BAYLINER®

245 Cruiser

Owner's Manual Supplement
Engine Serial Number: _____________________________________

Hull Identification Number: ____________________________________

Hull Identification Number

• The Hull Identification Number (HIN) is located just below the deck gunnel at the starboard aft corner of the boat.
• Record the HIN (and the engine serial number) in the space provided above.
• Include the HIN with any correspondence or orders.

© 2008 Bayliner Technical Publications. All rights reserved.

No part of this publication may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of Bayliner.

Printed in the United States of America.

General Notes

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Bayliner assumes no liability resulting from errors or omissions in this document, or from the use of information contained herein.

Due to our commitment to product improvement, Bayliner reserves the right to make changes in the product design, specifications, and equipment at any time without notice or obligation. Illustrations and/or photos may show optional equipment.

All Bayliner products meet or exceed USCG (United States Coast Guard) and/or NMMA (National Marine Manufacturer’s Association) construction standards. Manufactured with 1,1,1 Trichloroethane, a substance which harms public health and environment during the manufacturing process by destroying ozone in the upper atmosphere.

Proprietary Rights

This document discloses subject matter in which Bayliner has proprietary rights. The information and design disclosed herein were originated by and are the property of Bayliner. Neither receipt nor possession thereof confers or transfers any right to reproduce, copy, alter or disclose the document or any part thereof, any information contained therein, or to construct boats or any item from it, except by written permission from or written agreement with Bayliner. This document is to be returned upon request to Bayliner.
Chapter 7: Deck Equipment
Cleats & Bow/Stern Eyes  55
Windlass (If Equipped)  55
Canvas & Vinyl Tops & Enclosures  56
  Bimini Top (If Equipped)  56
  Camper Top (If Equipped)  57
  Vinyl Curtains (If Equipped)  57
Canvas Care  58
Clear Vinyl Care  59

Chapter 8: Appliances & Entertainment Systems
Refrigerator  60
Audio Equipment  60
Alcohol/110-Volt Electric Stove  61

Chapter 9: Convertible Seats, Beds, & Tables
Converting Cockpit Dinette to Sunlounge (If Equipped)  62
Converting V-berth Dinette to Sleeping Berth  64
Helm Seat Adjustments  66
  To Slide the Helm Seat Forward or Aft:  66
  To Adjust the Helm Seat Back:  66

Chapter 10: Lights
Care & Maintenance  67
Interior & Exterior Lights  67
Navigation Lights  67
Spotlight (If Equipped)  67

Chapter 11: Electrical System
12-Volt DC System  69
  Batteries  69
  Battery Switch  69
  Battery Switch (If Equipped with Two Batteries)  70
  Battery Switch Positions  70
  Fuses & Circuit Breakers  71
  12-Volt DC Accessory Outlets  71
  Alternator  72
  Battery Charger  72
110-Volt AC System  73
  Shore Power  74
  Connecting to Shore Power  75
  Parallel Switch (Only if Equipped with Dual Shore Power)  75
  Generator  76
Electrical Routings  78
  12-Volt DC Hull Harnesses  78
  12-Volt DC Deck Harness  79
  Battery Cable Routings  80
  110-Volt AC Hull Harness  81

Important Records  82

Float Plan  83
Hazard Boxes & Symbols

The hazard boxes and symbols shown below are used throughout this supplement to call attention to potentially dangerous situations which could lead to either personal injury or product damage. Read all warnings carefully and follow all safety instructions.

⚠️ **DANGER!**
This box alerts you to immediate hazards which WILL cause severe personal injury or death if the warning is ignored.

⚠️ **WARNING!**
This box alerts you to hazards or unsafe practices which COULD result in severe personal injury or death if the warning is ignored.

⚠️ **CAUTION**
This box alerts you to hazards or unsafe practices which COULD result in minor personal injury or cause product or property damage if the warning is ignored.

⚠️ **NOTICE**
This box calls attention to installation, operation or maintenance information, which is important to proper operation but is not hazard related.

- **FIRE HAZARD!**
- **EXPLOSION HAZARD!**
- **NO OPEN FLAME!**
- **ELECTRICAL HAZARD!**
- **HOT HAZARD!**
- **FALLING HAZARD!**
- **ROTATING PROPELLER HAZARD!**
- **RUN BILGE BLOWERS FOR 4 MINUTES!**
- **CO POISONING HAZARD!**
Chapter 1: Welcome Aboard!

- This Owner’s Manual Supplement provides specific information about your boat that is not covered in the Cruiser & Yacht Owner’s Manual.
- The Cruiser & Yacht Owner’s Manual contains general information about safe operating practices, general boating regulations, and general maintenance techniques. Information that is more specific to your particular boat is found in this Owner’s Manual Supplement.
- **Before** using your boat, study this Owner’s Manual Supplement, the Cruiser & Yacht Owner’s Manual, and all engine and accessory literature carefully. If similar instructions are found in more than one manual, always refer to the specific manufacturer’s manual (such as the engine manual) for the most complete and accurate information.
- Keep this Owner’s Manual Supplement and the Cruiser & Yacht Owner’s Manual on your boat in a secure, yet readily available place.

### Dimensions & Tank Capacities

<table>
<thead>
<tr>
<th>Overall Length</th>
<th>Length Rigged</th>
<th>Bridge Clearance</th>
<th>Beam</th>
<th>Draft (Hull)</th>
<th>Draft (Maximum)</th>
<th>Fuel Tank</th>
<th>Freshwater Tank</th>
<th>Black Water Holding Tank</th>
<th>Gray Water Holding Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>25' 1&quot;</td>
<td>30' 2&quot;</td>
<td>6' 6&quot;</td>
<td>8' 6&quot;</td>
<td>1' 9&quot;</td>
<td>3' 3&quot;</td>
<td>65 Gallons</td>
<td>20 Gallons</td>
<td>20 Gallons</td>
<td>20 Gallons</td>
</tr>
</tbody>
</table>

### Dealer Service

- Your dealer is your key to service.
- Ask your dealer to explain all systems **before** taking delivery of your boat.
- Contact your dealer if you have any problems with your new boat.
- If your dealer cannot help, call our customer service hotline: 360-435-8957 or send us a FAX: 360-403-4235.
- Buy replacement parts from any authorized Bayliner dealer.
- You can access on-line parts catalogs, links to vendor websites, and other helpful features by logging on to [http://www.baylinercustomercare.com](http://www.baylinercustomercare.com).
Warranty Information

- Bayliner offers a Limited Warranty on each new Bayliner purchased through an authorized Bayliner dealer.
- A copy of the Limited Warranty was included in your owner’s packet.
- If you did not get a copy of the Limited Warranty, please contact your Bayliner dealer or call 360-435-8957 for a copy.

Boating Experience

CONTROL HAZARD!

An experienced operator MUST be in control of your boat at ALL times. Do NOT operate your boat while under the influence of alcohol or drugs.

If this is your first boat or if you are changing to a type of boat you are not familiar with, for your own comfort and safety, get handling and operating experience before assuming command of your boat.

Take one of the boating safety classes offered by the U.S. Power Squadrons or the U.S. Coast Guard Auxiliary. For more course information, including dates and locations of upcoming classes, contact the organizations directly:

- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: http://www.usps.org
- In Canada, for the CPS courses call 1-888-CPS-BOAT.
- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: http://www.cgaux.org

Outside the United States, your selling dealer, national sailing federation, or local boat club can advise you of local sea schools or competent instructors.
Engine & Accessory Guidelines & Literature

NOTICE

*BEFORE* starting or working on your engine(s), read the engine manual.

NOTICE

*BEFORE* using the accessories on your boat, read the accessory manuals.

NOTICE

*BEFORE* storing your boat, refer to your engine and accessory manuals for storage/winterization instructions.

NOTICE

Certain modifications to your boat WILL result in cancellation of your warranty protection. *ALWAYS* check with your dealer *BEFORE* making any modifications to your boat.

- Your boat’s engine and accessories were selected to provide optimum performance and service.
- Installing a different engine or adding accessories may affect your boat’s running trim.
- If you choose to install a different engine or add accessories that may affect your boat’s running trim, have a trained marine technician perform a safety inspection and handling test *before* using your boat again.
- The engine and accessories on your boat have their own manuals. Read these manuals *before* using the engine and accessories.

Unless noted otherwise, *all* engine and accessory literature referred to in this supplement is included in your owner’s packet.

While the topics listed below may be included in this supplement and in the Cruiser & Yacht Owner’s Manual, *always* refer to the engine manual first for specific information on these important subjects:

- Engine Break-in Procedure
- Engine Starting and Stopping
- Gear Shifting
- Fuel and Oil Recommendations
- Engine Maintenance
- Engine Storage/Winterization

**Propeller**

**CAUTION**

**ENGINE DAMAGE HAZARD!**

The factory standard propeller may not be the best for your particular boat and load conditions. Refer to the engine manual for engine RPM ratings. The engine should reach, but not exceed its full rated RPM when full-throttle is applied.

Immediately contact your local Bayliner dealer if:

- The engine cannot reach its full rated RPM when full-throttle is applied, or;
- The engine exceeds its full rated RPM when full-throttle is applied.

- Keep the propeller in good repair and at the correct pitch for your particular situation.
- A slightly bent or nicked propeller will adversely affect the performance of your boat.
Qualified Maintenance

**WARNING!**

To maintain the safety of your boat, allow *ONLY* trained personnel to work on, or change, in any way, the:

- Steering system
- Propulsion system
- Engine control system
- Fuel system
- Environmental control system
- Electrical system
- Navigation system

Failure to maintain your boat’s systems (listed in the warning above) as designed could violate the laws in your jurisdiction and could expose yourself and others to the danger of bodily injury or accidental death.

Follow the maintenance instructions in:
- this *Owner’s Manual Supplement*
- the *Cruiser & Yacht Owner’s Manual*
- the engine owner’s manual, and;
- *all* accessory literature.

Special Care for Moored Boats

**NOTICE**

- To help seal the hull bottom and reduce the chance of gel coat blistering while your boat is moored, apply an epoxy barrier coating.
- The barrier coating should be covered with several coats of anti-fouling paint.
- Many states regulate the chemical content of bottom paints in order to meet environmental standards. Check with your local dealer about recommended bottom paints, and about the laws in effect in your area.

- Whether moored in saltwater or freshwater, your boat will collect marine growth on its hull bottom.
- This will detract from your boat’s beauty, greatly affect its performance, and may damage the gel coat.
- Periodically haul your boat out of the water and scrub the hull bottom with a bristle brush and a solution of soap and water.
Safety Standards

⚠️ **DANGER!**

**FALLING and ROTATING PROPELLER HAZARD!**

- *NEVER* allow anyone to ride on parts of your boat *NOT* designed for such use.
- Sitting on seat-backs, lounging on the forward deck, bow riding, gunwale riding or occupying the transom platform while underway is especially hazardous and WILL cause personal injury or death.

⚠️ **DANGER!**

**FALLING, ROTATING PROPELLER and CARBON MONOXIDE POISONING HAZARD!**

- *NEVER* allow anyone to occupy, or hang from, the back deck or transom platform while the engine is running.
- Teak surfing, dragging, or water skiing within 20 feet of a moving watercraft can be fatal.

⚠️ **DANGER!**

**PERSONAL SAFETY HAZARD!**

- *ALWAYS* secure the anchor and other loose objects *BEFORE* getting underway.
- The anchor and other items that are *NOT* properly secured can come loose when your boat is moving and cause personal injury or death.

⚠️ **WARNING!**

A wide variety of components used on this vessel contain or emit chemicals known to the State of California to cause cancer and birth defects and other reproductive harm.

Examples Include:

- Engine and generator exhaust
- Engine and generator fuel, and other liquids such as coolants and oil, especially used motor oil
- Cooking fuels
- Cleaners, paints, and substances used for vessel repair
- Waste materials that result from wear of vessel components
- Lead from battery terminals and from other sources such as ballast or fishing sinkers

To Avoid Harm:

- Keep away from engine, generator, and cooking fuel exhaust fumes.
- Wash exposed skin thoroughly with soap and water after handling the substances above.

- Your boat’s mechanical and electrical systems were designed to meet safety standards in effect at the time it was built.
- Some of these standards were mandated by law, and all of them were designed to insure your safety and the safety of other people, vessels and property.

Read this supplement, the Cruiser & Yacht Owner’s Manual, the engine owner’s manual, and all accessory instructions for important safety standards and hazard information.
Boat Lifting

**WARNING!**

**PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!**

- Lifting slings can slip on the hull, which could cause serious injury or death.
- Always secure the forward lifting sling to the aft lifting sling BEFORE lifting. This will reduce the risk of sling slippage.

**WARNING!**

**PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!**

Never lift any boat using the cleats, or the bow/stern eyes.

**WARNING!**

**PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!**

- Water in the bilge can shift and change the balance of the load.
- If water is present in the bilge, pump or drain the water out of the bilge areas BEFORE lifting your boat.

**CAUTION**

**PRODUCT or PROPERTY DAMAGE HAZARD!**

- When lifting any boat, ALWAYS use a spreader bar.
- The spreader bar MUST be equal to the width of the boat at each lifting point.
- Make sure your boat remains level during lifting. The engine can be damaged by water ingestion if the stern is lifted higher than the bow.

- Always follow the lift equipment’s instructions and requirements.
- When lifting your boat, always position the lifting slings at the port and starboard lifting sling label positions as shown in the illustration.
Carbon Monoxide (CO)

DANGER!
- Carbon monoxide gas (CO) is colorless, odorless, tasteless, and extremely dangerous.
- ALL engines, generators, and fuel burning appliances produce CO as exhaust.
- Prolonged exposure to low concentrations or very quick exposure to high concentrations WILL cause BRAIN DAMAGE or DEATH.
- Teak surfing, dragging, or water skiing within 20 feet of a moving watercraft can be fatal.

CO Facts
- CO poisoning causes a significant number of boating deaths each year.
- Called the "silent killer", CO is an extremely toxic, colorless, odorless and tasteless gas.
- CO can harm or even kill you inside or outside your boat.
- CO can affect you whether you’re underway, moored, or anchored.
- CO symptoms are similar to seasickness or alcohol intoxication.
- CO can make you sick in seconds. In high enough concentrations, even a few breaths can be fatal.
- Breathing CO blocks the ability of your blood to carry oxygen.
- The effects are cumulative. Even low levels of exposure can result in injury or death.

Factors that Increase the Effects of CO Poisoning
- Age
- Smokers or people exposed to high concentrations of cigarette smoke
- Consumption of alcohol
- Lung disorders
- Heart problems
- Pregnancy
Where & How CO Can Accumulate

Stationary conditions that increase CO accumulations include:

A. Using engine, generator, or other fuel burning device when boat is moored in a confined space.

B. Mooring too close to another boat that is using its engine, generator, or other fuel burning device.

To correct stationary situations A and/or B:

- Close all windows, portlights and hatches.
- If possible, move your boat away from source of CO.

Running conditions that increase CO accumulations include:

C. Running boat with trim angle of bow too high.

D. Running boat without through ventilation (station wagon effect).

To correct running situations C and/or D:

- Trim bow down.
- Open windows and canvas.
- When possible, run boat so that prevailing winds help dissipate exhaust.

How to Protect Yourself & Others From CO

- Know where and how CO may accumulate in and around your boat (see above).
- Always maintain fresh air circulation throughout your boat.
- Know where your engine and generator exhaust outlets are located and keep everyone away from these areas.
- Never sit on, or hang onto, the back deck or transom platform while the engine is running.
- Never enter the areas under transom platforms where exhaust outlets are located.
- Although CO can be present without the smell of exhaust fumes, if exhaust fumes are detected on your boat, take immediate action to dissipate these fumes.
- Treat symptoms of seasickness as possible CO poisoning. Get the person into fresh air immediately. Seek medical attention—unless you’re sure it’s not CO.
- Maintain the CO monitors that are installed inside your boat. Never ignore any alarm. Replace monitors as recommended by the monitor manufacturer.
- Follow the checklists provided on the next page.
- Get a Vessel Safety Check.

For information on how to get a free VESSEL SAFETY CHECK, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or United States Power Squadrons®.
- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: http://www.cgaux.org
- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: http://www.usps.org
**CO Checklists**

**Trip Checklist**
- Make sure you know where the exhaust outlets are located on your boat.
- Educate all passengers about the symptoms of CO poisoning and where CO may accumulate.
- When docked, or rafted with another boat, be aware of exhaust emissions from the other boat.
- Listen for any change in exhaust sound, which could mean an exhaust component failure.
- Test the operation of each CO monitor by pressing the test button.

**Monthly Checklist**
- Make sure all exhaust clamps are in place and secure.
- Look for exhaust leaking from exhaust system components. Signs include rust and/or black streaking, water leaks, or corroded or cracked fittings.
- Inspect rubber exhaust hoses for burned, cracked, or deteriorated sections. All rubber hoses should be pliable and free of kinks.

**Annual Checklist**

**Have a Trained Marine Technician:**
- Replace exhaust hoses if cracking, charring, or deterioration is found.
- Ensure that your engines and generators are properly tuned, and well maintained.
- Inspect each water pump impeller and the water pump housing. Replace if worn. Make sure cooling systems are in working condition.
- Inspect all metallic exhaust components for cracking, rusting, leaking, or loosening. Make sure they check the cylinder head gasket, exhaust manifold, water injection elbow, and the threaded adapter nipple between the manifold and the elbow.
- Clean, inspect, and confirm proper operation of the generator cooling water anti-siphon valve (if equipped).

**CO Monitors**

**NOTICE**
- The stereo memory and CO monitors place a small, but constant drain on the battery.
- If your boat will be unattended for an extended amount of time, plug into shore power with the battery charger turned On.

- Do not disconnect the CO monitors.
- Read the manufacturer’s instructions for your CO monitors. **If you did not get the manufacturer’s instructions, call (800) 383-0269 and they will be mailed to you.**

If your boat is not equipped with a CO monitor, consider purchasing one from your dealer or marine supply store.
### More Information

For more information about preventing carbon monoxide poisoning on recreational boats and other boating safety tips, contact:

<table>
<thead>
<tr>
<th>United States Coast Guard</th>
<th>National Marine Manufacturers Association (NMMA)</th>
<th>American Boat &amp; Yacht Council, Inc. (ABYC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of Boating Safety (G-OPB-3)</td>
<td>200 East Randolph Drive</td>
<td>613 Third Street</td>
</tr>
<tr>
<td>2100 Second Street SW</td>
<td>Suite 5100</td>
<td></td>
</tr>
<tr>
<td>Washington, DC 20593</td>
<td>Chicago, IL 60601-9301</td>
<td>Annapolis, MD 21403</td>
</tr>
<tr>
<td><a href="http://www.uscgboating.org">www.uscgboating.org</a></td>
<td><a href="http://www.nmma.org">www.nmma.org</a></td>
<td><a href="http://www.abycinc.org">www.abycinc.org</a></td>
</tr>
<tr>
<td>1-800-368-5647</td>
<td>312-946-6200</td>
<td>410-990-4460</td>
</tr>
</tbody>
</table>

For information about free VESSEL SAFETY CHECKS, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or United States Power Squadrons®.

- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: http://www.cgaux.org
- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: http://www.usps.org
Warning Labels

**WARNING**
CARBON MONOXIDE HAZARD. KEEP CLOSED WHEN RUNNING ENGINE OR GENERATOR.

**WARNING**
SECURE DOOR BEFORE USING STEPS. SLIP OR FALL COULD OCCUR - USE HANDHOLDS.
DO NOT USE FOREDECK WHEN BOAT IS UNDERWAY. PERSONAL INJURY OR DEATH COULD RESULT.

**CAUTION**
DISENFECTION AND FLUSH POTAILE WATER SYSTEM BEFORE USING. FAILURE CAN CAUSE ILLNESS.

**WARNING**
DO NOT ATTEMPT TO BOARD OR USE THE LADDER IF MOTOR IS RUNNING.

**DANGER**
Carbon monoxide (CO) can cause brain damage or death.
Engine and generator exhaust contains odorless and colorless carbon monoxide gas.
Carbon monoxide will be around the back of the boat when engines or generators are running.
Move to fresh air if you feel nausea, headache, dizziness, or drowsiness.

---

**Warning Labels**

- Carbon monoxide (CO) can cause brain damage or death.
- Engine and generator exhaust contains odorless and colorless carbon monoxide gas.
- Carbon monoxide will be around the back of the boat when engines or generators are running.
- Move to fresh air if you feel nausea, headache, dizziness, or drowsiness.
Carbon monoxide (CO) can cause brain damage or death. Engine and generator exhaust contains odorless and colorless carbon monoxide gas. Signs of carbon monoxide poisoning include nausea, headache, dizziness, drowsiness, and lack of consciousness. Get fresh air if anyone shows signs of carbon monoxide poisoning. See Owner’s Manual for information regarding carbon monoxide poisoning.

**WARNING**


**WARNING**

GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING, OPERATE BLOWER 4 MINUTES. CHECK ENGINE COMPART- MENT BIZBE FOR FUEL VAPORS. RUN BLOWER BELOW CRUISE SPEED. (AW16)

**WARNING**

ATTACH SHUT-DOWN SWITCH LANYARD TO QUALIFIED OPERATOR WHILE ENGINE IS IN OPERATION. UNCONTROLLED BOAT MAY CAUSE INJURY OR DEATH. READ OWNER’S MANUAL BEFORE USE. (AW01)

**WARNING**

QUALIFIED OPERATOR TO BE IN CONTROL AT ALL TIMES. OPERATION BY AN UN QUALIFIED OPERATOR CAN CAUSE LOSS OF CONTROL. THIS MAY RESULT IN SERIOUS INJURY, DEATH, OR PROPERTY DAMAGE. BOAT STABILITY AND HANDLING WILL CHANGE WITH WEIGHT DISTRIBUTION. READ OWNER’S MANUAL BEFORE USE. (AW03)

**WARNING**

RISK OF FALLING HATCH. INSURE LID IS SECURED. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH. (AW18)

**WARNING**

Use unleaded petrol only. (ET45)

**WARNING**

Fuel vapors may explode. Inspect fuel system at least annually. (ET46)
Chapter 2: Locations

Exterior Views

Hull Views


**Deck Views**

- **ALL-ROUND LIGHT**
- **TRANSOM SHOWER**
- **WINDSHIELD WIPER (IF EQUIPPED)**
- **WINDSHIELD FOOT CONTROLS (IF EQUIPPED)**
- **DECK HATCH**
- **WINDLASS (IF EQUIPPED)**
- **SPOTLIGHT (IF EQUIPPED)**
- **RUNNING LIGHT**
- **ANCHOR ROLLER**
- **HORN**
- **FRESHWATER FILL DECK FITTING**
- **GRAY WATER PUMP-OUT DECK FITTING (IF EQUIPPED)**
- **FUEL FILL DECK FITTING**
- **HOLDING TANK PUMP-OUT DECK FITTING**
- **SHORE POWER INLETS**
Helm

NOTE: TYPICAL HELM LAYOUT SHOWN. ACTUAL LAYOUT MAY VARY DEPENDING ON ENGINE AND ACCESSORY OPTIONS.
Component Locations

12-Volt DC Accessory Outlets (2 Total):
- One is located on the port switch panel at the helm.
- One is located on the forward end of the galley.

12-Volt DC Fuse Blocks:
Located in the starboard wall hatch in the aft berth.
110-Volt AC Master Panel: Located in the galley.

Air Conditioner (If Equipped): Located under the aft dinette seat cushion.

Air Conditioner Seawater Intake Seacock (If Equipped): Located in the engine room bilge.

Battery: Located in the engine room.

Battery Charger: Located on the port side of the engine room on the forward wall.
Battery Switch: Located inside the storage hatch below the entertainment faucet.

Bilge Pumps (2 Total):
- The aft bilge pump is located in the engine room bilge.

- The forward bilge pump is accessed through the bottom cabin entry step.
**Blower Switch:** Located on the starboard switch panel at the helm.

**CO Monitors (2 Total):**
- One is located on the ceiling in the aft berth.
- One is located in the dinette area, on the forward wall of the head.
**Depth Finder Transducer:** Access through the bottom cabin entry step.

**Electronic Fuel Shut-off Valve (Diesel Engine Only):** Located in the forward area of the engine room.

**Freshwater Fill Deck Fitting (marked WATER):** Located on the port aft corner of the deck.
**Freshwater Pump:** Located in the engine room.

**Freshwater Pump Switch:** Located just forward of the galley sink.

**Freshwater Tank:** Located on the port side of the engine room.
Fuel Fill Deck Fitting (marked GAS or DIESEL): Located on the starboard aft corner of the deck.

Fuel Tank: Located in the engine room bilge area.

Generator (If Equipped): Located on the port side of the engine room.
Generator Control Panel (If Equipped):
Located in the galley.

Generator Seawater Intake Seacock (If Equipped): Located in the engine room bilge.
High Water Alarm Control Panel: Located just below the shift/throttle lever.

Holding Tanks:
• The black water holding tank is located on the starboard side of the engine room.

• The gray water holding tank, if equipped, is located on the port side of the engine room.
Holding Tank Pump-out Deck Fittings:
- The black water holding tank pump-out deck fitting is located on the starboard aft corner of the deck.

- The gray water holding tank pump-out deck fitting, if equipped, is located on the port aft corner of the deck.

Macerator Switches (If Equipped): Located on the starboard side panel, just below the shift/throttle level.
Macerator Underwater Discharge Seacock (If Equipped): Located on the starboard side of the engine room, on the transom.

Navigation Lights:
- Red and green lights on the forward deck.
- White all-round light on the aft deck.
Shore Power Inlet(s): Located on the aft deck.

Shower Drain Sump Box: Access through the bottom cabin entry step.

Spotlight: Located on the forward deck.
**Spotlight Control Panel:**
Located at the helm.

**Transom Shower:** Located on the port side of the cockpit, just forward of the transom entry door.

**Trim Tab Hydraulic Fluid Reservoir:**
Located in the engine room, on the aft wall.
Trim Tab Switches: Located on the starboard switch panel at the helm.

Trim & Tilt Pump: Located on the starboard side of the engine room.
**Water Heater:** Located in the starboard forward corner of the engine room.

**Windlass Circuit Breakers (If Equipped):** Located inside the storage hatch below the entertainment faucet.
Windlass Foot Controls (If Equipped):
Located on the forward deck.
Chapter 3: Propulsion & Related Systems

Engine

**CAUTION**

TRANSOM ENTRY DOOR DAMAGE HAZARD!

Always Open the transom entry door before opening the engine hatch.

**NOTICE**

Read the engine manual BEFORE starting or working on your engine.

While the topics listed below may be included in this supplement and in the Cruiser & Yacht Owner’s Manual, always refer to the engine manual first for specific information on these important subjects:

- Engine Break-in Procedure
- Engine Starting and Stopping
- Gear Shifting
- Fuel and Oil Recommendations
- Engine Maintenance
- Engine Storage/Winterization

Freshwater Cooling (If Equipped)

**WARNING!**

FLOODING and SWAMPING HAZARD!

- Close the seawater intake seacock when leaving your boat unattended for any length of time.
- If the seacock is left open, a hose failure could flood the bilge, swamp the battery(s) and the engine, and even sink your boat.

**CAUTION**

SYSTEM DAMAGE HAZARD!

- Open the engine cooling system’s seacock or ball valve BEFORE starting the engine.
- Keep the engine cooling system’s seacock or ball valve Open while the engine is running.

The freshwater cooling system circulates seawater through the heat exchanger to reduce engine temperatures.

- Open the seawater intake seacock before starting the engine.
- Keep the seacock Open while the engine is running.
Bilge Blower System

**WARNING!**

**FIRE and EXPLOSION HAZARD!**

Fuel vapors can explode! **BEFORE** starting the engine:

1. Check the bilge areas for fuel vapors or leaking fuel. If you see leaking fuel or smell fuel vapors:
   a. Do **NOT** start the engine, do **NOT** turn **On** any electrical devices, put out **ALL** cigarettes, cigars, and other sources of flame or ignition.
   b. Get everyone off your boat.
   c. Get trained help to find and fix the problem.
2. Run the bilge blowers for at least four minutes **BEFORE** engine starting, electrical system work, or turning on electrical devices.
   • If you smell fuel vapors and the engine is already running:
     a. Shut **Off** the engine and turn **Off** **ALL** electrical devices.
     b. Put out **ALL** cigarettes, cigars, and other sources of flame or ignition.
     c. Get trained help to find and fix the problem.
   • **NEVER** obstruct or change the bilge blower system.

- The bilge blower system removes explosive fumes from the engine and bilge areas.
- Fresh air is drawn into the engine and bilge areas through the vents.

**To make sure the engine and bilge areas are properly ventilated:**

- Use the "sniff test" to check the engine and bilge areas for fuel vapors **before** starting the engine.
- **Always** run the bilge blowers for at least four minutes **before** starting the engine.
- Continue to run the blowers until your boat has reached cruising speed.
- **Always** run the blowers when running your boat below cruising speed.
Fuel System

**WARNING!**

*FIRE, EXPLOSION, and OPEN FLAME HAZARD!*

- Thoroughly inspect the fuel system for leaks every time you take on fuel.
- Follow both the *Cruiser & Yacht Owner's Manual* fueling instructions and the engine operation manual fuel recommendations.

**CAUTION**

Avoid the storage or handling of gear near the fuel lines, fittings and tank.

**NOTICE**

- On diesel engine models, air in the diesel supply system can stop an engine or severely restrict performance.
- If you suspect air in the fuel lines, refer to your engine operation manual for detailed instructions on how to bleed the system.

**NOTICE**

Carefully read the fuel section of both the *Cruiser & Yacht Owner’s Manual* and the engine operation manual, paying special attention to the subject of fuel recommendations.

---

**GAS ENGINE FUEL LINE ROUTING (IF EQUIPPED)**

- **FUEL TANK VENT**
- **FUEL FILL DECK FITTING**
- **FUEL FEED LINE**
- **FUEL TANK**
**Fuel Fill & Vent**
- Depending on engine type, the fuel fill deck fitting is marked either GAS or DIESEL.
- If you have problems filling the fuel tank, see if the fuel fill hose or fuel tank vent hose is kinked or collapsed.
- If there are no visible signs of a problem, contact your local dealer.

**Anti-siphon Valve (Gas Engine Only)**

```
NOTICE

- If an engine running problem is diagnosed as fuel starvation, check the anti-siphon valve.
- If the valve is stuck or clogged, ONLY change or replace it while the engine is Off.
- NEVER run the engine with the anti-siphon valve removed, except in an emergency.
```

- The anti-siphon valve is a vital fuel system part.
- If the fuel line ruptures, this valve prevents the siphoning of fuel from the tank.
- The valve is located on the fuel tank, where the fuel feed line attaches to the tank.
- The valve is spring loaded and is opened by fuel pump vacuum.

**Gas Engine Fuel Filters**
- The fuel pickup tube, located inside the fuel tank, is equipped with a fine mesh screen filter.
- Also, when supplied by the engine manufacturer, a fuel filter is installed on the engine.
- Periodically replace the fuel filter to make sure it remains clean and free of debris.
- Talk to your selling dealer or local marina about fuel additives that help prevent fungus or other buildup in your fuel tank.
**Fuel Filter/Water Separator (Diesel Engine Only)**

- The fuel feed line features a fuel filter/water separator.
- Service instructions for the fuel filter/water separator are provided on the filter.

---

**NOTICE**

- The frequency of water draining or element replacement is controlled by the contamination level in the fuel.
- Inspect the collection bowls for water daily.
- Replace the elements at least once a year, or when a loss of power is noticed, whichever comes first.

---

**Electronic Fuel Shut-off Valve (Diesel Engine Only)**

- Your diesel engine is equipped with an electronic fuel shut-off valve.
- When you start your engine, the electronic fuel shut-off valve opens to allow fuel to the engine.
- When you turn off the engine, the electronic fuel shut-off valve closes, stopping the fuel flow to the engine.
- If the electronic fuel shut-off valve malfunctions, it has a manual override.
- Turn the manual override clockwise to open the electronic fuel shut-off valve.
Quick Oil Drain System

The quick oil drain hose assembly was attached to the engine oil pan at the factory. However, some minor assembly is still needed before you can use this system.

NOTE: This is not the only method for changing your oil. Your selling dealer can recommend other methods.

How to install the quick oil drain system:

1. Unscrew the factory installed bilge plug from the bilge drain (A). NOTE: Keep the original factory bilge plug on your boat as a spare.
2. Unclip the quick oil drain assembly from the wire loop (B) on the engine.
3. Unclip the bilge plug’s draw cord (C) from the oil drain plug’s draw cord (D).
4. Thread the oil drain plug’s draw cord (D) through the bilge drain (A).
5. Pull the oil drain plug (E), and the oil drain hose (F) through the bilge drain.
6. Adjust the hose stop clamp (G) so that no more than 12 inches of hose, including the oil drain plug, can extend out of the bilge drain (A).
7. Clip the bilge plug’s draw cord (C) back to the oil drain plug’s draw cord (D).
8. Push the oil drain hose, oil drain plug, and both draw cords through the bilge drain and into the bilge area.
9. Screw the bilge plug (H) into the bilge drain (A) and tighten firmly.

To drain the engine oil:

1. Remove your boat from the water.
2. Unscrew the bilge plug.
3. Pull the draw cord until the oil drain plug and the oil drain hose slide out of the bilge drain.
4. Place the end of the oil drain hose into a suitable container.
5. Unscrew the oil drain plug and drain the engine oil.
6. Replace the oil drain plug.
7. Push the drain hose back into the bilge.
8. Replace the bilge plug and tighten firmly.

Always dispose of waste oil in accordance with local laws.
Chapter 4: Controls & Gauges

Steering
- Your boat features a power-assisted rack-and-pinion steering system.
- For information about the power-assist fluid reservoir, refer to the engine operation and maintenance manual.
- Boat steering is not self-centering.
- Refer to the engine manual for more steering system details.

Shift/Throttle Controls

**WARNING!**

**LOSS OF CONTROL HAZARD!**

Improper maintenance of the shift/throttle hardware may cause a sudden loss of control!

Read *all* of the information about the shift/throttle controls in the shift/throttle manual, the engine operation manual, and the *Cruiser & Yacht Owner’s Manual*.

Power Trim & Tilt
- The stern drive on your boat is equipped with power trim and tilt.
- Trim and tilt instructions are provided in the engine operation manual and the shift/throttle manual.

Trim Tabs
- *Before* using the trim tabs, read the trim tabs’ owner’s manual.
- The trim tabs are controlled by two rocker switches at the helm.
- Check and refill the trim tab hydraulic fluid reservoir as directed in the trim tabs’ owner’s manual.
- For the location of the fluid reservoir, see the *Component Locations* section in *Chapter 2* of this supplement.
Gauges

Cleaning the Gauges

CAUTION

PRODUCT or PROPERTY DAMAGE HAZARD!

- Use only mild soap and water to clean the gauge lenses and bezels.
- Use of other cleaners, including common window cleaning solutions, may cause the lenses to crack.
- Lenses cracked in this manner will NOT be covered by our warranty.

Gauge Fogging

- Moisture may occasionally find its way into the gauges causing lens fogging.
- Turning On the gauge lights will help dry the lenses.
- Fogging will not harm the gauges.

Radio Transmission Interference

VHF or other radio transmissions may cause brief erratic readings on the tachometer. This will not damage the tachometer gauge or affect its accuracy when not transmitting.

Fuel Gauge

It is normal for the pointer on your fuel gauge to bounce as fuel sloshes back and forth in the fuel tank.
Chapter 5: Navigation & Communication Equipment

Read the manuals for all navigation & communication equipment before using these systems.

Depth Finder

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do NOT use the depth finder as a navigational aid to prevent collision, grounding, boat damage or personal injury.</td>
</tr>
<tr>
<td>• When your boat is moving, submerged objects will NOT be seen until they are already under your boat.</td>
</tr>
<tr>
<td>• Bottom depths may change too quickly to allow time for your boat to react.</td>
</tr>
<tr>
<td>• If you suspect shallow water or submerged objects, run your boat at very slow speeds.</td>
</tr>
</tbody>
</table>

VHF Radio (If Equipped)

• Your boat may include a VHF (Very High Frequency) radio.
• As permitted by the FCC (Federal Communications Commission), the VHF radio can be used to access weather reports, summon assistance, or contact other vessels.
• Contact the FCC for licensing, rules and laws concerning VHF radio usage.

Global Positioning System (GPS) (If Equipped)

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The GPS system should NOT be relied upon as the ONLY aid to navigation.</td>
</tr>
<tr>
<td>• An experienced operator MUST monitor the GPS system at ALL times and keep a look-out for other marine traffic and possible collision situations.</td>
</tr>
</tbody>
</table>

NOTICE

The GPS system is ONLY an aid to navigation. It's accuracy can be affected by:

• Equipment failure or defects
• Environmental conditions
• Improper handling or use
Chapter 6: Plumbing

Bilge Pumps

- Your boat has two bilge pumps for pumping water out of the bilge.
- Built-in autofloat switches turn On the bilge pumps if bilge water rises above a preset level.
- You can also turn On the bilge pumps using the switches at the helm.
- The bilge pumps are wired directly to the batteries. Unless the batteries are dead, the bilge pump system should keep working even when your boat is unattended.

NOTICE
Discharge of oil, oil waste, or fuel into navigable waters is prohibited by law. Violators are subject to legal action by the local authorities.
**Bilge Pump Testing**

- The bilge pump is vital to the safety of your boat.
- Test the bilge pump often.

1. Turn **On** the bilge pump switch at the helm.
2. Make sure that water in the bilge is pumped overboard.
- If there is water in the bilge and the pump motor is running but not pumping, inspect the discharge hose for a kink or collapsed area.

If the discharge hose looks okay, check the bilge pump and strainer for clogging debris.

**Inspecting and clearing debris from the bilge pump:**

1. Squeeze the holding tabs on each side of the strainer and pull the pump housing out of the strainer.
2. Remove debris from the strainer and the bottom of the pump housing.
3. Remove the impeller guard screw and the impeller guard.
4. Remove all debris from the pump chamber, from around the impeller, and from the tab slots on the sides.
5. Make sure the impeller is firmly attached to the shaft and is not cracked or broken.
6. Reinstall the impeller guard and screw, and the pump housing on the strainer. Make sure both tabs lock into the slots.

---

**Built-in Autofloat Switch Testing**

- The autofloat switch turns the bilge pump **On** when water rises above a preset level.
- Test the autofloat switch often as follows:

**Autofloat switch testing:**

Twist the float switch test button to turn **On** the bilge pump.
- If the pump does not turn **On**, check the fuse on the fuse block.
- If the fuse is good, but the switch still does not work, it may mean the switch is bad, or the battery is dead.
Seawater Systems

Seacocks

**WARNING!**

**FLOODING and SWAMPING HAZARD!**

- *Close* the seacock(s) when leaving your boat unattended for any length of time.
- If a seacock is left open, a hose failure could flood the bilge, swamp the batteries and the engine, and even sink your boat.

**CAUTION**

**SYSTEM DAMAGE HAZARD!**

- *BEFORE* using any system that has a seacock, make sure that the system’s seacock is *Open*.
- Inspect and lubricate all seacocks annually.

Thru-hull inlet or outlet fittings near or below the waterline feature seacock valves. You can close a seacock to stop water entry:

- If the hose connected to the seacock fails, or;
- To work on equipment served by the seacock.

Seacocks are used on your boat in seawater intake or liquid-discharge systems including, but not limited to:

- Air conditioner (if equipped)
- Marine head (toilet)

*Before* using any system with a seacock, make sure the seacock is *Open* and stays *Open* until the system is shut *Off*.

Seawater Strainers

**CAUTION**

**FLOODING HAZARD!**

- *BEFORE* taking apart a seawater strainer for cleaning or other work, *Close* the seacock that sends seawater to that strainer.
- Failure to close the seacock before taking apart the seawater strainer may allow large amounts of water to flood the bilge, which could swamp the batteries and the engine, and even sink your boat.
- Keep the seacock *Closed* until the seawater strainer is completely reassembled.

**SYSTEM DAMAGE HAZARD!**

- After putting the seawater strainer back together, make sure that the seacock valve is *Open* *BEFORE* using the component/system.

- Seawater strainers are used to filter incoming seawater in *some* seawater intake systems. NOTE: Not all seawater intake systems have seawater strainers.
- If equipped, the seawater strainer is located near the seawater intake system’s seacock.
- Check the strainers for leaks and/or debris *every time* you use your boat.
- Refer to the seawater strainer instruction sheet for cleaning and maintenance information.
Freshwater System

**WARNING!**
- *ONLY* use safe drinking (potable) water in your boat’s freshwater system.
- *ONLY* use FDA approved "drinking water safe" hoses when filling the freshwater tank.
- *NEVER* use common garden hoses for drinking water.

- Read the *Freshwater System* section in the *Cruiser & Yacht Owner’s Manual*.
- The freshwater fill deck fitting is marked WATER.
- Pressurize the freshwater system by either turning *On* the freshwater pump switch (the battery switch must also be *On*).
- For the location of the freshwater pump switch, see the *Component Locations* section in *Chapter 2* of this *supplement*.
- Turn *Off* the freshwater pump switch when your boat is *not* in use or when the freshwater tank is empty.
- Inspect and clean the freshwater filter often (the filter is located on the freshwater pump).
- If your boat is to be left unattended for a long period of time, pump the freshwater tank dry to prevent stored water from becoming stagnant and distasteful.
- If the freshwater system needs to be disinfected, ask your dealer about treatments available for your boat’s system.

**Transom Shower**
- Read the manufacturer’s instructions *before* using the transom shower for the first time.
- The freshwater pump switch *must* be turned *On* *before* using the transom shower.
Freshwater System Winterization

1. Turn **Off** the water heater breaker switch.
   **NOTE:** Tag or Mark the water heater breaker switch to prevent it from being turned **On** while the water heater tank is empty.
2. Turn **On** the freshwater pump switch.
3. **Open all** of the faucets and showers and let the freshwater system drain completely.
4. Turn **Off** the freshwater pump switch.

*All* of the remaining water **must** be removed from the water lines. There are two ways to remove the remaining water from the lines:
- Compressed Air
- Gravity Draining

Compressed Air

You **must** have an air compressor with an air hose and an air nozzle.

1. Remove the water line from the outlet side of the freshwater pump (opposite side from filter).
2. **Open** the faucet that is furthest away from the freshwater pump.
3. Place the air nozzle against the end of the just removed water line and blow air through the system.
4. When water stops coming out of the faucet, stop the air and **Close** the faucet.
5. One at a time, repeat this process on **all** faucets and showers.

Gravity Draining

1. **Open all** faucets and showers.
2. Remove the drain plug from the tee fitting on the freshwater tank.
3. When the water has stopped draining from the freshwater tank and the water lines, replace the drain plug.
**Water Heater**

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCALDING HAZARD!</strong></td>
</tr>
<tr>
<td>Water heated by the water heater can be hot enough to scald the skin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER HEATER DAMAGE HAZARD!</strong></td>
</tr>
<tr>
<td>• Do <em>NOT</em> turn <em>On</em> the water heater circuit breaker on the 110-volt AC master panel until the water heater tank is <em>COMPLETELY</em> filled with water.</td>
</tr>
<tr>
<td>• The tank is full if water flows from the tap when the hot water is turned <em>On</em> in the galley.</td>
</tr>
<tr>
<td>• Even brief water heater operation with a dry tank <em>WILL</em> damage the heating elements.</td>
</tr>
<tr>
<td>• Warranty replacements will <em>NOT</em> be made on elements damaged in this manner.</td>
</tr>
<tr>
<td>• Turn the power <em>Off</em> and drain the water heater when the chance of freezing exists (see the winterizing instructions below).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>If 110-volt AC power is being provided by shore power or generator power, but the water heater is not working:</td>
</tr>
<tr>
<td>• Make sure the water heater circuit breaker on the 110-volt AC master panel is switched <em>On</em>.</td>
</tr>
<tr>
<td>• If the circuit breaker is <em>On</em>, but the water heater is still not working, ask your dealer how to check the push-to-reset circuit breaker located on the water heater.</td>
</tr>
</tbody>
</table>

- Read the water heater instruction manual and heed the warnings above.
- The water heater is connected to the 110-volt AC power system.
- To heat the water, turn *On* the water heater circuit breaker on the 110-volt AC master panel.
Winterizing the Water Heater

CAUTION

WATER HEATER DAMAGE HAZARD!

- NEVER turn On the water heater breaker on the 110-volt AC master panel while the water heater tank is empty.
- Even brief water heater operation with a dry tank WILL damage the heating elements.
- Warranty replacements will NOT be made on elements damaged in this manner.
- To prevent damage to the water heater after winterizing, always label the breaker switch on the 110-volt AC master panel as ‘winterized’.

NOTICE

The freshwater system MUST be drained BEFORE winterizing the water heater (see the Freshwater System Winterization Instructions on the previous page).

1. Turn Off the water heater breaker.
2. Disconnect the hose (A) attached to the pressure relief valve (B).
3. If there is any water in this hose, drain it into the bilge or into a bucket.
4. Open the pressure relief valve (B).
5. Open the drain valve (C).
6. Attach a tag to the water heater breaker to indicate that the tank is empty.

• NOTE: Your boat came with a tag attached to the water heater breaker. It is suggested that you keep this tag and re-use it when winterizing.
• Leave the pressure relief and drain valves Open until you fit out your boat after storage.
Preparing the Water Heater for Use After Boat Storage

**CAUTION**

**WATER HEATER DAMAGE HAZARD!**

- Fill the water heater tank *BEFORE* turning *On* the water heater breaker on the 110-volt AC master panel.
- *NEVER* turn *On* the water heater breaker on the 110-volt AC master panel while the water heater tank is empty.
- To test if the tank is full, turn *On* a hot water faucet. If water flows from the tap, the water heater tank is full.
- Even brief water heater operation with a dry tank *WILL* damage the heating elements.
- Warranty replacements will *NOT* be made on elements damaged in this manner.

When you are ready to resume use of your boat after it has been in storage, prepare the water heater for use as follows:

1. **Close** the drain valve (C).
2. **Close** the pressure relief valve (B).
3. Connect the hose (A) to the pressure relief valve (B).
4. Fill the water heater tank with freshwater.
5. Remove the ‘winter-ized’ tag on the water heater breaker on the 110-volt AC master panel *after* the water heater tank is *completely* filled with freshwater.
6. Turn *On* the water heater breaker.
Drain Systems

Deck Drains
- Water on the deck is drained overboard through the deck drains.
- Keep the deck drains free of debris.

Gray Water Drain System (With Holding Tank)

- Gray water above the waterline is gravity drained into the gray water holding tank.
- Gray water from the shower is below the waterline and drains into a sump pump box. When the drain water in the sump box rises to a preset level, an autofloat switch turns on the sump pump and pumps the drain water into the gray water holding tank (see sump box cleaning and winterization on the next page).

Gray Water Drain System (Without Holding Tank)

- The shower drains into the sump pump box.
- The sump pump box has an autofloat switch.
- When the drain water rises to a preset level, the autofloat switch turns on the sump pump, and the drain water is pumped overboard.
**Sump Box Cleaning**

Periodically clean the sump box (A), filter, and pump as follows:

1. Remove the cover screws (B) and the cover (C).
2. Remove any debris from the box and the filter.
3. Clean the sump pump as outlined in the *Bilge Pump* section of this chapter.

**Sump System Winterization**

Drain the sump pump system in the months when *not* in use.

1. Disconnect and drain *all* lines to the unit.
2. Remove the screws from the mounting feet (D) and drain the system.
3. Reinstall the screws in the mounting feet and reconnect the system.
Marine Head & Black Water Holding Tank

NOTICE
Check with local authorities about the legal use of marine head systems.

Manual Flush Head (If Equipped)

WARNING!
FLOODING and SWAMPING HAZARD!

- Close the seawater intake seacock when leaving your boat unattended for any length of time.
- If the seacock is left open, a hose failure could flood the bilge, swamp the batteries and the engine, and even sink your boat.

- Before using this system, read the marine head’s operation and maintenance manual.
- Look at the side of the black water holding tank to check the content level.
- The dockside pump-out deck fitting is marked WASTE.
- Empty the black water holding tank at every opportunity.

Using the Marine Head

1. Open the head’s seawater intake seacock (the location of this seacock is described in the Component Locations section of Chapter 2).
2. Before using the head, pump water into the bowl to wet the sides.
3. After use, pump until the bowl is clean.
4. Pump a few more times to clean the lines.
5. If excess waste causes the water to rise in the bowl, stop pumping until the water recedes.
- Close the intake seacock when the system will not be used for long periods of time.

Winterizing the System

Read the marine head’s operation and maintenance manual for winterizing instructions.
Electric Flush Head (If Equipped)

**WARNING!**

FLOODING and SWAMPING HAZARD!

- Close the seawater intake seacock when leaving your boat unattended for any length of time.
- If the seacock is left open, a hose failure could flood the bilge, swamp the batteries and the engine, and even sink your boat.

- Read the marine head operation and maintenance manual before using the marine head for the first time.
- The electric flush marine head uses seawater to flush waste from the toilet into the black water holding tank.
- The seawater intake valve (seacock) must be Open for the head to work.
- Check the content level of the black water holding tank often by looking at the side of tank.
- Empty the black water holding tank at every opportunity.
- The black water holding tank is plumbed to a fitting on the deck for dock-side pump-out.
- Keep the intake seacock Closed while your boat is underway or when the system will not be used for long periods of time.

**Winterizing the System**

Read the marine head operation and maintenance manual for winterizing instructions.
**Macerator (If Equipped)**

To use the macerator to pump waste directly underwater (where laws permit):

1. *Open* the underwater discharge seacock.
2. Press both macerator switches at the same time to run the pump.
3. Stop running the macerator as soon as the black water holding tank is empty.
4. *Close* the underwater discharge seacock when you are done pumping.
Air Conditioner (If Equipped)

**DANGER!**

**CARBON MONOXIDE POISONING HAZARD!**
- Dangerous carbon monoxide gas (CO) can be brought into your boat through the air conditioning system.
- Read the Carbon Monoxide (CO) section in Chapter 1 of this supplement.

**WARNING!**

**FLOODING and SWAMPING HAZARD!**
- Close the seawater intake seacock before leaving your boat unattended.
- If the seacock is left open, a hose failure could flood the bilge, swamp the batteries and the engine, and even sink your boat.

**CAUTION**

**SYSTEM DAMAGE HAZARD!**
- Open the system’s seawater intake seacock BEFORE turning On the air conditioner.
- This seacock MUST stay Open until the air conditioner is turned off.

- Read the air conditioner manual before using the air conditioner system.
- Turn On the air conditioner breaker on the 110-volt AC master panel.
- Open the seawater intake seacock before using the air conditioner. The seacock must remain Open while you’re running the air conditioner.
- Check the seawater strainer for debris before each use of the air conditioning system. Clean the strainer, when needed, as described in the Seawater Systems section of Chapter 6.
- Condensation water collects in the air conditioner pan and then drains into a sump pump box (see the Sump Box Cleaning and Sump System Winterization sections earlier in this chapter).
Chapter 7: Deck Equipment

Cleats & Bow/Stern Eyes

**WARNING!**
PERSONAL INJURY and/or PRODUCT or PROPERTY DAMAGE HAZARD!
NEVER lift your boat using the bow/stern eyes or the cleats.

Read the section on towing in the *Cruiser & Yacht Owner’s Manual* before:
- Towing anything behind your boat.
- Being towed by another vessel.

**Windlass (If Equipped)**

**DANGER!**
PERSONAL SAFETY & PRODUCT DAMAGE HAZARD!
An unsecured anchor could accidentally release while your boat is moving, damaging your boat and causing serious injury or death.

After retrieving the anchor:
- Secure the anchor with an anchor safety strap, or a chain stopper.
- Switch OFF the windlass circuit breaker to prevent accidental operation.

**CAUTION**
PRODUCT DAMAGE HAZARD!
Do NOT rely on the windlass alone to hold your boat at anchor. After setting the anchor, tie the rode off to a cleat or equivalent strong point.

Do NOT pull your boat to the anchor using the windlass, or continue running the windlass if it has stalled or is overloaded.

- Read and follow the manufacturer’s instruction manual before using the anchor windlass for the first time.
- The windlass can be controlled from a switch at the helm or from the deck foot switches.
- Make sure that the windlass circuit breaker is turned On before using the anchor windlass.
- To raise the anchor, use engine power (not the windlass) to move your boat to, and directly above, the anchor.
- Dislodge the anchor from the bottom by pulling it straight up with the windlass.
- Before getting underway, make sure the anchor is secured and the windlass circuit breaker is turned Off.
Canvas & Vinyl Tops & Enclosures

**CAUTION**

**PRODUCT or PROPERTY DAMAGE HAZARD!**
Take down and securely stow **ALL** canvas & vinyl **BEFORE** your boat is transported by road.

**NOTICE**

**BEFORE** cleaning and/or stowing your canvas or vinyl, read the sections later in this chapter, *Canvas Care and Clear Vinyl Care*.

**NOTICE**

Two people are needed for most of the tasks listed in this section.

**NOTICE**

Some canvas and vinyl options may not be described. Make sure your dealer explains how to install all canvas and vinyl.

**Bimini Top (If Equipped)**

1. Insert the end eyes of the main bow (A) into the aft hinges on the windshield and secure them with the pins.
2. Pull the secondary bows (B) forward and insert the end eyes of the forward braces (C) into the forward hinges on the windshield.
3. Insert the end eyes of the aft braces (D) into the deck hinges and secure them with the pins.
   - The jaw slides should not need to be adjusted.
   - If you decide to adjust the jaw slide positions, get the correct measurements from your selling dealer.
**Camper Top (If Equipped)**

1. Insert the end eyes of the main bow (A) into the forward deck hinges and secure them with the pins.
2. Zip four to six inches of the camper top’s zippers (B) to the bimini top.
3. Insert the end eyes of the aft braces (C) into the aft deck hinges and secure them with the pins.
4. Finish zipping both zippers
   - The jaw slides (D) should not need to be adjusted.
   - If you decide to adjust the jaw slide positions, get the correct measurements from your selling dealer.

**Vinyl Curtains (If Equipped)**

Make sure your dealer explains how to install your vinyl curtains.
Canvas Care (see also ‘Clear Vinyl Care’ on next page)

- After each use, especially in saltwater, rinse the canvas with cold freshwater.
- Before stowing, let the canvas air-dry completely.
- The canvas can be rolled or folded for stowage.

Cleaning the Canvas

NEVER use detergents when washing the canvas. Detergents can destroy the water repellency, and mildew/UV resistant finish of your canvas.

Regularly clean the canvas to prevent dirt, pollen, and etc. from embedding in the fabric. Generally, it is easiest to wash the canvas while it is installed on your boat.

- Use a soft-bristled brush to remove all dust and loose dirt.
  1. Hose down the canvas with freshwater.
  2. Gently wash the canvas with a solution of lukewarm water (no more than 100° F) and non-detergent mild soap, such as Ivory Snow®, Dreft®, or Woolite®.
  3. Rinse thoroughly to remove the soap.
  4. Before stowing, let the canvas dry completely.

Stubborn Stains

NEVER use detergents when washing the canvas. Detergents can destroy the water repellency, and mildew/UV resistant finish of your canvas.

Some stubborn stains may resist normal washing and you can try the methods below. However, these methods may remove the waterproof finish of the fabric and may also decrease the life of the polyester thread used in the canvas. Reapply a water repellent treatment as needed.

Method 1

1. Add 1/8 cup (1 oz.) of non-chlorine bleach to one gallon of water and mix thoroughly.
2. Thoroughly wet the canvas and then gently scrub the stained area with the weak bleach solution.
3. Rinse with cold water to remove all of the solution.

Method 2

1. Add 1/2 cup (4 oz.) of non-chlorine bleach and 1/2 cup (4 oz.) Ivory Snow®, Dreft®, or Woolite® to one gallon of water and mix thoroughly.
2. Soak the canvas in this solution for about 20 minutes.
3. Rinse with cold water to remove all of the solution.
Clear Vinyl Care

**CAUTION**
- *NEVER* store the clear vinyl pieces wet, as this will cause a milky film to develop.
- *NEVER* fold or crease the clear vinyl pieces as cracking will occur.
- Clear vinyl is *NOT* intended for use when your boat is in storage or being moored.
- Clear vinyl does *NOT* hold up well against ultraviolet rays.
- Under direct sunlight conditions, do *NOT* let the clear vinyl touch the framework. The framework radiates heat and can burn the clear vinyl.

- After each use, especially in saltwater, rinse the clear vinyl with cold freshwater.
- **Before** stowing, the clear vinyl must be completely dry. Air-drying is best, but you can also carefully dry the vinyl with a chamois or soft cotton cloth.
- The clear vinyl can be rolled or laid out flat for stowage.
- **Never** fold or crease the clear vinyl parts as cracking will occur.

**Cleaning Clear Vinyl**

Regularly clean the clear vinyl to prevent dirt, pollen, and etc. from marring the surface. Generally, it is easiest to clean the clear vinyl while it is installed on your boat.

1. Hose down the clear vinyl with freshwater.
2. Using a soft cotton cloth (**paper towels are abrasive and should never be used on clear vinyl**), gently wash the clear vinyl with soap and water.
3. Rinse thoroughly to remove the soap.
4. **Before** stowing, the clear vinyl must be completely dry. Air-drying is best, but you can also carefully dry the vinyl with a chamois or soft cotton cloth.
- Ask your dealer about products available to keep the clear vinyl polished and looking new.
Chapter 8: Appliances & Entertainment Systems

**NOTICE**

ALWAYS keep an approved ABC-type fire extinguisher in galley area.

- The separate instruction sheets or manuals for *all* appliances and entertainment systems contain detailed information and important safeguards.
- Read these instruction sheets and manuals *before* using your boat’s appliances and entertainment systems.
- If applicable, make sure the 110-volt AC breaker is turned *On* for the appliance or entertainment system you wish to use.

**Refrigerator**

The refrigerator runs on 12-volt DC power *unless* 110-volt AC power is being supplied by shore power or generator power (if equipped) *and* the refrigerator’s circuit breaker on the 110-volt AC master panel is *On*.

**Audio Equipment**

**NOTICE**

AM radio reception may be impaired anytime the engine is running.
Alcohol/110-Volt Electric Stove

**DANGER!**

**CARBON MONOXIDE POISONING HAZARD!**

- The alcohol stove is a source of dangerous carbon monoxide gas (CO).
- **BEFORE** using the alcohol stove, **Open** doors and windows to make sure there is enough fresh air for ventilation.
- Read the *Carbon Monoxide (CO)* section in Chapter 1 of this supplement.

**WARNING!**

- Open flame cooking appliances consume oxygen. This can cause asphyxiation or death.
- Maintain open ventilation.

**WARNING!**

**BURN/SCALDING and/or FIRE HAZARD!**

- Read the stove’s instruction manual **BEFORE** using.
- **ALWAYS** keep an approved ABC-type fire extinguisher in the galley area.
- Do **NOT** use the stove while underway.
- Any non-cooking devices on or near your stove during use are potential fire hazards!
- Do **NOT** touch the burners, grates or nearby surfaces as they may be hot even when they are dark in color.
- Areas near the burners and grates may become hot enough to cause burns.
- During and after use, do **NOT** touch or let clothing or other flammable material come in contact with the heated units or the areas near the units (burner tops, main frame sides and back, sea rails and pot holders) until they have had sufficient time to cool.

**CAUTION**

**PRODUCT DAMAGE HAZARD!**

To prevent overheating which can destroy the electric burner elements, **NEVER** try to use both alcohol and electric burners at the same time.
Chapter 9: Convertible Seats, Beds, & Tables

Converting Cockpit Dinette to Sunlounge (If Equipped)

1. Remove the table (A) and the table leg (B).

2. Place the table (A) so that it fits securely on the edge lips at the front of the lounge seat cushions.
3. Place the filler cushion (C) on top of the table.

4. When not in use, store the table and table leg under the aft seat cushion. Secure the table in place with the provided cord.
Converting V-berth Dinette to Sleeping Berth

1. Remove the table (A) and the table leg (B).

2. Securely store the table leg (B) in the clips provided under the port side seat cushion.

3. Place the filler board (C) so that it fits securely on the edge lips at the front of the dinette seats.
4. Place the table (A) so that it fits securely on the filler board and the edge lips at the front of the dinette seats.

5. Place the port and starboard aft seat backs (D) on top of the table.

6. Place the filler wedge (E) on top of the filler board.
Helm Seat Adjustments

To Slide the Helm Seat Forward or Aft:

1. While seated, reach under the helm seat and pull up on the lever.
2. Slide the helm seat forward or aft.
3. The helm seat will lock in place automatically.

To Adjust the Helm Seat Back:

- Lift up on the seat back handle to move it forward or aft.
Chapter 10: Lights

Care & Maintenance

All of the lights installed on your boat are of top quality, but you should be aware that failure may periodically occur for a variety of reasons:

1. There may be a blown fuse - replace the fuse.
2. The bulb may be burned out - carry spare replacement bulbs, making sure the wattage is correct.
3. A wire may be damaged or may have come loose - repair as required.
4. The bulb base may be corroded - clean the base and coat it with non-conductive electrical lubricant.

Interior & Exterior Lights

- The lights are powered by your boat’s 12-volt DC system.
- The battery switch must be turned On for the lights to work.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Be conservative in the use of battery power.</td>
</tr>
<tr>
<td>• Prolonged use of cabin interior lights (overnight) WILL result in a drained battery.</td>
</tr>
</tbody>
</table>

Navigation Lights

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid the storage of gear where it would block navigation lights from view.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running lights are legally required to show boat direction and right-of-way at night.</td>
</tr>
</tbody>
</table>

Spotlight (If Equipped)

Read the spotlight operating instructions before using the spotlight.
**Chapter 11: Electrical System**

---

**DANGER!**

**EXTREME FIRE, SHOCK and EXPLOSION HAZARD!**

- *NEVER* install non-ignition protected switches or other arcing devices in the fuel compartment.
- *NEVER* substitute automotive parts for marine parts. Marine electrical, ignition, and fuel system parts were designed and manufactured to comply with rules and laws that minimize the risks of fire and explosion.
- *NEVER* change the electrical systems or relevant drawings.
- Allow *ONLY* trained personnel to install batteries and/or do electrical system work.
- Make sure that *ALL* battery switches are turned *Off* *BEFORE* working in the engine spaces.

---

**WARNING!**

**FIRE and EXPLOSION HAZARD!**

Fuel vapors can explode! *BEFORE* turning on electrical devices or working on the electrical system:

1. Check the bilge areas for fuel vapors or leaking fuel. If you see leaking fuel or smell fuel vapors:
   a. Do *NOT* start the engine or generator (if equipped), do *NOT* turn *On* any electrical devices, put out *ALL* cigarettes, cigars, and other sources of flame or ignition.
   b. Get everyone off your boat.
   c. Get trained help to find and fix the problem.
2. Run the bilge blower(s) for at least four minutes *BEFORE* engine starting, electrical system work, or turning on electrical devices.

---

**CAUTION**

**SHOCK and ELECTRICAL SYSTEM DAMAGE HAZARD!**

When the engine is running, *NEVER* turn *Off* the battery switch or disconnect the battery cables. Doing either could cause damage to your boat’s engine and/or electrical system.

---

**NOTICE**

Electrical connections are prone to corrosion. To reduce corrosion-caused electrical problems:

- Keep *ALL* electrical connections clean.
- Apply a spray-on protectant that is designed to protect connections from corrosion.
12-Volt DC System

**Batteries**
- The batteries supply electricity for lights, 12-volt accessories, engine starting and, if equipped, generator starting.
- The *Electrical* section in Chapter 8 of the *Cruiser & Yacht Owner’s Manual* provides battery care and maintenance instructions.

**Battery Switch**

---

**CAUTION**

*S H O C K a n d E L E C T R I C A L S Y S T E M D A M A G E H A Z A R D!*

When the engine is running, *NEVER* turn *Off* the battery switch or disconnect the battery cables. Doing either could cause damage to your boat’s engine and/or electrical system.

---

**NOTICE**

Make sure your selling dealer fully explains how to use the battery switch.

- Standby-loads, such as the automatic bilge pumps and the stereo memory, are not affected by the battery switch since they are wired directly to the battery.
- Turn the battery switch to the *Off* position whenever your boat will be unoccupied for long periods of time.
Battery Switch (If Equipped with Two Batteries)

- Standby-loads, such as the automatic bilge pumps and the stereo memory, are not affected by the battery switch since they are wired directly to the batteries.
- Turn the battery switch to the Off position whenever your boat will be unoccupied for long periods of time.

### Battery Switch Positions

<table>
<thead>
<tr>
<th>BATTERY SWITCH POSITIONS</th>
<th>ENGINE STARTING</th>
<th>ACCESSORIES &amp; LIGHTS</th>
<th>ENGINE ALTERNATOR</th>
<th>BATTERY CHARGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSITION 1</td>
<td>Battery 1 provides starting power</td>
<td>Battery 1 provides power for accessories and lights</td>
<td>Charges battery 1</td>
<td>Charges BOTH batteries</td>
</tr>
<tr>
<td>POSITION 2</td>
<td>Battery 2 provides starting power</td>
<td>Battery 2 provides power for accessories and lights</td>
<td>Charges battery 2</td>
<td>Charges BOTH batteries</td>
</tr>
<tr>
<td>POSITION BOTH</td>
<td>BOTH batteries Provide starting power</td>
<td>BOTH batteries provide power for accessories and lights (not advised unless engine is running)</td>
<td>Charges BOTH batteries</td>
<td>Batteries will NOT charge properly</td>
</tr>
</tbody>
</table>

**CAUTION**

SHOCK and ELECTRICAL SYSTEM DAMAGE HAZARD!

When the engine is running, NEVER turn Off the battery switch or disconnect the battery cables. Doing either could cause damage to your boat’s engine and/or electrical system components.

**NOTICE**

Since your boat’s batteries were installed by your dealer, the battery switch positions listed below may vary. Make sure your selling dealer fully explains how to use the battery switches.
Fuses & Circuit Breakers

- As shown above, individual accessory fuses are on the fuse blocks. See the Component Locations section in Chapter 2 for the location of the fuse blocks.
- Fuses for engine controls and gauges are on the engine. See the engine operation manual.
- The DC main circuit breaker, and the push-to-reset circuit breakers for the bilge pumps and CO monitor are located on the battery switch panel.
- Some equipment may have secondary fuse protection at the unit, behind the battery switch panel, or at the batteries.

12-Volt DC Accessory Outlets

- The outlets can be used with any 12-volt device which draws 15-amps or less.
- Each 12-volt DC accessory outlet is protected by a 15-amp fuse on the fuse block.
- For the locations of the 12-volt DC accessory outlets, see the Component Locations section in Chapter 2 of this supplement.

CAUTION

Do NOT use the 12-volt DC accessory outlet with a cigarette or cigar lighter. High temperatures may melt the outlet.
**Alternator**

The alternator charges the battery when the engine is running at, or above, cruising speeds.

**Battery Charger**

- **CAUTION**
  
  ENGINE and ELECTRICAL SYSTEM DAMAGE HAZARD!
  
  NEVER run your boat’s engine and the battery charger at the same time.

- **CAUTION**
  
  - The battery charging systems (alternator and battery charger) installed on your boat are designed to charge conventional lead-acid batteries.
  - BEFORE installing gel-cell or other new technology batteries, consult with the battery manufacturer about charging system requirements.

- **Before** using the battery charger, read all instructions and warnings: (1) on the battery charger, (2) on the batteries, and (3) in the battery charger manual.
- The battery charger will automatically charge your boat’s batteries when 110-volt AC power is being provided by shore power or generator power (if equipped), and the battery charger circuit breaker on the 110-volt AC master panel is On.
- The battery switch(s) can be in any position during charging.
- During battery charging you may use 12-volt accessories, such as the lights and stereo, but battery charging will take longer.
110-Volt AC System

WARNING!

FIRE and ELECTRICAL SYSTEM DAMAGE HAZARD!
If equipped with a generator, NEVER bypass the power source lockouts. Using both shore power and generator power at the same time WILL cause major electrical system damage and could start a fire!

- The power source lockouts on the 110-volt AC master panel prevent the use of shore power and generator power at the same time.

CAUTION

WATER HEATER DAMAGE HAZARD!

- Do NOT turn On the water heater circuit breaker on the 110-volt AC master panel until the water heater tank is COMPLETELY filled with water.
- The tank is full if water flows from the tap when the hot water is turned On in the galley.
- Even brief water heater operation with a dry tank WILL damage the heating elements.
- Warranty replacements will NOT be made on elements damaged in this manner.

NOTICE

- Whether using shore power or generator power (if equipped), the use of several 110-volt AC accessories at the same time can result in an overloaded circuit.
- You may have to turn Off one or more accessories to use another accessory.

To gain a basic understanding of your boat’s 110-volt AC system, read the handbook, A Boater’s Guide To AC Electrical Systems. If this handbook is not in your owner’s packet, call 360-435-8957 and the handbook will be mailed to you.

- The 110-volt AC system can be energized by shore power, or generator power (if equipped).
- Individual breakers on the 110-volt AC master panel must be turned On to supply power to the accessories you wish to use.
- The 110-volt AC master panel may contain circuit breakers for accessories that are not available for your boat.
Shore Power

**DANGER!**
**FIRE, EXPLOSION and SHOCK HAZARD!**

- Use *ONLY* compatible shore power connectors and *NEVER* alter the connectors.
- Turn *Off ALL* breakers and switches on the 110-volt AC master panel *BEFORE* plugging in or unplugging the shore power cord.
- To prevent shock or injury from dropping a "hot" cord into the water:
  a. *ALWAYS* plug the shore power cord into the boat inlet first, and then into the dockside outlet.
  b. When unplugging from shore power, *ALWAYS* unplug the shore power cord from the dockside outlet first.
- *NEVER* leave the shore power cord plugged into the dockside outlet *ONLY*.
- *ONLY* use shore power cords approved for marine use. *NEVER* use ordinary indoor or outdoor extension cords.

---

**WARNING!**
**SHOCK and ELECTRICAL SYSTEM DAMAGE HAZARD!**

- Monitor the polarity indicator lights *EVERY TIME* you connect to shore power.
- If a reversed polarity light turns *On* when you are connecting to shore power, do *NOT* turn *On* the main breaker switches.
- Instead, *IMMEDIATELY* unplug the shore power cord (*ALWAYS* from the dockside outlet first) and alert marina management.

---

**WARNING!**
**SHOCK and ELECTRICAL SYSTEM DAMAGE HAZARD!**

- *BEFORE* each use, check the shore power cord for defects or damage.
- *NEVER* use a damaged or faulty cord since the danger of fire and electrical shock exists.
- Do *NOT* pinch the shore power cord in doors or hatches, or coil the shore power cord too tightly, since these situations can generate enough heat to result in a fire.
- If a shore power cord is dropped into the water, *COMPLETELY* dry the blades and contact slots *BEFORE* using.

---

**CAUTION**
**ELECTRICAL SYSTEM DAMAGE HAZARD!**

- *NEVER* connect to dockside power outside of North America unless you have the international electrical conversion option.
- Using several 110-volt AC accessories at the same time can result in an overloaded circuit. You may have to turn *Off* one or more accessories to use another accessory.
- Use double insulated or three-wire protected electrical appliances whenever possible.
• Single shore power 110-volt/60-hertz AC systems feature one 110-volt/30-amp shore power inlet.
• If your boat has an air conditioning system, a second (dual) 110-volt/30-amp inlet has been installed.
• Dual shore power inlets are labeled LINE 1 and LINE 2, which corresponds to the SHORE POWER 1 and SHORE POWER 2 master breakers on the 110-volt AC master panel.
• LINE 1 and LINE 2 are independent of each other except when the parallel switch is used.

**Connecting to Shore Power**

1. Review all hazard information at the beginning of this section, Shore Power.
2. Turn Off the shore power master circuit breaker(s) and all switches and breakers on the 110-volt AC master panel.
3. Attach the shore power cord(s) to the boat inlet(s) first, then to the dockside outlet(s).
4. Turn On the SHORE POWER 1 and SHORE POWER 2 (if equipped) master breaker(s) on the 110-volt AC master panel.
5. As needed, turn On the individual component breakers on the 110-volt AC master panel.

**Parallel Switch (Only if Equipped with Dual Shore Power)**

1. Connect to shore power as described in the Connecting to Shore Power section above.
2. Switch the parallel switch (transfers power from line 1 to line 2) On instead of the SHORE POWER 2 master breaker.
3. Turn On the individual component breakers as required.
Generator

**DANGER!**

**CARBON MONOXIDE POISONING HAZARD!**
- Generators are a source of dangerous carbon monoxide gas (CO). Check the generator exhaust system for leaks BEFORE each use.
- Read the Carbon Monoxide (CO) section in Chapter 1 of this supplement.

**WARNING!**

**FIRE and EXPLOSION HAZARD!**
Fuel vapors can explode! BEFORE starting the generator:
1. Check the bilge areas for fuel vapors or leaking fuel. If you see leaking fuel or smell fuel vapors:
   a. Do NOT start the generator or the engine, do NOT turn On any electrical devices, and put out ALL cigarettes, cigars, and other sources of flame or ignition.
   b. Get everyone off your boat.
   c. Get trained help to find and fix the problem.
2. Run the bilge blower(s) for at least four minutes BEFORE generator or engine starting, electrical system work, or turning on electrical devices.
   - If you smell fuel vapors and the generator is already running:
     a. Shut Off the generator and turn Off ALL electrical devices.
     b. Put out ALL cigarettes, cigars, and other sources of flame or ignition.
     c. Get trained help to find and fix the problem.

**WARNING!**

**FLOODING and SWAMPING HAZARD!**
- Close the seawater intake seacock when leaving your boat unattended for any length of time.
- If the seacock is left open, a hose failure could flood the bilge, swamp the batteries and the engine, and even sink your boat.

**CAUTION**

**SYSTEM DAMAGE HAZARD!**
- ALWAYS make sure the generator’s seawater intake seacock is Open BEFORE starting, and during running of the generator.
- NEVER run the generator starter for more than 30 seconds. If the generator does not start, wait at least 30 seconds BEFORE trying again.
- After the generator starts, let the generator stabilize BEFORE turning On the component breakers on the 110-volt AC master panel.

**NOTICE**
Follow the starting and stopping instructions in the generator’s operation manual.
• When your boat is not connected to shore power, the generator can supply 110-volt/60-hertz power.

• **Before** using the generator, read the generator operation manual for pre-start checks and break-in procedures.

• Refer to the generator manual for starting/stoping instructions.

**Important generator notes:**

• Polarity has been established in the installation of the generator. Therefore the polarity lights will not function in this mode.

• Fuel to run the generator is supplied from the fuel tank.

• Periodically replace the fuel filter on the generator to make sure it remains clean and free of debris.

• Diesel generators also have a fuel filter/water separator. Service instructions are provided on the fuel filter/water separator.

• The coolant mixture installed at the factory consists of equal parts of water and antifreeze (Ethylene Glycol).

• Check the generator’s seawater strainer for leaks and/or debris **before** each use.
Electrical Routings

**12-Volt DC Hull Harnesses**

[Diagram of electrical routings]

- Engine Harness Plug
- Forward Bilge Pump
- Trim Tab Pump
- Battery Switch Panel
- Trim & Tilt Pump
- Fuel Filter/Water Separator (if equipped)
- Macerator (if equipped)
- Discharge Seacock (if equipped)
- Engine Hatch Lift Pump (if equipped)
- Mercathode
- Battery Charger
- Freshwater Pump
- FRESHWATER COOLING INTAKE
- Fuel Sender
- AFT Bilge Pump
- High Water Alarm Sensor
- Marine Head Seawater Intake Seacock
- Sump Pump (if equipped)
Battery Cable Routings

NOTES:
POSITIVE BATTERY CABLES ARE RED
NEGATIVE BATTERY CABLES ARE YELLOW

BATTERY CABLE ROUTINGS (IF EQUIPPED WITH SINGLE BATTERY)

BATTERY CABLE ROUTINGS (IF EQUIPPED WITH DUAL BATTERY)
110-Volt AC Hull Harness
## Important Records

### Selling Dealer

<table>
<thead>
<tr>
<th>Name Of Dealership</th>
<th>Address</th>
<th>Phone/FAX/E-mail</th>
<th>Sales Manager</th>
<th>Service Manager</th>
</tr>
</thead>
</table>

### Key Numbers

<table>
<thead>
<tr>
<th>Ignition</th>
<th>Other</th>
</tr>
</thead>
</table>

### Electronics

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

### Engine

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Engine Serial Number</th>
<th>Oil Type/SAE</th>
<th>Quarts per Engine</th>
<th>Filter Type</th>
</tr>
</thead>
</table>

### Propeller

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name/Number</th>
<th>Serial Number</th>
</tr>
</thead>
</table>
Float Plan

Before going boating, fill out a copy of this float plan (or similar) and leave it with a reliable person whom you can depend on to contact the Coast Guard or other rescue organization, if you do not return as scheduled.

Description of Boat

<table>
<thead>
<tr>
<th>Description of Boat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration/Documentation Number</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Hull Color</td>
</tr>
<tr>
<td>Fuel Capacity</td>
</tr>
<tr>
<td>Distinguishing Features</td>
</tr>
<tr>
<td>Distinguishing Features</td>
</tr>
</tbody>
</table>

Operator of Boat

<table>
<thead>
<tr>
<th>Operator of Boat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Male or Female</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Phone/FAX/E-mail</td>
</tr>
<tr>
<td>Operator’s Experience</td>
</tr>
</tbody>
</table>

Persons Onboard

<table>
<thead>
<tr>
<th>Persons Onboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Full Name</td>
</tr>
<tr>
<td>Age</td>
</tr>
</tbody>
</table>
### Survival Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Radio (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of PFDs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke Signals (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paddles (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flares (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mirror (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flashlight (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchor (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raft/Dinghy (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPIRB (Yes/No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Trip Expectations

<table>
<thead>
<tr>
<th>Stopover</th>
<th>Arrive No Later Than: Date</th>
<th>Arrive No Later Than: Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Final Destination Port (If Different Than Home Port)**

<table>
<thead>
<tr>
<th>Arrive No Later Than: Date</th>
<th>Arrive No Later Than: Time</th>
</tr>
</thead>
</table>

If not returned by the date and time listed above, call the Coast Guard or other local authority.

### Vehicle Description

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>License Number</td>
</tr>
</tbody>
</table>

Where is the Vehicle Parked?

### Vehicle Description

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>License Number</td>
</tr>
</tbody>
</table>

Coast Guard Phone Number

Local Authority Phone Number