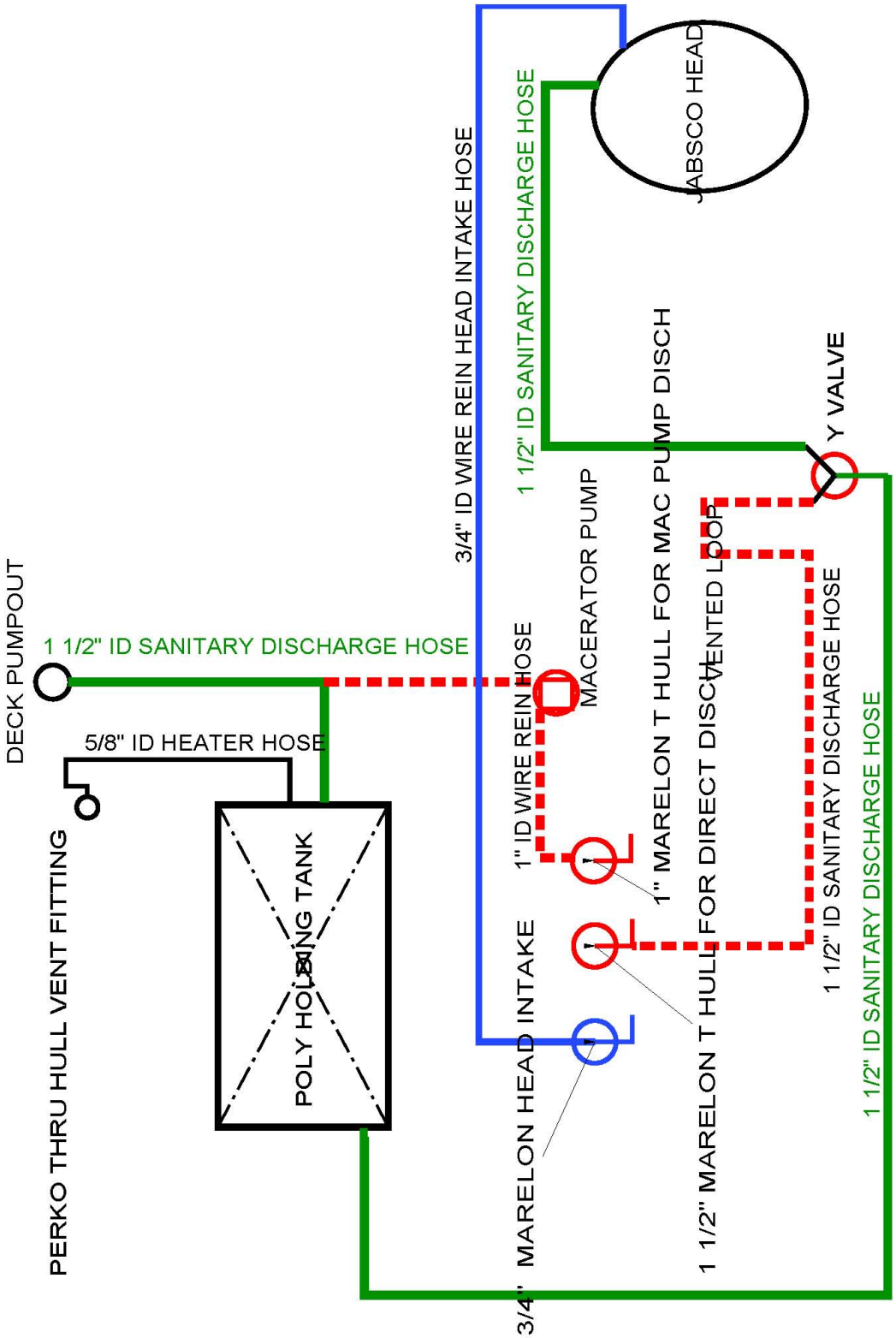
FRESH WATER SYSTEM



GRAY WATER SYSTEM

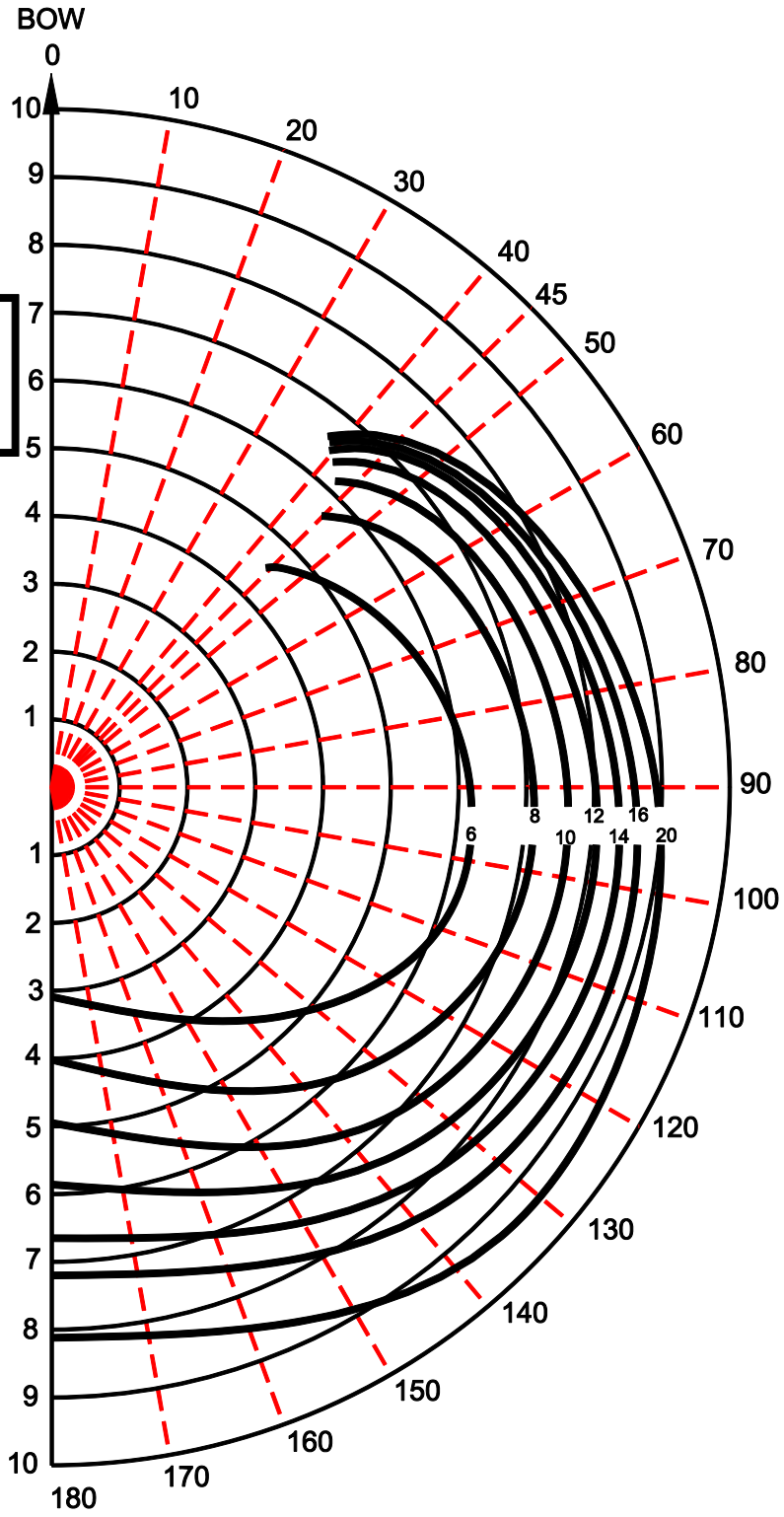


BLACK WATER SYSTEM



1929 FAIRPORT NURSERY RD.
FAIRPORT, OHIO 44077
440 354-3111

MODEL; TARTAN 3700
KEEL TYPE; DEEP FIN
RIG; CCR RIG WITH REACHER
DATE/BY 12/4/07 TJ



Stability Curve

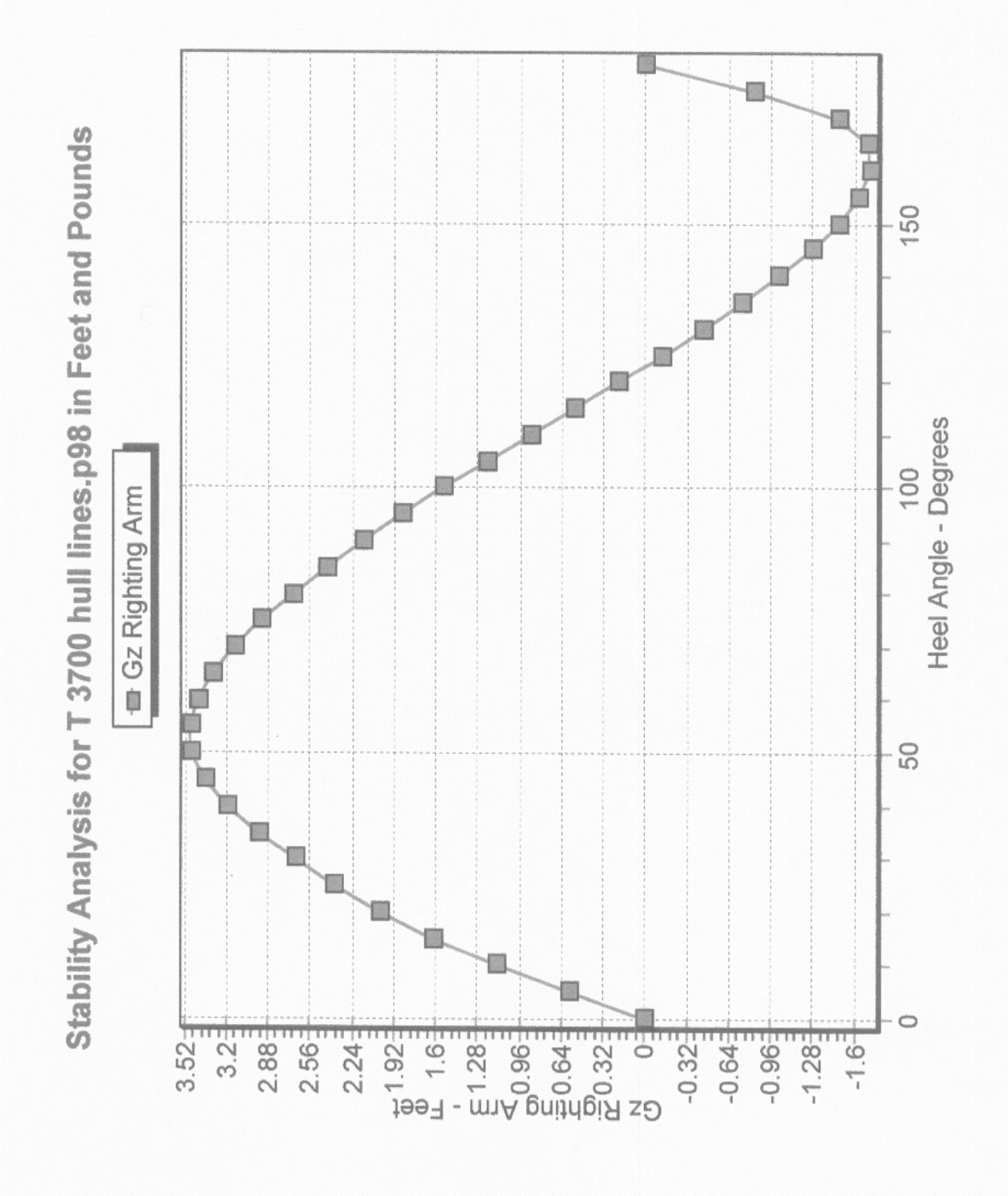


Table 1 - SPECIFICATIONS

DESIGNER: TIM JACKETT	
LENGTH OVERALL (LOA)	37'0"
LENGTH WATERLINE (LWL)	32' 6"
BEAM	12' 8"
-DRAFT - FIN KEEL	7' 3"
- BEAVERTAIL	5.0'
- CENTERBOARD UP/DOWN	4'/8'
DISPLACEMENT - FIN (LBS)	15,950
- BEAVERTAIL	16,150
- CENTERBOARD	16,350
BALLAST - FIN (LBS)	6,000
- BEAVERTAIL	6,200
- CENTERBOARD	6,400
PHRF RATING BEAVERTAIL	MID 90
PHRF DEEP KEEL	N/A
AUXILLARY - FUEL/ HP	DIESEL/40
BERTHS	7
FUEL - GALLONS	38
WATER - GALLONS	80
HOLDING TANK - GALLONS	24
SAIL AREA - SQUARE FEET	727
I - FORETRIANGLE	51.75'
J - FORETRIANGLE	15.0'
P - MAINSAIL LUFF	45.25'
E - MAINSAIL FOOT	15.0'
BRIDGE CLEARANCE	56'
BALLAST / DISPLACEMENT RATIO - PERCENT	40
DISPLACEMENT / LENGTH RATIO	210
SAIL AREA / DISPLACEMENT RATIO	18.2
RANGE OF POSITIVE STABILITY - DEGREES	125
STANDARD WHEEL SIZE	44
SHAFT SIZE	1 1/8"
STANDARD PROP SIZE / PITCH - 3 BLADE FIXED	16/13
OPENING PORTS	12
OPENING DECK HATCHES	6
DORADE VENTS	2
PRIMARY WINCHES	53.2STC
HALYARD WINCHES, HOUSE TOP	40.2STC
STANCHION HEIGHT	27"
ANCHOR SIZING FOR BOW ROLLER - MAX	35#
BATTERY SIZE - ENGINE / HOUSE	27 / 27
BATTERY AMP HOURS - ENGINE / HOUSE	105 / 210(2)

Tartan 3700 Fractional Rig
Sailmaker Specifications

MAST SECTION: 110219 BOOM SECTION: POCKET
100% SELF TACKING JIB I: 53.25' J: 14.50'
155% STEM MOUNTED REACHER I: 55.75' J:15.50'
P: 50.50' E: 16.00'

MAINSAIL: POCKET BOOM	
LUFF:	3/8" INTERNAL ROUND GROOVE
RECOMMENDED SLIDE:	BAINBRIDGE B036, A017
RECOMMENDED SLIDE: HEADBOARD & BATTENS	BAINBRIDGE: B012 SAILMAN U00377
FOOT:	LOOSE
CLEW ATTACHMENT:	CAR INSTALLED ON BOOM
CLEW CUT UP:	N/A
TACK CUT BACK:	63 MM or 2.50"
TACK CUT UP:	N/A
REEF CUT BACK:	80 MM or 3.15"
REEF CUT UP:	60 MM or 2.36"
SAIL GATE HEIGHT FROM BOOM:	APPROX. 76 MM or 3"
MAST RAKE	304 MM or 12.00"
JIB	
JIB FURLING SYSTEM:	HARKEN ESP CRUISING UNIT 2
FORESTAY BUILD LENGTH:	16691 MM or 54.76'
LUFF TAPE SIZE FOR FURLER:	5 MM or #6 (6/32")

155% REACHER

REACHER FURLING SYSTEM:	HARKEN ESP UNIT 1
FORESTAY BUILD LENGTH:	17587 MM or 57.70′
LUFF TAPE SIZE FOR FURLER:	5 MM or #6 (6/32″)

RECOMMENDED SAIL SIZE

SAIL TYPE	**LUFF**	**LEECH**	**FOOT**
MAINSAIL	15367 MM or 50.41′	88 Degree Tack Angle	4876 MM or 16.00′
100% JIB	15621 MM or 51.25′	14791 MM or 48.53′	4039 MM or 13.25′
155% REACHER	16663 MM or 54.67′	15740 MM or 51.64′	7138 MM or 23.42′

REV: T. MCNEILL 11/15/06, TARTAN MARINE CO.

Table 4 – RECOMMENDED MAINTENANCE

Note: The items listed in the recommended maintenance schedule are not covered under warranty.

Page (1)	UPON DELIVERY (By Dealer)	AFTER SHAKEDOWN CRUISE	AT EACH USE	EVERY (6) SIX MONTHS	EVERY (12) TWELVE MONTHS
SPARS, RIG AND SAILS					
Watch for chafing at spreader tips, pulpit and shrouds.	X	X	X		
Secure turnbuckles and clevis pins with cotter pins and protect with tape.	X				X
Tune or re-tune rigging.	X	X			X
Inspect all rigging, deck fittings for cracks, crevices, deterioration, kinks, or other unusual conditions.	X			X	
Make sure all rigging functions correctly.	X		X		
Clean or lubricate sheaves as required.				X	
Strip down, clean and lubricate winches					X
Rinse off blocks, sheets, lines and furling unit drum.			X		
ENGINE					
Check all hose clamps, cable straps and mounting bolts for tightness.	X	X		X	
Check engine and gear oil level.	X		X		
Check fuel level and water accumulation in filter/separator.	X		X		
Check coolant level.	X		X		
Check all warning lamp functions.	X		X		
Check for seawater discharge at exhaust.	X		X		
Inspect engine for oil leak or water leaks.	X		X		
Inspect and clean raw water intake strainer.			X		
Replace engine mounted fuel filter and remote filter separator element.					X

Recommended Maintenance Schedule	UPON Delivery	AFTER Shakedown Cruise	AT EACH USE	EVERY (6) SIX Months	EVERY (12) Twelve Months
ENGINE (CONTINUED)					
Change engine oil. (See engine manual for complete engine schedule)				**X**	
Inspect propshaft, nuts and cotter pins. On Saildrives inspect blades, pins, and fasteners.	**X**			**X**	
Inspect Zincs * Weekly until normal wear rate is determined at your dock/mooring		**X**		**X**	
Spray all electrical connections with WD 40 or similar lube.				**X**	
Inspect shift and throttle cables at connections.	**X**		**X**		
PLUMBING SYSTEMS					
Clean out bilge and sump debris strainer.	**X**		**X**		
Clean out water system debris strainer.	**X**	**X**		**X**	
Inspect all fittings for leaks.	**X**	**X**		**X**	
Lubricate Head					**X**
Lubricate sea cocks					**X**
STEERING SYSTEMS					
Inspect packing, stuffing box.		**X**		**X**	
Lubricate Nylon bearings with WD40					**X**
Inspect bolt assemblies for tightness and lubrication. Oil bearing areas, check adjustment of quadrant, grease mating areas, oil support bearings on seat face, oil shaft bearings on each side of pinion gear. (Rack and Pinion System)	**X**			**X**	
Inspect and lubricate sheave bearings. (Chain and Cable System)				**X**	
Inspect and oil wire rope, chain and pedestal shaft bearings. (Chain and Cable System)		**X** (Inspect Tension)			**X**
ELECTRICAL					
Inspect all navigation lights for operation.	**X**		**X**		
Inspect Batteries/charger for correct operation.	**X**		**X**		

Note: See all of the installed parts manuals for additional maintenance procedures

3.0 CONSTRUCTION

3.1 Hull

The hull of the Tartan 3700 is a single unit fiberglass molding which incorporates a specially developed NPG/ISO gelcoated hull with a resin infused modified epoxy laminate. Alternating layers of strand mat and mulit-axial glass in modified epoxy resin are locally reinforced and cored with closed cell synthetic foam in order to achieve an optimum balance of strength, stiffness and weight in the laminate composite.

The construction process ensures the complete weaning of the laminate complex with minimal voids or bubbles. Extra laminate is used in any area that would be subject to additional stresses. The exterior finish consists of gelcoat molded into the fiberglass. The boot stripe is applied using PPG Concept Acrylic Urethane while the cove stripe is a premium vinyl film. A synthetic foam core is sandwiched between the laminate layers to add significant strength and stiffness properties to the hull, and yet ensuring that overall weight is kept to a minimum. The strength/weight characteristic of the sandwich composite as well as resistance to impact and abrasion is magnified by the use of multi-axial glass in the laminate.

3.2 Deck

The deck and cockpit, like the hull, is a single unit fiberglass molding with a gelcoat surface. A balsa core is incorporated into the structure between the laminate layers for additional stiffness. A non-skid finish is molded into the working areas of the deck.

3.3 Hull / Deck Joint

The top flange of the hull is capped with marine adhesive sealant. The deck is then fitted and fastened through the Teak or Aluminum toerail by means of stainless steel bolts. As the bolts are tightened, the sealant is forced into exposed crevices. If a leak should ever develop in the hull / deck joint, the through bolts may be tightened accordingly.

3.4 Rudder & Steering

The rudder is constructed of two molded composite shells, which are bonded together and injected with two-part foam for added strength. The rudderpost is carbon fiber with a reinforcing web positioned within the rudder.

Wheel steering is standard. The pedestal system is a smooth operating wire rope; Edson steering system. The pedestal manufacturer has provided maintenance instructions concerning the steering system.

3.5 Ballast

The keel of your Tartan Yacht is of lead alloyed with antimony for added strength and cast to exacting tolerances. In addition to providing the yacht's stability, the foil shape of the keel produces hydrodynamic lift while sailing to weather, enhancing upwind performance.

The keel is fastened to the hull by means of stainless steel bolts, which are cast into the lead. These bolts project through the bottom of the boat and are bedded with sealing material to prevent water leaks. The bolts are secured by stainless steel nuts and washers, which are visible in the bilge.

4.0 RIGGING

4.1 General Description

In order to tune your mast effectively, it is important that you are familiar with the basic associated principles. Some definitions and explanations follow: The term 'standing rigging' refers to fixed pieces of stainless steel rod or wire supporting the mast. Those, which offer fore and aft support, are called 'stays' (backstay, forestay, etc.). Those, which provide transverse support, are called 'shrouds'.

The shroud running from the masthead to a chainplate on the deck near the rail is called the main or upper shroud. If it were to travel this route directly, the angle of support would be so fine as to induce extremely large tensile forces in the shroud and equally large compressive forces in the mast. To increase this angle of support, a spreader is positioned according to load requirements. This spreader should be angled upwards to bisect the angle formed by the shroud as it bends over the spreader tip. A horizontal spreader, or worse still a spreader angled downwards, is dangerous. The spreader may be forced to slip further down the shroud resulting in the loss of the spreader and possible collapse of the mast.

The spreader becomes a compressive member, and when properly loaded tends to push the middle of the mast to leeward. To eliminate such a leeward bow, a lower shroud is installed running from the mast at the base of the spreader down to the deck near the upper shroud chainplate. The primary purpose of the lower shroud is to provide athwartship support. The addition of the spreader and the lower shroud means that the mast is supported at more places transversely than fore and aft. Therefore, the mast itself need not be as strong transversely as fore and aft. The mast then may have a lesser (more aerodynamically advantageous) transverse dimension than fore and aft dimension.

4.2 Spars

Based upon the relationships described above, the more spreaders and shrouds used transversely, and the more intermediate forestays and running backstays used longitudinally, the smaller the allowable mast section may be. This can be advantageous as weight aloft and windage may be reduced in addition to minimizing the undesirable aerodynamic effect of the mast on the mainsail. The smaller the mast section, the less disturbed is the air flow across the main. However, a practical and functional balance of rig complexity and aerodynamic efficiency has governed the design of the rig of the Tartan 3700. The spar section and carbon fiber laminate schedule have been engineered to provide a strong, stiff and safe mast while minimizing weight aloft.

Tuning involves adjusting the tension in these shrouds and stays so that the mast will remain straight in most sailing conditions with an appropriate amount of rake for comfortable helm balance. Tuning is carried out in two phases - tuning at the dock and tuning while under sail.

4.3 Tuning at the Dock

All turnbuckles are equipped with toggles at their base, which eliminates bending load on the swage and turnbuckle threads. Toggles are fitted to both ends of the forestay. As the boat tacks and the headsail loading varies from side to side, the forestay terminals are subject to extreme fatigue loading.

Start tuning the spar by ensuring that the mast is in the center of the boat, perpendicular to the designed transverse water line. Your boat may not sit level at the dock due to distribution of gear, stores and tankage levels, so check the water line position both sides. Then slacken the lower shrouds completely by undoing their turnbuckles. Take the main halyard and lead the shackle end to a point on the rail or chainplate. Adjust the halyard so that the shackles just touch the reference point on the rail or chainplate with a given downward tension, and then cleat the halyard. Then take the halyard to the same reference point on the other side of the deck. With the same amount of downward tension, you will be able to just touch the shackle to the reference point if the mast is plumb transversely. If not, let off one upper shroud turnbuckle and take up on the other in order to bring the masthead closer to center line until the halyard shackle touches both reference points under the same downward tension.

The particular part of the rail or deck you choose as your reference point is not important as long as it is the same point on each side. Once the mast is centered transversely, tighten both upper shroud turnbuckles uniformly, one full turn one side, then one full turn on the other. Repeat until the turnbuckles become difficult to turn. Pin the turnbuckles.

Tighten the lower shroud turnbuckles so that almost all of the slack is removed; the center point of each lower shroud should have about 1 inch of play in either direction. Sight up the aft side of the mast to make sure that it is straight. The lower shrouds may require adjustment to straighten the mast.

Now check the rake. Rake is the fore and aft angle of the spar. The Tartan 3700 spar is designed to carry up to (approx.) **15 inches of rake**. Rake effects the position of the center of effort of your sail plan and, consequently, the balance of the helm. The effects are more pronounced in heavier winds. The extent of rake on our boat should be determined by your particular sailing characteristics, the typical local wind conditions and your sailmaker's suggestions.

Forward rake should be avoided. The main halyard may be used to measure rake. In calm wind and sea, with the boat floating level on her lines, hang a plumb weight or equivalent, such as a hammer or wrench, from the main halyard. Adjust the halyard so that the weight is suspended just above the gooseneck. The fore and aft distance between the mast and the halyard at the gooseneck level is the amount of rake. Ease off the forestay turnbuckles and tighten the backstay turnbuckle (or vice versa) until the desired rake is achieved. Pin both fore and backstay turnbuckles.

Unless the rake has to be re-adjusted in the future to correct helm balance, these turnbuckles will need no more adjusting. Additional tension may be applied by the backstay adjuster.

Check that the outboard ends of the spreaders are padded and taped to avoid chafing the genoa.

Ensure that all turnbuckles are pinned. The mast should be fixed at the step to prevent fore and aft movement and to hold the mast in the step.

You are now ready to complete the tuning procedure while sailing.

4.4 Tuning While Sailing

Select a day with a steady 8 to 12 knot breeze and reasonably flat sea. Put the boat on starboard tack, close hauled. Sight up the luff groove of the mast. If the mast seems to fall off to leeward at the spreaders, luff up slightly and tighten the starboard lower shroud as necessary. Put the boat back on the wind and check the spar again, adjusting as necessary. When the mast appears straight, bring the boat about and do the same on the port side.

Check the following carefully:

When the upper shrouds are at optimum tension and when at about 15 to 20 degrees of heel, the leeward rigging should look slack. This is quite appropriate and should never be tightened. When close hauled under genoa and main, the forestay may appear quite sagged. Tensioning the backstay will reduce the amount of sag, but the sag itself can never be eliminated. As a rule of thumb, the maximum static backstay pressure should never exceed one quarter of the backstay breaking strength.

If your boat is brand new, the rigging may seat and stretch to the extent that tuning from scratch again will become necessary in a matter of weeks. However, after this initial working-in period, you will find that the rig tends to hold its tune for considerably long periods of time. After becoming used to the feel of the boat, you may wish to either increase or decrease the amount of weather helm. Any sailboat, when sailing up wind, should have a slight tendency to "round up" or head into the wind if the helm is let go. If you find it typically difficult to hold the boat off the wind, the boat is carrying too much weather helm. This can be alleviated by reducing rake, which will move the center of effort of the sailplan further forward. Conversely, if you find the boat tends to fall off when sailing upwind and you must constantly push her to weather, then the boat carries lee helm and the rig will require more rake.

With constant tuning as the season progresses, your boats performance will improve. The boat will feel more comfortable to sail.

You will find that tuning is a bit of an art and you will begin to notice subtle changes in the behavior and response of your boat as you make subtle changes in tuning. The important thing to remember is to go about the process in a slow and orderly fashion. To record the details of the tuning and re-tuning procedures as well as the results achieved will provide you a better understanding of the rig and will serve as a useful reference for rigging the boat on subsequent occasions.

5.0 FUEL SYSTEM

5.1 Fuel Tank

The aluminum fuel tank has been pre-tested and is static grounded.

5.2 Fueling

Before opening the fuel inlet deck cap, be sure all open flames aboard the yacht are extinguished, no person is smoking and that the electrical main switch as well as all electrical circuits are turned to "off". Once the tank has been filled, close the inlet cap tightly and wash down any spills with fresh water.

5.3 Fuel Grade

For specific fuel grades refer to the engine Owner's Manual.

6.0 ENGINE AND TRANSMISSION

6.1 Engine

All necessary specifications and information concerning the engine installed aboard your yacht may be found in the engine Owner's Manual. Read this manual carefully so that it is thoroughly understood. The life and performance of the engine will depend upon the care it is given.

6.2 Transmission

The reduction gears and reverse gears are contained in the transmission casing attached to the after end of the engine. These gears normally require little maintenance, however, the oil should be checked from time to time (see the Engine Owners Manual).

To avoid damage to the gears and to increase clutch life, the engine should ALWAYS be at idle when shifting gears.

6.3 Saildrive (Standard)

All necessary specifications and information concerning the Saildrive installed aboard your yacht may be found in the engine Owner's Manual. Read this manual carefully so that it is thoroughly

understood. The life and performance of the engine will depend upon the care it is given

6.4 Propellers

The standard propeller supplied with the yacht is a folding three or four bladed bronze unit.

When sailing, it is advised to lock the propeller by putting the engine "in reverse" after it has been shut off. This will prevent the propeller from rotating or "free wheeling". The folding propeller on the Saildrive unit is a geared propeller, which will automatically close the propeller blades when sailing.

6.5 Removal of Propeller

Refer to the engine Owner's Manual for detailed instructions on removal of the propeller.

6.6 Installation of the Propeller

Refer to the engine Owner's Manual for detailed instructions on installation of the propeller.

6.8 Exhaust System

The exhaust system utilizes a horizontal type muffler. In operation, the engine water pump draws water through the engine intake port, circulates it through the engine block then into the muffler. The water is mixed with the exhaust gases in the muffler and discharged overboard through the exhaust port in the stern of the yacht.

In a yacht fitted with fresh water cooling, an auxiliary pump draws water through the intake port, circulates it through a heat exchanger then pumps it into the muffler and overboard through the exhaust port. Seawater in the heat exchanger lowers the temperature of the engine coolant circulated through the engine block by means of the normal engine water pump.

7.0 CONTROLS

7.1 General

Please refer to the engine Owner's Manual for starting procedure and engine panel functions.

7.2 Starting and Operating the Engine

1. Turn main battery switch to "on".
2. Check that engine water intake valve is open.
3. Check that the gear shift lever is in neutral.
4. Follow specific instructions as offered in engine Owner's Manual.

When sailing, it is always advisable to start the engine before the sails are lowered. In this way, it is still possible to maneuver if the engine should not start.

7.3 Engine Shut Down

1. Close the throttle to slow idle. Place the gear shift in neutral. Stop the engine.
2. If the engine is not to be used again for a long period, the water intake valve may be closed.
3. Turn the main battery switch to "off", if no other electrical service is required.

8.0 ACCESSORIES

8.1 Installation of Thru Hull Fittings

Note: To ensure correct positioning of the thru hull fitting, consult with your local TARTAN Dealer.

Installations in Non-Cored Areas:

A. Drill hole size to accommodate the thru hull fitting.
B. A small backup plate is required for strength purposes. Marine plywood is suitable. A hole the same size as that in the hull should be drilled in the wood. The holes may then be aligned, and the wooden backup plate may be bedded with marine sealer and allowed to dry.
C. Install the thru hull fitting, and securely tighten the nut.

Installations in Cored Areas:

A. Drill hole size to accommodate the thru hull fitting.
B. Using a knife, remove the synthetic core from the area surrounding the hole at least two inches beyond the edge of the hole.
C. Fill this area with resin saturated fiberglass mat and let cure. The hole may have to be trimmed or reshaped to accommodate the thru hull.
D. Mount the thru hull fitting with marine sealer on the flange portion of the fitting. A layer of marine sealer should also be applied between the interior portion of the fitting and the hull. Allow to dry.

Note: After applying the marine sealer between the exterior of the fitting and the hull, tighten the nut. The thru hull fitting should not be allowed to turn as this may break the seal. A wrench to tighten the nut and a wrench to hold the thru hull will be required.

9.0 ELECTRICAL

9.1 General

The electrical system in your Tartan Yacht has been designed to ensure as much trouble free operation as possible. Wiring and connections are kept as high in the interior of the yacht as practicable, reducing the possibility of exposure to water. The main switch panels are located to protect them as much as possible from the elements. The system in the Tartan 3700 is designed much like your home. All the main circuit breakers are designed to be left in the on position. The entire panel is shut of at the main battery switch should you decide to leave your boat for extended periods of time. The breakers at the battery shut off switch are designed to always be hot. These items include the bilge pumps, memory, courtesy lighting and inverter control.

9.2 Batteries

Tartan Yachts are factory supplied with batteries. The battery box is located under the aft cabin bunk.

> *Note: Do NOT turn the main battery switch to "OFF" while the engine is running as serious damage to the charging system will result. The engine manufacturer recommends that you do not change batteries with this switch while the engine is running.*

Contact your Tartan Dealer for recommended battery sizing.

9.3 Alternator

All engines are equipped with the standard alternator as supplied by the engine manufacturer. However, you may have an optional HIGH OUTPUT alternator installed. Please consult the product manufacturers manual for details on operation and care.

9.4 Charging System

Please consult the product manufacturer's manual for details on operation and care.

10.0 ELECTRONICS

10.1 General

Many owners add electronic equipment such as knotmeters, distance logs, depth sounders, (all of which usually require thru hull fittings) and relative wind indicators, wind speed indicators, radio direction finders, VHF, SSB radios as well as various types of electronic navigation aids such GPS and Loran. Many of these items may be installed while the yacht is being built or later by the Tartan Dealer.

10.2 Thru Hull Fittings

If other than standard thru hull fittings are required and are to be added after the yacht is built, consult the Tartan Dealer to determine the correct positioning of the thru hull fitting. Directions

concerning the components and installation of the thru hull fittings should be supplied with the unit. See section 8.1, "Installation of Thru Hull Fittings".

10.3 Masthead Fittings

Masthead fittings should be installed carefully, following manufacturer's recommendations. Cables leading from the masthead fitting should come out at the foot of the mast, and a connector installed at this point, which facilitates easy disconnecting when the mast is un-stepped. Keep all connectors, junctions and wiring as high in the yacht as possible to prevent them from coming in contact with water.

10.4 Electronic Equipment

All electronic equipment serviced by the yacht's 12-volt electric circuit should be separately protected by a circuit breaker or fuse. Radios and other DC accessories can be wired directly to the yacht's circuit panel. Make sure that the polarity for electronic accessories are correct, and that they are installed according to the manufacturer's recommendation.

11.0 SAFETY EQUIPMENT

SAFETY SHOULD BE THE FIRST CONCERN OF EVERY SAILOR, AND CERTAIN ITEMS SHOULD ALWAYS BE CARRIED ON THE YACHT.

11.1 Fire Extinguishers

Fire extinguishers should be carried on each yacht. Depending upon the size of the yacht, owners may carry several extinguishers mounted in the yacht so they would be readily accessible. These extinguishers should be certified with regular inspection and testing dates shown on each unit. Please consult governing regulations as they apply to your yacht and area sailed.

11.2 Life Jackets

One life jacket for each member of the crew must be carried. They should be of a type approved by your respective governing agency.

11.3 Life Buoys

Many yachts carry life buoys, which can be easily stowed in a bracket on the stern or adjacent to the helmsman. These life buoys should have a gravity-activated strobe or other bright light attached, along with a long line, which connects to a -man-overboard pole. The assembly facilitates spotting the person to whom the buoy has been launched in any type of sea or visibility conditions.

11.4 Life Lines

The lifelines aboard your yacht should be checked regularly to ensure their integrity. Always be sure that access gates (if fitted) are closed before leaving the dock. Check carefully that the swage end fittings are not pulling out and that the lock rings are on the turnbuckle ends and the turnbuckles are tight.

11.5 Safety Harnesses

Just as with life jackets, a safety harness should always be worn by anyone on deck. These harnesses allow the wearer to be attached to some permanent fixture on or above the deck. They should be of good quality and capable of carrying the full weight of the wearer falling several feet.

11.6 Flashlights

The yacht should be equipped with several water-proof flashlights, routinely checked to be in good condition with well charged batteries. Flashlights serve as a convenience at night while moving about the yacht and in trimming sails as well as a safety precaution locating a person overboard. At least two of the lantern type should be available on the yacht.

11.7 Dinghy or Life Raft

An inflatable dinghy or life raft may be carried. It should have the capacity to carry your full crew in an emergency. The dinghy may also serve as **a** convenience in moving from yacht to yacht or from yacht to shore. Inflatable craft should be thoroughly checked every year to ensure safe and proper operation. Your Tartan Dealer can advise you where such inspections are offered.

11.8 Safety Flares

Please consult Government regulations as they apply to your yacht and your area.

11.9 Fog Signals and Radar Reflectors

Both of these items are extremely important if sailing conditions deteriorate and visibility is restricted. Foghorns of the canister pressure type are good. Spare canisters should be carried aboard, and the "lung power" type makes a reliable back up.

Sailboats may not be identified well on radar, therefore a radar reflector is a must. These can be purchased commercially. The radar reflector should be stored carefully to prevent damage because the performance of the unit is directly related to the accuracy of the intersect angles of the component planes.

11.10 Anchor

The type and quantity of anchors carried will vary from region to region according to the sea bottom conditions. Each anchor should include an adequate size and length of line along with chain to ensure that the anchor lies properly and penetrates the bottom. Chain, also, is immune to chafe from bottom structure such as coral.

12.0 MAINTENANCE

Yachts kept shipshape and in good order require maintenance on a regular and frequent basis. The frequency will depend upon the conditions under which the yacht is being used. You must continually check the running and standing rigging, winches, engine, bilge and head as well as surface finishes for signs of needed maintenance. All deck hardware should be washed down with fresh water after sailing in salt water.

12.1.1 Gelcoat Surfaces

Wash down the gelcoat surface of the hull and the deck regularly with fresh water and a good detergent. A sponge or soft brush should be used on smooth surfaces, and a stiffer brush may be used on the non-skid areas of the deck. Follow by rinsing with fresh water.

At least once a year the topsides of the hull should be waxed with a good automotive or boat wax, then polished. This will help the gelcoat retain its color and appearance. Do not wax the non-skid surfaces of the deck. Dark Gelcoat color hulls may require waxing at more frequent intervals in order to prevent oxidation. Minor scratches in the gelcoated surfaces can be repaired by buffing with a light abrasive buffing compound followed by waxing and polishing. Scrapes or damages that have broken through the gelcoat surface can be repaired. For major damage, where a large area of the gelcoat has been removed, or where the damage extends into the glass lamination below the gelcoat, consult your Tartan Dealer or a qualified marine yard.

Gelcoat surfaces below deck are cleaned with a good detergent and water, then rinsed with fresh water. These surfaces may also be waxed to maintain the appearance.

The galley and head sinks are fiberglass and can be maintained with the same care as other gelcoat surfaces.

Gelcoat surfaces will stain if the yacht is moored where leaves fall on deck or birds roost. Under these conditions, surfaces should be scrubbed down very frequently. A protective cover may offer protection and reduce maintenance.

12.1.2 PPG Paints

PPG Paints should be cleaned with warm water and a mild detergent. Lights scuffs in the PPG finish can be buffed out using a light compound such as 3M Finesse It II Polish. Contact PPG for care and maintenance guidelines on your PPG hull. Touch-up kits are available through an authorized PPG Dealer.

PPG DCC CONCEPT Acrylic Urethane
PPG Technical Assistance 1-800-647-6050

12.2 Portlights and Hatches

The portlights and hatches of your yacht are manufactured by various companies. The portlights are stainless trimmed with safety glass or Lexan. Screen inserts are included. Lexan, which is impact-resistant and very durable is used in the hatches as well as the companionway sliding hatch. However, the surface of the Lexan is not abrasion resistant, and therefore, gritty cleaning agents should never be used on them. Clean Lexan with mild soap and water. If Lexan requires polishing, Lexan polish is available from most major hardware dealers. Toothpaste may be used as a substitute for Lexan polish. Rinse afterward with mild soap and water. Please consult the hatch and portlight manufacturers for care and maintenance guidelines.

12.3 Wood

12.3.1 Teak

Interior teak surfaces are maintained in the following manner: Remove dirt or cooking grease from teak surfaces before refinishing. This can be done by washing down the surface with mild soap and water. Interior surfaces should be cleaned and treated once or twice a year with an interior teak oil.

12.3.2 Cherry

Interior cherry surfaces have a high solids conversion varnish finish. This should be regularly washed off with fresh water and a little liquid detergent, then polished with a chamois leather. Please consult with the factory before refinishing varnished cherry surfaces.

12.4 Bottom of the Yacht

Note: Following this factory approved method will not void your hull blister warranty.

Although we use the finest gelcoats available today, our testing indicates that sanding these gelcoats seriously degrades blister resistance. By following the approved finishing methods you will maintain your hull blister warranty protection as well as protect your investment for years to come.

BOTTOM PAINTING BARE FIBERGLASS

1. Scrub the surface thoroughly with soap and water using a stiff brush. Flush with fresh water to remove soap residue.

2. Wipe surface thoroughly with a rag that has been dampened with Interlux Fiberglass Solvent Wash 202 or an equivalent de-waxing agent to remove mold release agents, wax and other contamination. Wipe off with a clean dry rag before liquid dries. Wipe only a few square feet at a time and change rags frequently.

3. Lightly spray the surface with water to insure all contamination has been removed. If water beads up or separates repeat Step 2.

4. Lightly sand all gelcoated areas with a 3M Medium Scotch-Brite Hand Pad or 320 grit sandpaper.

Lightly sand gray Interprotected areas with a 320 grit sandpaper until blended into surrounding areas to achieve a smooth finish if desired. Be careful not to sand into the gelcoat. Sand the keel and rudder with a 220 grit sandpaper to achieve a smooth finish if desired.

AFTER THE SURFACE HAS BEEN PROPERLY PREPARED

1. Remove the sanding residue by wiping with Fiberglass Solvent Wash 202.

2. Apply antifouling paint following manufacturers recommended application procedures. A sandless primer such a Pettit 6999 may be recommended for certain bottom paints.

ALUMINUM SAILDRIVES

Most of these areas are made of aluminum and it is important to ensure the surfaces are properly prepared and primed in order that the paint adheres well and the metal is protected from galvanic reactions. Aluminum Saildrives cannot be painted with copper base anti-fouling paints, so it is important that the antifouling for these areas be specified for use on aluminum. Interlux makes Micron 33 Aerosol, Trilux, Tri-Lux II and Micron 33 for use on aluminum. Check with the specific Saildrive manufacturer for recommended painting procedures.

TARTAN YACHTS DOES NOT OFFER THIS DOCUMENT AS A WARRANTY FOR BOTTOM PAINT APPLICATION OR THE PERFORMANCE OF BOTTOM PAINT APPLIED.

PLEASE CONTACT THE FACTORY IF YOU HAVE ANY QUESTIONS OR CONCERNS ABOUT THE BOTTOM PAINTING PROCEDURES.

When applying seasonal applications of bottom paint, it is extremely important that the coatings be the best quality and that they be applied carefully and strictly according to manufacturer's instructions. Thereafter, the routine maintenance of the bottom will be much easier with the best possible results.

The frequency and amount of maintenance required on the bottom is governed by the nature of the water in which the yacht is kept, and to some extent, by the use it gets. If the waters are polluted or are conducive to marine growth, the yacht may have to be hauled frequently and the bottom scrubbed down with brushes, detergent and fresh water immediately upon hauling. If for any other reason the yacht is hauled and it is planned to keep it out of the water for any length of time, the bottom should be scrubbed down immediately before any marine growth dries and hardens upon the bottom.

12.5 Cove Stripe

The cove (just below the deck line) is colored vinyl tape. The cove stripe may be cleaned by using a mild detergent solution. The vinyl tape, if needing replacement, can be purchased through your Tartan Dealer.

12.6 Standing Rigging

Standing rigging is defined as those fixed parts of the rigging, which support the mast. The standing rigging and all the components listed under "Stainless Steel" should be checked each time before going sailing and given a detailed monthly examination. Turnbuckles should be inspected to make sure that cotter pins are in place at top and bottom, that cotter pin ends are turned back carefully and that they are covered with plastic tape. Each spreader should be checked that the pins are properly in place and that the spreader is not out of alignment. The end of the spreader where the shroud passes through should be padded with a piece of foam and taped over to prevent chafing sails. Any stranded wire rigging should be checked for broken, protruding strands. Check also for any signs of rust in wire rigging. A good practice is to paint a small white ring around the wire where it enters the terminal. The paint will show if any slippage occurs and will prevent salt from collecting in the minute spaces between the strands, which will induce corrosion. Examine carefully where the wire enters the terminal end fitting for signs of rust or wear since this is a particularly vulnerable point when the yacht is sailed in salt water. If signs of rust or wear are found, the rigging should be replaced. Rod rigging should be examined for nicks or kinks and any signs of fatigue where the rod enters the terminal end fitting. If any potential problem is found, consult your Tartan Dealer.

12.7 Running Rigging

Running rigging comprises the gear that is normally used in handling and trimming sails such as sheets, guys, halyards and vangs. Main and genoa halyards are subject to heavy loading and constant flexing as they pass over the sheave at the head of the mast and turning blocks at the foot of the mast.

Rope halyards are typically not subject to wear as severe as wire halyards, but should be examined several times each season. The end fitting should be checked each time the yacht is sailed to ensure it closes and locks smoothly and securely. The splice at the end fitting should also be checked with each sail. Rope sheets tend to fray over a period of time and should be replaced when any strand of the outer layer of braid begins to fray.

12.8 Lifelines, Pulpits and Stanchions

Lifelines, like standing rigging, should receive regular, periodic inspections. The terminal ends at the connector must be well screwed into the barrel in order that all the threads of the barrel are fully engaged. The lock rings must be installed. Check the swaged ends for signs of rust. Check pulpits and stanchions for dents or cracks. Ensure that they are properly secured into their bases.

12.9 Winches and Blocks

Most problems which develop in winches are due to insufficient or improper maintenance. When sailing in salt water, winches should be stripped down, cleaned and lubricated no less than once a month. In fresh water areas this maintenance procedure should be performed at least twice each season. The bolts securing the winches should be checked at least once each season. Access to the bolts which secure the cockpit winches may be gained by removing the winch drums. Bolts securing the winches on the coachroof may be checked by removing the winch drums as well. If it is necessary to remove a winch base and remove the bolts, the bolts should be resealed with marine sealant.

Blocks normally require little maintenance, but they should be examined regularly for damage, particularly at the shackle connection. Never leave a snatch block open, and be sure the snatch is properly closed before

applying load so that the cheek of the block will not be bent. Sheaves and blocks can be sprayed with a silicone lubricant to keep them running freely. The sheaves at the head of the mast should be checked before the spar goes into the yacht at commissioning. These sheaves should also be checked periodically during the season (this necessitates going up the mast in a bosun's chair) to ensure that they are running freely and that the halyard is not cutting a groove in the sheave. The sheaves for the main and genoa halyards have gar-fil bearings which do not require lubrication. All running rigging should be washed down with fresh water after sailing in salt water.

NOTE : MOST DECK HARDWARE IS ATTACHED BY FASTENING BOLTS INTO ALUMINUM PLATES FIBERGLASSED INTO THE DECK. THERE ARE NO NUTS ON THE BACK SIDE OF THE DECK TO TIGHTEN. PLEASE CONSULT YOUR TARTAN DEALER FOR MORE INFORMATION.

12.10 Engine

The maintenance of your engine is covered in the engine Owner's Manual, which should be read carefully.

Note: Once the engine is started, it should be operated until it reaches full operating temperature to prevent corrosion. This may take several minutes in cold water.

Before changing the oil, consult the engine Owner's Manual for complete instructions.

Routinely check fuel lines for tightness and integrity. Probably your nose is your best guide here. If you smell fuel, there may be a leak somewhere in the system. A gentle tightening of each connection in the fuel line will often solve the problem. If you smell fumes aboard, extreme caution must be taken to prevent an explosion. Consult a qualified service mechanic immediately.

12.11 Power Train

Details of care and maintenance of the engine and Saildrive are given in Section 6.

12.12 Electrical

The electrical wiring should require little or no maintenance. Exposed terminals and connections should be checked several times each season and more frequently in saltwater environment. Check for tightness of the connections and the presence of any corrosion. Connections may be protected with a light application of spray coating obtainable from an electronics parts supplier.

"Clean, Dry, Tight" are the three most important factors in battery and electrical maintenance.

12.13 Upholstery

12.13.1 CLOTH

The cushions and seat backs on your Tartan Yacht are covered with relatively stain-resistant fabric, which should only be dry cleaned. However, consult your local dry cleaner before attempting this process. It is important that the upholstery be kept aired and that it be dried after use to prevent mold development. If the yacht is to be left unused for prolonged periods, it is advisable to stand the cushions on end so that air can circulate around them. It is also advisable at such times to clean out all lockers, removing all dampness and leaving locker doors open.

12.13.2 ULTRASUEDE and ULTRALEATHER

Please consult your care and maintenance card provided by Ultra Fabrics regarding the cleaning of your ultraleather or ultraseude fabrics.

12.14 Steering

The manufacturer's instructions for maintaining your pedestal steering system should be followed closely.

The complete system, including bolts should be inspected thoroughly each season.

In addition to the above, an inspection should be carried out every other year with the system under heavy load. While under load, look for parts bending, distorting or creaking. Watch for any indication of failing in the system when under full load for a period of time, and report any abnormalities to your Tartan dealer.

12.15 Deck Fittings

Any deck fitting which is under load (chain plates, genoa tracks, line stoppers, etc.) should be checked on a regular basis and re-bedded with marine sealant if found to be leaking.

12.16 Miscellaneous

Good maintenance is most important aboard your yacht. If you take care of the yacht's system, it will take care of you.

13.0 FITTING OUT

Note: Tartan Yachts must not be lifted in their shipping cradles by fork lifts without additional strengthening of the cradle. Most fork lifts tend to concentrate the maximum weight in a small area, therefore damage may occur. Recommended procedure requires that boats being lifted in shipping cradles have straps placed under fore and aft upright supports and be lifted by a crane.

13.1 Prior To Launching

The exterior of the yacht should be sponged down with soapy water to reveal any scratches or

damage. Repair damaged areas.

Wax the hull exterior. Color pigment may be mixed into the wax before application. This tends to make small scratches disappear when the hull is polished.

Check and clean the saildrive leg. If a folding propeller is fitted, check that the blades open and close readily, and that the cotter pins are in place and secure.

Examine all deck fittings for security and service all winches.

Check that batteries are fully charged, that battery terminals are clean and that all electrical connections are clean and secure.

Prior to launch, all thru hull valves should be closed to prevent any leakage. Check that all thru hull fittings are secure and that valves open and close easily.

Replace engine block and water pump drain plugs. Remove any winter cover protecting the engine air intake and plug or cover at the stern exhaust port.

13.2 After Launching

Check all thru hull fittings, sea cocks and the bilge to ensure that no leakage exists.

Open the intake seacock for the engine cooling water.

Turn on the main power switch.

Start engine. After the engine has reached operating temperature, shut down and change oil.

13.3 Stepping the Spar

CAUTION: ENSURE THAT THERE IS NO POSSIBILITY OF CONTACT WITH OVERHEAD ELECTRIC OR OTHER WIRES WHEN LIFTING AND STEPPING THE SPAR AS DAMAGE, INJURY OR FATALITY COULD RESULT.

TARTAN YACHTS RECOMMENDS THAT YOU HIRE A PROFESSIONAL RIGGER TO ASSIST WHEN STEPPING YOUR SPAR.

The spar is stepped through the deck at the mast collar and is seated on the mast step in the bilge.

a) Good preparation and maintenance of the spar and rigging is essential prior to stepping. The spar should first be laid carefully on two or more supports, washed and inspected from top to bottom. Check the masthead and sheaves for excessive wear or abrasion. Inspect all halyards from end to end for signs of wear or abrasions, and replace as necessary. Inspect the standing rigging carefully, looking for broken wire strands, cracked swage terminals or nicks, scratches and dents in rod rigging. Inspect all clevis pins for wear, and to be certain that they are properly pinned and taped so that they

do not damage sails or halyards. Consult your Tartan Dealer if you detect any potential problem.

b) Install the spreaders and secure the rigging to the spreader ends. Be sure the halyards are not entangled with the spreaders. Pad the spreader ends with foam and tape over thoroughly to prevent chafe to the sails. Test all mast lights with a portable 12 Volt battery and label all wires at the mast base accordingly. Tie all running rigging together and secure the bundle to the spar at the lower black band. Tie all standing rigging together and secure the bundle to the spar at the lower black band. Remove cotter and clevis pins from all turnbuckles and place them in a container for future use. Back off all turnbuckles and lightly grease the threads of the turnbuckle screws with a corrosion inhibitor such as Lanocote or Tef Gel. If the turnbuckle threads have tape adjustment marks, do not remove the tape or alter the positioning by adjusting the turnbuckle unevenly.

DOUBLE CHECK EACH OF THE ABOVE STEPS BEFORE PROCEEDING.

c) Prepare a rope sling, of adequate capacity, which will take the weight of the spar. Place the sling INSIDE the standing and running rigging so that it will not crush the rigging against the spar. Next, make fast a ½" diameter tie-down line to the sling, securing the line at the lower end of the spar. Ensure that the tie-down will not interfere with the removal of the bundle of standing rigging which will be undone before the sling is removed. To prevent the weight of the spar being carried by the spreaders or mast hardware when the spar is raised to a vertical position, adjust the tie-down so that the weight of the spar is carried by the sling and tie-down only.

d) Attach the crane lifting hook to the sling. It is recommended that a piece of carpet be wrapped and taped around the lifting hook to prevent it from marking the mast during stepping.

DO NOT STAND OR POSITION ANYONE DIRECTLY BELOW A SUSPENDED MAST.

At least three persons in addition to the crane operator should be present when stepping the spar. Position one person at the foot of the mast to guide the foot as the mast is being lifted, slowly swing the crane toward the yacht while keeping the foot pointed toward the base of the crane. This will keep the spar from swinging into the crane.

DO NOT PLACE HANDS, ARMS OR FEET DIRECTLY BELOW THE SPAR AS IT IS LOWERED INTO THE YACHT.

When the crane is in position, move the foot of the spar over to the second person who should now be aboard the yacht. Carefully pass the spar to the person aboard. Slowly raise the spar to an almost vertical position and guide the foot through the mast collar. Pad the mast collar with cloth to ensure that the paint on the mast is not damaged as the mast is lowered through the collar. Be careful not to let the masthead swing and hit the crane arm. When lowering the mast through the collar, all mast electrical wiring should precede the entry of the mast. Check aloft that the mast and crane are not fouling. With the foot of the mast through the collar, untie the bundle of standing rigging and clear each piece away from the crane lifting cable.

e) Lower the mast through the collar, being careful not to scratch the mast as it passes through the collar opening. A piece of carpet placed between the sides of the mast and the collar will reduce the

likelihood of scratching as the mast is lowered to the step. With the weight of the spar on the step, attach the forestay, backstay and both port and starboard upper shrouds. When stepping the mast for the first time, follow the instructions in the SparTite kit included with your new yacht.

WOOD CHOCKS ARE NOT AN ACCEPTABLE METHOD OF CHOCKING THE MAST AT THE PARTNERS. USE ONLY SPARTITE TO CHOCK YOUR CARBON FIBER MAST AS WOOD OR OTHER CHOCKS CAN POINT LOAD AND DAMAGE THE MAST.

Lower the crane cable sufficiently to allow the sling to be lowered and released, taking care that the sling and hook does not damage the steaming light on the forward side of the mast. It may be necessary to retrieve the sling by sending a person aloft in a bosun's chair. Connect the lower shrouds and snug up all turnbuckles by hand. Replace all cotter pins into the clevis pins. To prevent damage to sails, insert all clevis pins with the heads forward or outboard, and tape over the bent cotter pins. Release the bundle of running rigging and lead each line fairly to the appropriate blocks, stoppers and winches. Connect the mast electrical wires and test each circuit. Attach the mast collar tie-down straps to the mast below deck, make hand tight.

f) To un-step the spar, reverse the above procedure. Before removing the spar for winter storage, make a diagram of the location of the running rigging and the connections of the electrical wiring to serve as a guide when re-stepping the mast. Mark the turnbuckle screws with black electrical tape to facilitate returning to the same position on re-stepping. Do not use masking or filament tape on the spar as it may harm the surface finish. Do not expose a spar wrapped in plastic to direct sunlight. When storing the spar for the off season, do not allow water to be trapped against the painted finish. Trapped water will fog and blister the paint.

14.0 LAYING UP FOR WINTER

14.1 Hauling

The proper placement of slings and supports is most important when hauling out. Improper placement stresses the hull and may result in gelcoat fractures or other damage. Slings should never be placed on the saildrive leg. The forward sling is to be placed in the area of the forward main bulkhead. To prevent the slings coming into contact with the rub rail, the hull may be padded with carpet, placed flat against the hull just below the cove line. Tie a line between the slings fore and aft to prevent them from slipping.

14.2 Cradle Support

When hauling on a marine railway or placing the yacht in its storage cradle at least 60% of the weight of the yacht should be on the keel. The hull supports should not bear more than 30% to 36% of the weight of the yacht, otherwise structural damage may result if these weight percentages are not followed. Do not put weight on the keel further aft than the last keel bolt. The extreme aft tip of the keel is tapered to a thin section and will accept little weight without the possibility of bending (see 3.5). It may be necessary to go through the loading process two or three times, checking the keel

position relative to the center line of the cradle, before it is finally positioned,

14.3 When the Yacht Is Hauled

Scrub down the bottom to remove any marine growth and grease. Wash down the topsides and deck. All gear that may be damaged by cold or damp, such as clothing, life jackets, books, batteries etc., should be removed from the yacht and placed in a warm, dry storage area. All cushions should be stored on edge allowing air to circulate freely to reduce the chance of mold. Lubricate and cover all exposed mechanical fittings to guard against ice or snow. Check all electrical and mechanical components on the yacht and remove those needing service or replacement during the winter. Cover any exposed holes.

It will only be necessary to winterize the raw water side of the engine's cooling system. The freshwater side should always contain antifreeze of a type appropriate for your particular climate.

Refer to the engine Owner's Manual. Remove the engine drain plugs. The engine Owner's Manual or your Tartan Dealer may be consulted for the location and quantity of these plugs. After allowing drainage for five to ten minutes, replace the plugs and secure. Remove the engine water inlet hose from the seacock and place this hose end in a gallon container of automotive antifreeze. Start the engine and run until the antifreeze comes out of the exhaust outlet. Stop the engine. Replace the inlet hose on the seacock and tighten the hose clamps. Antifreeze will now be distributed throughout the cooling system as well as in the muffler. It is recommended that the drain plugs be again removed and the engine drained for total protection. Place a wooden plug in the exhaust outlet in the stern and shut off the fuel tank valve.

14.4 Fresh Water System

Pump the system dry. Pour a minimum of 2 gallons of recreational vehicle antifreeze (this is a non-toxic formula appropriate for potable water tanks) into the water tanks. Pump the antifreeze throughout the fresh water system by operating each fixture, ie. faucets, shower, etc. Remove the inspection port on the top of the water tank and dry the interior of the tank with a cloth. Place some baking soda in an open glass container and position this in the tank. Lay the inspection port back in place.

Note: Although the water system is being stored essentially "dry", do not forget to flush the system thoroughly at re-commissioning. Read through the above schedule to ensure that the tank is ready to be re-filled and is watertight.

14.5 Head and Holding Tank

Clean the bowl of the head and pump water through. Pump out the holding tank, and flush thoroughly. Add some holding tank disinfectant through the deck "waste" fitting. Add some antifreeze to the bowl of the head and pump it through the system. For best protection and trouble-free operation next season, follow the manufacturer's instructions and clean all valves in the head.

14.6 Batteries

Remove the batteries from the yacht. Clean the terminals and fully charge the batteries, then store them in a protected area with a moderate temperature. If the batteries are to remain on the yacht, make absolutely sure they are completely charged to help reduce the possibility of frost damage.

14.7 Diesel Engines

About a weekend or two prior to the end of the season, change the engine oil and filter. Re-useable oil filters should be cleaned in clean Varsol, gasoline or a similar agent, provided the element is in good

condition. Prior to re-installation of a cleaned filter, however, make certain the filter is entirely dry; gasoline fumes are not conducive to proper diesel engine performance! The engine should be run for a sufficient time, prior to the end of the season, to ensure that the clean oil circulates throughout the entire system. At the same time, all fuel filters and filter elements should be drained, cleaned and replaced where necessary. The same attention should be given to the water separator. The fuel system should then be bled and the engine re-started.

During the final hours of preparation for lay-up, it is suggested that the fuel tank be topped up and a recommended quantity of diesel fuel stabilizer (only) added to the fuel for winter storage. Do not add methyl hydrate to diesel fuel, for it will damage the engine.

When the time comes for actual lay-up of the yacht and after the yacht is hauled out, drain the seawater side of the cooling system and the exhaust system completely. Then close the engine water intake valve. Disconnect the intake hose and place the end of the hose in a container of pure ethylene glycol or "permanent" antifreeze. Run the engine until the antifreeze mixture comes out of the exhaust port. Stop the engine and open all engine drain plugs as an added safety measure. The coolant in the closed system should be checked to determine if the solution is of sufficient strength for the winter.

After the antifreezing process, the intake hose should be replaced and made fast to the intake seacock. Once again, this is the best time to re-open the water intake valve and to prepare a note to check the valve in the spring prior to starting the engine.

It is recommended that the water pump be removed and kept at home during the winter or that the impeller be removed and stored in a warm place. Both options are to prevent permanent "set" in the blades of the impeller which may result from exceptionally cold weather. An impeller is best stored in a plastic bag with talcum powder. The talc not only serves as a good preservative, but acts as a lubricant as well.

Finally, insert a wooden plug or oily cloth into the exhaust port at the transom and loosen the alternator belt. The engine will now be prepared for the winter storage period. If there are any doubts about proper procedures, you should contact your Dealer, the engine manufacturer or a qualified mechanic.

15.0 LIMITED WARRANTY

The Tartan Commitment.

You have purchased one of the finest sailboats built in the world today. And it is supported by one of the finest warranties in the industry. This excellent warranty coverage demonstrates not only our confidence in our Tartan sailboats, but also our commitment to every Tartan customer. We're dedicated to ensuring that you enjoy exceptional quality, dependability and peace of mind throughout your ownership experience.

To further demonstrate our commitment to our Tartan owners' satisfaction, we may establish a special policy adjustment to pay for specific repairs that are no longer covered by warranty. When we establish such a policy adjustment, we mail details to all applicable owners on record. That's why it is important to send in the Warranty Registration Form supplied to you with your purchase documents, and to notify us when you change your address, or if you have purchased your Tartan from a previous owner.

You made a wise decision to purchase a Tartan. Your yacht delivers world-class luxury and performance, along with an unparalleled commitment from Tartan to ensuring your satisfaction. You can be confident, as we are, that you'll enjoy owning your Tartan as much as you enjoy sailing it.

This warranty is effective for all Tartan yachts delivered after August 1, 2010.

I. Limited Warranty

Tartan Marine Company, LLC ("TMC") makes the following limited warranty for new Tartan Yachts manufactured by TMC and delivered to original owners after August 1, 2010 and normally operated in the United States, U.S. Territories, or Canada:

- each new Tartan Yacht to be free from defects in material or workmanship for twelve (12) months from commencement of the warranty period (the "Basic Warranty");

- the chain plates, mast step and floor timbers on each new Tartan Yacht to be free from defects in material or workmanship for fifteen (15) years from commencement of the warranty period (the "Structural Warranty"); and

- the hull to be free from osmotic blistering in below-the-water gel coat surfaces for fifteen (15) years from commencement of the warranty period (the "Blister Warranty") **The Blister Warranty does not apply to keels, rudders and other painted surfaces.**

The warranty period shall commence on the earlier of (a) the date the Tartan Yacht is delivered to the original owner, or (b) the first day of the thirteenth month after the Tartan Yacht is manufactured.

The Customer shall submit a completed Warranty Registration Form within thirty (30) days of sale of the new
Tartan Yacht. **Failure to submit the Warranty Registration Form timely may void this Limited Warranty.**

The obligation under this Limited Warranty is limited to the replacement or repair by TMC, at TMC's cost, of such parts or components as shall appear to TMC, upon inspection, to have been defective in material or workmanship at the time of delivery of the Tartan Yacht, provided that the parts or components alleged to be defective are made available for inspection by TMC at its factory or at a designated inspection location, with transportation costs to be paid by TMC. Any part or component replaced under this Limited Warranty will be new or re-manufactured and the decision whether to use a new or re-manufactured part will be made by TMC.

Replacement or repair of the parts or components as provided herein is the exclusive remedy under this Limited Warranty. This exclusive remedy will not be deemed to have failed of its essential purpose so long as TMC is willing and able to replace or repair any defective part or component within the limits of this Limited Warranty. In the event TMC fails to replace or repair the defective part or component as provided hereunder, the entire liability of TMC shall not exceed the cost to replace or repair the defective part or component.

The Structural Warranty and the Blister Warranty only of the Limited Warranty are transferable to the first subsequent owner of the Tartan Yacht upon application and approval by TMC subject to the submission of the following: (a) a survey of the Tartan Yacht conducted and certified by a surveyor who is a member of the Society of Accredited Marine Sureyors indicating the hull is in good condition and free of damage or defects; b) submission of a completed Request for Transfer or Warranty form; and c) a written statement warranting that the Tartan Yacht has not been in charter service or used for commercial purposes. In addition, the Tartan Yacht must be listed for sale with, or accepted as a trade-in by, an authorized dealer of TMC. If approved, the remaining term of the Structural Warranty and Blister Warranty of the Limited Warranty will be adjusted as follows:

Years of Original Warranty	Years of Adjusted Warranty
11-14	5
6 - 10	3
1 - 5	1

In no event shall the Basic Warranty of the Limited Warranty be transferable to any subsequent owner.

II. Limitations on Warranty

IN NO EVENT SHALL TMC BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGE TO OR LOSS OF USE OF PROPERTY OR EQUIPMENT, OR ANY OTHER DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE SALE, HANDLING OR USE OF THE TARTAN YACHT, OR FROM ANY OTHER CAUSE RELATING THERETO AND/OR TMC'S LIABILITY HEREUNDER. TMC SHALL NOT BE LIABLE FOR ANY CLAIMS, DEMANDS, INJURIES, DAMAGES, ACTIONS OR CAUSES OF ACTION WHATSOEVER BASED ON NEGLIGENCE OR STRICT LIABILITY.

Further, the following items **are not covered** under this Limited Warranty and/or any damage or failure directly or indirectly caused by any of the following:

- Fuels, lubricants, filters, coolants, and belts
- Sails, battens, running rigging and deck hardware
- Paints, varnishes, gel coats, chrome-plated or anodized finishes, or other surface coatings other than as specifically described in the Blister Warranty
- Osmotic blistering if the gel coat has been sanded, sandblasted or subjected to abrasives, or damaged by collision, impact or contact **and such actions shall void the Blister Warranty**
- Wooden parts that have warped, expanded, or contracted
- Abuse or negligence
- Improper operation
- Misuse, alteration, tampering, and changes, including installation of non-genuine Tartan parts or accessories
- Alteration, tampering, or changes to the mast, spreaders, spreader bars, standing rigging, or spinnaker pole

- Drilling into any carbon fiber component
- Improper commissioning or storage
- Transport and Packaging
- Lack of or improper maintenance and care
- Environmental conditions such as airborne chemicals, salt, hail, and lightning
- Fire, collision, or grounding
- Piracy or theft
- Salvage costs
- Incidental costs associated with the alleged defect, including but not limited to costs for downtime, substitute vessel, inconvenience, transportation, communication, lodging, lost income or revenue
- Forces of Nature
- Repairs if the expenses are out of proportion to the damage
- Improper or inadequate repairs and any resulting damage

If after inspection of the Tartan Yacht, part or component, TMC determines that the defect is a result of misuse, mishandling, abnormal conditions of operation, unauthorized repair or modification, or due to the failure properly to maintain or operate the Tartan Yacht, part or component all expenses incurred by owner or TMC in connection with the replacement or repair of the part or component shall be for the account of the owner.

This Limited Warranty also does not cover the following:

- Any charter or commercial use of the Tartan Yacht voids this Limited Warranty. A special warranty is available for these uses from the TMC Warranty & Service Department.
- Any Tartan Yacht that has ever been issued a “Salvage Title” or similar title or document or has ever been declared a “total loss” or the equivalent by an insurer or financial institution, such as by payment for a claim in lieu of repairs because the cost of repairs exceed the value of the Tartan Yacht.
- Any component, equipment, or accessory not manufactured by TMC, including but not limited to engines, throttles, sail drive units, tanks, toilets, gauges, steering systems, pumps, batteries, battery chargers, inverters, stoves, ovens, microwave ovens, radios, navigation components or systems, heating/cooling

units or systems, refrigeration, plumbing or electronic equipment. These items, although installed by TMC or an authorized installer, may be covered separately and exclusively by warranties provided by the manufacturer.

- Cracks in finishes which might appear at the hull-to-keel ballast joint. These are normal and are not considered as structural damage, or defects in material or workmanship.

- Leaks at stanchions, chain plates, sail tracks or traveler bases resulting from ordinary use. Required re- bedding in these areas is normal and is part of standard maintenance and care.

III. Disclaimer of Warranties

TMC MAKES NO WARRANTY THAT THE TARTAN YACHT SOLD HEREUNDER SHALL BE MERCHANTABLE OR THAT SUCH TARTAN YACHT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. MOREOVER, TMC MAKES NO EXPRESS OR IMPLIED WARRANTIES EXCEPT FOR THE LIMITED WARRANTY OUTLINED ABOVE. IN ADDITION, NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, MADE BY A DEALER, SALES REPRESENTATIVE, OR FIELD AGENT WHICH IS NOT SPECIFICALLY SET FORTH HEREIN SHALL BE BINDING ON TMC.

IV. Procedure for Warranty Claims

In order to enhance and expedite the warranty process, TMC requests that the owner comply with the following procedures:

Warranty claims shall be presented only to the TMC Warranty & Service Department at 1920 Fairport Nursery Rd.,
Fairport Harbor,
Ohio 44077.

All warranty claims must receive a written authorization from TMC before any replacement or repair work is permitted to be performed. No cost for any replacement or repair work performed before or without TMC's written authorization will be recognized for payment. TMC shall have the right to inspect the Tartan Yacht, part or component, including the removal of a core sample of laminate, to determine the validity of the claim and/or nature or root cause of the alleged defect.

All information requested by TMC shall be provided by the owner on a timely basis, including but not limited to, visual images of the alleged defect of the Tartan Yacht, part or component, quotations or estimates of replacement or repair costs, and information relating to the nature and/or root cause of the alleged defect.

TMC shall select the yard or contractor to perform the replacement or repair work and the parts, components or materials to be used in performing the replacement or repair work. All charges for authorized warranty replacement or repair work shall be submitted

to TMC within thirty (30) days of the performance of the replacement or repair work on forms provided by TMC.

In the event TMC approves a warranty claim under the Structural Warranty or the Blister Warranty of this Limited Warranty, TMC shall have the right, but not the obligation, in its sole discretion, to purchase the Tartan Yacht from the owner for the original purchase price.

The TMC Warranty & Service Department has the exclusive authority to approve or deny a warranty claim. No TMC Dealer has the authority to approve or deny a warranty claim and no statement by any TMC Dealer regarding a warranty claim will bind TMC with regard to that warranty claim.

Tartan Yachts

Commissioning Checklist

RESPONSIBILITY OF THE DEALER:

All TARTAN yachts are sold through Authorized TARTAN Dealers who have been selected on the basis of their knowledge of yachts and their ability to provide you with the service you deserve. They are experts in their profession who realize that they must provide you with a high level of service and attention when you purchase a TARTAN.

Your TARTAN Dealer is responsible for the following procedures connected with the purchase and commissioning of your yacht.

- ✓ Preparing a detailed specification list for your yacht, including options, colors and upholstery selections at time of ordering.
- ✓ Inspecting the yacht on delivery for loss and damage in transit and the processing of all claims against the transport company. Should you notice any loss or damage you must notify your dealer within 30 days of arrival, as neither the carrier nor TARTAN can honor claims beyond 30 days.
- ✓ Inspecting equipment boxes that come with the yacht to assure that all items are received in accordance with the TARTAN packing list.
- ✓ Commissioning the yacht in accordance with the TARTAN Commissioning Check List. The dealer must check and initial each item on the list, and return the list to TARTAN.
- ✓ Activating and checking all mechanical systems under the conditions of actual usage.
- ✓ Stepping the spars and installing all rigging. Tuning and adjustment of the rigging must be carried out under actual sailing conditions. Incorrect adjustments can lead to mast failure.
- ✓ Instructing you on the use of your yacht and all its systems.
- ✓ Providing all necessary assistance and service under the terms of the Limited Warranty on your yacht, including the processing of all claims with TARTAN Yachts.

RESPONSIBILITY OF THE OWNER:

For maximum safety and enjoyment of your new TARTAN, due regard must be given to the hazards of sailing and to proper maintenance procedures. The following is a partial list of items that are the responsibility of the owner for the safe operation of your yacht. However, this must be considered only a partial list of the safety obligations of the owner to be used as a guideline. Consult your local US Coast Guard and Power Squadron offices for additional information on the safe operation of your yacht

- ❑ Complete the Warranty Registration form enclosed in your owner's manual and return it to TARTAN Yachts promptly.

- ❑ Advise TARTAN Yachts of any change of address, or change of ownership, to assist us in maintaining an accurate list of owners for possible future mailings regarding safety information about your yacht.

- ❑ Confirm that all the items that are the responsibility of the dealer outlined in the previous section are completed by your dealer.

- ❑ Operate your yacht in accordance with instructions provided in all sections of this owner's manual, the individual supplier instruction manuals provided and all applicable US Coast Guard and other regulations.

- ❑ Supervise the maintenance of your yacht by competent marine service personnel in accordance with all instructions provided in this owner's manual, the individual supplier instruction manuals, the US Coast Guard standards, the American Boat and Yacht Council standards and all other applicable standards.

- ❑ Supply and maintain all additional safety equipment on board as required or recommended by the US Coast Guard and International Offshore Racing Council for your size yacht and the nature of the voyage.

COMMISSIONING PROCEDURE:

The proper commissioning of your TARTAN is the responsibility of your dealer. This is very important in assuring the satisfactory operation of your yacht. The construction and inspection of each TARTAN is completed in the fullest extent possible at the factory. However, further commissioning and inspection is necessary under actual sailing conditions and usage. Also, this commissioning procedure should be followed in subsequent years at commissioning time.

Commissioning Check List:

The Commissioning Check List procedure must be followed by your dealer in commissioning your yacht. Each item on the list should be checked off by the dealer as the work is completed. Both the dealer and the owner should sign the bottom of the check list to confirm that all items are completed.

Proper Lifting:

The careful placement of the lifting straps used to lift your TARTAN is very important to avoid damaging the propeller shaft, and to assure that the center of gravity of the yacht is midway between the straps. Additional caution should be exercised to avoid placing a strap in contact with a speedometer or depth finder thru-hull fitting. Please see your owner's manual or contact TARTAN or your TARTAN dealer for suggested lifting strap locations.

Standing Rigging:

The careful adjustment of the standing rigging of the mast under actual sailing conditions is critical to avoid mast failure. The rigging should be adjusted to maintain a maximum bend in the lateral direction, and will differ by model in a fore-and-aft direction under all sailing conditions. The wire rigging will tend to permanently stretch over a period of the time as strands bed into one another, so repeated checking of rigging adjustment is necessary. Detailed instructions for tuning the rigging are included in your owner's manual.

Bottom Paint:

Anti-fouling bottom paints must be carefully matched to the type of paint already on the boat to avoid the blistering and peeling common to mismatched paints. See the bottom painting instructions in your owner's manuals. Following these instructions is important as not to void your hull warranty.

COMMISSIONING LIST:

The following is a list of minimum commissioning duties to be performed by both the boat owner and the dealer. Additional operations may be required dependent on the model and equipment thereon.

PRIOR TO LAUNCH:

Exterior:

❑ Check hull, deck, shaft and keel, etc, for shipping damage and repair as needed. Prep bottom and apply bottom paint including centerboard and inside of truck (if applicable).

❑ Clean hull thoroughly.

❑ Touch up boot and cove stripe where required

❑ Wax topsides. (Gelcoat Only)

❑ Check castle nut on prop for cotter pin. (Folding and feathering props require additional steps)

Interior:

❑ Charge and inspect batteries. (NOTE: Batteries are shipped from our plant with only partial charge.)

❑ Check hose clamps on ALL thru-hull hoses and tighten as required. Check that engine and head have been de-winterized and that all drain plugs are in place.

❑ Check oil level in engine and transmission and inspect shift and throttle linkages.

❑ Boats with pedestal steering: Emergency tiller fitted and tested; Rudder stuffing box checked for leakage with boat underway.

❑ Flush bilge area thoroughly with fresh water and run pumps to flush out excess building dust which settled during the shipping of the boat.

❑ Clean bilge pump and sump pump strainers. (This will need to be done quite often in the first several weeks)**Mast Stepping:**

❑ Attach the backstay, leave the turnbuckle extended.

- ❑ Attach upper shrouds loosely.
- ❑ Chock mast in partners.
- ❑ Tighten the mast tie down rod(s) if necessary.
- ❑ Attach headstay.
- ❑ Use either main halyard or main boom topping lift to measure from side to side in vessel and tighten upper shrouds so masthead is centered in boat. Before final tightening of upper shrouds, check that proper upward angle of the spreaders has been maintained and go aloft to correct if needed
- ❑ Tighten backstay turnbuckle.
- ❑ Tighten lower shrouds so mast is straight athwartships. Lowers are to be just a little looser than uppers.
- ❑ Tighten intermediate shrouds.
- ❑ With rigging adjustments completed, install all cotter pins in the turnbuckle threads and re-check that all cotters are in clevis pins and opened to 20°. Tape all cotter pins and unfair edges.
- ❑ Install boom and rig mainsheet and topping lift. Check operation of the boom outhaul.
- ❑ Connect mast wiring to terminals inside vessel and check operation of mast lights and electronics.

After Launching:

- ❑ Check bilge for water.
- ❑ Check that engine exhaust is pumping water. Verify operation of forward, neutral and reverse.

To Be Done Prior to Turning Vessel Over to Owner:

- ❑ Clean entire deck, including removing excess bedding compound from around fittings which may continue to ooze for a short time after shipment.
- ❑ Check for deck leaks caused by shipping. NOTE: all boats are thoroughly checked prior to shipment, but fittings can loosen under shipment and handling.

- ❑ Fill water tank(s) and check operation of water system for leaks as well as the hot water if included.

- ❑ Check head operation, holding tank and macerator pump. Operate bilge pump(s). NOTE: if auto pump is installed, adjust switch level and assure that auto switch is not blocked by bilge hoses. Operate sump pump, shower and drain collection, and on some models sinks.

- ❑ Check operation of all running lights.

- ❑ Run engine in gear for a minimum of one hour.

- ❑ All fluid levels in engine are to be checked after test run.

- ❑ All gauges should be operational.

- ❑ Operate galley stove and oven (every burner).

- ❑ Interior teak oiling to be touched up as needed. We recommend Watco Teak Oil. (Oiled Teak interiors only)

- ❑ Adjust lifelines so they are taut.

- ❑ Remove all traces of shipping tape.

- ❑ Operate all winches and lubricate if necessary.

- ❑ Check operation of all thru-hull fittings.

- ❑ Operate all hatches and ensure that no binding occurs.

- ❑ All interior doors, drawers, hatch boards, operated and planed down if necessary after rigging is tensioned. A certain degree of swelling is to be anticipated. (Not warranty, part of commissioning)

- ❑ Check that all interior lights are operational.

- ❑ Check the hoist on all sails and ensure correct halyard lengths as well as freedom of movement of halyards, etc. Check and adjust operation of reefing system.

After Shakedown Sail:

❑ Re-tension all rigging if necessary.

❑ If excess headstay sag is apparent, adjust furler or tension backstay.

DEALER:_____

OWNER:_____

BOAT MODEL _____HULL NUMBER_____

DATE OF COMMISSIONING_____

Dealer Signature_____ Date_____

Owner Signature _____Date_____

Tartan Yachts Signature_____