

C44

Tiara
YACHTS

2024 OWNERS MANUAL

CALIFORNIA PROPOSITION 65 WARNING



WARNING

WARNING: Operating, servicing and maintaining a recreational marine vessel can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, service your vessel in a well-ventilated area and wear gloves or wash your hands frequently when servicing this vessel. For more information go to www.P65warnings.ca.gov/marine.



Welcome to the family of Tiara Yachts boat owners and congratulations on your purchase of your new Tiara.

We understand there are many choices available to you, and we appreciate the investment that you've made and the subsequent faith and confidence that you've placed into our product. Hopefully, during the selection and buying process, you discovered that each Tiara has been designed, engineered, and built with care and precision.

When our company was started, it was the goal of my father, Leon Slikkers, to provide you with the finest quality boat available. We want to be the best and deliver the best to you. And part of that includes a delightful ownership experience. Everything we have achieved since our humble beginnings has been with this same goal in mind.

The information within this owner's manual was assembled to assist you in understanding how to operate your boat to obtain the maximum enjoyment of your Tiara. So please take time to read the manual completely and please operate your boat safely and courteously.

I would also like to ask you a personal favor. Shortly, you will receive a survey asking for your opinion about the sales process you experienced when you purchased your boat. Approximately nine months later, you'll be sent another survey inquiring about your ownership experience. By taking a few minutes to complete these surveys, you will be providing us with valuable information.

Best wishes for many happy hours aboard your new Tiara Yacht,

A handwritten signature in blue ink, appearing to read "T. Slikkers", with a long horizontal flourish extending to the right.

Thomas B. Slikkers
CEO/President S2 Yachts

This page intentionally left blank.



LIMITED WARRANTY

2024 MODELS TIARA YACHTS, INC. LIMITED WARRANTY COVERAGE

Tiara Yachts, Inc. (Tiara) provides limited warranty coverage on Tiara Yachts products sold for use by retail (non-commercial) customers, as described in this Limited Warranty. For customers in the U.S.: this warranty gives you specific legal rights; you also may have other rights, which vary from state to state. For customers in the European Union: the purchaser may have additional legal rights under applicable national legislation governing the sale of consumer goods, and those rights (if applicable) are not affected by this warranty.

This warranty is provided only to the original purchaser of the boat from an authorized Tiara Yachts dealer but can be transferred to subsequent owners. Contact Tiara's Customer Relations Department if you need information about transferring this warranty. No warranty coverage is provided to subsequent owners unless they follow Tiara's transfer procedures. This warranty does not extend or apply to anyone else. The terms of this written warranty cannot be changed or modified, except by a written agreement signed by an officer of Tiara Yachts, Inc.

COVERED PRODUCTS AND LIMITATIONS:

Tiara's limited warranty coverage applies only to:

1. Defects in materials and workmanship in the boat and all components and accessories (except for the excluded items described below) for a period of two (2) years;
2. Structural defects in materials and workmanship in the hull and deck for a period of five (5) years;
3. Blistering due to defects in material and workmanship in the gelcoat surface of the hull bottom for a period of five (5) years, provided that the gelcoat surface has not been altered in any way such as sanding, sandblasting or application of a coating other than standard antifouling paint, any of which will void this warranty.

Each of the warranty coverage periods runs from the date of purchase of the boat from an authorized Tiara Yachts dealer and applies only to warranted defects that first manifest themselves and are reported to Tiara within the applicable warranty period. Tiara retains the right to determine to its reasonable satisfaction whether any claimed defect is covered by this warranty.

Certain items are excluded from warranty coverage by Tiara, and this limited warranty coverage does not apply to:

1. Engines, transmissions, generators, air conditioning systems, swim platforms and lifts, seakeeping systems, electronics and batteries, and other components manufactured by other manufacturers. These products may come with separate warranties from their manufacturers; see the Owner Packet for warranty registration requirements and details on these products.
2. Dealer final assembly and pre-delivery commissioning, and dealer installed components.
3. Scratching, chipping, discoloration or flaking of any powder coated or painted surface including engines and hardtop components.
4. Gelcoat stress cracking, chalking, fading or discoloration. This includes bilge gelcoat.
5. Damage caused by accident, wear, storm damage, grounding, towing, commercial use of the boat, or misuse or abuse, or deterioration resulting from normal use (including gaskets, seals, springs, wipers and sealants).
6. Maintenance, adjustments or realignments to any components including latches, hinges, hatches, doors and drive train components.
7. Mold, mildew, upholstery damage or deterioration and cleaning.
8. Damage or deterioration resulting from environmental conditions, including electrolysis, crevice or galvanic corrosion, any deterioration of underwater equipment, or any damage or deterioration resulting from any failure to undertake reasonable, routine maintenance.

9. Any repairs, adjustments, alterations or modifications made by anyone other than an employee of Tiara Yachts, or an authorized Tiara Yachts dealer with Tiara's prior, written authorization.
10. Damage which has occurred as a result of the boat being operated as a demonstrator and/or displayed for sale.
11. Damage or deterioration of the hull or deck structure due to the attachment of hardware or other components.
12. Weight, speed, fuel consumption or other performance characteristics.
13. Damage or deterioration resulting from improper trailering, hauling, launching or storage.
14. Boats purchased or used for commercial or governmental purposes or uses.

REMEDIES UNDER THIS LIMITED WARRANTY

If a defect covered by this warranty occurs, Tiara (or one of its authorized dealers, as determined by Tiara) will repair and replace the defective component, in its sole discretion. This 'repair or replacement' remedy is the exclusive remedy under this warranty. Tiara has no responsibility or liability for any consequential or incidental damages, such as loss of use, storage charges, interest or finance charges, insurance or depreciation, transportation or lodging charges, or charges for towing or hauling out, etc. which are specifically excluded and disclaimed from this warranty. For customers in the U.S.: some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. UNDER CERTAIN APPLICABLE LAWS, THERE MAY BE NO IMPLIED WARRANTIES OR GUARANTEES FROM TIARA APPLICABLE TO YOUR BOAT, AND ALL IMPLIED OR STATUTORY CONDITIONS AND WARRANTIES (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) AND GUARANTEES ARE DISCLAIMED WHERE ALLOWED BY LAW. TO THE FULLEST EXTENT ALLOWED BY LAW, ANY AND ALL APPLICABLE IMPLIED WARRANTIES AND GUARANTEES (IF ANY), INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE APPLICABLE PROVISIONS OF THIS WRITTEN WARRANTY. For customers in the U.S.: some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

RESPONSIBILITY OF PURCHASER

1. No warranty coverage is provided by Tiara unless the customer and dealer complete and return all Vessel Registration and Customer Acceptance Forms to Tiara Yachts, Inc. within seven (7) days after delivery of the boat to the original purchaser.
2. The original purchaser or approved transferee must notify the Tiara Yachts dealer from which the boat was purchased of any claimed defect within fifteen (15) days after first detecting the claimed defect. Warranty work in excess of \$500 requires Tiara's prior written approval.
3. If the dealer fails to satisfactorily repair the claimed defect within fifteen (15) days, written notice must then be promptly given directly to Tiara. Tiara is not responsible for unreported warranted defects.
4. The boat, including any claimed defective part, must be returned to the Tiara Yachts dealer from which the boat was purchased (or to another dealer or facility as directed by Tiara Yachts) within the warranty period for inspection and warranty service. The expense of returning and transporting the boat or any part for warranty service, and the expense of returning and transporting it back to the owner after repair or replacement, is the responsibility of the owner, and will not be reimbursed by Tiara.
5. If the dealer from whom the boat was purchased is no longer an authorized Tiara Yachts dealer, contact Tiara for instructions on how to obtain warranty service.

S2 reserves the right to improve its products through changes in design or materials without being obligated to the owners of the boats of similar or the same model of prior manufacture. We may be contacted as follows: Tiara Yachts Customer Relations Department, 725 East 40th Street, Holland, Michigan 49423 (616/394-7460) or CR@tiarayachts.com.



SUPPLEMENTAL LIMITED WARRANTY INFORMATION ON FINISHED WOOD COMPONENTS

Your Tiara Yachts® Boat may be furnished with certain finished wood panels and components that require periodic maintenance and refinishing to maintain their appearance and finish. S2 Yachts, Inc.'s Limited Warranty coverage does not include the matching of wood grains, or the condition or durability of any finishes for such panels and components. This statement supplements S2 Yachts, Inc.'s Limited Warranty with respect to these wood panels and components. All other terms of S2 Yachts, Inc.'s Limited Warranty remain in effect, and you should refer to the Limited Warranty for other terms, conditions and requirements

CALIFORNIA EVAPORATIVE EMISSIONS CONTROL SYSTEM WARRANTY STATEMENT: YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and S2 Yachts, Inc. is pleased to explain the evaporative emission control system's warranty on your 2024 model year spark-ignition marine watercraft. In California, new spark-ignition marine watercraft (SIMW) must be designed, built, and equipped to meet the State's stringent anti-smog standards. S2 Yachts, Inc. must warrant the evaporative emission control system on your spark-ignition marine watercraft for the period listed below provided there has been no abuse, neglect, or improper maintenance of your SIMW.

Your evaporative emissions control system may include parts such as: canisters, carburetors, clamps, connectors, filters, fuel caps, fuel lines, fuel tanks, valves, vapor hoses, and other associated evaporative emissions control system components.

MANUFACTURER'S WARRANTY COVERAGE:

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your SIMW is defective, the part will be repaired or replaced by S2 Yachts, Inc.

OWNER'S WARRANTY RESPONSIBILITIES:

- As the spark-ignition marine watercraft owner, you are responsible for performance of the required maintenance listed in your owner's manual. S2 Yachts, Inc. recommends that you retain all receipts covering maintenance on your spark-ignition marine watercraft, but S2 Yachts, Inc. cannot deny warranty solely for the lack of receipts.
- As the spark-ignition marine watercraft owner, you should however be aware that S2 Yachts, Inc. may deny you warranty coverage if your spark-ignition marine watercraft or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your spark-ignition marine watercraft to a S2 Yachts, Inc. dealer or authorized service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact S2 Yachts, Inc. at 1-616-392-7163.

The California evaporative emissions control system warranty covers the following list of components:

- | | |
|-------------------------------------|--|
| (1) Canister Mounting Brackets | (11) Fuel Line |
| (2) Carbon Canister | (12) Fuel Line Fittings |
| (3) Carburetor Purge Port Connector | (13) Fuel Tank |
| (4) Clamps* | (14) Liquid/Vapor Separator |
| (5) Control Cables* | (15) Pressure Relief Valves* |
| (6) Control Linkages* | (16) Purge Valves |
| (7) Control Solenoids* | (17) Vacuum Control Diaphragms* |
| (8) Control Valves* | (18) Vapor Hoses |
| (9) Electronic Controls* | (19) All other parts not listed that may affect the evaporative emissions control system |
| (10) Fuel Cap | |

*Note: As they relate to the evaporative emissions control system.

IMPORTANT INFORMATION

Your Tiara Owner's Manual has been written to include a number of safety instructions to assure the safe operation and maintenance of your boat. These instructions are in the form of **WARNING** and **CAUTION** statements. The following definitions apply:

All instructions given in this book are as seen from the stern looking toward the bow, with starboard being to your right, and port to your left. A glossary of boating terms is included in the Appendix.



DANGER

DANGER INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.



WARNING

WARNING INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



CAUTION

CAUTION indicates hazards or unsafe practices which could result in minor personal injury, or product and property damage.

NOTICE

NOTICE is used to address best practices not related to physical injury.

IMPORTANT NOTE: Your boat uses internal combustion engines and flammable fuel. Every precaution has been taken by Tiara Yachts to reduce the risks as-

IMPORTANT INFORMATION

sociated with possible injury and damage from fire or explosion, but your own precaution and good maintenance procedures are necessary in order to enjoy safe operation of your boat.

If for any reason you have trouble with your Tiara Owner's Manual, or require replacement pages, please contact our Customer Service department at the address on the cover page. We will be happy to supply replacement pages at no charge.

This manual has been compiled to help you to operate your craft with safety and pleasure. It contains details of the craft, the equipment supplied or fitted, its systems, and information on its operation and maintenance. Please read it carefully, and familiarize yourself with the craft before using it.

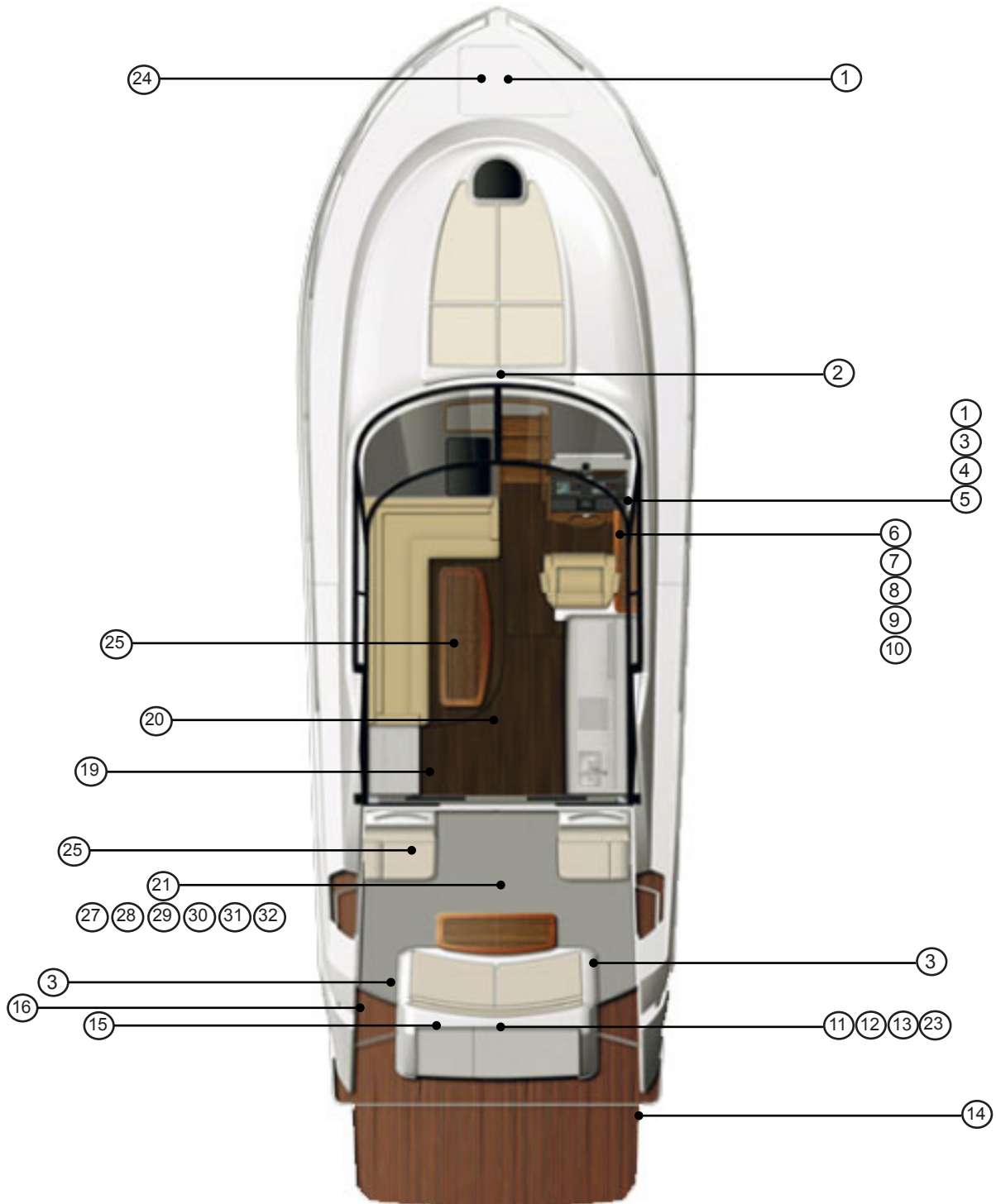
If this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of local sea schools, competent instructors, and reference material.

PLEASE KEEP THIS MANUAL IN A SECURE PLACE, AND PRESENT IT TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

Owner's manuals for the installed equipment on your boat have also been provided for your reference. They have been stored in a valise that is included in your new boat. Please read this information, and also hand them over to the new owner when you sell the boat.

SAFETY LABEL LOCATIONS

The following safety label locations can be found on the Tiara 44 Coupe. The numbers correspond to the list on Table 1.



SAFETY LABEL LOCATIONS

The following safety label locations can be found on the Tiara 44 Coupe. The numbers correspond to the list on Table 1. To obtain replacement labels refer to the part number of the label in Table 1 and contact your nearest Tiara Yachts dealer.

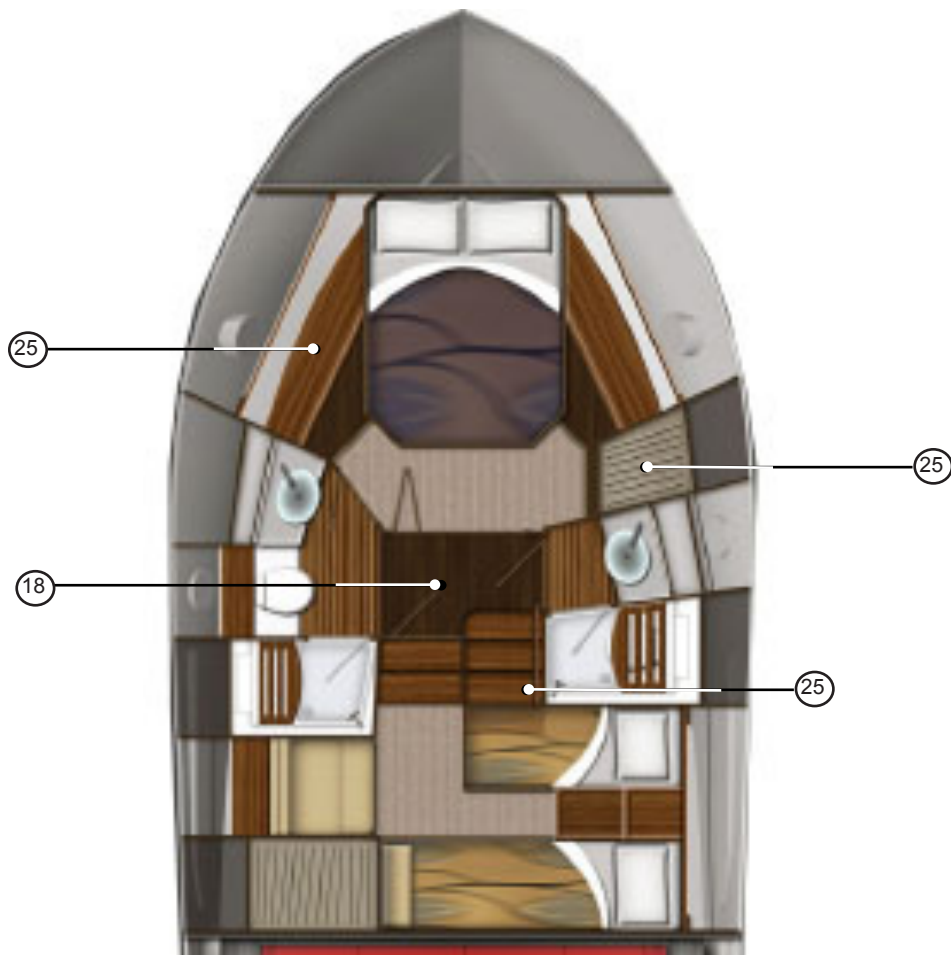


TABLE 1: SAFETY LABELS

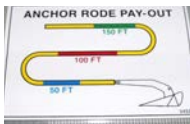




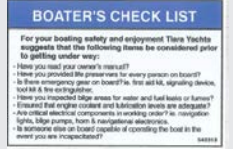
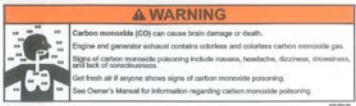


1	<p>ANCHOR RODE PAY-OUT. P/N 5452280 Location: under the anchor hatch; helm with anchor/rode combination only</p>	
2	<p>WARNING: SEAT WHILE UNDERWAY. P/N 545875 Location: aft of the foredeck sun pad cushion near the window.</p>	
3	<p>WARNING: CLOSE TRANSOM DOOR(S). P/N 5453220 Location: helm & near port and starboard transom doors.</p>	
4	<p>DIESEL CERTIFICATON PLATE. P/N 5450570 Location: helm</p>	
5	<p>NOTICE: FIRE EXTINGUISHING SYSTEM. P/N 5453300 Location: helm</p>	
6	<p>BOATER'S CHECKLIST. P/N 5453130 Location: helm</p>	
7	<p>WARNING: LEAKING FUEL. P/N 5453150 Location: helm</p>	<p>Leaking fuel is a fire and explosion hazard that can result in serious injury, burns or death. Inspect fuel system for leaks at least once a year.</p>
8	<p>WARNING: CO HELM. P/N 5453690 Location: helm</p>	
9	<p>WARNING: HARDTOP. P/N 5453160 Location: helm</p>	
10	<p>DANGER: ROTATING PROPS. P/N 5450151 Location: helm.</p>	

TABLE 1: SAFETY LABELS


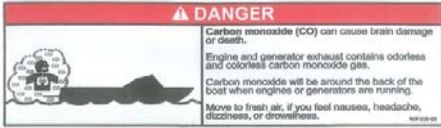


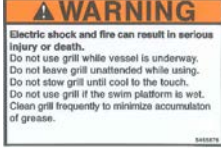


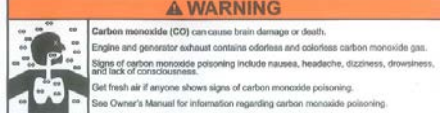
11	<p>WARNING: TRUNK. P/N 5455620 Location: Exterior surface of trunk lid.</p>	
12	<p>DANGER: CO TRANSOM. P/N 5453670 Location: Exterior surface of trunk lid.</p>	
13	<p>WARNING: FUEL VAPORS. P/N 5453240 Location: Inside surface of trunk lid.</p>	
14	<p>DANGER: ROTATING PROPELLERS. P/N 5455152 Location: Stbd side of swim platform.</p>	
15	<p>WARNING: GRILL SHOCK/FIRE. P/N 5455876 Location: Underside of grill lid.</p>	
16	<p>WARNING: HAZARDOUS VOLTAGE P/N 5451110 Location: Near port side shore power cord.</p>	
17	<p>N/A</p>	<p>N/A</p>
18	<p>NOTICE: OVERBOARD DISCHARGE. P/N 5450050 Location: Overboard discharge seacock.</p>	
19	<p>WARNING: CO. P/N 5453680 Location: lower galley.</p>	

TABLE 1: SAFETY LABELS


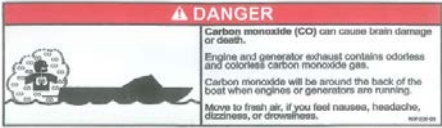


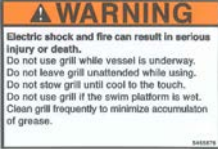

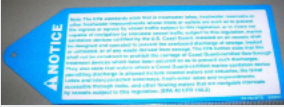
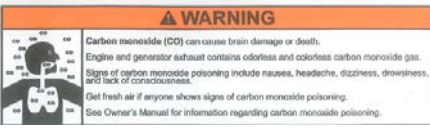
11	<p>WARNING: TRUNK. P/N 5455620 Location: Exterior surface of trunk lid.</p>	
12	<p>DANGER: CO TRANSOM. P/N 5453670 Location: Exterior surface of trunk lid.</p>	
13	<p>WARNING: FUEL VAPORS. P/N 5453240 Location: Inside surface of trunk lid.</p>	
14	<p>WARNING: ROTATING PROPELLERS. P/N 5455130 Location: Stbd side of swim platform.</p>	
15	<p>WARNING: GRILL SHOCK/FIRE. P/N 5455876 Location: Underside of grill lid.</p>	
16	<p>WARNING: HAZARDOUS VOLTAGE P/N 5451110 Location: Near port side shore power cord.</p>	
17	N/A	N/A
18	<p>NOTICE: OVERBOARD DISCHARGE. P/N 5450050 Location: Overboard discharge seacock.</p>	
19	<p>WARNING: CO. P/N 5453680 Location: lower galley.</p>	

TABLE 1: SAFETY LABELS

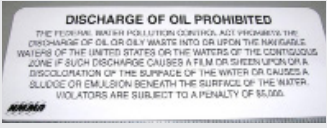
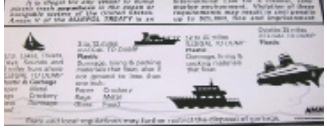

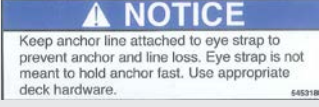




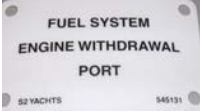
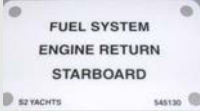
20	<p>LABEL: DISCHARGE OIL PROHIBITED P/N 5450190 Location: Underside of engine room hatch.</p>	
21	<p>LABEL: TRASH OVERBOARD P/N 5451640 Location: Underside of engine hatch.</p>	
22	N/A	N/A
23	<p>WARNING: OPEN TRUNK THAT FILLS WITH WATER P/N 5455620 Location: Exterior surface of trunk lid.</p>	
24	<p>NOTICE: ANCHOR LINE LOSS. P/N 5453180 Location: Underside of anchor hatch.</p>	
25	<p>FIRE EXTINGUISHER P/N 5452010 Locations: galley, port aft facing seat, forward stateroom hanging locker, aft stateroom hanging locker.</p>	
27	<p>FUEL SYSTEM GENERATOR RETURN P/N 5451360 Location: Forward engine room bulkhead.</p>	
28	<p>FUEL SYSTEM GENERATOR WITHDRAWAL P/N 5451350 Location: Forward engine room bulkhead.</p>	
29	<p>FUEL SYSTEM ENGINE RETURN PORT P/N 5451320 Location: Forward engine room bulkhead.</p>	
30	<p>FUEL SYSTEM ENGINE WITHDRAWAL PORT P/N 5451310 Location: Forward engine room bulkhead.</p>	
31	<p>FUEL SYSTEM ENGINE RETURN STBD P/N 5451300 Location: Forward engine room bulkhead.</p>	

TABLE 1: SAFETY LABELS

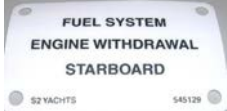
32	FUEL SYSTEM ENGINE WITHDRAWAL STBD P/N 5451290 Location: Forward engine room bulkhead.	 <p>The image shows a rectangular safety label with a white background and black text. The text reads: "FUEL SYSTEM ENGINE WITHDRAWAL STARBOARD". At the bottom left, it says "52 YACHTS" and at the bottom right, it says "545129".</p>
----	--	---

Table of Contents

Chapter 1: EXTERIOR EQUIPMENT AND FEATURES

1.1 HELM AREA AND SALON.....	1-1
1.1.1 Before Cruise	1-1
1.1.2 Steering.....	1-2
1.1.3 Engine Controls	1-4
1.1.4 Engine Monitoring	1-4
1.1.5 Equipment Switches	1-5
1.1.6 Equipment Controls	1-7
1.1.7 Helm Area	1-8
1.1.8 Port Side L-Lounge	1-8
1.1.9 Port Side Cabinets	1-9
1.2 GALLEY.....	1-9
1.3 AFT COCKPIT LAYOUT	1-11
1.4 HARDTOP	1-12
1.4.1 Sun Shade	1-12
1.5 SIDE DECKS.....	1-14
1.6 FOREDECK.....	1-14
1.7 HULL SIDES.....	1-14
1.8 STERN	1-15

Chapter 2: BELOW DECK EQUIPMENT AND FEATURES

2.1 SMOKE DETECTOR, CARBON MONOXIDE MONITORING SYSTEM & FIRE EXTINGUISHERS.....	2-1
2.2 AIR CONDITIONING	2-3
2.2.1 Marine Air Systems® air conditioner.....	2-3

2.3 MASTER STATEROOM	2-3
2.3.1 Stateroom	2-3
2.3.2 Locker, Storage	2-3
2.3.3 Master Stateroom Appliances, Electronics & Outlets.....	2-4
2.4 MASTER HEAD.....	2-4
2.5 LOWER ATRIUM	2-5
2.6 V.I.P. STATEROOM	2-5
2.7 V.I.P. HEAD.....	2-6
2.7.1 V.I.P. Day Head Features.....	2-6

Chapter 3: ENGINE ROOM

3.1 GENERAL ARRANGEMENT	3-1
3.1.1 Centerline.....	3-1
3.1.2 Starboard	3-3
3.1.3 Port	3-3

Chapter 4: ELECTRICAL SYSTEMS

4.1 GENERAL.....	4-1
4.2 THE 12/24VDC SYSTEM	4-1
4.2.1 Power supply	4-1
4.2.2 Battery Charging	4-3
4.2.3 Wet Flooded Cell Batteries	4-4
4.2.4 Distribution	4-4
4.2.5 Operating Notes.....	4-5
4.3 THE 120/240V AC SYSTEM	4-6
4.3.1 Power Supplies	4-6
4.3.2 Distribution	4-6

4.3.3 Operating Notes.....	4-7
4.4 BONDING SYSTEM.....	4-8

Chapter 5: OPERATING YOUR BOAT

5.1 WHEN ARRIVING AT YOUR BOAT.....	5-1
5.1.1 Connecting to Shore Power.....	5-2
5.1.2 Fueling Your Boat.....	5-3
5.1.3 Fuel System.....	5-5
5.1.4 Filling Your Water Tank.....	5-7
5.1.5 Starting Your Engines.....	5-7
5.1.6 Throttle Operations.....	5-9
5.1.7 Starting the Generator.....	5-10
5.2 LEAVING AND RETURNING TO THE DOCK.....	5-11
5.3 WHILE UNDERWAY.....	5-12
5.3.1 Waste Disposal.....	5-13
5.3.2 Anchoring.....	5-14
5.4 AFTER RETURNING TO THE DOCK.....	5-15

Chapter 6: COMMISSIONING YOUR BOAT

6.1 BEFORE LAUNCHING YOUR BOAT.....	6-1
6.1.1 Bottom Paint.....	6-1
6.1.2 Bilge Areas.....	6-2
6.1.3 Electrical Systems.....	6-2
6.1.4 Installing the Propellers.....	6-2
6.2 LIFTING YOUR BOAT.....	6-5
6.3 AFTER LAUNCHING YOUR BOAT.....	6-5

6.3.1 Fresh Water System	6-6
6.3.2 Electrical Systems.....	6-7
6.3.3 Engines, Transmissions and IPS Drive Units.....	6-8
6.3.4 Interior Equipment.....	6-9
6.3.5 Exterior Equipment	6-10

Chapter 7: ROUTINE MAINTENANCE

7.1 FUEL SYSTEM.....	7-1
7.2 FRESH WATER SYSTEM	7-4
7.3 ELECTRICAL SYSTEM.....	7-6
7.3.1 The 12V D.C. System	7-6
7.3.2 The 120V/240V A.C. System	7-7
7.4 EXTERIOR EQUIPMENT AND FIBERGLASS.....	7-7
7.4.1 Gel Coat Finish Maintenance.....	7-8
7.4.2 Imron® Marine Finish Maintenance Guide	7-8
7.4.3 Plexiglass	7-10
7.4.4 Hardware	7-10
7.4.5 Canvas and Upholstery.....	7-11
7.4.6 Hull Bottom	7-12
7.4.7 Underwater Gear	7-12
7.4.8 Optional Washdowns	7-12
7.4.9 Sunroof	7-13
7.5 INTERIOR EQUIPMENT AND DECOR.....	7-13
7.6 ENGINE ROOM.....	7-13
7.6.1 Engines, Transmissions, IPS Units and Generator.....	7-14
7.6.2 Oil Change System	7-15

7.6.3 Ventilation System	7-15
7.6.4 Raw Water Intake Strainers	7-16
7.6.5 Raw Water Seacocks.....	7-16
7.7 HEAD SYSTEM.....	7-17
7.8 DRAINAGE SYSTEM	7-18
7.9 AIR CONDITIONER FILTERS	7-20

Chapter 8: STORING AND WINTERIZING YOUR BOAT

8.0.1 Supporting the Boat During Storage.....	8-1
8.0.2 Storage	8-1
8.1 FUEL SYSTEM.....	8-1
8.2 FRESH WATER SYSTEM.....	8-2
8.3 ELECTRICAL SYSTEM.....	8-3
8.3.1 12V D.C. System	8-3
8.3.2 120V A.C. System.....	8-4
8.4 EXTERIOR EQUIPMENT AND FIBERGLASS.....	8-4
8.5 INTERIOR EQUIPMENT	8-5
8.5.1 Air Conditioning.....	8-5
8.5.2 Head System	8-6
8.6 ENGINE ROOM AND BILGE AREAS.....	8-7
8.6.1 Engines, Transmissions, IPS Drives and Generator.....	8-7
8.6.2 Exhaust Systems	8-7
8.6.3 Raw Water Systems.....	8-8
8.6.4 Steering System.....	8-9

Appendix A: SPECIFICATIONS

A.1. GENERAL	A-1
A.2. BOAT SPECIFIC	A-2

Appendix B: GLOSSARY

Appendix C: MAINTENANCE GUIDES

Appendix D: MAINTENANCE SCHEDULES

Appendix E: ACCIDENT REPORTS

Appendix F: FLOAT PLAN

Appendix G: TROUBLESHOOTING

Addendum: FRESH WATER SYSTEM

Addendum

FRESH WATER SYSTEM

Reference the addendum at the end of this manual for additional fresh water system information.

The fresh water system must be disinfected before first use and yearly at the beginning of each season. A clean sanitized fresh water system will greatly reduce the risk of developing coliform bacteria or other disease-causing organisms (pathogens) and will help protect the health of everyone onboard.



WARNING

DISINFECT THE ENTIRE FRESH (POTABLE) WATER SYSTEM PRIOR TO USE AND YEARLY AT THE BEGINNING OF EACH SEASON. FAILURE TO DO SO CAN RESULT IN DEVELOPING COLIFORM BACTERIA OR OTHER DISEASE-CAUSING ORGANISMS (PATHOGENS) IN THE WATER SYSTEM. CONSUMPTION OF CONTAMINATED WATER COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

This page intentionally left blank.

Chapter 1

EXTERIOR EQUIPMENT AND FEATURES

1.1 HELM AREA AND SALON

The helm area is on the starboard side of the forward upper cockpit. To access the back side of all helm installed electronics and electrical equipment and engine instrumentation, unscrew the bolts and pull the helm console aft.



CAUTION

All repairs to items in your console should be serviced by a marine electrician or mechanic. Failure to do so could result in damage to equipment or difficulty in safely operating the boat.

1.1.1 Before Cruise

Before casting off on your maiden voyage it is important that you are familiar with the location and operation of the engine throttle controls, joystick, starting procedure, steering operation and function, and how to interface with the Multi Function Displays (MFD) and understand their functionality and interpretation. It is recommended that the maiden voyage is approached on a calm weather day. Learn to maneuver the boat in calm open water using the throttle controls; the joystick; and the steering wheel. Read the your engine manufacturer's Operator's Manual completely before the maiden voyage.

Inspect all safety gear and make certain it is certified equipment and up to date (not expired). Know locations of all safety equipment. Understand local regulations and waterways.

Boat owners should take a course with a certified training service to understand boating and the "rules of the road" on the water. Some recommended services are: your dealer, a licensed professional captain, the United States Coast Guard Auxiliary or the United States Power Squadron. It is also beneficial to read the latest edition of: *Chapman Piloting & Seamanship* by Elbert S. Maloney. Please refer to section 5 of this manual for further information on leaving and returning to the dock.

EXTERIOR EQUIPMENT & FEATURES

1.1.2 Steering

Please see Section 5.1.5 for engine starting procedures.

The following is a summary of steering control operation. For detailed information consult your engine manufacturer's Operator's Manual.

Steering is achieved by the steering wheel, the joystick control, or the throttle controls.

Volvo IPS and Steering Wheel Driving:

Steering wheel responsiveness can be quick. Aggressive steering can turn and heel the boat dramatically. While underway maneuverability is highly responsive to the skipper's command.

The steering wheel has a tilt feature. Tilt the steering wheel by pushing the tilt catch on the 6 o'clock position on the wheel base.

The steering wheel sends a digital signal to the Electronic Vessel Control (EVC) computer which then sends commands to the Inboard Performance Systems (IPS units) drive system. As a result the drives rotate according to the digital command. The steering wheel will rotate in either direction limitlessly but a digital stop has been encoded. No matter how many turns the wheel is given in either direction, the drives will stop rotating once the digital stop point has been passed. At higher engine speeds the steering turning degree is more controlled, that is to say, the angles of turning will be limited at higher engine revolutions (RPM). At higher engine speeds a built in resistance will interface with the wheel giving the helmsman the analog feel of force when turning.

The rudder angle indicator on the Volvo Penta display gives you a reference for what the drive angle is. It may not represent the actual drive angle at all times. When the ignitions are turned off the IPS units automatically center.

Joystick driving with the Volvo engine option:

All Joystick buttons are ON-OFF switches. Press once for ON, press a second time for OFF. Please refer to **Figure 1-1**.



Figure 1-1: Joystick

1. Joystick Control.
2. Joystick Activation and Deactivation: Activates and deactivates joystick steering. While joystick steering the throttles still control the engine RPMs. When selecting the Joystick with this button the autopilot function is also engaged. When releasing the joystick the autopilot continues on the last heading of the joystick. Further joystick driving will adjust the autopilot heading. To steer gradually, twist the joystick in the desired direction. To dodge or turn quickly push the joystick to port or starboard and the boat will quickly turn hard. The steering wheel is in a stand by position while joystick driving. To use the steering wheel turn it to release stand by, and it will become fully available, meanwhile deactivating the joystick.
3. Dynamic Positioning System: Not factory installed. Should you have this after-market installed it is necessary to consult the Volvo Penta® Operators Manual for operation, warnings, and cautions involved.
4. Docking Mode: An audible signal will confirm that the docking mode is activated and the docking mode button will be illuminated. Engine revolutions are limited in docking mode. Higher precision movements are noticed at lower speeds in docking mode. To de-activate press the docking mode button and an audible alarm will sound twice and the button light will go out.
5. High Mode: This mode is used with the docking mode. If conditions call for more power while in docking mode, select high mode. An audible signal will confirm that high mode is selected and the high mode button will illuminate. Select the high mode button again to de-activate high mode and the system is now in docking mode.

EXTERIOR EQUIPMENT & FEATURES

Cummins Inboard Joystick Docking:

The Cummins Inboard Joystick (CIJ) is a docking system that uses inboard propulsion and the bow thruster to control the vessel during docking procedures. By pressing the active station button twice on the CIJ that particular CIJ is ready to control the boat. For more information on operating the boat with the CIJ please visit the Cummins web site or consult the Cummins literature and your dealer

1.2 ENGINE CONTROLS

Please see Section 5.1.5 for engine starting procedures.

The engine controls are installed on the starboard side helm. The controls contain the clutch and throttle for each engine. The starboard handle controls the starboard engine and the port handle controls the port engine. The engines are shifted into forward by pushing the handles forward from vertical and are shifted into reverse by pulling the handles aft from vertical. When starting make sure the controls are in the neutral position. Please refer to the engine operating instructions provided by the manufacturer of your vessel's engines for specific starting and throttle-clutch operating details.

The ignitions are located on the starboard side of the helm. The port ignition is for the port engine, the starboard for the starboard engine. Please consult Chapter 5, section 5.1.5 and your engine manufacturers Owner's Manual for further starting and cranking procedures.

1.3 ENGINE MONITORING

Engine monitoring is handled with the Garmin Multi Function Displays (MFD's). Please refer to literature provided by Garmin to understand the operation and functionality of the MFD's.

In addition to the touch screen controls on the MFD's, a GRID (Garmin Remote Input Device) is installed aft of the helm joystick. The GRID device allows the user to interface with the Garmin Displays with a joystick and buttons in addition to touching the screens.

1.4 EQUIPMENT SWITCHES

Switches on the port side helm:

- **Starboard Wiper:** Same as port wiper, except located on the starboard side of the windshield.
- **Port Wiper:** An OFF-ON switch that, when switched ON, activates the port windshield wiper. When switched OFF, the wiper motor automatically parks the wiper in an out of the way position.
- **Windshield Washer:** A momentary switch that, when activated, opens solenoid valves located on the forward engine room bulkhead and sprays fresh water on the port, center, and starboard windshields. For the washers to operate the fresh water pump breaker must be ON on the D.C. system panel.
- **Horn:** (red switch) A momentary switch which, when pressed, sounds the boat's horn.
- **NAV/ANC Light:** An ON-OFF-ON switch that, when switched to one ON position, lights the red and green running lights on the bow, the forward white light on the hardtop on centerline, and the white stern light on the transom. This position is used when operating your boat



CAUTION

Always make sure the aft navigation light is visible. Never obstruct, or block the visibility of any of the NAV lights.

EXTERIOR EQUIPMENT & FEATURES

at night or when visibility is reduced due to weather. The other ON position lights only the forward and aft white lights. This position is to be used when your boat is anchored at night.

Aft of the throttles there is a trim tab panel:

- **Trim Tabs** - The Lenco™ switch control for the operation of the port



CAUTION

When backing your boat at more than idle speed depress both trim switches at the bottom to fully retract tabs. Failure to do so could result in damage to trim tab hydraulic cylinders.

and starboard trim tabs is located outboard of the helm. The electronically actuated trim tabs can control the fore and aft “trim” and port and starboard “heel” of your boat while it is on plane. Refer to the Lenco™ manual for Auto Glide™ features.

The following switches located on the starboard side of the helm:

- **Hardtop Lts:** An OFF-ON switch that, when switched ON, activates the lights in the exterior hardtop.
- **Accent Lts:** An OFF-ON switch that, when switched ON, activates white interior lighting forward or red lights for use during night navigation.
- **Helm Seat:** A switch that actuates the helm seat forward or aft.
- **Sunroof:** An OPEN-OFF-CLOSE switch that controls the pneumatic sun roof. When closing there is a defined stop to the motion, for safety sake. Release the switch and then continue to close when it is safe to do so.
- **Windlass** - An UP-OFF-DOWN switch that activates the foredeck anchor windlass to either raise or lower the anchor. For this switch to operate the Windlass breaker on the DC System Panel (in the salon) must be ON.

The following switches are located on the DC System panel in the lower port, aft, galley cabinet.

EXTERIOR EQUIPMENT & FEATURES

- **Fwd Bilge Pump:** An OFF-ON switch that, when switched on, activates the forward bilge pump located under the forward cabin sole.
- **Mid Bilge Pump:** An OFF-ON switch that, when switched on, activates the mid bilge pump located on the forward engine room floor.
- **Aft Bilge Pump:** An OFF-ON switch that, when switched on, activates the aft bilge pump located in the aft engine room, near the garboard drain.
- **Engine Room Blower:** An ON-OFF switch that, when switched ON, activates the engine room exhaust blowers.

The following switches are located near the grill on the transom:

- **Hydraulic Swim Platform Lift Switch:** (optional equipment) An UP-DOWN switch that, when activated, raises or lowers the swim platform. Please see the Nautical Structures Owner's Manual for more information.
- **Underwater Lights:** (optional equipment) An ON-OFF switch that, when switched ON, illuminates the underwater lights on the transom. **NOTE:** When operating this switch be aware of pinch points and people and objects located around the swim platform. Be certain all people, pets, and items are cleared away from the swim platform when using this switch.
- **Lazarette Storage Hatch:** An UP-DOWN switch that, when switched into position, activates the lazarette storage hatch to open or close. **NOTE:** When operating this switch be aware of pinch points and people seated on the aft seat. Be certain all items are cleared away from the lazarette counter top.

1.5 EQUIPMENT CONTROLS

At the top of the console is the **compass**. A compass indicates the direction the bow of your boat is headed. The compass in your Tiara 44 Coupe should be compensated by a Tiara dealer, or other qualified marine service facility, for magnetic variance associated with operating your boat in your particular location.

EXTERIOR EQUIPMENT & FEATURES



WARNING

IF A FIRE SHOULD OCCUR, TURN OFF ALL MAIN ELECTRICAL SWITCHES AND SHUT DOWN THE GENERATOR. DO NOT OPEN THE ENGINE ACCESS HATCH OR LARGE ENGINE HATCH. ALLOW THE CHEMICAL TO SOAK THE ENGINE COMPARTMENT FOR AT LEAST FIFTEEN (15) MINUTES.



WARNING

FIRE FIGHTING CHEMICALS, SMOKE FROM A FIRE, AND ENGINE EXHAUST DURING A FIRE GIVE OFF TOXIC GASES AND CAN CAUSE ASPHYXIATION OR OTHER SERIOUS HEALTH PROBLEMS. IF A FIRE SHOULD OCCUR, OR THE SYSTEM ACCIDENTALLY DISCHARGES, SEEK FRESH AIR. DO NOT BREATHE THE FUMES.

Below the steering wheel is the fire system indicator. The halon bottle for the system is located on the forward engine room bulkhead. For specific information on how the fire system works, refer to the owner's manual provided by the fire system manufacturer.

The optional remote search light control is located on the port side helm. For specific operating instructions, refer to the information provided by the equipment manufacturer.

The stereo can be controlled using the Garmin Multi Function Displays (MFD's) or the remotes located on port side of the Master Stateroom and on the port cockpit step.

1.6 HELM AREA

The wide helm seat has electrical adjustment controls on the seat. Outboard of the helm seat there is a 12V receptacle, drink holders, and helm air supply.

1.6.1 Port Side L-Lounge

The port side L-lounge has seating for four. The teak table has long or short legs to adjust height.

1.6.2 Port Side Cabinets

The port side cabinets are located aft of the port side L-lounge. The following equipment is located in the LOWER port side cabinet:

- AC System Panel (see Chapter 4 for more information).
- DC System Panel (see Chapter 4 for more information).
- GFI electrical outlets.

The following equipment is located in the UPPER port side cabinet (please refer to the manufacturer's literature for operating instructions and use of all installed components):

- Air conditioning control pads.
- Bilge alert high water alarm and switch.
- Dometic tank monitor panel (see Chapter 7, section 7.8).
- Generator panel.

1.7 GALLEY

The galley is in the aft salon, see **Figure 1-2**. The galley features the following equipment. Please refer to the manufacturer's literature for instructions and use of all installed components in the galley.

- Safety handrails.
- Corian® counter tops.
- S.S. under mount sinks with hot/cold water faucet and optional garbage disposal.
- Recessed two-burner electric cook top, exhaust fan, and backsplash.

EXTERIOR EQUIPMENT & FEATURES

- Microwave/convection oven below aft counter.
- Storage drawers below counter top.
- Trash can forward.



Figure 1-2: Aft Salon.

- Upper galley storage, port and starboard.
- Dual Isotherm® 120V drawer units - one refrigerator/refrigerator and one refrigerator/freezer

NOTICE

Do not set the Corian® lid over a warm stove top. Allow the burners to cool before covering. Failure to follow this notice could result in damage to the lid, stove, or both.

- Optional ice maker.

There are Corian® counter top lids for: the stove, a large sink basin, and a small sink basin. The lid for the stove covers a safety switch that disables stove opera-

EXTERIOR EQUIPMENT & FEATURES

tion. The lids are stowed in the lower galley, forward of the microwave, when not in use.

The LCD TV is located behind the upper galley cabinet. Pull the TV cabinet handle forward to see the TV. Pulling it fully forward engages a positive stop.

1.8 AFT COCKPIT LAYOUT

Sliding lockable doors secure the salon from the aft cockpit. A door jam is built into the floor. Flip the jam forward to keep the sliding doors in the open position.

The engine hatch is located on the aft cockpit floor. When opening the engine hatch the engine room light automatically turns on.

Fixed cockpit steps are built in to the port and starboard aft cockpit to assist in boarding.





Figure 1-3: Aft Cockpit.

EXTERIOR EQUIPMENT & FEATURES

Lower cockpit seating features fore and aft facing lounge seating, see **Figure 1-3**. Storage is below all lounge seats, below the removable seat bottoms. Below the seats there are hand hold straps that can be swung out to above cushion position.

The aft cockpit teak table has long or short legs to adjust height for alternatives

 WARNING
DO NOT STEP ON THE HARDTOP. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE HARDTOP, AND COULD CAUSE A FALL, RESULTING IN SERIOUS PERSONAL INJURY.
 CAUTION
Do not overload the hardtop. The hardtop is designed to carry typical electronic packages, antennas, and the like only. Prior to any hardtop installation consult your Tiara Yachts Dealer and or Tiara Professionals.

in utility.

1.9 HARDTOP

The hardtop has a pneumatic sunroof. The sunroof switch is on the helm. When closing, the sunroof is designed to stop just before the sunroof closes. Release the switch. Continue pressing the switch to close all the way.

1.9.1 Sun Shade

The sun shade is electrically powered and extends to shade the aft cockpit. The switch on the DC panel should be ON to active the sun shade switch, located on the forward face of the starboard aft facing seat, in the aft cockpit. When the sun shade is extended it is recommended that the support poles be used. See **Figure 1-4**.

EXTERIOR EQUIPMENT & FEATURES



Figure 1-4:

Sunshade poles: The poles are stowed in the aft storage. Secure the upper pole first. Slide the lock and insert the pole head. The lock will slide to the lock position when the pole head is properly inserted. Secure the lower pole head the same way. Repeat for the other side.



Figure 1-5: To check the sunshade fuse remove the port panel by pulling down. The fuse is located inside a gray control box.

EXTERIOR EQUIPMENT & FEATURES

During storage, severe inclement weather or transporting the boat on the ground it is recommended that the sunshade be in the closed position.

In the event that the sun shade switch does not actuate the sun shade consult the Makefast Marine Powered Sun Shade Installation Instructions provided in your boat literature packet. There is a fuse associated with the sun shade, see **Figure 1-5**.

1.10 SIDE DECKS

While moving about the side decks, handrails are provided, port and starboard on and around the hardtop.

Cleats are located on the toe rail. Nonskid texture has been provided on all walking surfaces.

The following fills can be located on the starboard side deck from aft to forward:

- Diesel - Fill for diesel fuel that fills the fuel tank.
- Waste - Pump out fitting for the waste tank.

The following fills can be located on the port side deck from aft to forward:


- Diesel - Fill for diesel fuel that fills the fuel tank.
- Water - Fill for fresh water that fills the fresh water tank.

1.11 FOREDECK

On the Tiara 44 Coupe foredeck there is an escape ventilation hatch, mooring cleats, navigation lights, and the bow rail. There is a chaise lounge sun pad with cup holders and hand holds that includes weather cover.

The windlass and windlass remote controls are located inside the anchor locker. Please read the windlass remote manufactures literature for operating instructions. Refer also to Chapter 5, section 5.3.2.

1.12 HULL SIDES

**WARNING**

DO NOT OPERATE YOUR BOAT UNDER POWER WITH THE TRANSOM DOORS OPEN . OPERATION OF BOAT WITH TRANSOM DOORS OPEN MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN THE OPEN WATER.

The port and starboard hull sides each have a number of vents, drains, plenum intakes, and discharge thru hulls.



*Figure 1-5:
Switches on the port side of
the transom buffet. From left to
right: Optional hydraulic swim
platform lift switch, optional
underwater lights switch,
transom hatch switch.*

**CAUTION**

When raising the transom storage hatch make sure no items are placed on the lids. Make sure nobody is seated in the forward facing lounge. Failure to do so could result in damage or injury.

EXTERIOR EQUIPMENT & FEATURES

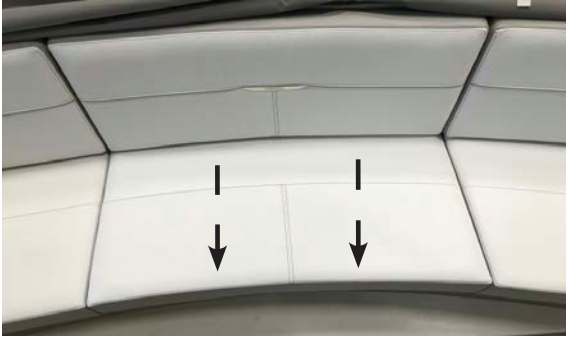


Figure 1-6:

To manually open the transom hatch, remove the hatch lift actuator pin, which is located under the center forward-facing lounge in the aft cockpit.

Slide the center seat cushion out. Remove the two screws located underneath the forward edge of the seat. Carefully remove the center seat bottom, turn the access plate counter clockwise, and remove the access plate. Pull the pin to starboard. Manually lift the transom hatch to access the transom storage compartment.



1.13 STERN

The transom area features stainless steel entry doors. Lift a door up to swing it into one of three positions. The door will drop down and stay stationary in the aft or forward open position or the closed position.

The transom storage compartment is accessed with the switch on the port side of the buffet table, see **Figure 1-5**. The switch actuates the transom hatch. In the



WARNING

FUEL VAPORS ARE A FIRE AND EXPLOSION HAZARD THAT CAN RESULT IN SERIOUS INJURY, BURNS, OR DEATH. DO NOT STORE CONTAINERS OF FUEL OR OTHER FLAMMABLE LIQUIDS IN THE LAZARETTE STORAGE OR THE ENGINE ROOM COMPARTMENT.

EXTERIOR EQUIPMENT & FEATURES

event of electrical or mechanical failure the hatch can be released and manually opened, see **Figure 1-6**.

The transom storage compartment features:

- Storage for dock lines, bumpers, poles.
- Hatches for access to Pod Units and under floor mechanicals.
- Access to the generator.
- Blind GFI.

Below the transom buffet port lid is a standard chopping board or an optional electric grill.

To operate the optional electric grill:

NOTICE

After cooking: Allow the grill to cool off before closing the lid. Clean the grill surface. Empty the contents of the drip pan below the grill. Lift the grill grate up and carefully remove the fully cooled drip pan. Failure to do so could result in damage to the grill or grill area.

1. Raise the grill lid.
2. On the AC panel switch the “deck grill” breaker ON.
3. The grill is ready for cooking.



WARNING

CARBON MONOXIDE IS PRODUCED BY ALL GASOLINE ENGINES AND GENERATORS SETS. CARBON MONOXIDE CAN CAUSE BRAIN DAMAGE OR DEATH. TURN OFF ENGINES AND GENERATOR WHEN THE SWIM PLATFORM IS IN USE. SWIMMERS SHOULD NOT ENTER CAVITY UNDER SWIM PLATFORM. SIGNS OF EXPOSURE INCLUDE NAUSEA, DIZZINESS, AND DROWSINESS.

EXTERIOR EQUIPMENT & FEATURES

When finished grilling, switch the “deck grill” breaker to OFF, clean the grill top, empty the drip pan contents.

Closing the lid automatically trips the breaker on the AC panel OFF. The grill will not operate when the lid is closed. Please read the grill manufacturer’s literature for operation guidelines.

The swim platform contains a swim ladder under the starboard side of the platform. Release the catch and extend the ladder. Lower the extended ladder down into the water to assist in boarding the boat from the water.

The Nautical Structures swim platform lift system is an optional system that raises and lowers the swim platform. Refer to the lift system Owner’s Manual for operation, safe use, and related information.

Behind a door outboard of the port cockpit gangway is the shore power inlet.



CAUTION

When routing electric cables and dockside water hose from boat to dock, be sure to allow sufficient slack so that as boat moves within its slip, the cables are not strained in any way. Failure to allow for sufficient slack could result in damage or injury.

- The 50A 220V A.C. shore power inlet cord comes with a power recoil feature. Above the inlet is the switch to release or retrieve the cable. Place the switch in the middle position when not moving the cable.

Behind a door outboard of the starboard cockpit gangway is the fresh water fill, and the washdown hose connections. The dockside fresh water inlet has a built-in regulator. When a hose from the dock is attached and pressurized, your boat’s fresh water system will be using water from the dock, not from the onboard fresh water tank.

Note: When using dock side water, the fresh water pump breaker (on the D.C. Distribution Panel) should be switched OFF.

- On the outboard side of the starboard cockpit gangway there is a cockpit shower.

EXTERIOR EQUIPMENT & FEATURES

- On the aft face at the bottom of the transom buffet are two pop-up cleats (**not to be used for towing**).
- Below water line on the transom are the trim tabs, sacrificial anodes and the optional underwater lights (**see Section 7.4.6 Underwater Gear**).



WARNING

THE CLEATS ON THE BOW AND STERN OF YOUR BOAT HAVE NOT BEEN DESIGNED FOR, AND ARE NOT INTENDED TO BE USED FOR TOWING. USING THEM FOR THIS PURPOSE COULD RESULT IN PERSONAL INJURY OR DAMAGE TO YOUR BOAT. REFERENCE CHAPMAN PILOTING SEAMANSHIP & SMALL BOAT HANDLING FOR PROPER TOWING PROCEDURES.

NOTICE

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States or the waters of the Contiguous Zone if such discharge causes a film or sheen upon or a discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to substantial civil and/or criminal sanctions including fines and imprisonment.


EXTERIOR EQUIPMENT & FEATURES

This page intentionally left blank.

Chapter 2

BELOW DECK EQUIPMENT AND FEATURES

To operate any electrical equipment in the interior the components associated breaker needs to be in the ON position (or pushed to reset) on either the A.C. or the D.C. Distribution Panels. For more information on electrical systems in the boat see Chapter 4. See **Figure 2-1** for a below deck layout.

**WARNING**

THE CARBON MONOXIDE MONITORING SYSTEM IS ONLY A SUPPLEMENTAL SAFETY AID. MAKE SURE YOU FOLLOW ALL SAFETY PROCEDURES GIVEN IN THIS MANUAL. CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT WILL CAUSE DEATH AT CERTAIN LEVELS.

2.9 SMOKE DETECTOR, CARBON MONOXIDE, MONITORING SYSTEM & FIRE EXTINGUISHERS

There are three carbon monoxide detectors and smoke detectors. They are located:

- Master Stateroom
- V.I.P. Stateroom
- Galley

There are four handheld fire extinguishers. Fire extinguishers are located:

- Galley.
- Master Stateroom hanging locker.
- V.I.P. Stateroom hanging locker.
- Below the seat bottom cushion of the aft facing port side seat.

BELOW DECK EQUIPMENT & FEATURES

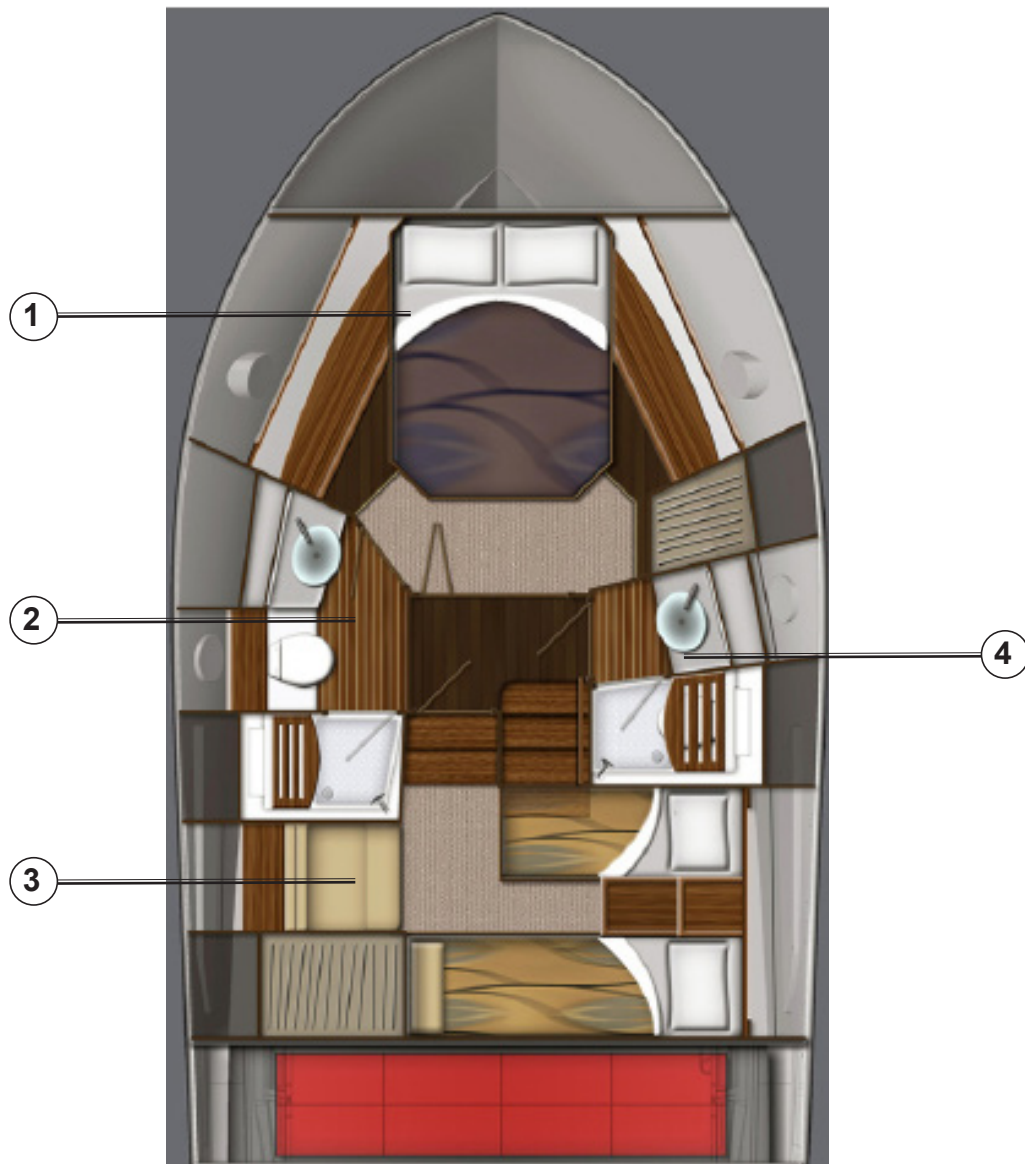


Figure 2-1: Below Deck Layout

1. Master Stateroom.
2. Master Head.
3. VIP Stateroom.
4. VIP Day Head

2.10 AIR CONDITIONING

2.10.1 Marine Air Systems® air conditioner with reverse cycle heat

The Marine Air System® handles air conditioning and heat. Please read the literature provided by Marine Air for operation.

Units are located:

- A 6K BTU unit located forward in the master stateroom berth.
- A 6K unit behind a removable outboard panel inside the port side hanging locker in the aft stateroom.
- Below the helm seat there is one 12k unit.
- A 12K unit under the port L-Lounge.

2.11 MASTER STATEROOM

2.11.1 Stateroom

The stateroom has a private entrance forward. There is solid teak flooring with a carpeted riser and a plush pedestal berth, see **Figure 2-2**.

- Light switches are on port.
- A/C control pad on starboard above the outlet.
- The master head door is on the port side of the master stateroom.
- An deck escape hatch provides natural light and ventilation.

2.11.2 Locker, Storage

- Shelves are port and starboard.
- The berth mattress lifts up to access storage. Lift the berth from aft.
- A cedar lined hanging locker is on starboard.

BELOW DECK EQUIPMENT & FEATURES



Figure 2-2: Master Stateroom.

2.11.3 Master Stateroom Appliances, Electronics & Outlets

- 19" flat screen TV.
- Two reading lights with switches on the lamps.
- Blu-Ray DVD player.
- Bose® Soundlink® portable bluetooth speaker system.

2.12 MASTER HEAD

The master head door is entered from the port side master stateroom. The master head features:

- A fiberglass stall shower with sump pump, glass shower door, and teak seat.
- Teak countertop with solid surface accents, a vessel sink with a hot/ cold water faucet.
- Upper cabinet with mirror and lights.
- Lower vanity storage.
- Portlights that open. Privacy shades for portlights.
- Solid teak floor.

BELOW DECK EQUIPMENT & FEATURES

- VacuFlush® toilet.
- Exhaust fan.
- Air conditioning vent (controls in master stateroom).

2.13 LOWER ATRIUM

The atrium has a skylights supplying natural light.

A floor hatch in the atrium floor provides access to the waste tank. Push the hatch from aft and slide it forward. Below the hatch is access to the waste tank.

2.14 V.I.P. STATEROOM

The V.I.P. Stateroom is entered from the aft atrium, **see Figure 2-3**. The V.I.P. Stateroom features:

- A carpeted floor.
- Twin berths with innerspring mattresses, upholstered headboard, coverlets, pillow shams, and storage under forward berth. Includes a filler cushion for the mattresses.
- Cedar-backed hanging locker, starboard.
- Upper hull side cabinets, port.



Figure 2-3: V.I.P. Stateroom.

BELOW DECK EQUIPMENT & FEATURES

- Hull side windows with opening ports and privacy shades.
- Skylight supplying natural light, includes privacy cover.
- Two (2) reading lights, independently switched.
- Marine Air Systems® 6,000 BTU air conditioning system.
- Below entrance step access to sump pump and gray water collection box for V.I.P. shower.
- The air conditioning control and light switch are located on the starboard side entrance.

2.15 V.I.P. HEAD

The V.I.P. head has full frame doors with entry from the VIP stateroom or atrium.

2.15.1 V.I.P. Day Head Features

- Full frame doors with entry from atrium.
- Fiberglass stall shower with sump pump, glass door, & teak seat covering VacuFlush® toilet.
- Teak counter top with solid surface accents, vessel sink with hot and cold water faucet.
- Upper medicine cabinet with mirror and lights.
- Lower vanity storage.
- Solid teak floor.
- Exhaust fan.
- Air conditioning vent (controls in VIP stateroom).
- Light switch on lower, forward vanity.
- Tissue roll mount installed on the backside of the lower vanity door.

ENGINE ROOM

3.16 GENERAL ARRANGEMENT

The engine room of your Tiara 44 Coupe is entered through a hatch in the aft cockpit floor. The engines are located to port and starboard as you stand on centerline.

A general description of some of the engine room's components is reviewed here, for your information and awareness. Your dealer can also provide you with specific information on any system or component in your boat.

For maintenance of any system in the engine room, please refer to Chapter 7 in this manual. Also consult the literature provided by each components manufacturer, and your authorized Tiara Yachts dealer.

Depending on the engine option chosen the engine room arrangement varies.

3.16.1.1 Centerline

Centerline Forward:

The fuel water separators, and the Fireboy fire suppression system bottle are on the forward engine room bulkhead. The fuel valves are located at the top of the bulkhead on the tank.

A bilge pump is located forward on centerline just ahead of the batteries.



CAUTION

Engines and equipment in the engine room may be hot to the touch and might burn your skin. Care must be taken to avoid these areas while in the engine room.

ENGINE ROOM

The Electrical Panel Box is located on centerline, forward (**Figure 3-1**). The D.C. Main Master panel contains the main breakers for D.C. powered components on the vessel. For all practical purposes these breakers should be left in the ON position during use of the vessel. Please reference Chapter 4 of this manual for further electrical system details. The main battery bank switches are below the panel.



Figure 3-1: Centerline, forward engine room - The Electrical Panel Box & Battery Bank Switches.

Centerline Forward with the Volvo Engine Option:

The interior air conditioning systems seacock, pump, and strainer are installed on the centerline bilge.

Centerline Aft:

Between the engines is a removable floor. Below are the battery banks and the oil changer. Please refer to the oil changer manufacturer's literature for operation instructions.

Aft is the optional generator. Below the generator the following equipment is installed:

- Generator raw water filter and seacock.
- Raw water pump and associated equipment.
- Sump pump.

Centerline Aft with the Cummins Engine Option:

the batteries that supply power to the bow thruster; the generator raw water filter and seacock; and the mid-engine room bilge pump.

3.16.1 Starboard

Outboard of the engines are the engine room hull side air intake plenums. The plenums are designed to allow fresh air into the engine room for ventilation and engine air, while separating and draining out sea water overboard.

The horn and sunroof air compressor is located outboard of the starboard engine. The fresh water distribution system and pumps are also located here.

The water heater is located on the starboard side outboard of the engine. Please see the manufacturers literature for operation instructions.

Starboard with the Cummins Engine Option:

Aft of the starboard engine is the starboard engine raw water intake seacock and strainer. Aft of that is the steering system hydraulic pump and autopilot pump.

The optional hydraulic swim platform lift pump is located aft of the starboard engine. Please see the manufacturers literature for operation instructions.

3.16.2 Port

Outboard of the engine, is the port engine room hull side air intake plenum.

The battery charger is located on the port side of the forward bulkhead.

Below the port plenum there is a storage bucket for the aft 50A, 240V shore power cable, see **Figure 3-2**). The shore power isolation transformer is located just forward of the cord bucket.

Port with the Cummins Engine Option:

Aft of the port engine are the batteries that supply power to the bow thruster. Also aft of the port engine is the port engine raw water intake seacock and strainer and the air conditioning system raw water intake seacock, strainer and pump.

ENGINE ROOM



Figure 3-2: Storage bucket for the aft 50A, 240V shore power cable, outboard on port.



WARNING

FUEL VAPORS ARE A FIRE AND EXPLOSION HAZARD THAT CAN RESULT IN SERIOUS INJURY, BURNS, OR DEATH. DO NOT STORE CONTAINERS OF FUEL OR OTHER FLAMMABLE LIQUIDS IN THE ENGINE ROOM COMPARTMENT.

Chapter 4


ELECTRICAL SYSTEMS

4.1 GENERAL

The electrical systems in your Tiara 44 Coupe have been designed and built to the recommendations of the American Boat and Yacht Council (ABYC), the requirements of the United States Coast Guard, and have received National Marine Manufacturers Association (NMMA) Yacht Certification. They have been developed to supply all the boat's electrical needs at the dock, at anchor, and underway. While we are not attempting to describe all of the electrical engineering that went into the system, we believe some understanding of the basics of its operation would help assure trouble free operation.

All of the electrical functions on your boat are a part of three basic systems, 12V DC 120/240V AC, and bonding.

4.2 THE 12/24VDC SYSTEM

WARNING

ALL SERVICE WORK ON THE ELECTRICAL SYSTEMS IN YOUR TIARA SHOULD ONLY BE PERFORMED BY YOUR TIARA YACHTS DEALER, OR OTHER AUTHORIZED MARINE ELECTRICAL SERVICE FACILITY. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY.

4.2.1 Power supply

Power is supplied to the 12V DC system from the engine bank. Each engine bank (port and starboard) is comprised of two 12V flooded cell batteries. There is a third bank of batteries, a house bank, comprised of four 12V batteries. The house bank supplies power to all the vessel functions such as lighting, pumps, actuators, 12V stereo, and electronics. **See Table 4-1.**

The intent of your 12V DC system design is to provide a source of the basic battery power needed to operate your vessel safely while underway, plus provide an additional source of power for convenience and comfort items. It is expected that the engine bank will provide the basic operating power, and that the house bank will provide the convenience and comfort power, as well as power for other owner installed convenience items and electronics.

ELECTRICAL SYSTEMS

Table 4-1: Battery Specifications.

Battery Bank	Number of Batteries	Power Supplied	Location	Power Distribution	Charging Source
Port Engine	2	12 volts	Center Line Bilge	Port Engine, Wipers, Trim Tabs, Nav Lts, Bilge Pumps	Shore Power Cord or Engine Alternator.
Starboard Engine	2	12 volts	Center Line Bilge	Stbd Engine	Shore Power Cord or Engine Alternator.
House	4	12 volts	Center Line Bilge	Vessel Functions	ACR's via Engine Battery Banks or Battery Charger.
Bow Thruster	4	24 volts	Aft of Port Engine	Bow Thruster	24v Alternator or 24v Battery Charger

The helm display alarms will alert of any low voltage. Investigate low voltage situations immediately, contact your dealer or qualified marine electrician.

4.2.2 Battery Charging

Battery power is replenished in two ways. First, from the engine alternators. Each engine alternator charges it's respective battery bank, while the engines are running.

The second source of battery bank charging comes from the 120V AC battery charger. For the charger to operate the boat must be connected to shore power, or have the generator running and powering the 120/240V AC System Panel (see **Figure 4-2**) in the cabin (see Section 4.3.1). The battery charger breakers on the engine room electrical panel must also be in the ON position.



CAUTION

All owner installed items should be installed by your TIARA dealer, or other authorized marine electrical service facility. They must only be installed to be powered from the house battery bank. The engine battery bank supply is strictly reserved for engine power only.

It is important that your batteries be kept in a state of full charge as often as possible. Fully charged batteries will indicate a voltage in excess of 14.7 volts (House Bank) with no load, or while being charged. Prolonged periods of discharge below 12.2 volts (House Bank) (indicated with no load on the bank) will cause the batteries to deteriorate rapidly, and will result in their inability to hold a charge for the expected amount of time. This can happen easily if your boat is left unattended for an extended period of time, has DC loads on, such as lights, and the battery charger is not left ON. **Always leave your battery chargers ON when leaving the boat for any period of time.**

4.2.3 Wet Flooded Cell Batteries

Wet flooded cell batteries are the source of electrical power on your Tiara 44 Coupe. These batteries require periodic maintenance. In warmer climates, the electrolyte should be checked on a monthly basis. In cooler climates, the electrolyte can be monitored less frequently. The battery cells are covered with a round screw-in top. Unscrew each top to inspect each cell. Each cell of the group 31, wet flooded cell, deep cycle battery contains lead plates. If a maintenance inspection finds low electrolyte, in which the lead plates are visible, it is necessary to fill each low cell with **distilled water** so that the lead plates are no longer visible. The cells should not be filled to the top. If the cells are overfilled its possible that during charging the electrolyte could boil over and cause damage to the battery or surrounding equipment, therefore, it is necessary to only fill the cells just over the lead plates, leaving an air space between the distilled water electrolyte and the cap. If upon inspection the lead plates are not visible, the cell is filled to specification.

NOTICE

The engine room lights are turned ON by an automatic switch on the engine hatch. There is no specific switch elsewhere on the vessel.

NOTICE

Turn ON the optional Washdown Pump breaker when there is a need to use the raw water washdown. The washdown pump pressure switch turns ON the pump when the spray nozzle is opened. Turn breaker OFF when not in use.

ELECTRICAL SYSTEMS

4.2.4 Distribution

Power from the battery banks supplies the battery switches inside the forward engine room bulkhead electrical panel box.

Power from each engine bank is connected to its respective Engine Battery Bank Switch, and power from the house bank is connected to the House Battery Bank Switch. When these switches are in the OFF position, all DC power to the rest of the boat is disconnected, with one exception:

Note: Power is supplied to the forward, mid, and aft automatic bilge pumps and active corrosion protection (from the engine battery bank). Shutting OFF the main disconnect switches will **not** disconnect power to these items.

The Automatic Charge Relays (ACR) inside the engine room electrical panel box are provided to automatically charge the House Battery Bank while the vessel is underway. The ACRs have a manual feature that should only be used (depressed) in conditions such as those described in Section 4.2.4. This will manually cross connect both engine battery banks. The ACR may also be manually switched OFF to de-energize interconnection of the battery bank systems for service.

From the Battery Bank Switches, on the Master Panel, power is distributed to the System Panel in the cabin (see **Figure 4-2**), or directly to a DC component. Power to all DC components is further distributed from this panel.

4.2.5 Operating Notes

As mentioned in Section 4.2.3, the Automatic Charge Relays inside the engine room electrical panel box have a manual feature button, and is provided for use in certain conditions.

The condition under which the Emergency Battery Bank Interconnect switch should be used is:

- **Failure of one battery bank. In this condition, some circumstance has caused the failure of one battery bank so that it can no longer supply any power to the components.** To power all loads from one battery bank you must first turn the failed bank's associated switch to the OFF position, and then depress the Auto Charge Relay. All DC components will now be powered from the good battery bank.

When leaving the boat for any extended period, turn the Battery Bank switches OFF on the cabin panel (see **Figure 4-1**). You should also leave the boat connected to shore power with the 240VAC Battery Charger breaker ON. Turning OFF the battery bank switches also disables power to the helm, preventing operation of the engines and other helm functions.

When you first arrive at your boat for a trip, and periodically when using your boat, it is a good idea to monitor your battery voltages. Battery voltages below 11.5 volts (12V) (with a load on the bank) indicate a problem condition preventing battery replenishment which should be investigated, and corrected immediately.

4.3 THE 120/240V AC SYSTEM

4.3.1 Power Supplies

AC power is supplied to the AC System Panel (see **Figure 4-2**) in two ways:

1. Connecting to 120/240V 50A or optional 120V 30A adapter via the dock side inlets (see Section 5.1.1 for shore power connection directions).
2. Running the on board generator.



Figure 4-1: D.C. System Panel.

4.3.2 Distribution

Power from the generator, the optional inverter, or shore power is supplied to the AC System Panel. The system is designed, on the AC System Panel, so that only one power source can be selected at a time.

Power is supplied from the selected main breaker to the individual circuits via the circuit breakers in the panel.

4.3.3 Operating Notes

Aft shore cord primary 120/240V 50A and the shore inlets will power everything in the vessel.

When using AC power, it is a good idea to monitor the voltage available, and load applied, periodically, to detect abnormal operating conditions early. To check the voltage and amperage, select which power source you wish

ELECTRICAL SYSTEMS

to check with the selector switch below the volt and amp meters in the AC System Panel.

The volt meter will indicate the current voltage of that source and the amp meter will indicate the load presently being applied to that source. If voltage supplied is lower than 210V or higher than 260V for the 240V 50A power, discontinue use and correct the problem as soon as possible. For the optional 120V 30A system if voltage supplied is lower than 105V or higher than 130V discontinue use.



4.4 BONDING SYSTEM

The purpose of the bonding system on your boat is to provide a low resistance electrical path between otherwise isolated metallic objects, particularly those in common contact with sea water and potentially subject to galvanic corrosion.

The bonding system is connected to two large zinc sacrificial anodes mounted to the transom of your boat. These zincs are provided to purposely deteriorate over time, to assure the other components do not. These zincs must be checked periodically to

Figure 4-2: A.C. System Panel.



CAUTION

Operating your A.C. electrical system with low, or high, voltage may damage some on-board A.C. electrical appliances.

**WARNING**

WHEN OPERATING ALL D.C. LOADS FROM ONE BATTERY BANK, ALL NON-ESSENTIAL LOADS SHOULD BE DISCONTINUED UNTIL THE PROBLEM WITH THE FAILED BANK IS CORRECTED, AND TWO BATTERY BANKS ARE AVAILABLE FOR USE AGAIN. FAILURE TO DO SO CAN RESULT IN RAPID DEPLETION OF BATTERY CAPACITY NEEDED TO SAFELY OPERATE THE BOAT, AND PUT THE BOAT AND PERSONS ON BOARD IN JEOPARDY.

determine their status and be replaced when they become depleted by 50% or more. Active corrosion protection is provided for of the IPS drives, as they are not connected to the bonding system. The trim tabs have anodes for added protection. These anodes must also be checked periodically and replaced as necessary.

The bonding system is connected to the main DC ground buss along with the AC grounding buss. This establishes the water as ground potential and helps prevent the existence of electrical potential on exposed metallic hardware and electrical equipment.

An isolation transformer is installed in the Tiara 44 Coupe. The isolation transformer fully protects the boat from shore power shock hazards and galvanic corrosion.

**WARNING**

THE A.C. GROUNDING BUSS MUST REMAIN CONNECTED TO THE MAIN D.C. GROUND BUSS AT ALL TIMES. DO NOT CUT THE GREEN WIRE IN THE SHORE POWER CORD, OR RELATED EQUIPMENT. TO DO SO CAN CAUSE LETHAL VOLTAGE TO BE PRESENT ON BOAT EQUIPMENT, OR IN THE WATER AROUND THE BOAT.



CAUTION

Owner installed components that are below the waterline must also be connected to the bonding system. Comparable wire sizes and terminals must be used, and should be connected directly to the nearest bonding system terminal strip. Failure to do so may result in severe galvanic corrosion of the item, and possible premature failure, resulting in a water leak.

5.1 WHEN ARRIVING AT YOUR BOAT

When just arriving onboard your boat, before taking it out, follow these operating preparation instructions:

1. Turn ON the 12V D.C. main battery switches, and necessary breakers on the D.C. System Panel on the cabin D.C. System Panel. The main battery switches on the cabin D.C. System Panel remotely turn ON the main battery switches in the engine room.
2. Turn ON any necessary A.C. breakers on the cabin A.C. System Panel.
3. From the cabin D.C. System Panel, check the condition of your batteries with the meter select switch. If a battery reads below 10.5 volts with a load on it, or below 11.5 volts with no loads, investigate the D.C. system for the cause.
4. Check the bilge areas of your boat, forward, aft, and in the engine room, for unexpected water or debris.
5. Check and open any seacocks for equipment that may have been shut off (closed) when you last left your boat.
6. In the engine room, check the engine oil, engine coolant, transmission oil (IPS units), generator oil, and coolant. Also, smell for any fuel fumes or other unusual smells and investigate if detected.
7. At the helm area, check to see that all equipment is functioning. Activate equipment switches and test for power and function. Read all literature provided by equipment manufacturers.

5.1.1 Connecting to Shore Power

How to connect to 240V 50A shore power:

1. Switch OFF the shore power breaker(s). Located near the shore power cord source. There are also breakers on the A.C. System Panel in the cabin.
2. Extend the shore power cord. Open the cover. Flip the cablemaster switch to the OUT position. The cablemaster switch is near the shore power cord cover. When sufficient cable is extended to reach the shore power station return the cablemaster switch to the neutral or center position.

When routing electric cables from the boat to the dock, be sure to allow sufficient slack so that as the boat moves within its slip, the cables and hoses are not strained in any way. Never allow the shore power cord to dangle in the water.

3. Plug the cord into the dock side power outlet.
4. Turn ON the dock side power station breakers.
5. Turn ON the shore power breaker(s) on the deck.
6. Be sure that the input status light on the salon A.C. System Panel is ON (illuminated). This light is labeled "AVAIL" and is green.

To disconnect 240V shore power:

1. Turn OFF the shore power breaker(s) on the deck or the A.C. System Panel.
2. Turn OFF the dock breaker.



CAUTION

When routing electric cables and dock side water hoses from the boat to the dock, be sure to allow sufficient slack so that as the boat moves within its slip, the cables are not strained in any way. Do not allow the cord to dangle into the water.



WARNING

DO NOT MAKE UNNECESSARY CONNECTIONS IN WET WEATHER, WITH WET HANDS, WITH WET CABLES AND CONNECTIONS. ALWAYS USE A 3-WIRE ELECTRICAL SYSTEM CONNECTED TO A GROUND. DO NOT USE WORN OR DAMAGED CABLES. FAILURE TO HEED THIS WARNING CAN RESULT IN AN ELECTRICAL SHOCK INJURY AND OR DEATH.

3. Disconnect the shore power cord from dock outlet.
4. Return the cord to the boat cockpit and carefully retract the cable by flipping the cablemaster switch to IN. When fully retracted toggle the cablemaster switch to the neutral or center position and replace cover.

As an option 240V 50A forward shore power is available. When installed it is located in the anchor locker. The connection procedure is the same except that the 240V 50A cord has no power retractor and must be extended and retracted manually.



Figure 5-1: Fuel Fill.

5.1.2 Fueling Your Boat

The fuel tank fuel fills are located port and starboard near the cockpit steps. All fuel fills are labeled DIESEL, see **Figure 5-1**.

To fill the fuel tank follow this procedure:

1. Turn off all switches on the A.C. and D.C. System Panels so that any equipment that can make sparks can not run.
2. If your boat is equipped with a generator, make sure the generator switch is in the OFF position.
3. Make sure that your boat is securely moored.
4. Close all port lights, hatches and doors.



WARNING

BE SURE THAT THE FUEL FILL IS IN CONTACT WITH THE FUEL NOZZLE TO PREVENT ANY STATIC SPARKS DURING THE FUELING OPERATION. FAILURE TO HEED THIS WARNING COULD RESULT IN A STATIC ELECTRICITY CHARGE THAT COULD LEAD TO INJURY, DAMAGE OR DEATH.

5. Estimate how much fuel is needed to fill the tanks.
6. Using the special key provided for this purpose, insert the key into the slot in the fuel fill, turn the key counterclockwise, and remove the cap.
7. Insert the fuel nozzle into the fuel fill and dispense the fuel until the tank is full. Verify that the tank is full by reading the fuel gauge and/or by the sound of the fuel fill filling up. If your tank takes significantly more fuel than expected, investigate the cause immediately.
8. Remove the nozzle and replace the fuel fill cap. Tighten securely with the provided key.
9. Check the engine room and bilge areas for fuel odors. If you smell fuel, do not start the engines or other electrical equipment. Investigate the cause, correct, and completely ventilate the bilge area before proceeding.



WARNING

FUEL IS FLAMMABLE. NO SMOKING. NEVER FILL THE TANK WHILE THE ENGINES, BLOWERS, GENERATOR, OR OTHER EQUIPMENT IS OPERATING. DO NOT FILL NEAR OPEN FLAMES.

NOTICE

Be careful not to spill any fuel outside the boat into the water. If you do, clean up the fuel immediately in the manner prescribed by your local regulations.

NOTICE

To prevent damage to your fuel system, use only a good grade of fuel as recommended by the engine manufacturer. Do not use a fuel which contains harsh additives. Damage to your fuel system as a result of using these fuels will not be covered by your warranty.

NOTICE

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States or the waters of the Contiguous Zone if such discharge causes a film or sheen upon or a discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to substantial civil and/or criminal sanctions including fines and imprisonment.

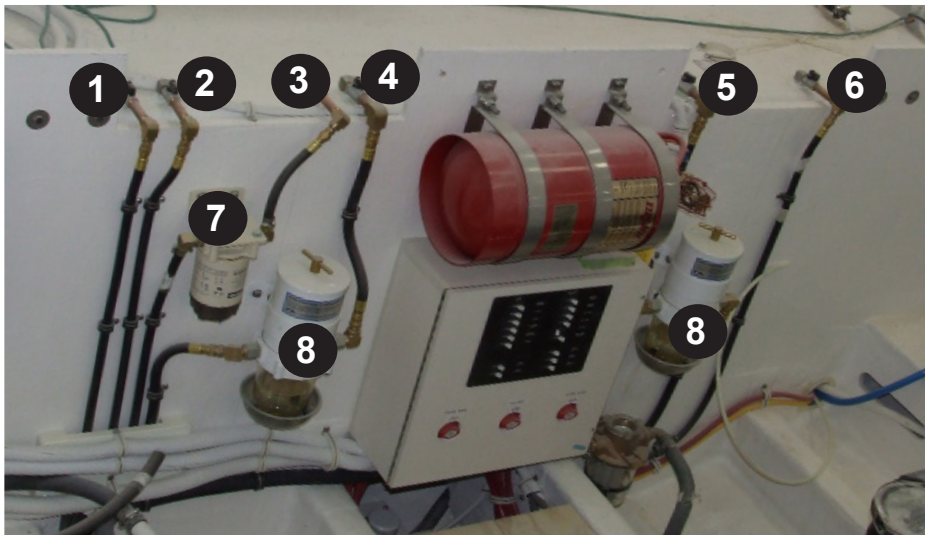


Figure 5-2: Fuel tank lines and valves in the forward engine room.

- | | |
|------------------------|-----------------------------|
| 1. Port engine return. | 5. Starboard engine supply. |
| 2. Generator return. | 6. Starboard engine return. |
| 3. Generator supply. | 7. Generator fuel filter. |
| 4. Port engine supply. | 8. Engine fuel filters. |

5.1.3 Fuel System

For an illustration of the fuel system valves, tank and hoses, see **Figure 5-2** .
When a fuel valve is closed it is perpendicular to its associated hose and fittings.
When a valve is open it is parallel to its associated hose and fittings.



WARNING

DO NOT START THE ENGINES UNTIL YOU ARE SURE THERE ARE NO FUEL FUMES IN THE BILGE OR ENGINE COMPARTMENT OF YOUR BOAT. FUEL VAPORS ARE EXPLOSIVE AND MAY IGNITE DURING ENGINE START-UP CAUSING SERIOUS INJURY OR DEATH.



CAUTION

To reduce the risk of fire, investigate all fuel odors immediately and do not start the engines, or other electrical equipment.



CAUTION

If engines fail to start after 70 seconds of cranking, cease cranking operation. Before attempting to crank engines again, the water must be drained from the muffler. Failure to do so could result in raw water contamination of the engines' cylinders.



CAUTION

A no spill vent system is used so that fuel will not spill out of the vents when filling, however, fuel will exit the fuel fill pipe if overfilling occurs. When filling the fuel tanks listen carefully for a filling fuel pipe.

5.1.4 Filling Your Water Tank

The fill fitting for the water tank is located on the port side deck, the fitting is labeled “water”.

To fill the water tank:

1. Open fill fitting with a provided deck plate key.
2. Insert hose from dock side water supply and turn on.
3. Stop filling when water overflows fitting and comes out of the vent fitting on the hull side below the fill fitting.
4. Replace cap and tighten.

5.1.5 Starting Your Engines

Before starting your engines, be sure that you have performed all the maintenance and safety checks listed under Section 5.1, When Arriving at Your Boat.

After performing the above mentioned maintenance and safety checks, proceed as follows to start your specific engine option:

Starting the Volvo Penta Engine Option:



Figure 5-3: Volvo control keys.

1. Open all hatches to the bilge area. Investigate and remedy any fuel vapors that are detected.
2. The fuel tank valves are located in the forward engine room, see **Figure 5-2**. Prior to starting be certain that all the fuel valves are in the open position. A fuel valve is open when it is parallel to its associated hose and fittings.
3. Make sure that the engine clutch levers are in the neutral position, straight up and down.
4. To start the engines:
 - Swipe the Volvo control key (**Figure 5-3**) near the ignition control pad, see **Figure 5-4**. This will allow access to the ignitions. The forward button is for the port engine.

OPERATING YOUR BOAT

- Press the Ignition button and then the Start/Stop button. Release when the engine starts.
- If the engine battery bank is low on voltage, press and hold the battery parallel switch, located forward of the ignition control pad, during the cranking operation.

5. Repeat for the starboard engine (aft button).



Figure 5-4: Volvo ignition controls below the outboard flip up cover, just aft of the controls at the helm.

6. The volt meter should read between 12 and 14 volts. If the reading is below 8, or above 16, stop the engines and investigate the cause before proceeding.
7. Let the engines run at idle several minutes, before leaving the slip.

Starting the Cummins Engine Option:

1. Open all hatches to the bilge area. Investigate and remedy any fuel vapors that are detected.
2. The fuel tank valves are located in the forward engine room, see **Figure 5-2**. Prior to starting be certain that all the fuel valves are in the open position. A fuel valve is open when it is parallel to its associated hose and fittings. Make sure all the valves are OPEN prior to starting.
3. Make sure that the engine clutch levers are in the neutral position, straight up and down.

4. Turn the port ignition key to the ON position (the first position clockwise).
5. Turn the port engine key to the START position and release when engine starts. If the engine battery bank is low on voltage, press and hold the battery parallel switch, located below the port and starboard ignitions, during the cranking operation.
6. Repeat for the starboard engine.
7. Let the engines run at idle several minutes to fully circulate the oil throughout the engine, before leaving the slip.

5.1.6 Throttle Operations

There is one set of control heads with either engine application. The port side control handles the port engine and the starboard side handles the starboard engine. The engine controls are in neutral when they are in the center vertical positions. Shifting forward engages the engines in forward gear and speed is increased the further forward the throttle is advanced. Shifting aft from neutral engages the reverse gears and backs the boat down. When the controls are within 20% of each other the engines will automatically synchronize. Please refer to the Volvo® engine manual for more detailed information.

5.1.7 Starting the Generator

Check the generator manufacturer's owner's manual for starting instructions. The generator display panel is located in the port galley upper cabinet, see **Figure 5-5**.

To Start the Generator:

1. The fuel tank valves are located in the forward engine room, see **Figure 5-2**. Prior to starting be certain that the generator fuel valves are in the open position. A fuel valve is open when it is parallel to its associated hose and fittings
2. Press and hold the generator START button on the Generator Display Panel.
3. The generator status lamp will blink while the engine is preheating and cranking and stay on while the generator is running.

OPERATING YOUR BOAT

4. Status on the Digital Display will change from Starting to Running.

To Stop:

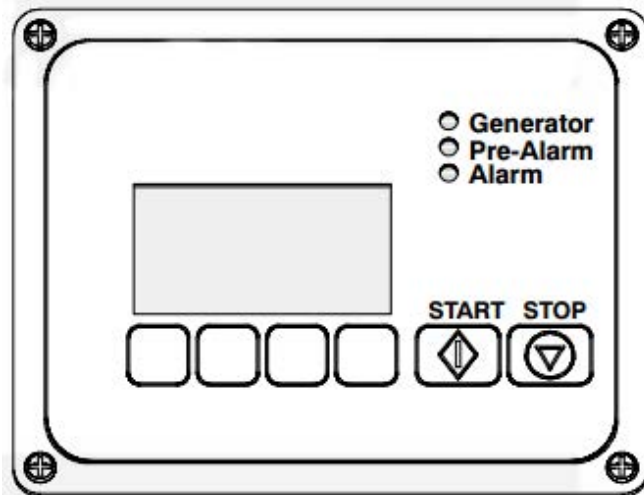


Figure 5-5: Generator Display Panel.

1. Press the generator stop switch on the Generator Display Panel.

2. The generator status lamp will go out. Status on the Digital Display will change from Running to Stopped.

The engines and the generator share a fuel tank. The generator fuel withdrawal tube is designed to run out of fuel at a quarter (1/4) tank of fuel with the boat sitting at rest. Cruising attitudes and sea conditions may affect when this occurs. The system was designed in this manner to allow for a margin of safety so the generator does not run the engines out of fuel.



WARNING

THE SAME PRECAUTIONS REGARDING FUEL VAPORS FOLLOWED DURING MAIN ENGINE START-UP SHOULD BE TAKEN WHEN STARTING YOUR GENERATOR.



CAUTION

If the generator fails to start after 70 seconds of cranking, cease cranking operation. Before attempting to crank engines again, the water must be drained from the muffler. Failure to do so could result in raw water contamination of the engines' cylinders.

5.1 LEAVING AND RETURNING TO THE DOCK

Before leaving on a short cruise or an extended trip, you should leave information regarding your trip with someone who will be staying ashore. Particularly information regarding who is aboard, where you intend to cruise, and when you plan to return. This information will be extremely valuable should you run into trouble while away from the dock.

Before you cast off, be certain that you have planned your trip so that you know when to expect to need fuel and where you will purchase it. Fuel docks are not always as convenient as gas stations on the road! You should also do a last minute double check to see that all necessary safety items are on board, especially a Coast Guard approved life vest, of the proper size, for everyone on board.

Specific procedures as to the maneuvers needed to leave the dock and return to the dock smoothly vary with each situation. Information on the best procedures can be found in Chapman's (see Glossary), and through safe boating classes offered in your area, through the Coast Guard Auxiliary and the Power Squadron. For information on the courses offered in your area, call the "Boating Course Hotline" at 1-800-336-2628. Please refer to section 1.1.1 of this manual for further information regarding boating safety.

Note: Refer to Section 1.1.2 & 1.1.3 for specific information on your engine controls.

While maneuvering around the dock, have all guests on board remain in the cockpit, or cabin areas, if they are not involved in the handling of mooring lines.

5.1 WHILE UNDERWAY

As the skipper of your boat, everyone on board is your responsibility. Their safety and enjoyment of the trip depends on your ability to operate your boat properly. You must stay aware of the weather and sea conditions, surrounding boating traffic, navigation of area waters and the condition of your boat and its equipment and engines.

When operating your boat at night, or when visibility is significantly reduced, you should display the proper running lights. For specific information on which lights and signals are needed for different conditions, refer to information in Chapman's or from the Coast Guard.



WARNING

DO NOT OPERATE YOUR BOAT WHILE UNDER THE INFLUENCE OF ALCOHOL. THIS MAY CAUSE SERIOUS PERSONAL INJURY, PROPERTY DAMAGE, AND/OR DEATH. SMART SKIPPERS STAY SOBER!

Remember:

- 1. Alcohol severely reduces the ability to react to several different signals at once.**
- 2. Alcohol makes it difficult to correctly judge speed and distance, or track moving objects.**
- 3. Alcohol reduces night vision and the ability to distinguish red from green.**

You must also keep a watchful eye on the wake that your boat produces when underway. When boating around, or near, docks and seawalls, it is important to operate near idle RPM's in order to minimize your boat's wake. Most local governments hold you responsible for damage caused by your boat's wake. When boating around smaller craft you must also control the size of your wake in order to avoid capsizing the smaller vessel.

Please also keep in mind that your engines produce both noise and exhaust gas emissions. While your boat is equipped with the latest in diesel engine technology, and has an excellent exhaust system muffler, it still emits noise and gasses that may be an annoyance to your fellow boaters, or people on shore. As the operator you are responsible for these factors and must consider them when operating your boat.

5.1.1 Waste Disposal

For head pump-out procedure refer to Chapter 7, section 7.8. While away from the dock, it is important that you endeavor to preserve our natural resources and maintain our waterways by properly disposing of all trash. The federal government has mandated:

- 1. It is illegal to dump plastic trash anywhere in the ocean or navigable waters of the United States. It is also illegal to discharge garbage in**

the navigable waters of the United States, including inland waters as well as anywhere in the Great Lakes. The discharge of other types of garbage is permitted outside of specific distances offshore as determined by the nature of that garbage.

2. The discharge of dunnage, lining, and packing materials that float is prohibited within 25 nautical miles from the nearest land.
3. Other unground garbage may be discharged beyond 12 nautical miles from the nearest land.
4. Other garbage ground to less than one inch may be discharged beyond three nautical miles of the nearest land.

Consult the literature published by the United States Coast Guard, or understand the regulations mandated by the official maritime agency in the region you are boating within.

NOTICE

Any person who violates the waste disposal requirements is liable for a civil penalty of up to \$25,000, a fine of up to \$50,000, and imprisonment for up to five years for each violation. Regional, state, and local restrictions on garbage discharges also may apply.

5.1.2 Anchoring

Anchoring your boat while away from the dock is possible by using the anchor and anchor rode provided for this purpose. The standard boat has an anchor locker accessed via a hatch located in the foredeck. This locker is large enough to store all of the anchor rope/chain rode. The anchor, when stowed, is integrated into the bow stem.

Specifics regarding the proper techniques, equipment and conditions for safe anchoring can be found by referring to [Chapman Piloting: Seamanship & Boat Handling](#), or through a 'boating safety' course.

A helm switch labeled "Windlass Up/Down" activates the foredeck anchor windlass to either raise or lower the anchor. A windlass remote is located in the anchor locker. To operate the windlass remote the windlass breaker on the D.C. System panel (located on the cabin) must be ON. Please refer to the information provided by the windlass manufacturer for remote operation.

OPERATING YOUR BOAT

Windlasses are not designed to hold high loads while a boat is at anchor. When the windlass is not in use and the boat is at anchor, the rope rode should be attached to the load-bearing cleat located near the windlass. If the optional all chain rode



Figure 5-6: Windlass and ground tackle in the anchor locker.

is selected, the chain should be secured using the chain stopper that is mounted forward of the windlass, see **Figure 5-6**.

To secure the anchor into the bow while underway, a cable, with a shackle on the free end, is attached to the foredeck for a secondary positive means to hold the anchor in the stowed position. This must be removed before anchoring.

A rope lanyard with an “S” hook on the end has been provided. To use, attach the hook to the anchor shackle and cinch the anchor tight into the bow roller. Wraps may be taken around the windlass to pull tight and then secure to the anchor cleat. The

lanyard must be removed before anchoring.

5.1 AFTER RETURNING TO THE DOCK



WARNING

WHEN OPERATING AN ELECTRIC WINDLASS, BE CAREFUL TO KEEP HANDS AND FEET AWAY FROM THE WINDLASS DURING OPERATION. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY WHEN THEY ARE TRAPPED BETWEEN THE WINDLASS AND ROPE OR CHAIN.

When you have returned to the dock, in order to maintain the finish and function of your boat, it is necessary to thoroughly wash it with a mild detergent soap and fresh water. After washing, in order to reduce spotting and maximize your boats appearance, dry all non-fiberglass surfaces with a dry towel or chamois.

When leaving your boat you should do the following:

1. Check the bilge areas for debris that might clog your bilge pumps while you are away.
2. Listen carefully and visually inspect for water leaks in the engine room forward and aft bilge areas, paying particular attention to the shaft logs and rudder posts.
3. Close all unnecessary seacocks.
4. Turn off all unnecessary electrical breakers.
5. Check to see that the auto bilge pump breakers are in the on position on the D.C. System Panel.

The bilge pumps and shower sump areas need to be checked, before leaving the boat, for debris that might clog the pumps. The float switches must also be checked to see that they are turning the pumps on and off properly. To check, just lift the float until the pump comes on, and lower until it stops. If they are not working, do not leave your boat unattended until they are fixed.

6. Check the security of all hatches and doors.
7. Check to see that all mooring lines are secure and that your boat is properly positioned in the slip so as to not interfere with the dock during tidal changes and storms.
8. Check to see that shore power cord(s) and dock side water hoses have sufficient slack, if left attached. Dock side water supplies should be turned off.

When leaving the boat for any extended period, turn the Engine and House Battery Bank switches OFF. You should also leave the boat connected to shore power with the 120V A.C. battery chargers ON. This will maintain the battery voltage in the proper state, and allow for the operation of the automatic bilge pumps. Turning OFF the Engine and House Battery Bank switches also disables power to the helm, preventing operation of the engines and other helm functions. If you are leaving the boat for a shorter period of time and wish to keep D.C. power supplied to other components, switching the ignition breakers on the D.C. System Panel to the OFF position will prevent the engines from being operated.

This page intentionally left blank.

COMMISSIONING YOUR BOAT

6.1 BEFORE LAUNCHING YOUR BOAT

To activate the warranty your Dealer is required to provide S2 Yachts with the Boat Registration and the Customer Acceptance Form with the signature of the original purchaser within 30 days.

The following items are best accomplished by your Tiara Yachts dealer, or an equally qualified marine service facility. Your engine and IPS drives should be prepared according to the information provided from the engine manufacturer.

Before launching your boat for the first time the following items should be completed:

6.1.1 Bottom Paint

If your boat is equipped with factory applied bottom paint, the second coat should be applied over the first, just before launching. The second coat is left off until this time so as to maximize the anti-fouling properties of the paint. Be sure that the bottom is clean and dry before applying the second coat. Paint has been provided by Tiara for this purpose.

If your boat has not been ordered with factory applied bottom paint, and your boat will be kept in the water for an extended period of time (three weeks or more), we recommend you have the bottom painted. When painting the bottom, we recommend that the paint system you use not involve sanding or abrading the gelcoat surface in any way. Your Tiara 44 Coupe comes with a five year warranty against blistering that may be voided by breaking the gelcoat surface. Whatever the system you choose, we recommend that you follow the paint manufacturer's recommendations for preparation and application, and that you consider having your Tiara Yachts dealer, or other qualified marine service facility, apply the paint. Remember, never sand the gelcoat surface, use a primer type of paint system.

6.1.2 Bilge Areas

The Tiara 44 Coupe does not have a garboard drain plug. Close all seacocks before lifting the boat into the water. Make sure necessary seacocks are open once the boat is ready to go underway.

COMMISSIONING YOUR BOAT

6.1.3 Electrical Systems

Check to see that the batteries are fully charged. If not, the batteries may be charged by connecting to shore power (see Section 5.1.1) and running the 120V A.C. battery charger (see Chapter 4, Electrical Systems).

Check the electrolyte in each battery cell, making sure that they are filled to the specification recommended in section 4.2.2 in Chapter 4.

6.1.4 Installing the Propellers

Volvo Engine Option

To install the propellers follow the procedure outlined by Volvo® in the Volvo® Operator's Manual.

Cummins Engine Option

To install the propellers (see **Figure 6-1**), the following procedure should be followed:

1. Remove adhesive tape, jam nuts and cotter pin from the prop end of the shaft.
2. Remove key by installing a 10-24 or 8-32 machine screw in the greased threaded hole in the key. Use the screw to pull the key out of the keyway.
3. Clean the shaft end, especially the tapered surfaces to remove all foreign material.
4. Clean the internal taper of the propeller hub. Check for burrs or machining imperfections. Deburr and correct any imperfections.
5. If lapping propellers is part of your normal propeller installation procedure, perform this operation at this time.
6. With key removed, install propeller on shaft. By hand, push prop onto shaft until seated on taper. With a fine point magic marker such as a Sharpie®, mark the location of the forward end of the prop hub on the shaft.
7. Remove propeller.

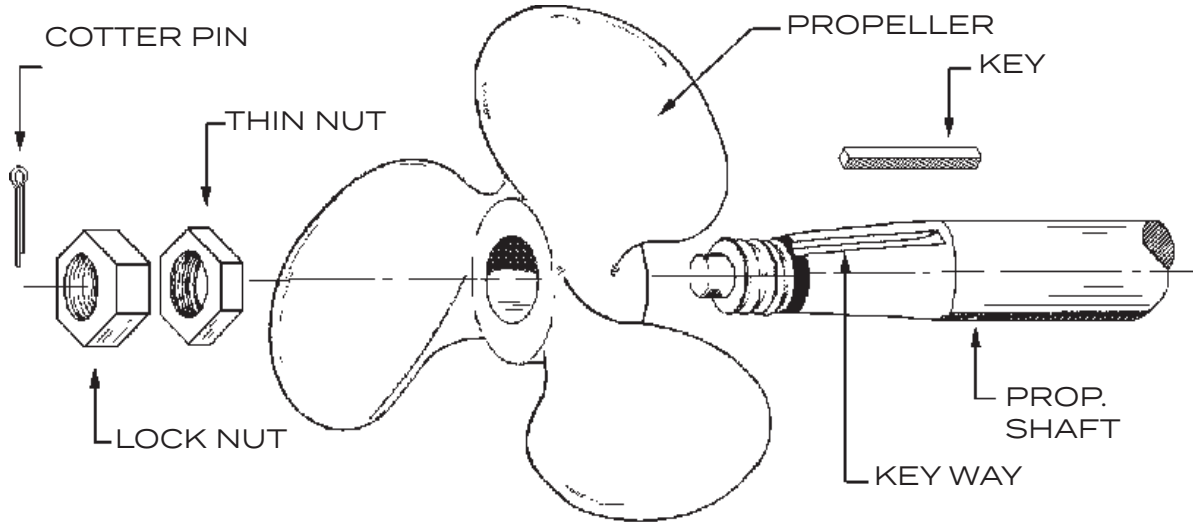


Figure 6-1: Propeller Installation on Shaft.

8. Install key into shaft keyway. Key fit should be a light press fit. Use of a nylon or brass hammer may be needed. Gently tap key into the keyway until key is seated. Ensure the key bottoms out in the flat section of the keyway away from the spooned radius at the end of the keyway.



CAUTION

Do not install the propeller with a poorly fitted key in the keyway. A poorly fitting key may cause vibration underway, unexpected propeller shaft stress, and possible shaft failure.



CAUTION

Do not allow the key to slide forward in the shaft keyway and ride up on the radius at the forward end of the shaft keyway. Failure to prevent this may cause unacceptable shaft stresses and possible shaft and/or propeller failure.

COMMISSIONING YOUR BOAT

9. Reinstall propeller. Push prop on shaft until it seats on taper. Look at the front of the propeller hub. The front edge of the hub should be located at the mark on the shaft made in step 6.
10. If the front edge of the hub is at mark from step 6 go to step 14.
11. If the front edge of the hub is beyond (covering) mark, go to step 2 and repeat the procedure.
12. If the front edge of the hub is not to the mark or behind the mark, double check steps 2, 3, 4, 5, 7, and 8 and repeat if necessary. If this is the second time you have tried these steps, go to step 13.
13. Determine cause of problem:
 - a. Make sure key is completely seated in flat section of keyway.
 - b. Make sure no debris or foreign material is between key, shaft keyway and propeller hub keyway.
 - c. Measure keyway height, shaft keyway depth, and prop hub keyway depth. The prop shaft keyway depth plus the prop hub keyway depth should be 0.010" to 0.015" greater than the keyway height. If it is not, report findings to your Tiara dealer for further assistance.
14. Install the shortest brass prop jam nut and tighten to propeller. Care should be taken to ensure that torque is being applied to tighten prop shaft and not to bend shaft and deflect boat bottom. If torque applied causes the boat bottom to deflect or shaft to bend, the shaft may become slightly out of specified straight-line resulting in drivetrain vibration at some speeds.
15. Install second thicker brass jam nut. The same care should be taken as in step 14 when tightening this jam nut.
16. Finally, install the cotter pin in the hole provided at the end of the prop shaft. It is necessary to bend only one of the legs of the pin to secure it in place.

Repeat for the other propeller.

Be sure that the propellers are installed on the correct shaft. If they are on the wrong shaft, the boat will move in reverse when shifted into forward.

6.1 LIFTING YOUR BOAT

Now that your boat is ready to launch, it is necessary to lift it into the water with a marine hoist or travel lift. This should only be done by your Tiara Yachts dealer or a qualified marine service facility and personnel.

Lifting your boat is accomplished with the use of slings. Sling Locations are indicated by sling labels on the hull side: port, starboard, forward and aft. The slings should be held at least the same beam as the boat with the hoist or spreader bars. Pads should be placed at the chine corners to ease the pressure while lifting.

6.1 AFTER LAUNCHING YOUR BOAT

Check the bilge area and all thru-hulls, seacocks, IPS rings, to insure there are no leaks.

Open all seacocks and make certain that the hoses and fittings are not leaking. Turn ON the bilge pumps and check that they are operational.

6.1.1 Fresh Water System



CAUTION

Failure to follow the proper lifting procedures while lifting your boat may result in structural damage to the hull and deck or underwater gear.

Prepare the fresh water system for operation. To prepare the system follow this procedure:

1. Open all faucets (hot & cold), set single lever action faucets to the warm position.

Note: If antifreeze was not used, skip to step 7.

2. Turn ON the fresh water pump breaker, located on the D.C. System Panel, located in the cabin. The pump is self priming.

COMMISSIONING YOUR BOAT

3. When anti freeze flow stops, turn the pump OFF. Do not close faucets at this time.
4. Fill fresh water tank with clean fresh water. The fill fittings for the water tank is on the port sidedeck, labeled WATER. The tank should be filled until water runs out of the vent on the hull side, just below the fill.
5. Turn the pump ON and empty the water tank. When the water tank is empty turn the pump OFF.
6. Repeat steps 4 thru 5 until system is clean.
7. Final fill: Fill the fresh water tank (as indicated in step 4). Open the water heater valves on the water heater to the use position. The water heater is located on the starboard side of the engine room, (see **Figures 6-2 & 6-3**). Turn the fresh water pumps ON (as indicated in step 2).
8. When a smooth flow of water is observed from all faucets, close faucets. The pump will shut off as the system pressure increases and any air should now be purged from the system.
9. The fresh water system is now commissioned.



Figure 6-2: Water Heater Valves Closed.



Figure 6-3: Water Heater Valves Open.

6.1.2 Electrical Systems

Hook the shore power cord up to a source of dock side power and test all A.C. powered systems and circuits. Test all D.C. systems and circuits. Report all problems and questions to your Tiara Yachts dealer at once.

Check the generator fluids. Start your generator and test all A.C. systems connected to the generator. Follow any start-up procedures recommended by the generator manufacturer in their owner's manual.

6.1.3 Engines, Transmissions and IPS Drive Units

Volvo Engine Option

Check the engines and IPS drives for proper oil and coolant fluid levels. Start the engines and check to see that they are operating properly. Consult the engine manufacturer's owner's manual for fluid level information, start-up and break-in procedures. See Section 5.1.5 for engine starting procedures. Consult with your dealer to understand Engine and IPS drive unit commissioning.

Cummins Engine Option

The alignment between the transmission flange and propeller shaft flange must be checked before leaving the dock for the first time (see **Figure 6-4**). While this alignment is set before the boat leaves the factory, the boat may settle after shipment and then again when being put in the water. This must be checked and adjusted, if necessary, by your **TIARA YACHTS** dealer or a qualified marine service facility. The boat must be in the water for at least 24 hours before checking the alignment.

The alignment should also be checked again at 25 hours, whenever the boat has been out of the water for an extended period, or at least once a year. If it is not within tolerances indicated in Figure 6-4, you must have it adjusted.



WARNING

TROUBLE SHOOTING AND REPAIRING THE ELECTRICAL SYSTEMS AND CIRCUITS ON YOUR BOAT SHOULD ONLY BE DONE BY QUALIFIED MARINE ELECTRICAL REPAIR PERSONNEL. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE, FIRES IN BOAT WIRING, SEVERE ELECTRICAL SHOCK AND DEATH.

COMMISSIONING YOUR BOAT

Check the engines and transmissions for proper oil and coolant fluid levels. Start the engines and check to see that they are operating properly. Check your engine manufacturer's owner's manual for any start-up and break-in procedures. See Section 5.1.5 for engine starting procedures.

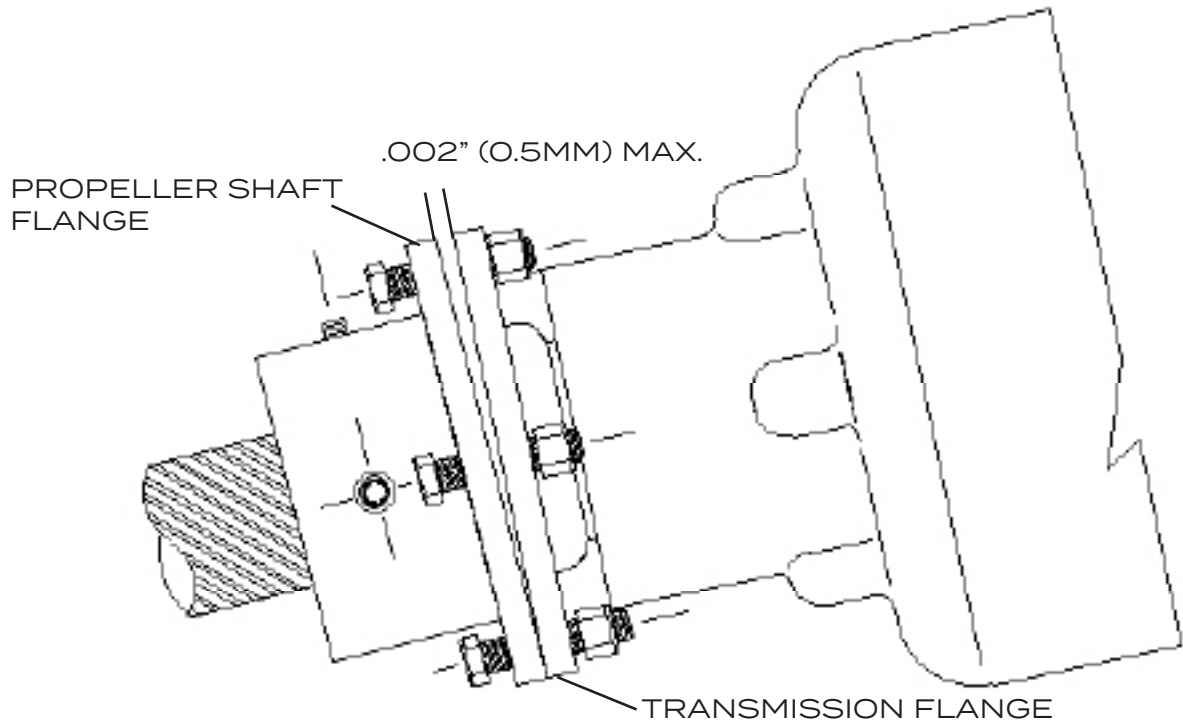


Figure 6-4: Transmission and Propeller Shaft Flange Alignment.

6.1.4 Interior Equipment

Operate the head systems, per instructions provided by the head manufacturer, to be certain that the head system is operating properly.

6.1.5 Exterior Equipment

Set up any canvas and vinyl enclosures to be certain that they fit properly. Clean the entire boat and wax all smooth surfaces (hull and deck). Hull sides are best done prior to launch.

Please refer to Chapter 7, Section 7.4 for maintenance of the gel coat and Imron® surfaces.

NOTICE

Do not use abrasive cleaners on smooth fiberglass surfaces. They will dull the surface and allow dirt to penetrate the surface.

This page intentionally left blank.

Chapter 7

ROUTINE MAINTENANCE

The various systems and products that make up your Tiara 44 Coupe will require routine maintenance from time to time, and many will require scheduled maintenance. For information about maintaining the items purchased by the factory and included in your boat, refer to the various products' owner's manuals, and Appendix C of this manual.

7.1 FUEL SYSTEM

The fuel system in your Tiara 44 Coupe has one aluminum fuel tank.

The fuel tank fills are located near the cockpit steps on the port and starboard gunnel. All fuel fills are labeled DIESEL. Vents are located below the fuel fills in the hull.

Fuel hoses need to be inspected seasonally to assure that the clamps that attach the hoses to the tanks, and fill and vent fittings, are tight, and that the hoses are in good condition.

The fuel filters/water separators are located on the forward engine room bulkhead. The filter elements should be changed every 500 hours, every other oil change, annually or if a power loss is noticed, whichever comes first.

To change the filter elements, follow this procedure:

1. Turn OFF the fuel valves for each tank (forward engine room bulkhead).
2. Remove the lid of the fuel filter element.



WARNING

FUEL IS EXTREMELY FLAMMABLE. ANY PROBLEMS WITH THE FUEL SYSTEM IN YOUR BOAT MUST BE CORRECTED IMMEDIATELY. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

ROUTINE MAINTENANCE

3. Remove the element by holding the molded handle and slowly pull upward with a twisting motion.
4. Clean the canister and install a new filter element.
5. Replace the lid gasket with the new one that is supplied with the new element.
6. Apply a coating of clean fuel to this seal prior to reassembly.
7. Fill the unit with clean fuel, then replace the lid.
8. Turn fuel valves ON.
9. Snugly tighten the T-handle BY HAND ONLY.
10. Start the engine and check for leaks. Additionally, after shutting the engine off check for leaks again.
11. Correct any leaks with the engine OFF.

NOTE: It is suggested than extra filter elements be carried in your vessel as one tankful of excessively contaminated fuel can require multiple element changes.

For the generator there is a separate fuel filter that services it alone. Located on the port side, forward engine room bulkhead, see **Figure 7-1**. The generator fuel filter element should be changed every 400 hours or at every oil change.

To change the generator fuel filter element follow these instructions:

1. Turn OFF the generator fuel valves in the engine room. Refer to Figure 5-2.

Unscrew and remove the drain plug on the bottom of the generator fuel filter unit.

2. Remove the element with bowl connected from the Head/Mounting Bracket.
3. Remove the bowl and discard filter properly.
4. Clean the bowl and the bowl O-Ring gland.



Figure 7-1: Generator fuel filter, located on the forward port engine room bulkhead.

5. Lubricate the O-Ring with clean motor oil and place it in the bowl gland.
6. Spin the bowl onto the new element. CAUTION: Do not overtighten.
7. Lubricate the element gasket with clean motor oil
8. Prime the fuel filter system: Fill Bowl/Element Assembly with clean fuel.
9. Spin Bowl/Element Assembly onto Head. Tighten by hand 1/2 to 3/4 turns after element gasket contacts head base.
10. Turn the fuel valves ON.
11. Start the generator and check for leaks.
12. Correct any leaks with the generator OFF.

7.2 FRESH WATER SYSTEM

The fresh water system requires very little maintenance. The biggest problem many boat owners have is that the water in the water tank (located under the floor, forward) is not used up and replenished often enough, and becomes stale. To combat this problem, you can drain the tank periodically and refill, or add a water conditioner to the tank periodically. Water conditioners are available at your Tiara Yachts dealer and marine or recreational vehicle supply stores.

The main pieces of equipment in the fresh water system that may require maintenance are the water heater, in-line water filters, and the fresh water pump. Refer to the owner's manuals supplied by the equipment manufacturers for specifics.

It may be necessary, on an annual basis, to clean the fresh water system strainers. The strainers are located near the pumps in the starboard engine room (see **Figure 7-2**).

To clean the strainer follow these steps:

1. Switch the Fresh Water Pump breakers to OFF (D.C. System Panel).
2. Switch the Water Heater breaker to OFF (A.C. System Panel).
3. Depressurize the Fresh Water System by opening the galley faucet.
4. Locate the strainer sight glasses (see **Figure 7-2**).
5. Have towels ready and placed under the sight glass.
6. Carefully unscrew the sight glass.
7. Remove the strainer screen.
8. Clean with mild soap and fresh water. Rinse with fresh water.

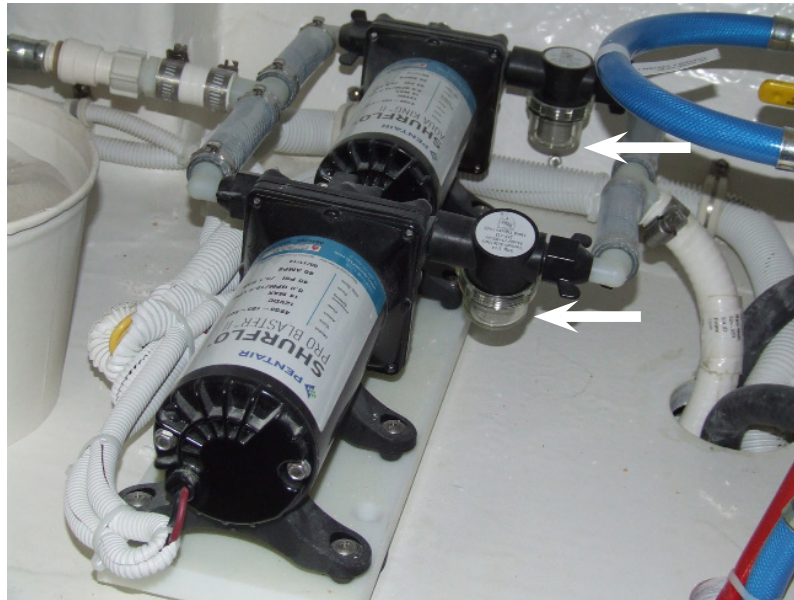


Figure 7-2: Fresh water filters and pumps. Filters shown with arrows. Located in the starboard engine room.

9. Replace the strainer screen and screw the sight glass back into place.
10. With faucets still open switch the Fresh Water breakers to ON.
11. After observing a steady flow of water through the faucet, close the faucet.
12. Switch the Water Heater breaker back to ON.

In the engine room above the water manifold on starboard there is an in-line fresh water filter that services the galley water. The in-line filter should be changed annually.

7.3 ELECTRICAL SYSTEM

7.3.1 The 12V D.C. System

Your boat comes equipped standard with several **wet flooded cell batteries**. Twice a season, the batteries need to be cleaned. To do this:

1. Turn the Battery switches OFF on the D.C. System Panel and disconnect the battery(s).
2. Use a cloth and a solution of baking soda and water to wipe the tops.
3. Clean all battery terminals.
4. Reconnect all battery cables to the terminals and tighten.

Please refer to the owner's manual supplied by the battery manufacturer for any additional maintenance instructions.

The batteries in your boat are kept charged when the engines are running, by the engine's alternators. If equipment in the 12V D.C. system is used without the engines running, the batteries will lose their charge. The charge may be maintained with the 120V A.C. battery charger while connected to shore power, or running the optional generator (see Chapter 4, Electrical Systems). If you have trouble getting them charged, or to hold a charge after charging, contact your Tiara Yachts dealer or a marine electrical service to investigate the cause.

Wet flooded cell batteries require periodic maintenance.

1. In warmer climates, the electrolyte should be checked on a monthly basis. In cooler climates, the electrolyte can be monitored less frequently.
2. The battery cells are covered with a round screw-in top. Unscrew each top to inspect each cell.
3. Each cell of the wet flooded cell, deep cycle battery has a lead plate. If a maintenance inspection finds low electrolyte, in which the lead plate is visible, it is necessary to fill each low cell with **distilled water** so that the lead plate is no longer visible. The cells should not be topped off. If the cells are topped off its possible that during charging the electrolyte could boil over and cause damage to the

battery or surrounding equipment, therefore, it is necessary to only fill the cells just over the lead plates, leaving an air space between the distilled water electrolyte and the cap.

4. If upon inspection the lead plate is not visible, the cell is filled to specification.

Every time you use your boat, it is a good idea to check all the D.C. equipment on your boat. If you find something that does not work properly, contact your Tiara Yachts dealer or a qualified marine electrical service to repair.

7.3.2 The 120V/240V A.C. System

The terminals on each end of the shore cord should be checked for corrosion every time it is used, before using. The outside should also be checked for cracks and chafing of the insulation each time it is used.

The generator requires regular maintenance and you should refer to the owner's manual supplied by the generator manufacturer for specifics.

Every time you use your boat, it is a good idea to check all the A.C. equipment on your boat. If you find something that does not work properly, contact your Tiara Yachts dealer or a qualified marine electrical service to repair.

7.4 EXTERIOR EQUIPMENT AND FIBERGLASS

The exterior should be maintained after each use of the boat as follows:

1. Rinse the boat with clean fresh water.
2. Wash all exterior surfaces and hardware with a sponge, or soft bristle brush, and a solution of fresh water and mild detergent. Nonskid areas may be scrubbed with a stiff bristle brush.
3. Rinse the boat with fresh water.

At least once a year, apply a high grade automotive or marine wax to the smooth fiberglass surfaces. Follow the directions supplied with the wax.

ROUTINE MAINTENANCE

7.4.1 Gel Coat Finish Maintenance

Depending on the build of your boat the hull could be gel coat or Imron® paint, if you are not sure contact your dealer or Tiara Yachts. The deck is a gel coat surface. The following are guidelines for gel coat care:

After a period of time, when your boat has been exposed to the sunlight, the gel coat surface may fade, dull, or chalk. This will require buffing to bring back the original luster. When deciding to buff follow this guideline:

1. Confirm that there is noticeable chalking on the gel coat.
2. Use a medium grit buffing compound.

NOTE!: Buffing experience and use of an industrial grade buffer is strongly recommended.

3. Use a buffer with a clean pad.
4. Follow the buffing compound manufacturer's instructions.

After buffing, apply a coat of wax to all smooth surfaces; follow the instructions given by the manufacturer of the wax. The hull sides and transom should receive the same cleaning as the other fiberglass surfaces. Refer to your boats literature packet for a pamphlet that further elaborates on the care of fiberglass.

If the fiberglass or gelcoat surface should need repair, contact your Tiara Yachts dealer or another qualified marine service facility.

7.4.2 Imron® Marine Finish Maintenance Guide

Depending on the build of your boat the hull could be gel coat or Imron® paint, if you are not sure contact your dealer or Tiara Yachts. The deck is a gel coat surface. The following are guidelines to maintain your Imron® painted hull finish as directed by the paint manufacturer:

How to Maintain, Care for, and Repair Your Imron® Marine Finish

Imron® polyurethane enamels provide superior protection against elements your boat will face throughout its long life. To make sure you maximize the benefits of Imron®, use the following guide to take care of your finish.

ROUTINE MAINTENANCE

- Wash your boat often, especially when exposed to dusty, acidic or alkaline environments.
- When washing your boat, use non-abrasive, neutral pH (non acidic or alkaline) detergent. Do not use solvent-based solutions for washing large areas.
- During the first 30 days when the finish is still fresh, clean the boat with water rinse only. Pressure washers used when paint is still fresh could affect the finish. Avoid high pressure too close to areas that have chips or cracks visible or fresh paint.
- Do not wash the boat using extremely hot water or while the surface is hot.
- Avoid washing with stiff bristles. Soft cloth and felt brushes are recommended.
- Do not allow spilled gasoline, oil, anti-freeze, hydraulic fluid, or windshield washer fluid to stand on the paint – remove immediately by rinsing with water. With some oils and hydraulic fluids, allowable exposure time before staining occurs is significantly shortened if fluid or paint surface is hot.
- Do not wax for the first 60 days.
- Have any paint nicks or scratches repaired as soon as they occur to protect against future degradation.

NOTICE

Do not use abrasive cleaners on smooth fiberglass surfaces. They will dull the surface and allow dirt to penetrate the surface and obstruct visibility.

ROUTINE MAINTENANCE

- Should your boat's finish become damaged, have it repaired as soon as possible. Contact a reputable repair shop near you and specify the DuPont Imron® quality used for the original finish. This will assure you the best possible color match and the same durability and appearance as when your boat was new or newly refinished.

7.4.3 Plexiglass

The hatches and portlights in your boat are made of plexiglass and must only be cleaned with mild soap and water, or plexiglass cleaner.



CAUTION

Keep all strong solvents such as acetone, and strong window cleaners containing Ammonia (Windex®), away from plexiglass surfaces. They can cloud and cause crazing in the plexiglass surface.

7.4.4 Hardware

All exterior chrome hardware may be cleaned with any available chrome cleaner. If the exterior stainless hardware begins to show signs of “bleeding”, scrubbing with a mild, nonabrasive cleaner, such as Bon Ami®, will remove any tarnish. Follow with a coat of wax, as you would the fiberglass surfaces.

NOTE: Many parts of your boat, including the cleats and bow rail, have components of or are comprised of stainless steel. All metals in the marine environment, including stainless steel, require proper maintenance to look the best and remain functional.

To inhibit corrosive effects on stainless steel maintain it by:

- Washing it with a mild soap and fresh water followed by a thorough rinsing with fresh water; dry with a chamois cloth.
- It is also recommended that stainless steel parts be waxed every two to three months. A nonabrasive polish such as premium auto wax works well.

- For areas that can not be waxed, a rust inhibitor spray is recommended to prevent corrosion.

7.4.5 Canvas and Upholstery

The upholstery on the exterior of your boat, such as the helm and companion seats, and cockpit bolsters, should also be cleaned with a solution of mild detergent and water, or vinyl shampoo, and rinsed well with clean fresh water. An application of vinyl conditioner may also help restore them to their original condition.

- The canvas and enclosures on your boat should be cleaned with a mild soap and clean fresh water. The underside should be brushed frequently, as this will help prevent the combination of dirt and moisture, from condensation, from staining the fabric.
- Wax the zippers occasionally to keep them working well.
- One of the best ways to keep upholstery fabrics looking good and to delay the need for deep or vigorous cleaning is to hose exterior fabrics off on a monthly basis with clean fresh water.
- For interior fabrics brushing off dirt before it becomes embedded in the fabrics, wiping up spills as soon as they occur, or spot cleaning soon after stains occur is best.
- Prevent dirt from becoming deeply embedded in the fabric and eliminate the need for more frequent vigorous cleaning. In most environments, a thorough cleaning will be needed every two to three years.
- For cleaning tactics consult the literature or website of the manufacturer of the upholstery installation that you are concerned with. All upholstery enclosures should be stowed in the bag supplied or hung neatly in a dry location. Do not allow upholstery to come in contact with dirt or wet environments for prolonged periods of time during storage or while in use.

ROUTINE MAINTENANCE

7.4.6 Hull Bottom

The portion of the hull that is below the water line should be kept clean and free of marine growth with the use of an antifouling paint. Refer to the paint manufacturer for recommended periodic cleaning procedures. Typically, the bottom will need to be repainted once a year and then cleaned a few times during the year. Contact your local Yachts dealer for recommended local cleaning procedures and services. Failure to keep the bottom clean will result in loss of boat performance and fuel economy.

7.4.7 Underwater Gear

The IPS drives must be painted with some form of growth inhibiting (antifouling) paint. Contact your Tiara Dealer Service Department for recommendations.

Sacrificial anodes to prevent galvanic corrosion of underwater hardware are installed on the trim tabs, and on the transom of your boat. With the Volvo® engine option, they are also installed in the IPS drive exhaust tunnels (Please consult the Volvo® Operators Manual). With the Cummins engine option, anodes are attached to the propeller shafts. The anodes should be replaced when they become depleted by 50% or more. Regular inspection is recommended to monitor their condition. See your dealer or local qualified marine service facility for replacement.

NOTE: Bottom paint must not be applied to the sacrificial anodes.

Underwater lights are installed in the transom. The lights are serviceable and accessed in the aft lazarette.

7.4.8 Optional Washdowns

It is important to keep the “o” ring on the insert end of the washdown hoses lubricated. To lubricate the washdown quick disconnects apply a liquid mild soap such as a liquid boat wash to the insert on the hose end. For a long term lubrication solution apply petroleum jelly such as Vaseline®. Depending on the location and usage, a monthly application may be necessary. Apply a light coat to the hose connection and insert it into the washdown port.

7.4.9 Sunroof

The sunroof track should be periodically cleaned and lubricated.

1. Open the sunroof completely.
2. Use a clean dry cloth, wipe down the track.
3. Apply dry silicone lubricant to the top of track surface.
4. Cycle the sunroof open and closed a few times to set in the lubricant.

7.5 INTERIOR EQUIPMENT AND DECOR

The interior of your boat should be maintained much like the inside of your home. The fabrics that the cushions are made of should be treated much like the fabrics in home upholstery. The major difference is that the interior may be subjected to moisture not found at home. Periodically, put the cushions, blankets, sheets, etc. out in the sun to allow them to dry thoroughly and air out well. If they get wet with salt water be sure to rinse them with fresh water to remove the salt crystals and then dry thoroughly. Salt crystals retain moisture and will damage the material.

The carpet should be vacuumed periodically and cleaned just the same as a home carpet.

The teak trim was coated with polyurethane varnish before leaving the factory and should only need occasional dusting with furniture polish.

The quartz surfaces, including the exterior counter on the transom, should be cleaned with a mild soap and water, or a nonabrasive cleaner, such as Bon Ami®, for difficult stains.

Plexiglass surfaces should be cleaned as in Section 7.4.3.

7.6 ENGINE ROOM

The engine room should be kept clean and free of any debris. A clean engine room assures that the engines and generator will receive a clean supply of air while running, and any problems or leaks will be immediately obvious during routine engine fluid checks.

ROUTINE MAINTENANCE

7.6.1 Engines, Transmissions, IPS Units and Generator

As mentioned in Section 5.1, it is important to check your engine, transmission, and generator fluids every time you use the boat, and daily on long trips. If the engines and IPS units are kept clean, leaks and other problems are easier to spot. Oil, coolant, and filter change intervals are outlined in the engine and generator manufacturer's owner's manual. Please read them and follow their recommendations exactly. Have all engine, IPS unit, and generator maintenance performed by your Tiara dealer or other qualified marine service facility.

With the Volvo® engine option, your main engine exhaust system is comprised of an exhaust riser at the engine turbo charger outlet, two raw water inlet hoses that add raw water to the exhaust gas at the riser, and an exhaust hose that carries the wet exhaust to the IPS drive unit. Periodically check the hose clamps for proper tightness. Refer to your engine manufacturers owner's manual for further detail regarding the exhaust system.

With the Cummins engine option, the main engine exhaust system is comprised of an exhaust riser at the engine turbo charger outlet, hoses and an elbow connects the riser to a horizontal lift style muffler. A hose connects the muffler to the transom outlet.



WARNING

THIS VESSEL CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.



CAUTION

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States or the waters of the Contiguous Zone if such discharge causes a film or sheen upon or a discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to substantial civil and/or criminal sanctions including fines and imprisonment.

7.6.2 Oil Change System

As a convenience during regular maintenance intervals, an oil change system for the main engines, transmissions, and generator, is installed in the aft centerline engine room. Please read the instructions provided from the system manufacturer for operation.

Note: Be certain to clean up any oil spilled in the bilge during oil changing operations. Failure to do so can allow the bilge pumps to transfer the oil into the surrounding water. Properly dispose of any oil contaminated rags per the local environmental requirements.



CAUTION

Always return the oil change system valves to the closed position after using the system. Failure to do so can result in transfer of oil between engines and/or generator due to crankcase pressures.



CAUTION

Always use the correct amount and type of engine oil recommended by the equipment manufacturer. Failure to do so can result in premature equipment failure, and loss of equipment warranty.

7.6.3 Ventilation System

The engine room ventilation system is comprised of large hull side air inlets, port and starboard.

The engine room intake plenums are designed to remove moisture from the incoming air and drain it overboard. The plenum drains are outboard on both sides just forward of the aft engine room bulkhead. The drains are vertical coming from the bottom of the plenums. Twice a season check the hoses for secure connections. Refer to section 7.9 for drainage maintenance.

ROUTINE MAINTENANCE

7.6.4 Raw Water Intake Strainers

The engine raw water intakes, generator raw water intake, air conditioning raw water intake, and raw water washdown pump intake are equipped with strainers. The strainers should be checked each time you use the boat to assure that no debris has accumulated that may block the flow. If they are clogged and need cleaning, follow this procedure:

1. With the related equipment not operating, close the seacock, at the hull bottom, to stop the flow of water.
2. Remove the top of the filter by unscrewing counterclockwise. A spanner wrench has been provided for this purpose.
3. Lift the strainer out by the handle on the top.
4. Remove any debris from the strainer screen and rinse with clean water. Check to be sure that the O-ring under the top is intact and replace if necessary.
5. Install the strainer, replace the cover, and tighten with the spanner wrench.
6. Open the seacock, start the related equipment, and check the system for leaks.

7.6.5 Raw Water Seacocks

Monthly open and close the raw water seacocks to ensure that they do not become seized. Debris and marine growth can accumulate and hinder the proper operation of the sea cocks. If they are difficult to operate contact your Tiara Yachts dealer and have them serviced. There are raw water seacocks for the engines (2), air conditioner, generator, and raw water wash downs.

7.7 HEAD SYSTEM

The head in your Tiara 44 Coupe comes supplied with operating and maintenance instructions from the manufacturer.

When the waste tank is full, it is necessary to pump it out, see **Figure 7-3**. The waste tank is located below the atrium floor hatch. Pull the hatch handle up and forward to fold the hatch open.

The pump out procedure is as follows:

1. Set a course to a marine facility where a pump out station is located.
2. At the pump out station remove the cap from the **waste** deck fitting, located on the starboard foredeck, with a spanner wrench. Turn counterclockwise until loose and remove.
3. Insert the pump out hose into the opening.
4. Remove all waste from the holding tank.
5. Fill the tank with clean water and pump out again.
6. Replace the cap and tighten.

Note: The optional overboard discharge seacock is wired to the closed position at the factory.

To pump waste overboard follow this procedure.



Figure 7-3: The Dometic® Tank Monitor Panel is located in the port side, galley, upper cabinet. Lights indicate the status of the waste tank and fresh water tank quantities. The graphic guide on the left of the panel indicates full or empty. A full center symbol (head) indicates a full waste tank and it should be promptly pumped out.

ROUTINE MAINTENANCE

1. Open the overboard discharge seacock by pulling the handle to the vertical position. The seacock is located on the port side, outboard of the tank (see **Figure 7-4**).
2. Turn ON the Waste Pumpout breaker on the D.C. System Panel.
3. When finished reverse the entire procedure

There is a clean air filter that keeps holding tank vent air clean. This filter should be replaced annually for most effective odor control, see **Figure 7-4**.

7.8 DRAINAGE SYSTEM

NOTICE

It is illegal to discharge raw sewage from a vessel within a three mile limit of the territorial waters of the United States of America. It is illegal to discharge raw sewage from a vessel within the navigable waters and rivers of the United States including the Great Lakes. When in international waters it is the responsibility of the vessel owner/operator to follow local laws and restrictions.

The drainage system consists of the forward, mid, and aft bilge pumps, the shower sump, and other drains.

The bilge pumps and shower sump areas need to be checked, before leaving the boat, for debris that might clog the pump. The float switches must also be checked to see that they are turning the pumps on and off properly. The procedure for checking float switch operation depends on the type of float switch. Consult the switch manufacturers instructions for proper testing procedures. If the bilge pumps are not working, do not leave your boat unattended until they are fixed.

The other drains/hoses should be checked every other month to be sure that they are draining properly. If clogged, pressurized water should be sufficient to clear them.

Gray water macerator drain boxes collect drainage from the shower drains, sink drains, and air conditioning condensation. They filter some debris and discharge the solution overboard. Periodically these boxes should be inspected and cleared of any clogging debris, see **Figure 7-5**.

ROUTINE MAINTENANCE



Figure 7-4: Top of the waste tank (top picture). A vent filter is located with the black arrow. Replace the vent filter annually.

The overboard discharge seacock is located outboard of the port side waste tank, as highlighted with the circle (bottom left) and shown close up (bottom right).



7.9 AIR CONDITIONER FILTERS

The air conditioning units have a thin plastic mesh filter on the air intake side. The filter(s) should be removed and cleaned periodically. Carefully remove the filter by sliding it upwards taking care not to bend the aluminum grill behind the filter, clean, and replace.

AC units are located:

- A 6K BTU unit located forward in the master stateroom berth.

ROUTINE MAINTENANCE

Figure 7-5: Gray water sump drain box with macerator. One located below aft stateroom step tread. One located below the generator in the engine room.



- A 6K unit behind a removable outboard panel inside the port side hanging locker in the aft stateroom.
- Below the helm seat there is one 12k unit.
- A 12K unit under the port L-Lounge.

Chapter 8

STORING AND WINTERIZING YOUR BOAT

If you live in a climate where you will not be able to use the boat for several months a year, there are a number of things that must be done to prevent damage to your boat from the cold and from lack of usage. These items assume that your boat will be hauled out of the water during this storage time. To lift the boat, follow the instructions in Section 6.2.

8.1 SUPPORTING THE BOAT DURING STORAGE

The best way to support your boat when it is out of the water is on a cradle, made specifically for this purpose. The cradle must be well supported and placed on a level surface. It must be placed in the proper fore and aft position in order to properly support the hull. When the cradle is in the correct location, the bunks will uniformly touch the bottom of the hull. Custom made cradles are available from Tiara Yachts, through any Tiara Yachts dealership. The cradles come with padding on the bunks to protect the bottom of the boat.

8.1.1 Storage

If the boat is to be stored indoors, be sure that the building has enough ventilation. It is important that the boat be well ventilated during storage.

If the boat is to be stored outdoors, a proper cover is necessary to protect the boat from the elements. Construct a frame over the top of the boat to support a canvas or plastic cover. The frame should be built so as to be slightly wider than the outside of the boat. The cover should be fastened securely, as a loose cover can flap and damage the gelcoat surface.

8.2 FUEL SYSTEM

The fuel tank should be filled to near capacity before storage in order to minimize fuel deterioration. The addition of an appropriate fuel conditioner will also prolong the fuel life. Fuel remaining in the fuel systems of the engines and generator should be treated per the engine or generator manufacturer's recommendations.

8.3 FRESH WATER SYSTEM

To prepare your boat's fresh water system for winterizing, the system must be drained. The procedure for draining is:

STORING & WINTERIZING

1. Make sure the water heater breaker on the A.C. System Panel is in the OFF position.
2. Open all fresh water faucets. Leave the faucets open.
3. Turn ON the fresh water pumps to drain the water tank, the switches are on the D.C. System Panel.
4. Turn OFF the fresh water pumps.
5. Remove the hoses from the input and output sides of the fresh water pumps, and let the tank and hoses drain into the bilge. The fresh water pumps are located forward and below near the water heater.



WARNING

HOT WATER WILL CAUSE BURNS. DO NOT FOLLOW THESE PROCEDURES WITH HOT WATER IN THE SYSTEM.



CAUTION

Do not operate the water heater without water in the fresh water system. Failure to do so could damage the water heater.

6. Turn ON the fresh water pumps for a few seconds to remove the water from the bottom of the pump and then turn OFF the fresh water pumps.
7. Drain the water from the water heater by opening the valve on the bottom of the water heater. Allow the water drain into the bilge. Close the valve when the water tank is empty.

The system must then be flushed with potable water antifreeze. To flush the system:

1. Close all fresh water system faucets.

2. Reconnect the hoses to the water pumps.
3. Pour five gallons of potable water systems antifreeze into the water tank via the deck fill.
4. Turn the water heater valves to bypass position. See Figure 6-3 in Chapter 6.
5. Turn ON the fresh water pump breakers on the D.C. System Panel.
6. Open all faucets in the system, hot and cold, one at a time, until the antifreeze begins to come out, and then close. Leave the very last faucet visited open until air blows out of the faucet, making sure that the antifreeze is present first, and then close it.
7. Turn OFF the fresh water pumps.

To protect the shower sump from freezing:

1. Pour potable water antifreeze into the shower drain.
2. Monitor the forward starboard thru-hull outboard of the hanging guest berth hanging locker.
3. When the antifreeze is forced out of the thru hull via the shower sump the system is protected.

8.4 ELECTRICAL SYSTEM

8.4.1 12V D.C. System

The only major component of your D.C. system that needs preparation for winter storage are the batteries. To prepare the batteries for storage:

1. Make sure the batteries are fully charged.
2. Switch the HOUSE BATTERY, PORT BATTERY, and STBD BATTERY switches OFF on the D.C. System Panel.
3. Disconnect the batteries.

STORING & WINTERIZING

4. Clean the battery terminals and case. Apply a coat of petroleum jelly to the terminals, or spray liberally with Boeshield T9.
5. Make sure that all battery electrolyte cells are filled to specification. See section 7.3.1 for filling specifications.
6. Leave the batteries disconnected during the storage period. If left connected they could discharge over time causing damage to the batteries. Optimally the batteries should be charged periodically during storage if left connected. Please refer to the literature supplied by the battery manufacturer for any additional winterizing instructions.

You should check the information provided with any installed electronics to see if they may be damaged by the lowest temperatures that your boat may experience. If so, remove and store in a clean, dry area that will protect them from damaging temperatures.

8.4.2 120V A.C. System

The installed A.C. electrical system in your Tiara 44 Coupe does not require any winterizing procedure, with the exception of the generator. For generator winterization, see Section 8.6.1.

8.5 EXTERIOR EQUIPMENT AND FIBERGLASS

The entire exterior of your boat should be completely washed and dried before storage for the winter. The fiberglass surfaces, bottom paint, zincs, etc. should wait for the spring for maintenance and/or replacement.

All exterior hardware should be protected with a heavy coat of boat wax or petroleum jelly.

8.6 INTERIOR EQUIPMENT

The interior should be carefully cleaned before storage. All carpeting should be vacuumed, all upholstery cleaned, and the interiors of all cabinets should be emptied and wiped clean. All bilge areas should also be wiped clean.

Whether stored inside or outside, open all interior drawers, lockers, and cabinets to allow them to properly ventilate and stay fresh. If possible, remove all upholstery, carpeting, and cushions and store them in a quiet dry environment.

8.6.1 Air Conditioning

Your Tiara 44 Coupe has the following standard self-contained air conditioning units:

- A 6K BTU unit located forward in the master stateroom berth.
- A 6K unit port outboard and aft near the bulkhead. There is a removable panel to access the A/C unit.
- Below the helm seat there is one 12k unit.
- A 12K unit under the port L-Lounge.
- The A/C raw water pump, raw water seacock and intake strainer are located on centerline forward in the engine room.

To winterize the air conditioning units:

1. After hauling the boat, open the raw water seacock, unscrew the drain from the strainer site glass (see **Figure 8-1**), disconnect the raw water pump intake. Remove all water from the hoses, seacock and strainer.

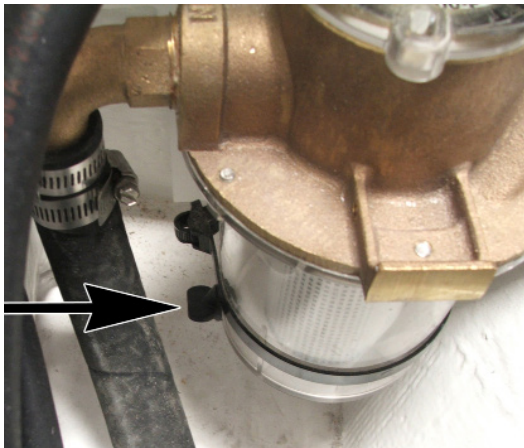


Figure 8-1: Raw water strainer site glass drain plug.

2. Disconnect the outlet hose from the raw water pump and drain all water from the air conditioning units.

3. Run the pump for a few seconds (D.C. System Panel) to be sure there is no water left in it. Reconnect the hoses to the pump, screw the drain back into the strainer.

4. The system can be filled with an antifreeze mixture. Refer to the air conditioning manufacturer's owner's manual for the recommended procedure.

See Chapter 7 for additional air conditioning maintenance recommendations.

8.6.2 Head System

To winterize the head system follow these steps:

STORING & WINTERIZING

1. Drain the fresh water system. Refer to section 8.2 in this Chapter.
2. Run the toilets without incoming water (this will drain the waste tank outlet hose).
3. Take your boat to a facility with the required pump-out facilities and follow the procedure outlined in Section 7.8 in Chapter 7.



CAUTION

When reconnecting raw water hoses, be certain to tighten clamps well. Leaking fitting on raw water hoses can sink the boat.

4. If desired, flush 1-2 gallons of potable water systems antifreeze into the system.

8.7 ENGINE ROOM AND BILGE AREAS

All the bilge areas, forward under the floor, engine room, and aft under the cockpit, should be wiped clean. The hoses leading from the bilge pumps forward, in the engine room and under the cockpit floor, should be disconnected from the pumps and drained. Any bilge water should then be removed with a sponge and wiped dry.

8.7.1 Engines, Transmissions, IPS Drives and Generator

The engines, transmissions, IPS Drives, and generator should be prepared for storage according to the manufacturer's recommendations. Please refer to the owner's manuals for these items for specific instructions.

8.7.2 Exhaust Systems

The exhaust systems for the engines and generator must have the water drained from their mufflers.

The main engine mufflers should be drained by removing the plug from the aft end of the muffler, allow the water to drain out, and replace the plug.

Follow a similar procedure for the generator muffler (see **Figure 8-2**).

8.7.3 Raw Water Systems

The engine raw water cooling systems must be drained. Open the raw water seacock(s) and remove and clean the strainer(s) for each engine, disconnect the hoses, if necessary, to remove all water. Reconnect all hoses and reassemble the strainer when complete. Consult the engine manufacturer's literature for more information.

The raw water washdown system must also be drained.

To do so:

1. Open the seacock and the washdown faucet, in the cockpit, inside the starboard gunnel storage.



WARNING

BE CERTAIN THAT THE EXHAUST DRAIN PLUGS ARE INSTALLED TIGHTLY. FAILURE TO DO SO WILL ALLOW ENGINE EXHAUST GASES CONTAINING CARBON MONOXIDE AND WATER INTO THE BILGE AREA.



CAUTION

Prior to transporting your vessel by truck and trailer the engine mufflers must be drained to prevent sea water reversion into the engines.

STORING & WINTERIZING

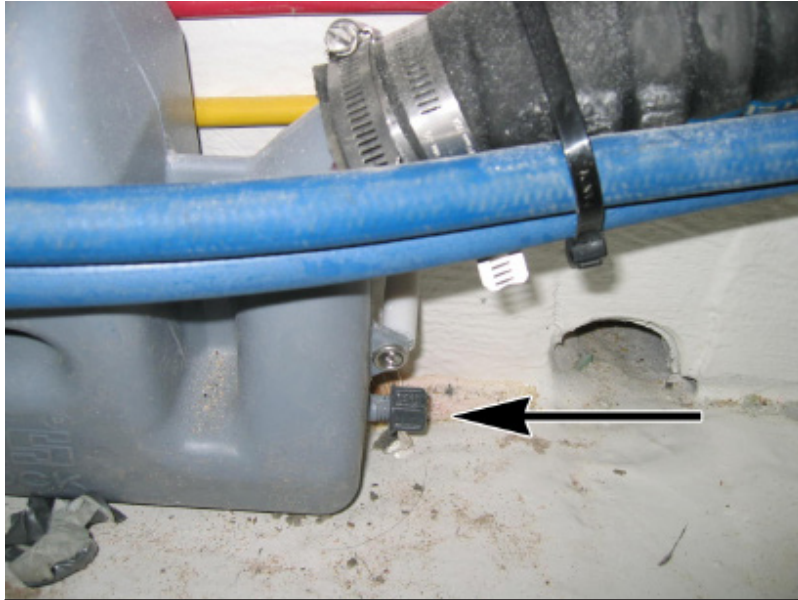


Figure 8-2: Generator muffler plug shown. The generator muffler is located below the port side of the generator.

2. Disconnect the hoses from the intake and outlet sides of the pump and let the water drain out. Use compressed air, if necessary, to remove all the water.
3. Run the pump for a few seconds to remove all water from the pump body.
4. Lubricate the pump impeller per instructions in the pump owner's manual.
5. Reconnect all hoses and tighten the clamps securely.

8.7.4 Steering System

The steering system for the Cummins engine option is located in the lazarette area, underneath the trunk floor hatch.

To prepare it for storage:

1. Use clean water and detergent to wash off the steering arms and linkage. Dry with a clean cloth.
2. Apply a light coat of petroleum jelly to the piston rod.
3. Lubricate the pivot points and upper rudder bearings with a light-weight oil.
4. Inspect the packing glands for wear. If worn, replace with new packing.
5. Coat all components with a light coat of petroleum jelly or other suitable corrosion inhibiting material such as BOESHIELD T-9® or WD-40®.



CAUTION

Be very careful with compressed air. Too much pressure or volume can damage the raw water system.



CAUTION

When reconnecting raw water hoses be certain to tighten clamps well. Leaking fittings on raw water hoses can sink the boat.

STORING & WINTERIZING

This page intentionally left blank.

Appendix A

SPECIFICATIONS

A.1. GENERAL

ENGINE OPTIONS

Twin Volvo® IPS 600 with Glass Cockpit & Joystick Plus® control	435 HP
Twin Cummins® QSB550 Straight Drive with Garmin® Electronics and Joystick Docking System	550 HP

GENERAL SPECIFICATIONS

L.O.A. with Standard Swim Platform	45'6"	13.87 meters
Beam.....	14'11"	4.54 meters
Draft (Fully Loaded)	3'8 3/4"	1.14 meters
Height from Waterline to Top of Std. Hardtop	10'0"	3.05 meters
Height from Waterline to Top of Std. Radar.....	12'0"	3.66 meters
Height from Waterline to Top of Std. Anchor/Nav Lt....	12'8"	3.86 meters
Approximate Dry Weight	30,000 lbs.	13,608 kg
Fuel Capacity	350 U.S. gallons	1,324.89 liters
Water Capacity.....	118 U.S. gallons	446.68 liters
Holding Tank Capacity	35 U.S. gallons	132.49 liters
Sleeping Accommodations.....	4	
Deadrise at Transom.....	18°	

A.2 COMPONENT SPECIFICATIONS

Fill out the following information and leave it in your Tiara Owner’s Manual. This information will be important for you and Tiara Yachts service personnel to know, if and when you may need to call Tiara Yachts for technical assistance or service.

Boat	
Model:	Hull Identification #:
Purchase Date:	Delivery Date:
Ignition Keys:	Registration #:
Engines	
Port Engine	Starboard Engine
Make:	Make:
Model:	Model:
Engine Serial Number:	Engine Serial Number:
Transmission / Pod Serial Number:	Transmission / Pod Serial Number:
Propellers	
Make:	Diameter / Pitch:
# of Blades:	Other:
Generator	
Make:	Model:
Serial #:	kW:
Dealer	Tiara Yachts
Name:	Phone #: (616) 392-7163
Phone #:	Representative:
Sales Associate:	Address: 725 East 40th Street Holland, MI 49423 United States
Service Manager:	
Address:	

Tiara Yachts reserves the right to make changes and improvements in equipment, design and vendor supplied equipment at any time without notification.

Aft: In, near, or toward the stern of a boat.

Aground: A boat stuck on the bottom.

Amidships: In or toward the part of a boat midway between the bow and stern.

Anchor: A specially shaped heavy metal device designed to dig efficiently into the bottom under a body of water and hold a boat in place.

Anchor locker: a locker, usually located in the bow of a boat, used for stowing the anchor line or chain

Anchorage: An area specifically designated by governmental authorities in which boats may anchor.

Ashore: On shore.

Astern: Behind the boat, to move backwards.

Athwartship: At right angles to the center line of the boat.

Barnacles: Small, hard-shelled marine animals which are found in salt water attached to pilings, docks and bottoms of boats.

Beam: The breadth of a boat usually measured at its widest part.

Beamy: boats of greater than normal beam

Bearing: The direction of an object from the boat, either relative to the boat's direction or to compass degrees.

Berth: A bunk or a bed on a boat.

Bilge: The bottom of the boat below the flooring.

Bilge Pump: A pump that removes water that collects in the bilge.

Boarding: Entering or climbing into a boat.

Boarding Ladder: Set of steps temporarily fitted over the side of a boat to assist persons coming aboard.

Boat Hook: Short shaft of wood or metal with a hook fitting at one end shaped to aid in extending one's reach from the side of the boat.

Bow: The front end of a boat's hull.

Bow Line: A line that leads forward from the bow of the boat.

Bow Rail: Knee high rails of solid tubing to aid in preventing people from falling overboard.

Bridge: The area from which a boat is steered and controlled.

Bridge Deck: A deck forward and usually above the cockpit deck.

Broach: When the boat is sideways to the seas and in danger of capsizing; a very dangerous situation that should be avoided.

Bulkhead: Vertical partition or wall separating compartments of a boat.

Cabin: Enclosed superstructure above the main deck level.

Capsize: When a boat lays on its side or turns over.

Chapman's: Chapman Piloting & Seamanship, by Chapman and Jonathon Eaton; published by Hearst.

Chain locker: See anchor locker.

Chock: A deck fitting, usually of metal, with inward curving arms through which mooring or anchor lines are passed so as to lead them in the proper direction both onboard and off the boat.

Cleat: A deck fitting, usually of metal with projecting arms used for securing anchor and mooring lines.

Closed Cooling System: A separate supply of fresh water that is used to cool the engine and circulates only within the engine.

Coaming: A vertical piece around the edges of cockpit, hatches, etc., to stop water on deck from running below.

Cockpit: An open space, usually in the aft deck, outside of the cabin.

Companionway: Opening in the deck of a boat to provide access below.

Compartment: The interior of a boat divided off by bulkheads.

Cradle: A framework designed to support a boat as she is hauled out or stored.

Cutlass Bearing: A rubber bearing in the strut that supports the propeller shaft.

Deck: The floor-like platform of a boat that covers the hull.

Displacement: The volume of water displaced by the hull. The displacement weight is the weight of this volume of water.

Draft: The depth of water a boat needs to float.

Drydock: A dock that can be pumped dry during boat construction or repair.

Dry Rot: A fungus attack on wood areas.

Electrical Ground: A connection between an electrical connector and the earth.

Engine Beds: Sturdy structural members running fore and aft on which the inboard engines are mounted.

EPIRB: Emergency Position Indicating Radio Beacon. Operates as a part of a world-wide satellite distress system.

Even Keel: When a boat floats properly as designed.

Fathom: A measure of depth. One Fathom = 6 feet.

Fender: A soft object of rubber or plastic used to protect the topsides from scarring and rubbing against a dock or another vessel.

Fend off: To push or hold the boat off from the dock or another boat.

Flying Bridge: A control station above the level of the deck or cabin.

Flukes: The broad portions of an anchor which dig into the ground.

Following Sea: A sea that comes up from the stern and runs in the same direction that the boat is going.

Fore: Applies to the forward portions of a boat near the bow.

Foundering: When a boat fills with water and sinks.

Fuel pump: feeds fuel under pressure

Freeboard: The height from the waterline to the lowest part of the deck.

Galley: The kitchen of a boat.

Grab Rail: Hand-hold fittings mounted on cabin tops or sides for personal safety when moving around the boat, both on deck and below.

Ground Tackle: A general term including anchors, lines, and other gear used in anchoring.

Grounds: A boat touches the bottom.

Gunwale: The upper edge of a boat's side.

Hand Rail: Rail mounted on the boat, for grabbing with your hand, to steady you while walking about the boat.

Harbor: An anchorage which provides reasonably good protection for a boat, with shelter from wind and sea.

Hatch: An opening in the deck with a door or lid to allow for access down into a compartment of a boat.

Head: A toilet on a boat.

Heat Exchanger: Used to transfer the heat that is picked up by the closed cooling system to the raw cooling water.

Helm: The steering and control area of a boat.

Hull: The part of the boat from the deck down.

Inboard: A boat with the engine mounted within the hull of the boat. Also refers to the center of the boat away from the sides.

Inboard/outboard: Also stern drive or I/O. A boat with an inboard engine attached to an outboard drive unit.

Keel: A plate or timber plate running lengthwise along the center of the bottom of a boat.

Knot: Unit of speed indicating nautical miles per hour. 1 knot = 1 nautical mile per hour (1.15 miles per hour). A nautical mile is equal to one minute of latitude: 6076 feet. Knots times 1.15 equals miles per hour. Miles per hour times .87 equals knots.

Lay-up: To decommission a boat for the winter (usually in northern climates).

Leeward: The direction toward which the wind is blowing.

Length On The Waterline (LWL): A length measurement of a boat at the waterline from the stern to where the hull breaks the water near the bow.

Length Overall (LOA): a length measurement of a boat from the fore part of the stem to the after part of the stern

Life Preserver: provides additional buoyancy to keep a person afloat when he/she is in the water

Limber Hole: A passage cut into the lower edges of floors and frames next to the keel to allow bilge water to flow to the lowest point of the hull where it can be pumped overboard.

Line: The term used to describe a rope when it is on a boat.

Lists: A boat that inclines to port or starboard while afloat.

Locker: A closet, chest or box aboard a boat.

Loran: An electronic navigational instrument which monitors the boat's position using signals emitted from pairs of transmitting stations.

Lunch hook: A small light weight anchor typically used instead of the working anchor. Normally used in calm waters with the boat attended.

Marina: A protected facility primarily for recreational small craft.

Marine Ways or Railways: Inclined planes at the water's edge onto which boats are hauled.

Midships: The center of the boat.

Moored: A boat secured with cables, lines or anchors.

Mooring: An anchor permanently embedded in the bottom of a harbor that is used to secure a boat.

Nautical Mile: A unit of measure equal to one minute of latitude. (6076 feet)

Nun Buoy: A red or red-striped buoy of conical shape.

Oil Pump: Supplies lubricating oil where needed within the engine.

Outboard: A boat designed for an engine to be mounted on the transom. Also a term that refers to objects away from the center line or beyond the hull sides of a boat.

Overhead: the ceiling of a cabin or compartment,

Pad Eye: A deck fitting consisting of a metal eye permanently secured to the boat.

Personal Flotation Device (PFD): For example, a life preserver or throwable device.

Pier: A structure which projects out from the shoreline.

Pile or Piling: A long column driven into the bottom to which a boat can be tied.

Pitch: The measure of the angle of a propeller blade. Refers to the theoretical distance the boat travels with each revolution of the propeller.

Pitching: The fore and aft rocking motion of a boat as the bow rises and falls.

Plenum: a chamber for directing air flow, as in engine intake air plenum

Port: The left side of the boat when facing the bow.

Porthole (port): The opening in the side of a boat to allow the admittance of light and air.

Propeller: A device having two or more blades that is attached to the engine and used for propelling a boat.

Propeller Shaft: Shaft which runs from the back of the engine gear box, aft, through the stuffing box, shaft log, struts, and onto which the propeller is attached.

Pyrotechnic Distress Signals: Distress signals that resemble the brilliant display of flares or fireworks.

Raw Water Cooled: Refers to an engine cooling system that draws sea water in through a hull fitting or engine drive unit, circulates the water in the engine, and then discharges it overboard.

Reduction Gear: Often combined with the reverse gear so that the propeller turns at a slower rate than the engine.

Reverse Gear: Changes the direction of rotation of the propeller to provide thrust in the opposite direction for stopping the boat or giving it sternway.

Roll: A boat's sideways rotational motion in rough water.

Rope Locker: See anchor locker.

Rubrail: Railing (often rubber or hard plastic) that runs along the boat's sheer to protect the hull when coming alongside docks, piers, or other boats.

Rudder: A movable flat surface that is attached vertically at or near the stern for steering.

Sea anchor: An anchor that does not touch the bottom. Provides drag to hold the bow in the most favorable position in heavy seas.

Scupper: An opening in the hull side or transom of the boat through which water on deck or in the cockpit is drained overboard.

Seacock: Safety valves installed just inside the thru-hull fittings and ahead of the piping or hose running from the fittings.

Shaft Log: Pipe through which the propeller shaft passes.

Sheer: The uppermost edge of the hull.

Sling: A strap which will hold the boat securely while being lifted, lowered, or carried.

Slip: A boat's berth between two pilings or piers.

Sole: The deck of a cockpit or interior cabin.

Spring Line: A line that leads from the bow aft or from the stern forward to prevent the boat from moving ahead or astern.

Starboard: The right side of a boat when facing the bow.

Steerageway: Sufficient speed to keep the boat responding to the rudder or drive unit.

Stem: The vertical portion of the hull at the bow.

Stern: The rear end of a boat.

Stern line: a line that leads aft from the stern of the boat

Stow: To pack away neatly.

Stringer: Longitudinal members fastened inside the hull for additional structural strength.

Strut: Mounted to the hull which supports the propeller shaft in place.

Strut Bearing: See "cutlass bearing."

Stuffing Box: Prevents water from entering at the point where the propeller shaft passes through the shaft log.

Superstructure: Something built above the main deck level.

Swamps: When a boat fills with water from over the side.

Swimming Ladder: Much the same as the boarding ladder except that it extends down into the water.

Taffrail: Rail around the rear of the cockpit.

Thru-hull: A fitting used to pass fluids (usually water) through the hull surface, either above or below the waterline.

Topsides: The side skin of a boat between the waterline or chine and deck.

Transom: A flat stern at right angles to the keel.

Travel Lift: A machine used at boat yards to hoist boats out of and back into the water.

Trim: Refers to the boat's angle or the way it is balanced.

Trough: The area of water between the crests of waves and parallel to them.

Twin-Screw Craft: A boat with two propellers on two separate shafts.

Underway: When a boat moves through the water.

Wake: Disrupted water that a boat leaves astern as a result of its motion.

Wash: The flow of water that results from the action of the propeller or propellers.

Waterline: The plane of a boat where the surface of the water touches the hull when it is afloat on even keel.

Water pump: circulates cooling water

Watertight Bulkhead: Bulkheads secured so tightly so as not to let water pass.

Wharf: A structure generally parallel to the shore.

Windlass: A winch used to raise and lower the anchor.

Windward: Toward the direction from which the wind is coming.

Working Anchor: An anchor carried on a boat for most normal uses. Refers to the anchor used in typical anchoring situations.

Yacht Basin: A protected facility primarily for recreational small craft.

Yaw: Side-to-side movement, usually caused by rough seas.

Owner's Guide: Care & Upkeep of Fiberglass Products

As the world's premier gel coat supplier, Polynt Composites has provided this brochure as a guide to properly maintain and care for your gel coat surface.

Gel Coats provide a protective layer against weathering on a surface. Over time, exposure to sunlight, water, dust and chemicals cause wear and tear on the gel coat surface. This results in chalking, discoloration, yellowing or loss of gloss. By following simple, regular maintenance procedures, you can minimize these effects.

Basic Maintenance

When not in use, keep the gel coat surface out of the sun or covered with a canvas tarp. Do not use plastic sheeting or other non-porous materials as they trap moisture between the cover and the surface, causing damage to the gel coat.

For best results, use a cleaner recommended for use with fiberglass and follow label instructions. Alternatively, you can wash the surface with a mild detergent, such as dishwashing soap.

DO NOT use automatic dishwasher detergent, abrasive cleaners, bleach, strong acids or bases (i.e. TSP or ammonia). Only use pH neutral cleaners.

Wax at least twice a year to restore gloss and protect the finish. Only use a wax that is recommended for gel coat surfaces and follow instructions carefully. NEVER wax a gel coat surface in direct sunlight.

Corrective Procedures*

Chalking

A fine rubbing compound as well as a mild detergent will reduce the weathering and chalking accumulated on the surface. Use only a fine grit compound and follow label directions carefully. DO NOT apply rubbing compound in direct sunlight. For best results, wax after applying compound. When applying wax, remove excess compound and apply a thin layer of wax using a clean cloth. It is recommended to use a wax designed for fiberglass.

Scratches, Nicks and Stains

Most scratches and nicks can be removed by using a rubbing compound followed by waxing as described above. Deep marks or gouges should be professionally repaired.

Most stains can be removed by washing with mild detergent. For stubborn stains, use a fine abrasive household cleanser designed for fiberglass products, followed by waxing to restore its original luster.

Non-water soluble stains such as grease and oil, rubber heel marks, etc., can be removed by using a solvent such as acetone, rubbing alcohol, toluene or xylene, followed by a mild detergent. If these solvents are not effective, try a rubbing compound or fine sanding followed by a rubbing compound and then waxing.

If you have questions, consult your local dealer.



Polynt Composites USA
99 E. Cottage Ave
Carpentersville, IL 60110

800-322-8103

**Always try a test spot first*

Maintenance	Each Use	Weekly	Monthly	Semi Annually	Yearly	As Needed
Clean hull below the waterline				X		
Bottom paint					X	X
Check sacrificial anodes			X			
Replace sacrificial anodes					X	
Wash boat canvas & hardware	X		X			
Wax exterior gelcoat				X		X
Clean & protect hardware						X
Polish & protect plastic glass					X	X
Clean exterior upholstery	X					X
Clean cabin & interior upholstery						X
Flush engine with fresh water	X					
Spray metal components in bilge with a protector			X			
Clean bilge				X		X
Check bilge for leaks	X		X			
Inspect & operate thru-hull valves			X			
Inspect steering & control systems	X					
Service steering & control systems				X		
Inspect fuel system for leaks	X					
Inspect & service fuel system				X		
Inspect fuel tank vents & screens					X	
Replace fuel filters					X	
Lubricate fuel fill o-rings			X			
Inspect fire extinguisher			X			
Test bilge pump auto switches	X					
Inspect & protect electrical components, wire & battery connections				X		
Check battery electrolyte & service			X			
Test and inspect AC electrical system & shore power cord				X		
Inspect water systems for leaks				X		
Check neutral safety switch	X					
Check trim tab fluid level			X			

DEPARTMENT OF HOMELAND SECURITY U.S. Coast Guard RECREATIONAL BOATING ACCIDENT REPORT		OMB Control Number: 1625-0003 Expires: 07/31/2022
INSTRUCTIONS: Use "Report required because" section below to determine if a report is required for your accident. If required, please have each vessel owner or operator involved in the accident submit a report to their state reporting authority. Each boat operator/owner involved in an accident should submit a separate report. For each question below, please provide answers if applicable and if known; otherwise leave blank.		
Privacy Act Notice		
Authority: 46 U.S.C. 6102 and 33 CFR 173 & 174 authorize the collection of information on boating accidents. Purpose: The Coast Guard uses this information for statistical purposes, chiefly to inform the public, to measure the Program's efforts, and to regulate issues relating to boating safety. Routine Uses: The Coast Guard shares this information within the agency, and if state and federal law permit it, to the public.		
REPORT SUBMISSION		
Report required because (select all that apply): <input type="checkbox"/> At least one person in this accident <i>died</i> . If so, how many? _____ <input type="checkbox"/> At least one injured person in this accident <i>required or was in need of treatment beyond first aid</i> . If so, how many? _____ <input type="checkbox"/> At least one person in this accident <i>disappeared</i> and has not yet been recovered. If so, how many? _____ <input type="checkbox"/> All boat and other property damage (e.g., fishing/hunting gear) caused by this accident <i>totaled (or likely totaled) \$2,000 or more</i> : Approximate value of damage to <i>your</i> boat: \$ _____ Approximate value of damage to <i>your</i> other property: \$ _____ <input type="checkbox"/> Your or another <i>boat</i> in this accident was (or likely was) a <i>total loss</i>		To be submitted within: 48 hours (if injury, disappearance or death) 10 days (if boat/property damage only) To be submitted to: (Local State Reporting Authority) Phone: You may submit any comments concerning the accuracy of the burden estimate or any suggestions for reducing the burden to: Commandant (CG-BSX-21), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0003), Washington, DC 20503. Questions relating to the collection of this data should be sent to the Coast Guard.
Report submitted by (select all that apply): <input type="checkbox"/> Boat Operator (required if possible) <input type="checkbox"/> Boat Owner (if operator unable, or same as operator) <input type="checkbox"/> Other (describe): _____		For State Agency Use Only
First Name	Last Name	Phone
		Primary Cause of Accident
ACCIDENT SUMMARY		
WHEN Date: (mm/dd/yyyy) Time: am <input type="checkbox"/> pm <input type="checkbox"/> (select one)		ACCIDENT DESCRIPTION: Briefly describe this accident (attach extra pages if necessary)
WHERE Body of Water Name		
Location (on water) description		DAMAGE TO YOUR BOAT: Briefly summarize any damage to your boat
Nearest city/town		
County:	State:	
YOUR BOAT – PEOPLE		DAMAGE TO YOUR OTHER PROPERTY: (NOT BOAT) Briefly summarize any damage to your other property (not boat)
# people on board (including operator):		
# people being towed (e.g., on tubes, skis):		
# people wearing lifejackets (on board or towed):		
OTHER BOATS INVOLVED IN ACCIDENT		
# of other boats involved:		

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.														
YOUR BOAT														
BOAT IDENTIFICATION														
Your Boat Name:						Manufacturer:								
Model Name:						Model Year:								
Registration #:						Documentation #:								
Hull Identification # (HIN):						Rented: <input type="checkbox"/> Yes <input type="checkbox"/> No								
SIZE ESTIMATES														
Length: ft.		Depth from transom (stern) to keel (bottommost point): ft.				in.		Beam width at widest point: ft.						
HULL MATERIAL														
Type of Hull Material (select one)														
Fiberglass			Wood			Rubber/vinyl/canvas			Other (describe):					
Aluminum			Steel			Plastic								
BOAT TYPE														
Boat Type (select one)						Available Propulsion (select all that apply)								
Cabin motorboat		Inflatable boat		Personal watercraft (PWC) (e.g., Wave Runner™, Jet Ski™, Sea-Doo™)		Paddlecraft:		Propeller		Air thrust				
Open motorboat		Houseboat				Canoe		Sail		Other (describe):				
Auxiliary sail		Sail (only)		Air boat		Kayak		Manual						
Pontoon boat		Rowboat		Other (describe):				Water jet						
ENGINE														
# Engines:			Engine type and horsepower (select one)						Fuel type (select all that apply)					
Manufacturer			Outboard		Sterndrive		Inboard		Pod drive		Gas		Electric	
Total horsepower: hp			No engine		Other:				Diesel		Other:			
SAFETY MEASURES														
Organizations that have conducted a vessel safety check (VSC) on board your boat within the past year (including carriage of safety equipment, e.g., lifejackets, anchor and line, fire extinguishers):														
US Coast Guard Auxiliary: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No				Federal Agency (Name):										
US Power Squadrons: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No				State Agency (Name):										
				Other Agency (Name):										
# Life jackets on board:		# Fire extinguishers on board:		Type of fire extinguishers (e.g., ABC):										
		# Fire extinguishers used:												
ACCIDENT DETAILS – EXTERNAL CONDITIONS														
WEATHER														
Overall weather was (select one)				It was (select one)		Visibility was (select one)			Wind was (select one)					
Clear		Raining		Day		Good			0 mph (none)					
Cloudy		Snowing		Night		Fair			Over 0, up to 12 mph (light)					
Foggy		Hazy				Poor			Over 12, up to 25 mph (moderate)					
Other (describe):				Approximate air temperature:		°F			Over 25, up to 55 mph (strong)					
									Over 55 mph (stormy)					
WATER														
Overall water conditions (select one):						Other water conditions:								
Up to 6 in. waves (calm)						Approximate water temperature:			°F					
Over 6 in., up to 2 ft. waves (choppy)						Strong current?			Yes		No			
Over 2 ft., up to 6 ft. waves (rough)						Hazardous waters? (e.g., rapid tidal flow, currents)			Yes		No			
Over 6 ft. waves (very rough)						Congested waters?			Yes		No			

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.			
ACCIDENT DETAILS – ACTIVITIES AND OPERATIONS ON YOUR BOAT			
OPERATOR/PASSENGER ACTIVITIES			
Operator/passenger activities on <i>your</i> boat at time of accident:			
Activities were (select one)		Operator/Passenger activities (select all that apply)	
<input type="checkbox"/> Recreational	<input type="checkbox"/> Fishing	<input type="checkbox"/> Tubing	<input type="checkbox"/> Starting engine
<input type="checkbox"/> Commercial	<input type="checkbox"/> Hunting	<input type="checkbox"/> Water Skiing	<input type="checkbox"/> Making repairs
	<input type="checkbox"/> White water activity (e.g., rafting)	<input type="checkbox"/> Relaxing	<input type="checkbox"/> Other (list):
BOAT OPERATIONS			
Your boat operations at time of accident (select all that apply)			
<input type="checkbox"/> Cruising (underway under power)	<input type="checkbox"/> Drifting	<input type="checkbox"/> Racing	<input type="checkbox"/> Towing another vessel
<input type="checkbox"/> Changing direction	<input type="checkbox"/> At anchor	<input type="checkbox"/> Rowing/paddling	<input type="checkbox"/> Launching
<input type="checkbox"/> Changing speed	<input type="checkbox"/> Being towed	<input type="checkbox"/> Docking/undocking	<input type="checkbox"/> Tied to dock/mooring
<input type="checkbox"/> Sailing	<input type="checkbox"/> Other (list):		
ACCIDENT DETAILS – CONTRIBUTING FACTORS ON YOUR BOAT			
CONTRIBUTING FACTORS			
Indicate factors on <i>your</i> boat which may have contributed to this accident (select all that apply)			
<input type="checkbox"/> Alcohol use	<input type="checkbox"/> Improper lookout	<input type="checkbox"/> Dam/lock	<input type="checkbox"/> Starting in gear
<input type="checkbox"/> Drug use	<input type="checkbox"/> Operator inattention	<input type="checkbox"/> Force of wake/wave	<input type="checkbox"/> Sharp turn
<input type="checkbox"/> Excessive speed	<input type="checkbox"/> Operator inexperience	<input type="checkbox"/> Hazardous waters	<input type="checkbox"/> Restricted vision (e.g., fog)
<input type="checkbox"/> Improper anchoring	<input type="checkbox"/> Language barrier	<input type="checkbox"/> Heavy weather	<input type="checkbox"/> Mission/inadequate aids to navigation (e.g., buoy, daymarker)
<input type="checkbox"/> Improper loading	<input type="checkbox"/> Navigation rules violation	<input type="checkbox"/> Ignition of fuel or vapor	<input type="checkbox"/> Inadequate on-board navigation lights
<input type="checkbox"/> Overloading	<input type="checkbox"/> Failure to vent	<input type="checkbox"/> Hull failure	<input type="checkbox"/> People on gunwale, bow or transom
<input type="checkbox"/> Other (describe):			
ACCIDENT DETAILS – YOUR BOAT			
MACHINERY/EQUIPMENT FAILURE			
Failure of the following machinery/equipment on <i>your</i> boat contributed to this accident (select all that apply)			
<input type="checkbox"/> Engine	<input type="checkbox"/> Onboard lights	<input type="checkbox"/> Shift	<input type="checkbox"/> Sound equipment (e.g., horn, whistle)
<input type="checkbox"/> Electrical system	<input type="checkbox"/> Seats	<input type="checkbox"/> Radio	<input type="checkbox"/> Auxiliary equipment
<input type="checkbox"/> Fuel system	<input type="checkbox"/> Steering	<input type="checkbox"/> Fire extinguisher	<input type="checkbox"/> Other (list):
<input type="checkbox"/> Sail/mast	<input type="checkbox"/> Throttle	<input type="checkbox"/> Ventilation	
<input type="checkbox"/> Onboard navigation aids (e.g., GPS)			
ACCIDENT DETAILS – EVENTS ON YOUR BOAT			
ACCIDENT EVENTS			
Types of events occurring to/on <i>your</i> boat during accident (select all that apply)			
<input type="checkbox"/> Collision with recreational boat	<input type="checkbox"/> Flooding/swamping	<input type="checkbox"/> Person fell overboard	
<input type="checkbox"/> Collision with commercial boat (e.g., tug, barge)	<input type="checkbox"/> Fire/explosion – fuel	<input type="checkbox"/> Person fell on/within boat	
<input type="checkbox"/> Collision with fixed object (e.g., dock, bridge)	<input type="checkbox"/> Fire/explosion – non-fuel	<input type="checkbox"/> Sudden medical condition	
<input type="checkbox"/> Collision with submerged object (e.g., stump, cable)	<input type="checkbox"/> Carbon monoxide exposure	<input type="checkbox"/> Person struck by boat	
<input type="checkbox"/> Collision with floating object (e.g., log, buoy)	<input type="checkbox"/> Mishap of skier, tuber, wake boarder, etc.	<input type="checkbox"/> Person struck by propeller or propulsion unit	
<input type="checkbox"/> Capsizing	<input type="checkbox"/> Person left boat voluntarily	<input type="checkbox"/> Person electrocuted	
<input type="checkbox"/> Grounding	<input type="checkbox"/> Person ejected from boat (caused by collision or maneuver)		
<input type="checkbox"/> Sinking	<input type="checkbox"/> Other (describe):		

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.									
ACCIDENT DETAILS – YOUR BOAT- INJURED PEOPLE RECEIVING OR IN NEED OF TREATMENT BEYOND FIRST AID									
<i>Report only injured people on, struck by, or being towed by your boat, receiving or in need of treatment beyond first aid. Do not report injured people on, struck by, or being towed by another boat or no boat (e.g., swimmers, people on a dock). If more than one injured person to report, attach additional copies of this page. If none, SKIP INJURED PEOPLE section.</i>									
INJURED PERSON									
First Name			MI		Last Name				
Street									
City			State			Zip			
Phone			Date of Birth (mm/dd/yyyy)			Age			
INJURY DETAILS									
Injury caused when person (select all that apply)					Nature of most serious injury (select one)				
Struck the (e.g., boat, water):					Scrape/bruise		Dislocation		
Was struck by a (e.g., boat, propeller):					Cut		Internal organ injury		
Was exposed to carbon monoxide poisoning					Sprain/strain		Amputation		
Received an electric shock					Concussion/brain injury		Burn		
Other (describe):					Spinal cord injury		Other (describe):		
Person was wearing lifejacket?			Yes	No	Broken/fractured bone				
Person received treatment beyond first aid?			Yes	No	Body part of most serious injury (e.g., head, trunk, leg):				
Person was admitted to a hospital?			Yes	No					
ACCIDENT DETAILS – YOUR BOAT – DEATHS/DISAPPEARANCES									
<i>Only report deaths/disappearances of people on, struck by, or being towed by your boat. If more than one death/disappearance to report, attach additional copies of this page. If none, SKIP DEATHS/DISAPPEARANCES section.</i>									
PERSON WHO DIED/DISAPPEARED									
First Name			MI		Last Name				
Street									
City			State			Zip			
Phone			Date of Birth (mm/dd/yyyy)			Age			
DETAILS OF DEATH/DISAPPEARANCE									
Injury caused when person (select all that apply)					Nature of death/disappearance (select one)				
Struck the (e.g., boat, water):					Death – by drowning				
Was struck by a (e.g., boat, propeller):					Death – other likely cause (describe)				
Was exposed to carbon monoxide poisoning									
Received an electric shock					Disappeared and not yet recovered				
Other (describe):					Person was wearing lifejacket?		Yes	No	

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.					
ACCIDENT DETAILS – YOUR BOAT OPERATOR					
OPERATOR INSTRUCTION			OPERATOR SAFETY MEASURES		
Boating safety instruction completed <i>(select all that apply)</i>			On board, prior to accident, was operator wearing:		
<input type="checkbox"/> None			A lifejacket?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> State course			An engine cut-off switch <i>(Lanyard or wireless device) if equipped?</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> USCG Auxiliary course			On board, prior to accident, was operator using:		
<input type="checkbox"/> US Power Squadrons course				Alcohol?	<input type="checkbox"/> Yes
<input type="checkbox"/> Internet <i>(name of sponsoring organization)</i>			Drugs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Other <i>(describe)</i>			Operator arrested for Boating Under the Influence?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
			Weather reports consulted prior to accident?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
OPERATOR EXPERIENCE					
Experience operating this type of boat <i>(select one)</i>					
<input type="checkbox"/> 0 to 10 hours	<input type="checkbox"/> Over 10, up to 100 hours	<input type="checkbox"/> Over 100, up to 500 hours	<input type="checkbox"/> Over 500 hours		
ACCIDENT DETAILS – OTHER KEY PEOPLE					
Only report other key people not already documented as injured, died, disappeared or operator/owner of your boat. If more than two other key people to report, attach additional copies of this page.					
NAME/ADDRESS					
This other key person was a(n) <i>(select all that apply)</i>					
<input type="checkbox"/> Other boat operator <input type="checkbox"/> Other boat owner <input type="checkbox"/> Owner of other damaged property <input type="checkbox"/> Passenger on your boat <input type="checkbox"/> Witness					
First Name		MI	Last Name		
Street					
City		State	Zip	Phone	
Other boat name <i>(if any)</i>			Other boat registration # <i>(if any)</i>		
NAME/ADDRESS					
This other key person was a(n) <i>(select all that apply)</i>					
<input type="checkbox"/> Other boat operator <input type="checkbox"/> Other boat owner <input type="checkbox"/> Owner of other damaged property <input type="checkbox"/> Passenger on your boat <input type="checkbox"/> Witness					
First Name		MI	Last Name		
Street					
City		State	Zip	Phone	
Other boat name <i>(if any)</i>			Other boat registration # <i>(if any)</i>		

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.					
YOUR BOAT OPERATOR					
NAME/ADDRESS					
First Name	MI	Last Name			
Street					
City	State	Zip			
AGE/GENDER/PHONE					
Date of Birth (mm/dd/yyyy)	Age	Gender	Male	Female	Phone
YOUR BOAT OWNER					
If same as <i>your boat operator</i> SKIP rest of YOUR BOAT OWNER section.					
NAME/ADDRESS/PHONE					
First Name	MI	Last Name			
Street					
City	State	Zip	Phone		
PERSON SUBMITTING THIS REPORT					
If same as <i>your boat operator</i> OR <i>owner</i> , SKIP rest of PERSON SUBMITTING THIS REPORT section.					
NAME/ADDRESS/PHONE/ROLE					
First Name	MI	Last Name			
Street					
City	State	Zip	Phone		
I was a(n) (select one)					
<input type="checkbox"/>	Other person on board <i>this</i> boat				
<input type="checkbox"/>	Accident witness <i>not</i> on board <i>this</i> boat				
<input type="checkbox"/>	Other (<i>describe</i>):				
SIGNATURE OF PERSON SUBMITTING THIS REPORT					
Your signature				Date (mm/dd/yyyy)	
<p>An Agency may not conduct or sponsor and a person is not required to respond to an information collection, unless it displays a currently valid OMB Control Number.</p> <p>The Coast Guard estimates that the average burden for this report form is 30 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (CG-BSX-21), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0003), Washington, DC 20503.</p>					



www.cgaux.org

FLOAT PLAN

INSTRUCTIONS: Complete this plan before you go boating and leave it with a reliable person who can be depended upon to notify the Coast Guard, or other rescue agency, should you not return or check-in as planned. If you have a change of plans, or will be delayed, notify the person holding your Float Plan. Finally, close your plan by notifying the holder you have arrived home safely and if the holder has reported you overdue, notify all applicable rescue authorities of your safe return.



www.uscgboating.org

Do NOT file this plan with the Coast Guard

VESSEL

IDENTIFICATION:

Name & Hailing Port _____
 Document / Registration No. _____ HIN _____
 Year, Make & Model _____
 Length _____ Type _____ Draft _____ Hull Mat. _____
 Hull & Trim Colors _____
 Prominent Features _____

COMMUNICATION:

Radio Call Sign / Number _____
 DSC MMSI No. _____
 Radio-1: Type _____ Ch. / Freq. Monitored _____
 Radio-2: Type _____ Ch. / Freq. Monitored _____
 Cell / Satellite _____
 Email _____

PROPULSION:

Primary-- Type _____ Eng. _____ Fuel Capacity _____
 Auxiliary--Type _____ Eng. _____ Fuel Capacity _____

NAVIGATION: (Check all onboard)

Compass Radar GPS / DGPS Depth Sounder
 Charts Maps _____

SAFETY & SURVIVAL

VISUAL DISTRESS SIGNALS:

Electric Distress Light (night only)
 Flag (day only)
 Flare, Aerial (day & night)
 Flare, Handheld (day & night)
 Signal Mirror (day only)
 Smoke (day only)

AUDIBLE DISTRESS SIGNALS:

Bell
 Horn
 Whistle

EPIRB:

UIN* _____

ADDITIONAL GEAR:

Anchor - Line length _____ Food for _____ days / person
 Dewatering device Water for _____ days / person
 Exposure suits _____
 Fire Extinguisher _____
 Flashlight / Searchlight _____
 Raft / Dinghy _____

PERSONS ONBOARD

OPERATOR:

Name _____
 Address _____
 City _____ State _____ Zip Code _____
 Age _____ Gender _____ PFD PLB UIN* _____
 Note _____
 Float Plan Note _____

Has experience with: this vessel; the boating area(s).
 Home Phone _____
 Vehicle (Year, Make & Model) _____
 Vehicle License No. _____ Trailer
 Vehicle parked at _____

PASSENGERS / CREW: (Identify all on board)

Name	Home Phone	Age	Gender	PFD	Note
1. _____	_____	_____	_____	<input type="checkbox"/>	_____
2. _____	_____	_____	_____	<input type="checkbox"/>	_____
3. _____	_____	_____	_____	<input type="checkbox"/>	_____
4. _____	_____	_____	_____	<input type="checkbox"/>	_____
5. _____	_____	_____	_____	<input type="checkbox"/>	_____
6. _____	_____	_____	_____	<input type="checkbox"/>	_____
7. _____	_____	_____	_____	<input type="checkbox"/>	_____
8. _____	_____	_____	_____	<input type="checkbox"/>	_____
9. _____	_____	_____	_____	<input type="checkbox"/>	_____
10. _____	_____	_____	_____	<input type="checkbox"/>	_____
11. _____	_____	_____	_____	<input type="checkbox"/>	_____
12. _____	_____	_____	_____	<input type="checkbox"/>	_____

Passenger PLB UIN*
 (Not listed in a specific order)

If you have a genuine concern for the safety or welfare of the persons onboard this vessel that have not returned or checked-in, in a reasonable amount of time, then follow the step-by-step instructions on the Boating Emergency Guide™ located on the last page of this Float Plan.

(*) EPIRB and PLB registration required by Federal regulations. www.beaconregistration.noaa.gov



www.cgaux.org

FLOAT PLAN continued

INSTRUCTIONS: Complete this plan before you go boating and leave it with a reliable person who can be depended upon to notify the Coast Guard, or other rescue agency, should you not return or check-in as planned. If you have a change of plans, or will be delayed, notify the person holding your Float Plan. Finally, close your plan by notifying the holder you have arrived home safely and if the holder has reported you overdue, notify all applicable rescue authorities of your safe return.

Do NOT file this plan with the U.S. Coast Guard



www.uscgboating.org

CONTACTS

Contact 1 _____ Phone Number _____

Contact 2 _____ Phone Number _____

Rescue Authority _____ Phone Number _____

ITINERARY

		DATE	TIME	LOCATION / WAYPOINT	MODE OF TRAVEL	REASON FOR STOP	CHECK-IN TIME
1	Depart						
	Arrive						
2	Depart						
	Arrive						
3	Depart						
	Arrive						
4	Depart						
	Arrive						
5	Depart						
	Arrive						
6	Depart						
	Arrive						
7	Depart						
	Arrive						
8	Depart						
	Arrive						
9	Depart						
	Arrive						
10	Depart						
	Arrive						
11	Depart						
	Arrive						
12	Depart						
	Arrive						
13	Depart						
	Arrive						
14	Depart						
	Arrive						
15	Depart						
	Arrive						
16	Depart						
	Arrive						
17	Depart						
	Arrive						
18	Depart						
	Arrive						
19	Depart						
	Arrive						
20	Depart						
	Arrive						
21	Arrive						

If you have a genuine concern for the safety or welfare of the persons onboard this vessel that have not returned or checked-in, in a reasonable amount of time, then follow the step-by-step instructions on the Boating Emergency Guide™ located on the last page of this Float Plan.

USCG Float Plan - BOATING EMERGENCY GUIDE™

BEFORE YOU BEGIN – This guide is designed to work either with or without a Float Plan. You will need the following items: 1) the Float Plan, if one was given to you; 2) a pen or pencil; 3) a clean sheet of paper or writing tablet; and 4) your local telephone directory.

Step 1: Do you have a genuine concern for the safety or welfare of any persons who have not returned or checked-in, in a reasonable amount of time?

If **yes**, then continue with **Step 2**. Otherwise **STOP** – no further action is required at this time.

Step 2: Were you given a prepared Float Plan by anyone on board the vessel?

If **yes**, then continue with **Step 3**. Otherwise, go to **Step 5**.

Step 3: Locate the Contacts at the top of page 2 on the Float Plan. Call Contact number 1...

IF CONTACT #1	THEN						
Answers phone	Take notes during your conversation. 1. Let the person know you are responding to a late return or check-in by the individuals designated on the Float Plan. 2. Determine if the person you are talking to, or anyone else at that location, has recently had contact with anyone on the vessel, and when and where that contact occurred. 3. Are you still concerned about the safety or welfare of any persons on board the vessel? <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>IF</th> <th>THEN</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>Continue with Step 4.</td> </tr> <tr> <td>No</td> <td>STOP. No further action is required.</td> </tr> </tbody> </table>	IF	THEN	Yes	Continue with Step 4 .	No	STOP . No further action is required.
IF	THEN						
Yes	Continue with Step 4 .						
No	STOP . No further action is required.						
Does not answer phone	Continue with Step 4 .						

Step 4: Call Contact number 2...

IF CONTACT #2	THEN						
Answers phone	Take notes during your conversation. 1. Let the person know you are responding to a late return or check-in by the individuals designated on the Float Plan. 2. Determine if the person you are talking to, or anyone else at that location, has recently had contact with anyone on the vessel, and when and where that contact occurred. 3. Are you still concerned about the safety or welfare of any persons on board the vessel? <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>IF</th> <th>THEN</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>Continue with Step 6.</td> </tr> <tr> <td>No</td> <td>STOP. No further action is required.</td> </tr> </tbody> </table>	IF	THEN	Yes	Continue with Step 6 .	No	STOP . No further action is required.
IF	THEN						
Yes	Continue with Step 6 .						
No	STOP . No further action is required.						
Does not answer phone	Continue with Step 6 .						

Step 5: Using the checklist below, jot down only what you know about each item:

DO NOT SPECULATE. Incorrect information may mislead Search and Rescue personnel; add to the overall search and rescue time; and adversely affect the outcome.

- Period of time the vessel has been overdue.
- Purpose of the trip or voyage.
- Description of vessel. (Type, size, color, features, etc.)
- Vessel's departure point and destination.
- Places the vessel planned to stop during transit.
- Navigation equipment aboard. (Examples: GPS, radar, compass, sounder, etc.)
- Number of persons aboard. Relevant characteristics such as dependability, reliability, etc.
- Was the vessel initially docked or moored or did a vehicle tow it to a launch point?
- License plate number and description of the tow vehicle and/or the passenger's transport vehicle.
- Communications equipment aboard, including type of radio and frequencies monitored, cellular or satellite telephone numbers of individuals, etc.
- Additional points of contact along the vessel's planned route.
- Operator and/or a passenger/crew member absolutely had to be back at the scheduled return time.
- Call your local Rescue Authority that responds to marine emergencies (Police, Sheriff, Constable, First responder, etc.).

Go to **Step 6-2**.

Step 6:

1. Call the Rescue Authority contact at the top of page 2 on the Float Plan.
2. Tell the dispatcher you are responding to a late return or check-in by the persons on board the vessel.
3. The dispatcher will instruct you from there.

Note: The dispatcher will provide you with the necessary contact or agency connection to get a search and rescue mission started. This puts you in direct contact with the agency conducting the actual search and rescue, eliminating unnecessary middlemen.
The dispatcher will tell you if he/she desires a follow-up call on the outcome of the rescue.

4. Continue with **Step 7**.

Step 7: Be patient... you've done everything you can possibly do for now. It is important to keep the telephone available so emergency personnel can contact you with additional information and/or questions concerning the search and rescue effort.

STOP -- End of Guide

Provided as a courtesy by:
 S2 Yachts, Inc.
 Holland, MI
 (616) 392-7163
 Get a Vessel Safety Check before you go boating.



The USCG Float Plan is the official Float Plan of the U.S. Coast Guard and U.S. Coast Guard Auxiliary. For more information visit:

www.floatplancentral.org

Problem	Cause and Solution
Control Systems	
<p>Hydraulic steering is slow to respond and erratic.</p>	<ul style="list-style-type: none"> • Steering system is low on fluid. Fill and bleed system. • Steering system has air in it. Fill and bleed system. • A component in the steering system is binding. Check and adjust or repair binding component. • Engine steering cylinder is binding. Grease spindle.
<p>The boat wanders and will not hold a course at cruise speeds.</p>	<ul style="list-style-type: none"> • There could be air in the steering system. Fill & bleed the system. • The engine steering tab is corroded or out of adjustment. Replace or adjust steering tab. • Engine steering cylinder is binding. Grease spindle.
<p>The engine will not start with the shift control lever in neutral.</p>	<ul style="list-style-type: none"> • The control cable is out of adjustment & not activating the neutral safety cut out switch. • The shift control lever is not in the neutral detent. Try moving the shift lever slightly. • There is a loose wire on the neutral safety switch on the transmission. Inspect wires and repair loose connections. • The starter or ignition switch is bad.
Performance Problems	
<p>Boat is sluggish and has lost speed and RPM.</p>	<ul style="list-style-type: none"> • The boat may be need to have marine growth cleaned from hull and running gear. • Propeller may be damaged & need repair. • Weeds or line around the propeller. Clean propeller. • Boat is overloaded. Reduce load. • Check for excessive water in the bilge. Pump out bilge & find & correct the problem. • The throttle adjustments has changed and the engine is not getting full throttle. Adjust the throttle cable.

Problem	Cause and Solution
<p>The boat vibrates at cruising speeds.</p>	<ul style="list-style-type: none"> • Propeller may be damaged and need repair. • The propeller or propeller shaft is bent. Repair or replace damaged components. • The running gear is fouled by marine growth or rope. Clean running gear. • The engine is not trimmed properly. Trim the engine.
<p>Engine Problems</p>	
<p>The engine is running too hot.</p>	<ul style="list-style-type: none"> • The engine raw water pick-up strainer up is clogged with marine growth. Clean pick-up. • The engine raw water pump impeller is worn or damaged. Repair the pump. • The engine thermostat is faulty and needs to be replaced.
<p>The engine alternator is not charging properly.</p>	<ul style="list-style-type: none"> • The battery cable is loose or corroded. Clean and tighten battery cables. • The alternator is not charging and must be replaced. • The engine battery isolator in the charging system is not working properly. Replace the isolator. • The battery is defective. Replace the battery. • The alternator breaker may be in the OFF position.
<p>The engine suddenly will not operate over 2000 RPM.</p>	<ul style="list-style-type: none"> • The engine emergency system has been activated. The onboard computer has sensed a problem and has limited the RPM to protect the engine. Find & correct the problem. • The tachometer is bad and needs to be replaced.

Problem	Cause and Solution
<p>The engine is loosing RPM. The boat is not overloaded and the hull bottom and running gear are clean and in good condition.</p>	<ul style="list-style-type: none"> • The engine may be having a problem with a sticky anti-siphon valve, located in the fuel line near the fuel tank, that is restricting the fuel flow. Remove & clean or replace the anti-siphon valve. • The remote gasoline fuel filter could be dirty. Inspect and replace the fuel filter. • The primary fuel filter on the engine may be dirty. Inspect and replace the fuel filter. • The electronic engine control system on the engine is malfunctioning. Repair the engine control system. • The fuel injection system on the engine is malfunctioning. Repair the fuel injection system.
<p>Accessory Problems</p>	
<p>The livewell pump runs, but does not pump water.</p>	<ul style="list-style-type: none"> • The strainer on the intake scoop is clogged preventing the water from getting to the pump. Put the boat in reverse to clean the strainer. • There is an air lock in the system. Run the boat above 15 m.p.h. and the pick-up scoop will force the air lock past the pump and prime the system. • The thru-hull valve is not open. Open valve. • The valve in the livewell is not open. Open the valve in the livewell.
<p>The automatic float switch on the bilge pump raises but does not activate the pump.</p>	<ul style="list-style-type: none"> • The in-line fuse near the battery switch has blown. Replace the fuse. • The pump impeller is jammed by debris. Clean pump impeller housing. • The pump is defective. Replace pump.

FRESH WATER SYSTEM

The fresh water system must be disinfected before first use and yearly at the beginning of each season. A clean sanitized fresh water system will greatly reduce the risk of developing coliform bacteria or other disease-causing organisms (pathogens) and will help protect the health of everyone onboard.



WARNING

DISINFECT THE ENTIRE FRESH (POTABLE) WATER SYSTEM PRIOR TO USE AND YEARLY AT THE BEGINNING OF EACH SEASON. FAILURE TO DO SO CAN RESULT IN DEVELOPING COLIFORM BACTERIA OR OTHER DISEASE-CAUSING ORGANISMS (PATHOGENS) IN THE WATER SYSTEM. CONSUMPTION OF CONTAMINATED WATER COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.


Follow this procedure to disinfect the fresh water system, kill bacteria that may be present, and prepare the system for operation:

Note: The fresh water system may be filled with nontoxic potable water antifreeze. If antifreeze was not used, skip to step 7.

1. Turn both water heater valves to the normal operation position (**Figure A-1**).
2. Open all faucets (hot & cold), setting single faucets to the warm position.
3. Switch ON the FRESH WATER PUMP breaker(s), located on the DC Distribution Panel. The pumps are self-priming.
4. When anti-freeze stops flowing out of the faucets, switch the pump breaker(s) OFF. Do not close faucets.
5. Fill the fresh water tank with clean, fresh water. The fill fitting for the water tank is on the deck amidships, labeled WATER. The tank should be filled until water runs out of the vent located on the hull side just below the fill.
6. Keeping all faucets open, switch the FRESH WATER PUMP breaker(s) ON and empty the water tank. When the water tank is empty turn the pump breaker(s) OFF.

FRESH WATER SYSTEM

7. Repeat steps 5 and 6 until all nontoxic potable water antifreeze is removed from the system.
8. Ensure the water system, including the water heater and pump(s), is drained completely.
9. Close all faucets.



CAUTION

Notify all persons aboard that the fresh water system is being sanitized. Do not allow anyone to drink from the fresh water system during the sanitizing process.

10. Prepare a chlorine sanitizing solution: in a container with 1 gallon of fresh water, mix 1/4 cup of Clorox® or Purex® regular unscented household bleach (5% sodium hypochlorite solution) for each 15 gallons of water tank capacity (**Table A-1**).

Table A-1: Tank capacity vs. cups of bleach

Water Tank Capacity	Cups of Bleach
15 Gal	1/4 Cup
30 Gal	1/2 Cup
45 Gal	3/4 Cup
60 Gal	1 Cup
75 Gal	1-1/4 Cups
90 Gal	1-1/2 Cups
105 Gal	1-3/4 Cups
120 Gal	2 Cups
135 Gal	2-1/4 Cups
150 Gal	2-1/2 Cups

11. Fill the fresh water tank halfway with clean, fresh water.
12. Pour the sanitizing solution into the water tank through the deck WATER fill fitting.
13. Fill the remainder of the tank with clean, fresh water. The tank should be filled until water runs out of the vent. (See step 5.)
14. Switch ON the FRESH WATER PUMP breaker(s).
15. At each faucet, run about 1/2 gallon of water out of each tap (hot and cold), then close the tap. You should be able to smell chlorine out of each tap.
16. Switch OFF the FRESH WATER PUMP breaker(s).
17. **Allow the chlorine sanitizing solution to sit in the system for three (3) hours.** A shorter time period will require a greater concentration of chlorine sanitizing solution to disinfect the water system.

FRESH WATER SYSTEM

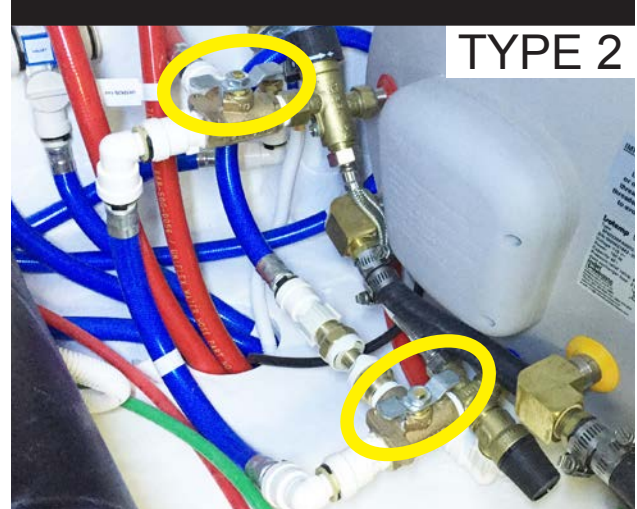
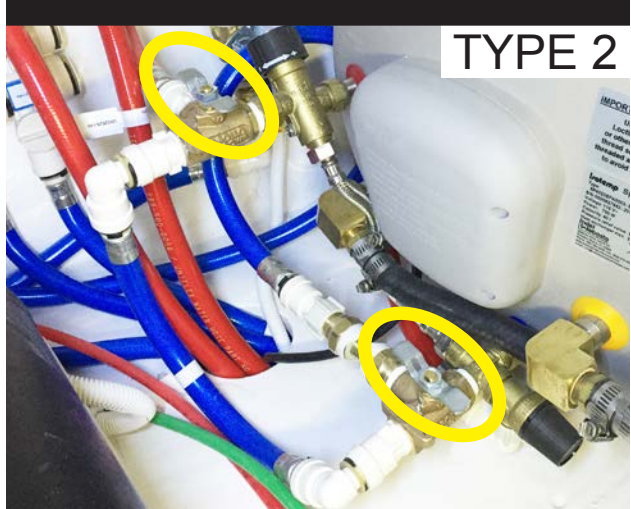
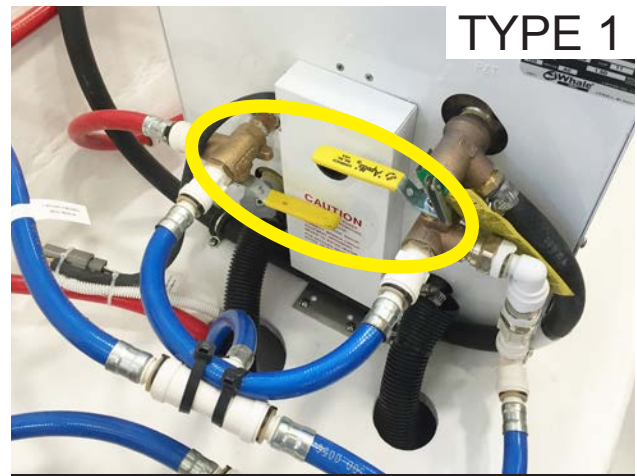
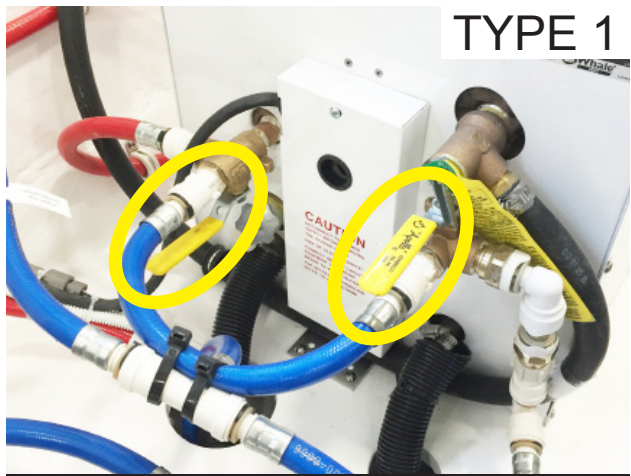


Figure A-1: Water heater valves in normal operation position

Figure A-2: Water heater valves in bypass position

18. Switch ON the FRESH WATER PUMP breaker(s).
19. Drain the chlorine sanitizing solution by opening all faucets (hot & cold), setting single faucets to the warm position, and empty the water tank. When the water tank is empty turn the pump breaker(s) OFF.
20. Ensure the water system, including the water heater and pump(s), is drained completely.
21. Fill the fresh water tank with clean, fresh water. The tank should be filled until water runs out of the vent. (See step 5.)

FRESH WATER SYSTEM

22. Keeping all faucets open, switch the FRESH WATER PUMP breaker(s) ON and empty the water tank. When the water tank is empty turn the pump breaker(s) OFF.
23. Repeat steps 21 and 22.
24. Final fill: Fill the fresh water tank with clean, fresh water. The tank should be filled until water runs out of the vent. (See step 5.)
25. Turn the FRESH WATER PUMP breaker(s) ON
26. Open each faucet. When a smooth flow of water is observed from each hot and cold tap, close the faucet. When all faucets are closed, the pumps will shut off as the system pressure increases. Any air should now be purged from the system. Leave the FRESH WATER PUMP breaker(s) ON.

The fresh water system is now commissioned and ready for use.

To remove excessive chlorine taste or odor that might remain in the system, do the following:

1. Ensure the water tank has enough available capacity to accept 10 additional gallons. If there is ample room in the tank, proceed to step 3, below.
2. Drain at least 10 gallons of water out of the system so the following vinegar solution will have room to be added. To do this switch ON the FRESH WATER PUMP breaker(s) and open a faucet. When at least 10 gallons has been drained, close the faucet and turn the pump breaker(s) OFF.
3. Prepare a solution of one (1) quart vinegar to five (5) gallons fresh water.
4. Pour the vinegar solution into the water tank through the deck WATER fill fitting.
5. Repeat steps 3 and 4.
6. Allow the vinegar solution to agitate in the tank for 24 hours.
7. Switch ON the FRESH WATER PUMP breaker(s).
8. Drain the vinegar solution by opening all faucets (hot & cold), setting single faucets to the warm position, and empty the water tank. When the water tank is empty turn the pump breaker(s) OFF.
9. Close all faucets.

FRESH WATER SYSTEM

10. Fill the fresh water tank with clean, fresh water. The fill fitting for the water tank is on the deck amidships, labeled WATER. The tank should be filled until water runs out of the vent located on the hull side just below the fill.
11. Turn the FRESH WATER PUMP breaker(s) ON
12. Open each faucet. When a smooth flow of water is observed from the hot and cold tap, close the faucet. When all faucets are closed, the pumps will shut off as the system pressure increases. Any air should now be purged from the system. Leave the FRESH WATER PUMP breaker(s) ON.
13. Repeat if necessary.

FRESH WATER SYSTEM

This page intentionally left blank.

Tiara[®]

Y A C H T S

725 E 40th Street, Holland, MI 49423 | 616.392.7163
tiarayachts.com



AMERICAN MADE