

BAYLINER®

285 Cruiser

Owner's Manual *Supplement*

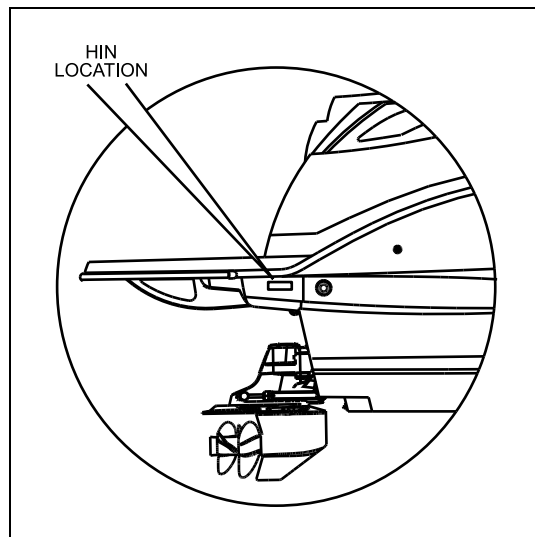
Date of Purchase: _____

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.



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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.

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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!



1 2 3
4 min
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.

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 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

 WARNING!
CONTROL HAZARD! An experienced operator <i>MUST</i> be in control of your boat at <i>ALL</i> times. Do <i>NOT</i> 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: 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: 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.

Safety Standards


 **DANGER!**




FALLING & 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.

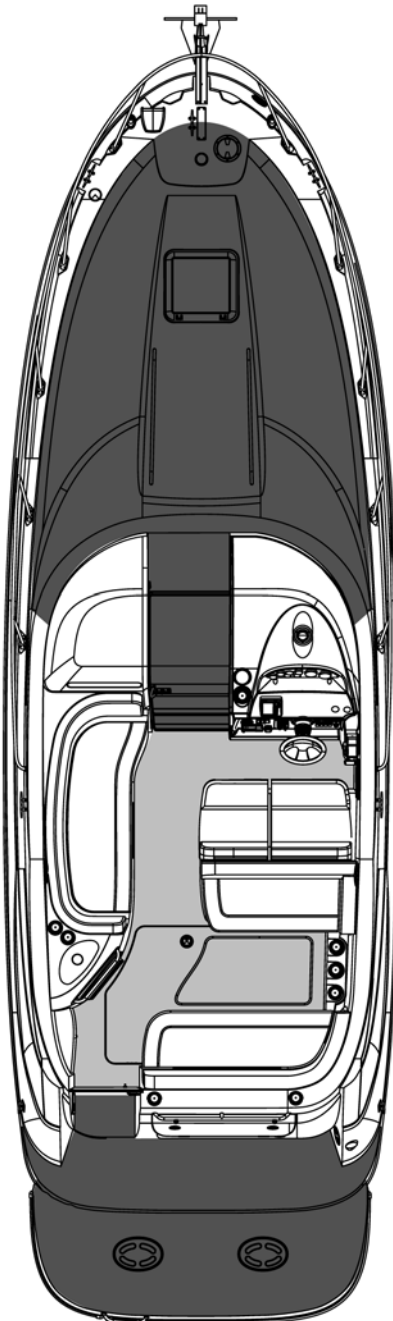
PASSENGER LOCATIONS

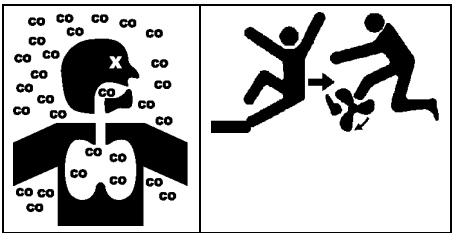


ACCOMMODATION DECK
(DECK AREA SAFE FOR
OCCUPATION DURING
NORMAL OPERATION)



**NEVER OCCUPY THESE
AREAS WHILE UNDERWAY**





FALLING, ROTATING PROPELLER & 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.

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/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 all safety standards in effect at the time it was built. These standards help 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.

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 | • Fuel System | • Electrical System |
| • Propulsion System | • Environmental Control System | • Navigation System |
| • Engine Control System | | • CO Monitor(s) |

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 <i>Owner's Manual Supplement</i> | • The engine owner's manual, and; |
| • The <i>Cruiser & Yacht Owner's Manual</i> | • <i>All</i> accessory literature. |

Special Care for Moored Boats

NOTICE

- Applying an epoxy barrier coating to the hull bottom will help prevent gel coat blistering while your boat is moored.
- Cover the barrier coating with several coats of anti-fouling paint.
- Many states have environmental standards regulating the chemical content of bottom paints. Your local dealer can recommend bottom paints approved for use in your state.

- While moored, your boat's hull bottom will collect marine growth that not only looks bad, but also reduces performance, and could damage the gelcoat.
- As often as needed for your area, haul your boat out of the water and scrub the hull bottom with a bristle brush and soap and water.

Engine & Accessory Guidelines & Literature

NOTICE

- **BEFORE** starting or working on your engine, read the engine manual.
- **BEFORE** using the accessories on your boat, read the accessory manuals.
- **BEFORE** storing your boat, refer to your engine and accessory manuals for storage/winterization instructions.
- 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!

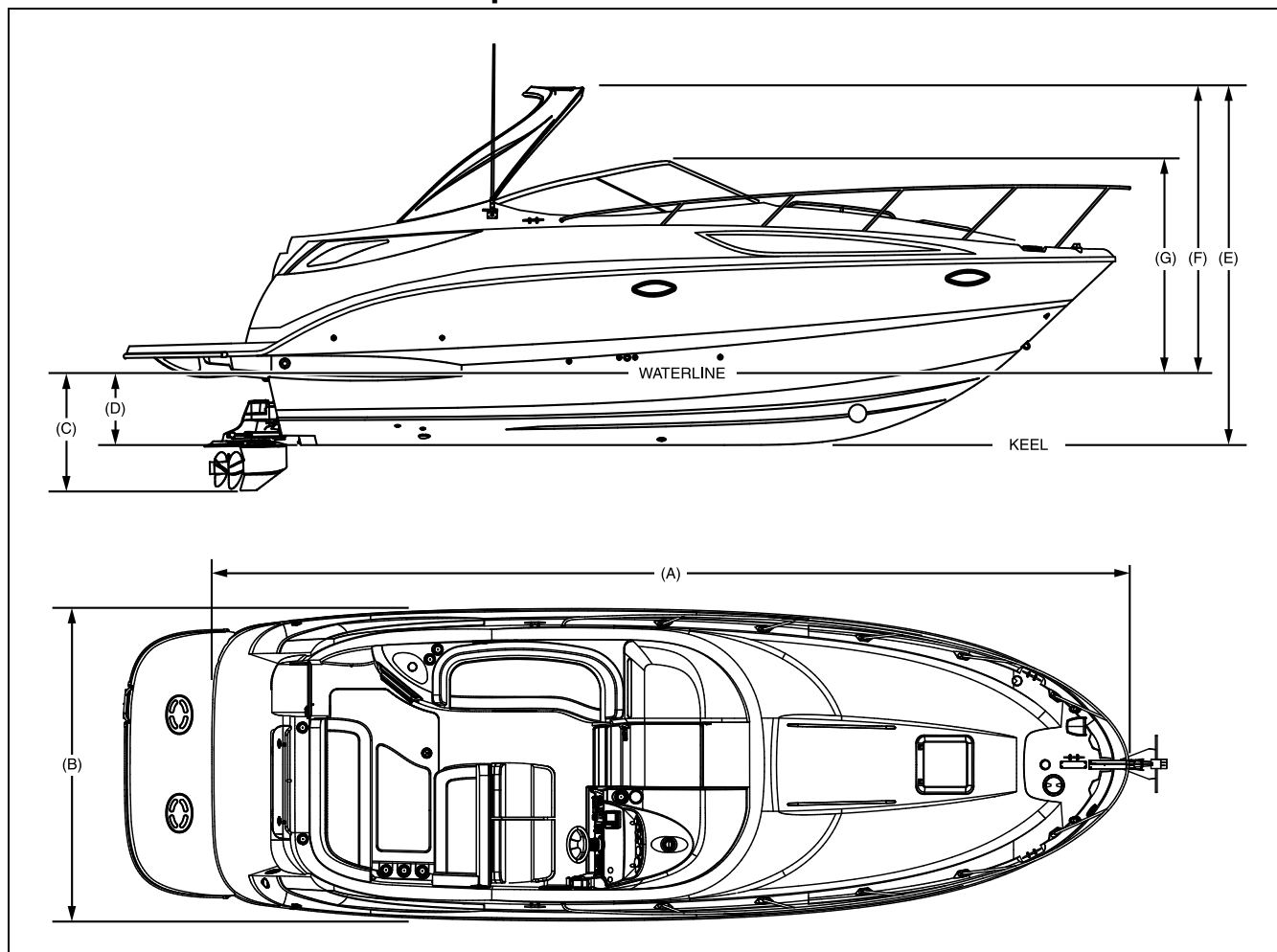
The factory standard propeller may not be the best for your particular boat and load conditions. Refer to the engine manual for engine RPM ratings. The engine should reach, but not exceed its full rated RPM when full-throttle is applied.

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.

Basic Boat Dimensions & Capacities



(A) Overall Length28' 7" 8.71 m
 With Opt. Swim Platform.31' 1" 9.47 m
 (B) Beam (Width).9' 11" 3.02 m
 (C) Draft (Stern Drive Down)39.5"* 100.3 cm*
 (D) Draft (Stern Drive Up).....25"* 63.5 cm*
 (E) Overall Height13' 5" 4.08 m
 (F) Waterline to Top of Arch10' 1" 3.07 m
 (G) Waterline to Top of Windshield. .6' 9" 2.05 m

* MINIMUM WATER DEPTH TO PREVENT RUNNING AGROUND

Dry Weight.7,867 lbs. 3,568 kg.
 Fuel Capacity..... 89 gal. 337 liters
 Holding Tank Capacity 30 gal. 114 liters
 Water Capacity..... 28 gal. 106 liters
 Dead Rise..... 17°

Extended Swim Platform Structural Limitations

The extended swim platform is designed to be lightweight for proper boat balance. The load limit for the extended swim platform is 30 pounds per square foot, evenly distributed.

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.

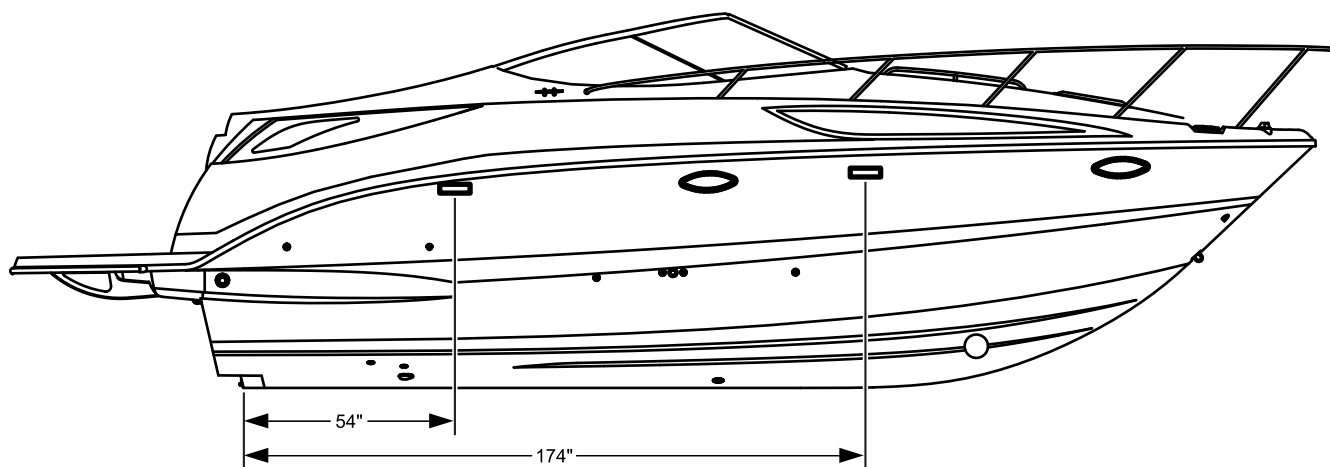


CAUTION

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.


LIFTING SLING LABELS
(TYPICAL PORT & STARBOARD)

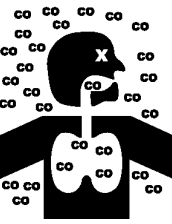


DRAWING IS FOR REFERENCE ONLY AND IS NOT TO SCALE


- **Always** follow the lift equipment's instructions and requirements.
- When lifting your boat, **always** position the lifting slings at the forward and aft lifting sling label positions.

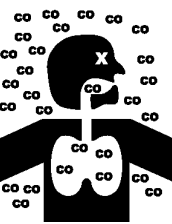
Carbon Monoxide (CO)

 **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.

 **DANGER!**



CARBON MONOXIDE POISONING HAZARD!

- NEVER** use full canvas and vinyl enclosures when the engine or generator is running.
- For proper fresh air circulation, remove forward, aft, and both side enclosure curtains *BEFORE* starting the engine or generator.

CO Facts

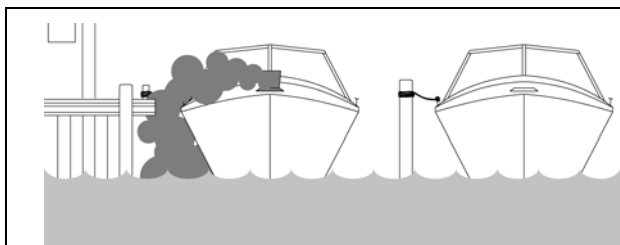
- CO poisoning causes a significant number of boating deaths each year.
- Called the "silent killer", CO is an extremely toxic, colorless, odorless and tasteless gas.
- CO can harm or even kill you inside or outside your boat.
- CO can affect you whether you're underway, moored, or anchored.
- CO symptoms 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

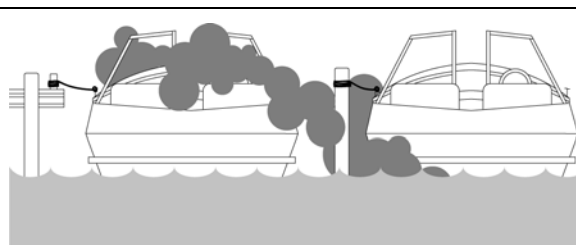
- Age
- Smokers or people exposed to high concentrations of cigarette smoke
- Consumption of alcohol
- Lung disorders
- Heart problems
- Pregnancy

Where & How CO Can Accumulate

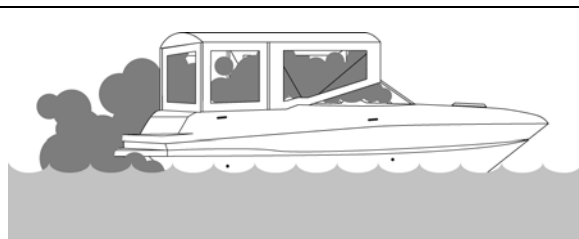
Stationary conditions that increase CO accumulations include:



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



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

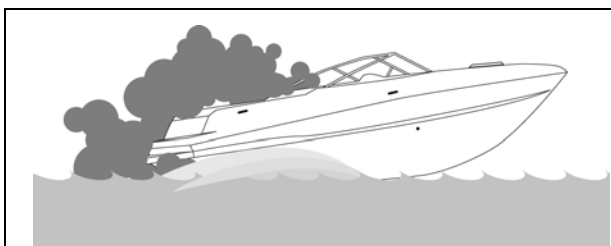


Running your engine or generator with full canvas and vinyl enclosures installed.

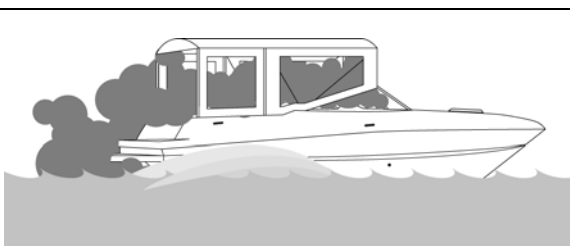
To correct these stationary conditions:

- **Close all** windows, portlights and hatches.
- If possible, move your boat away from source of CO.
- Remove forward, aft, and both side enclosure curtains **BEFORE** starting the engine or generator.

Running conditions that increase CO accumulations include:



Running boat with trim angle of bow too high.



Running boat without through ventilation (station wagon effect).

To correct these running conditions:

- 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 previous page).
- Stay away from the transom while the vessel is idling or underway – The transom is where carbon monoxide collects while idling or underway.
- Avoid Other Idling Vessels – Idling vessels produce concentrated levels of carbon monoxide.
- **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 were installed inside your boat.** **Never** ignore any alarm. Replace monitors as recommended by the monitor manufacturer.
- Follow the CO checklists provided below.
- 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: 800-368-5647 or online at: www.cgaux.org

U.S. Power Squadrons: 888-367-8777 or online at: 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.
- Plug into shore power with the battery charger turned *On* whenever your boat will be unattended for an extended amount of time.

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

More Information

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

**United States Coast Guard
Office of Boating Safety (G-OPB-3)**
2100 Second Street SW
Washington, DC 20593
www.uscgboating.org
1-800-368-5647

**National Marine Manufacturers
Association (NMMA)**
200 East Randolph Drive
Suite 5100
Chicago, IL 60601-9301
www.nmma.org
312-946-6200

**American Boat & Yacht Council,
Inc. (ABYC)**
613 Third Street
Suite 10
Annapolis, MD 21403
www.abycinc.org
410-990-4460

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®.

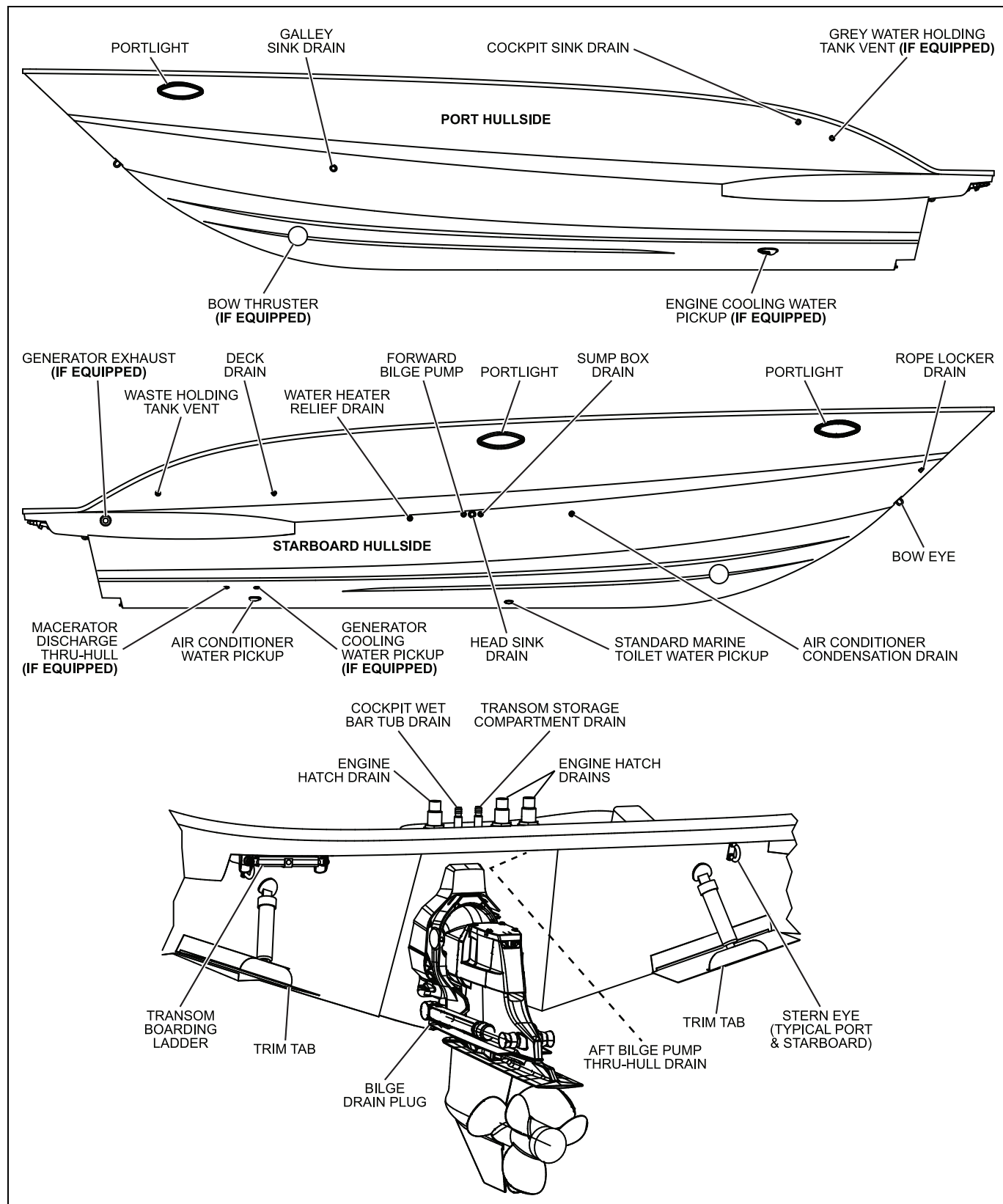
U.S. Coast Guard Auxiliary: 800-368-5647 or online at: www.cgaux.org

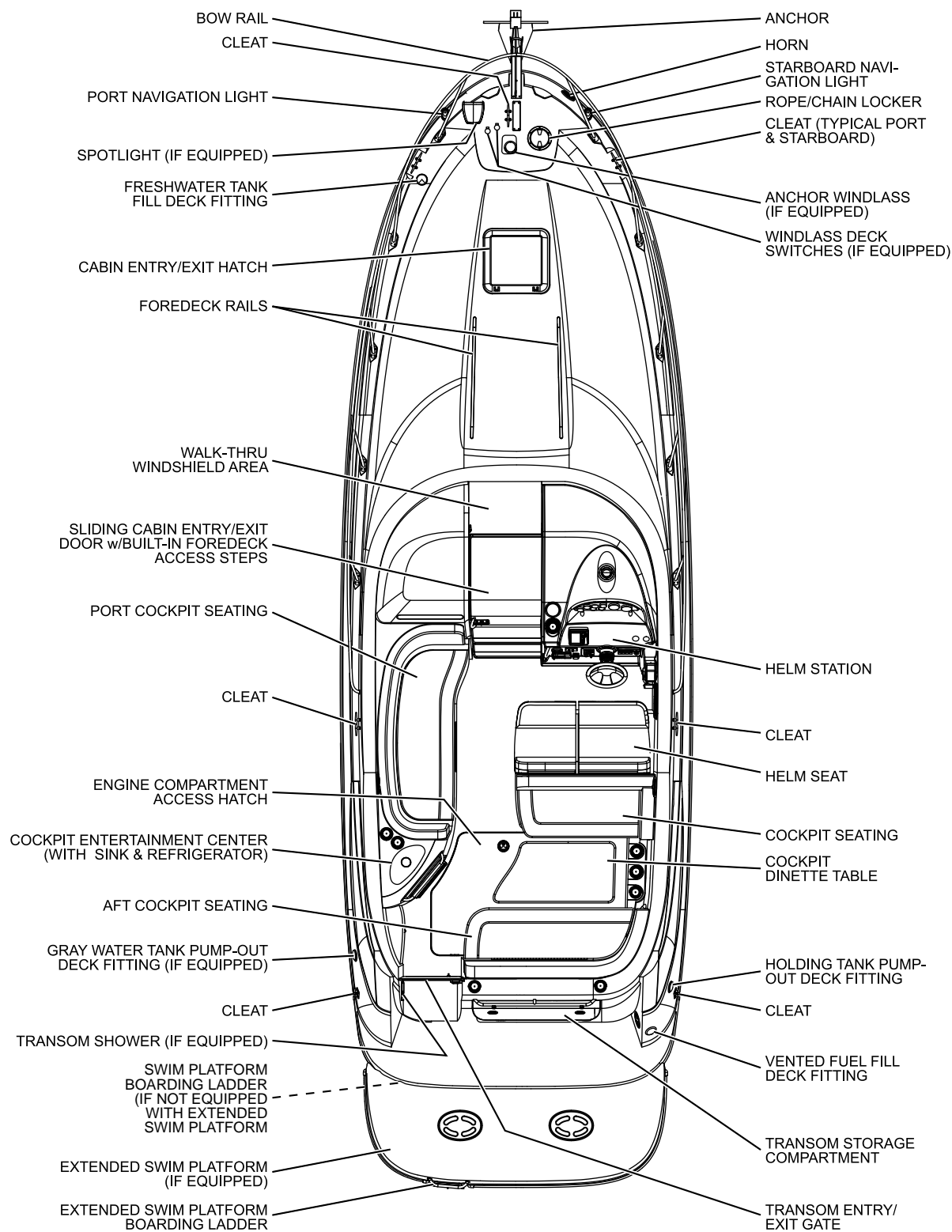
U.S. Power Squadrons: 888-367-8777 or online at: www.usps.org

Chapter 2: Locations

Exterior Views

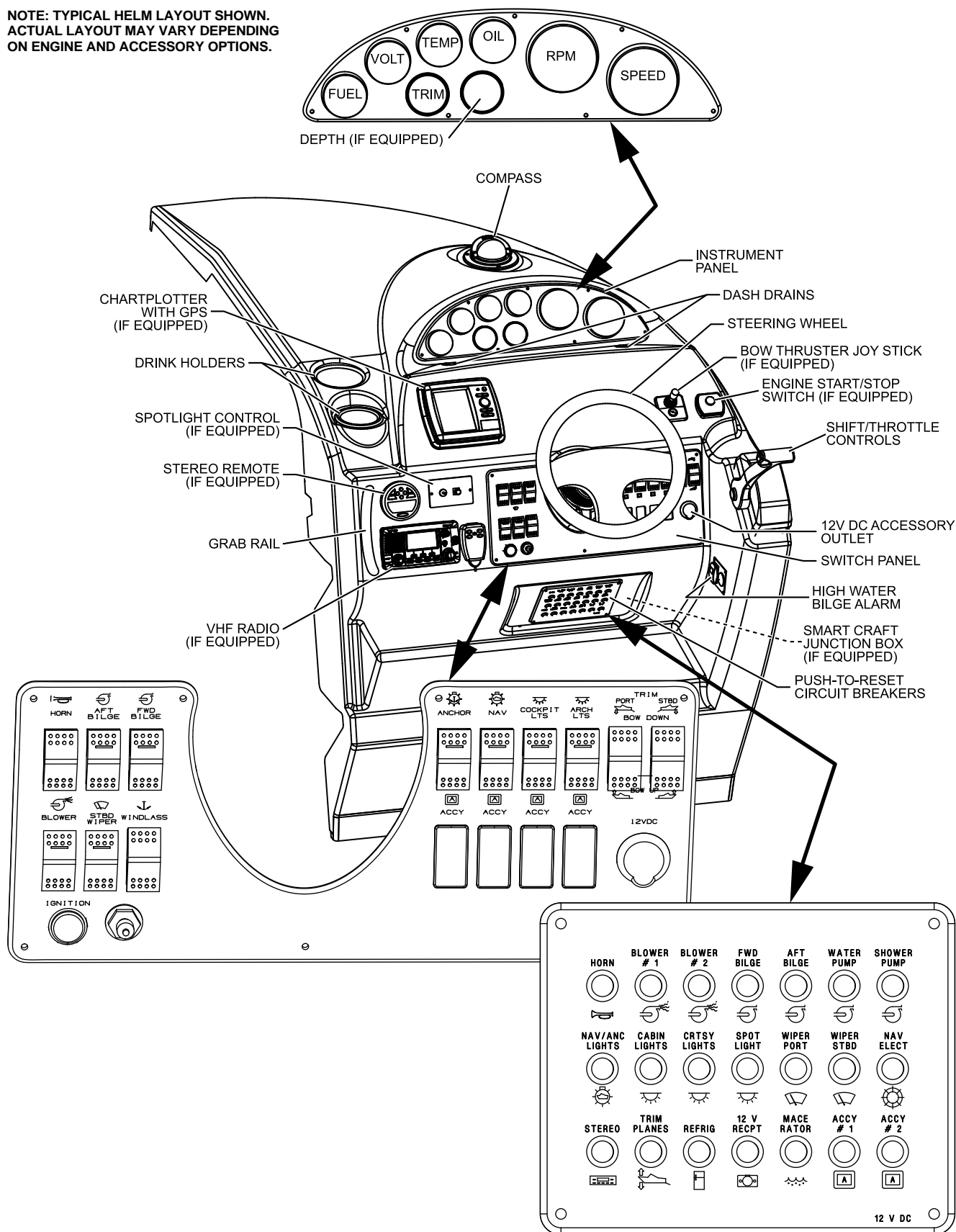
Hull Views



Deck View

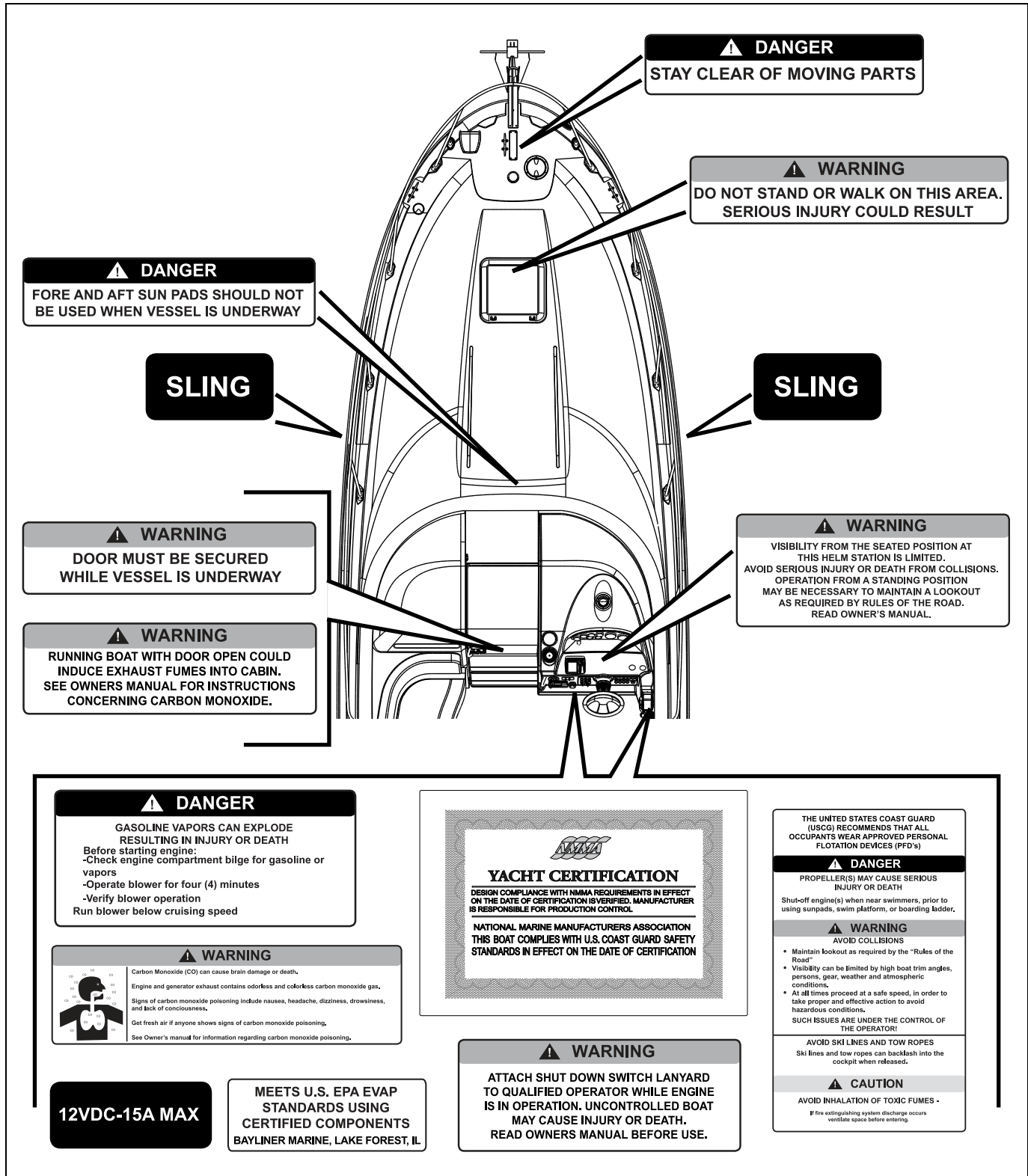
Helm

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



Warning Labels

Helm Area & Forward Deck



Cockpit & Aft Deck

LOCATED ON UNDERSIDE OF ENGINE ACCESS HATCH

DISCHARGE OF OIL PROHIBITED

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 A PENALTY OF \$5,000.

⚠ DANGER

STAY CLEAR OF MOVING PARTS WHILE ENGINE IS RUNNING

⚠ WARNING

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. INSPECT SYSTEM REGULARLY. EXAMINE FUEL TANKS FOR LEAKS OR CORROSION AT LEAST ANNUALLY

NOTICE

THIS BOAT IS EQUIPPED WITH AN OPTIONAL DIRECT OVERBOARD DISCHARGE VALVE. DISCHARGING OF SEWAGE DIRECTLY OVERBOARD IS FOR USE WHERE APPROVED ONLY

NOTICE

CHECK BATTERY CELL FLUID LEVEL APPROXIMATELY EVERY 4 WEEKS AND MORE OFTEN IN SUMMER AND HOT ZONES.

⚠ WARNING

IN CASE OF FIRE, DO NOT OPEN ENGINE BOX OR COMPARTMENT.

SHUT DOWN ENGINES, GENERATORS OR BLOWERS

CONTINUOUSLY DISCHARGE ENTIRE CONTENTS OF HALON OR CO PORTABLE FIRE EXTINGUISHER THROUGH PORT IMMEDIATELY.

SLING

⚠ DANGER

TRANSOM DOOR MUST BE CLOSED AND SECURE WHEN ENGINE IS RUNNING

LOCATED INSIDE TRANSOM STORAGE LOCKER

⚠ CAUTION

IF SWITCH IS TURNED OFF WHILE ENGINE IS RUNNING ALTERNATOR WILL BE DAMAGED

SHORE POWER

30A 125V GROUNDING

WARNING

To minimize shock hazard, connect and disconnect cable as follows:

1. Turn off boat's shore power switch
2. Connect cable at boat first.
3. If equipped with polarity indicator which activates, disconnect and correct polarity.
4. Disconnect at shore outlet first
5. Close inlet cover tightly

DO NOT ALTER SHORE POWER CABLE CONNECTORS

EASY LOCK™

MARINCO

Napa, California 94558

SLING

NOTICE

FIXED FIRE EXTINGUISHING SYSTEM MUST BE SUITABLE FOR GROSS COMPARTMENT VOLUME OF 250 CU FT.

⚠ WARNING

GASOLINE VAPORS ARE EXPLOSIVE! AVOID SERIOUS INJURY OR DEATH FROM FIRE OR EXPLOSION, RESULTING FROM LEAKING FUEL. INSPECT SYSTEM FOR LEAKS AT LEAST ONCE A YEAR.

THE USE OF FUELS CONTAINING ETHANOL HIGHER THAN 10% (E-10) CAN DAMAGE YOUR ENGINE OR FUEL SYSTEM AND WILL VOID THE WARRANTY. NEVER USE (E-85)

OPEN FLAME APPLIANCES CAN IGNITE GASOLINE VAPORS CAUSING DEATH OR INJURIES FROM THE FIRE OR EXPLOSION. TURN OFF ALL OPEN FLAME APPLIANCES WHEN REFUELING.

⚠ 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



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

⚠ DANGER

LEAVING WINDOW OPEN COULD
INDUCE EXHAUST FUMES
INTO CABIN RESULTING IN SEVERE
PERSONAL INJURY OR DEATH.

NOTICE

EXHAUST FAN MUST BE ON
WHEN USING COOKING
APPLIANCES

Save Our Seas

It is illegal to dump plastic trash anywhere into the ocean or navigable waters of the United States. Violation of these requirements may result in civil penalty up to \$25,000 and fine of \$50,000 and imprisonment up to five years. Regional, state and local restrictions on garbage, discharge may also apply.

PLASTIC-Includes, but is not limited to: plastic bags, styrofoam cups and lids, six pack holders, stirrers, straws, milk jugs, egg cartons, synthetic fishing nets, ropes, lines, and bio or photo degradable plastics.

GARBAGE-Means paper, rags, glass, metal, crockery, (generated in living spaces aboard the vessel that we normally call trash), and all kinds of food, maintenance and cargo-associated waste. "Garbage" does not include fresh fish or fish parts, dishwasher and gray water.

INSIDE 3 MILES
(and in U.S. Lakes, Rivers, bays and Sounds)

PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT

ANY GARBAGE EXCEPT DISHWATER/GRAYWATER/FRESH FISH PARTS

3 TO 12 MILES

PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT

ANY GARBAGE NOT GROUND TO LESS THAN ONE SQUARE INCH

12 TO 25 MILES

PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT

OUTSIDE 25 MILES

PLASTICS

DUNNAGE- Material used to block and brace cargo, and is considered a cargo associated waste.

DISHWATER-Means the liquid residue from the manual or automatic washing of dishes and cooking utensils which, have been pre-cleaned to the extent that any food particles adhering to them would not normally interfere with the operation of automatic dishwashers.

GRAYWATER-Means drainage from a dishwasher, shower, laundry, bath, and washbasin, and does not include drainage from toilets, urinals, hospitals and cargo spaces.

⚠ DANGER

LEAVING WINDOW OPEN COULD
INDUCE EXHAUST FUMES
INTO CABIN RESULTING IN SEVERE
PERSONAL INJURY OR DEATH.

⚠ WARNING

Carbon Monoxide (CO) can cause brain damage or death.

Carbon monoxide can be present in the cabin.

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.

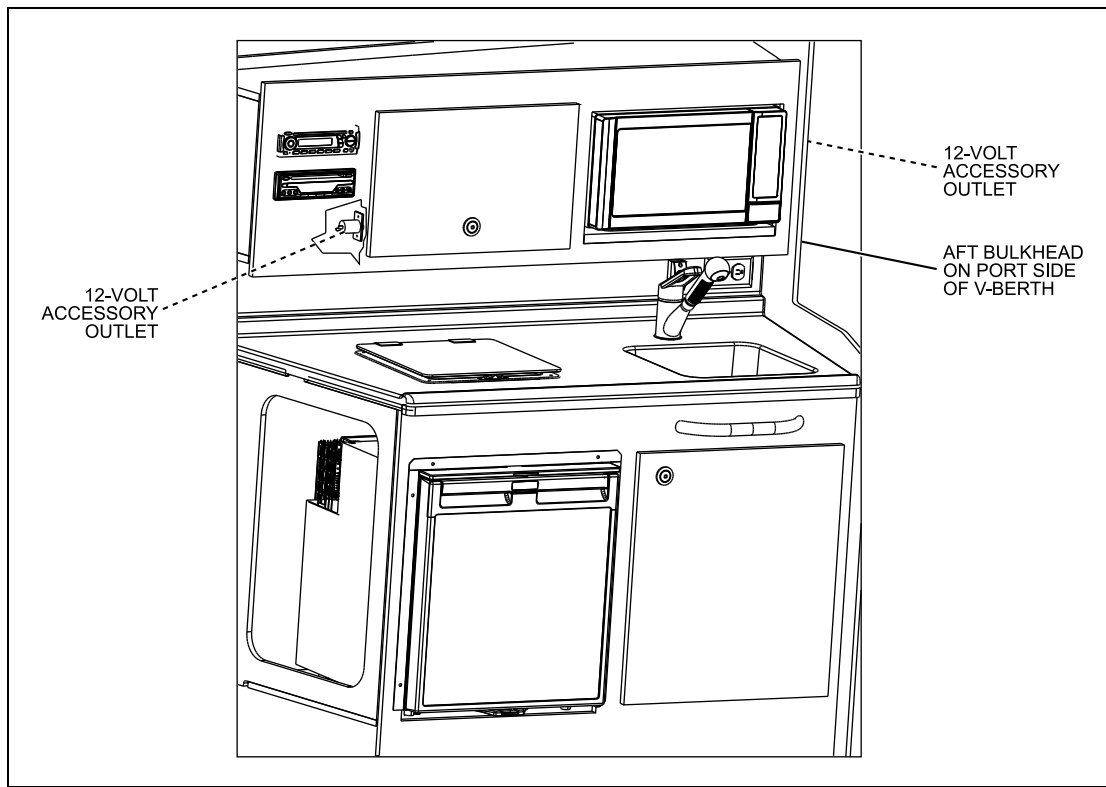
Get fresh air if carbon monoxide detector alarm sounds.

Carbon monoxide detector must be functioning at all times.

Component Locations

12-Volt DC Accessory Outlets (3 Total):

- One is located at the helm.
- One is located in the galley, inside the cabinet above the stove.
- One is located on the port side of the v-berth, on the aft bulkhead.



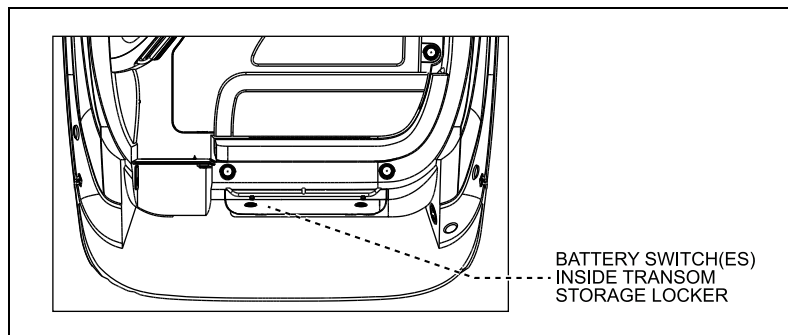
12- Volt DC Push-to-Reset Circuit Breakers: Located below the helm dash.

110-Volt AC Panel: Located in the aft berth.

Batteries: Located on the port side of the engine room.

Battery Charger: Located on the forward wall in the engine room.

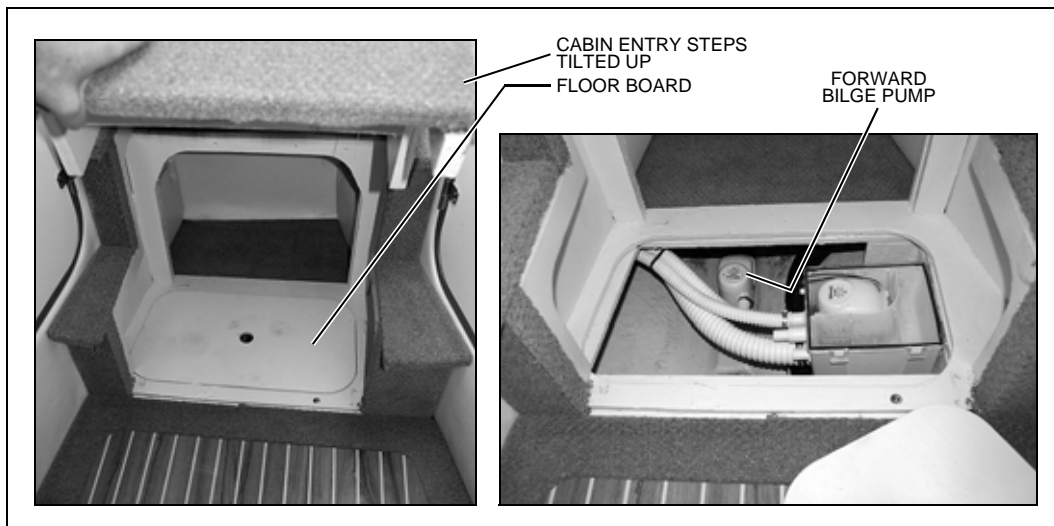
Battery Switches: Located in the transom storage locker.



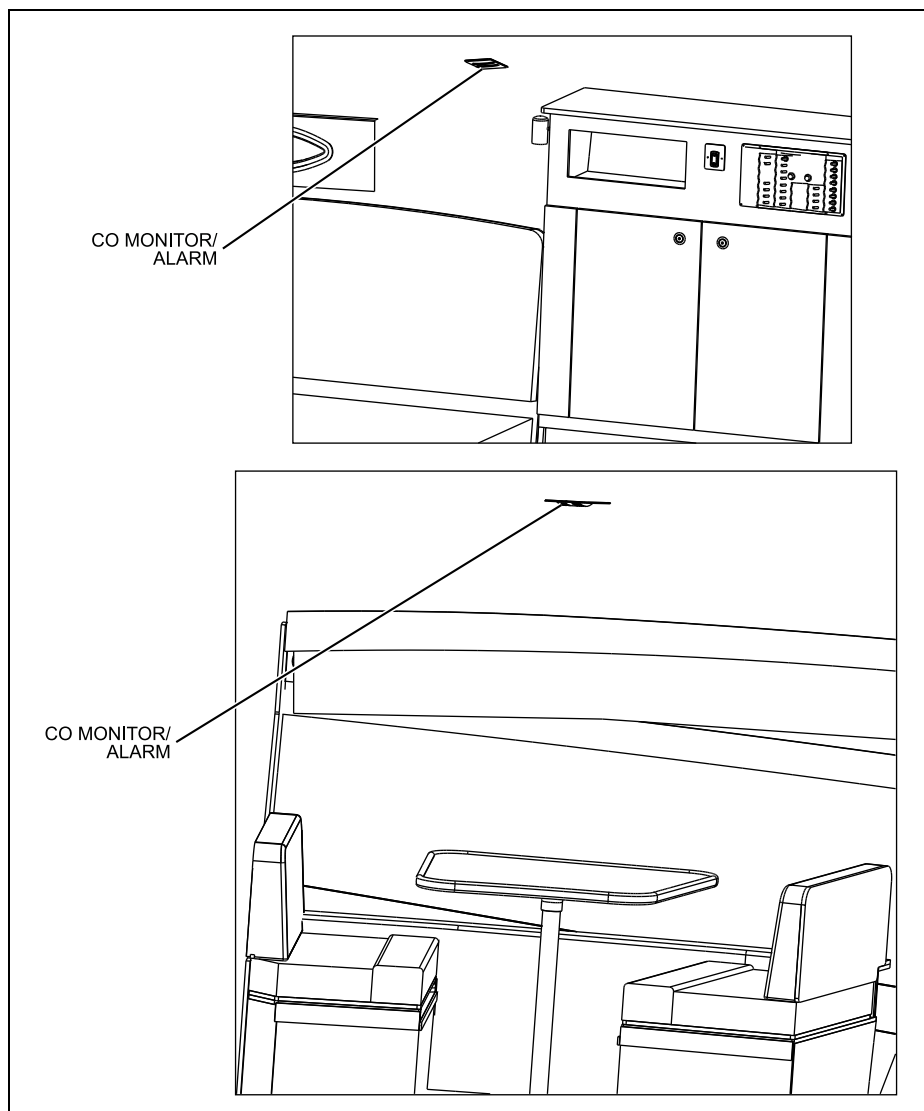
Bilge Blower Switch: Located on the helm switch panel.

Bilge Pumps (2 Total):

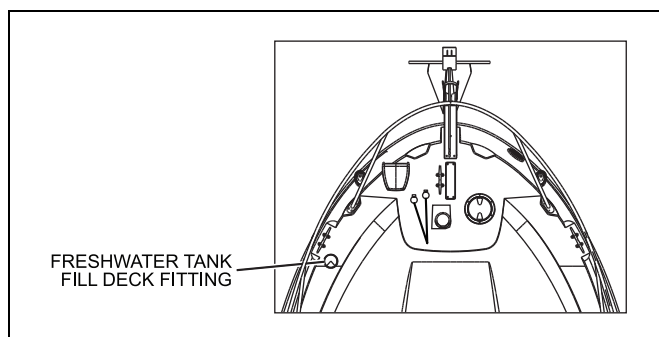
- The aft bilge pump is located in the engine room bilge.
- The forward bilge pump is accessed by first lifting the cabin entry steps and then removing the floor board.

**CO Monitors (2 Total):**

- One is located on the ceiling in the aft berth.
- One is located on the ceiling above the dinette table.

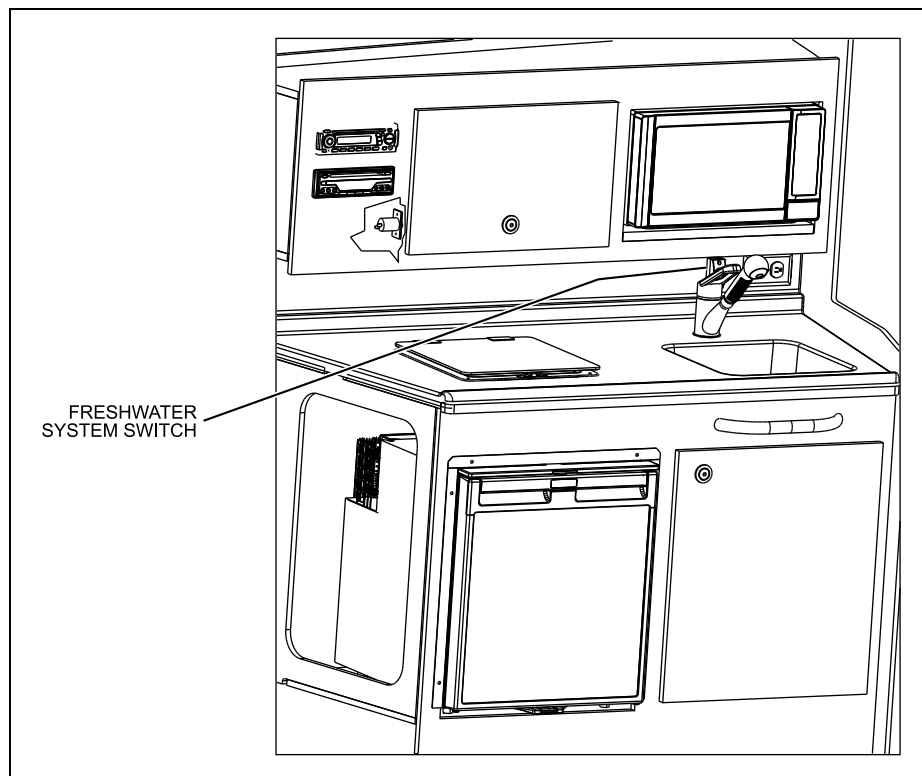


Freshwater Fill Deck Fitting: Located on the starboard aft deck.



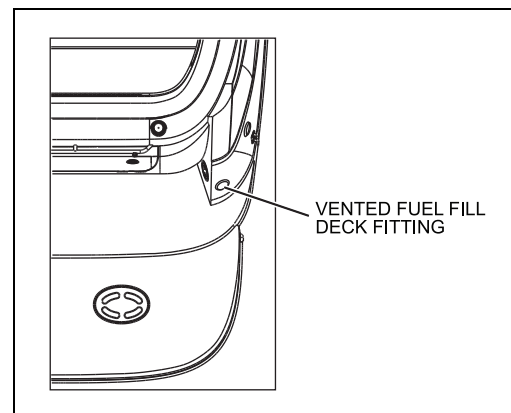
Freshwater Pump: Located on the forward wall in the engine room.

Freshwater Pump Switch: Located behind the galley faucet.

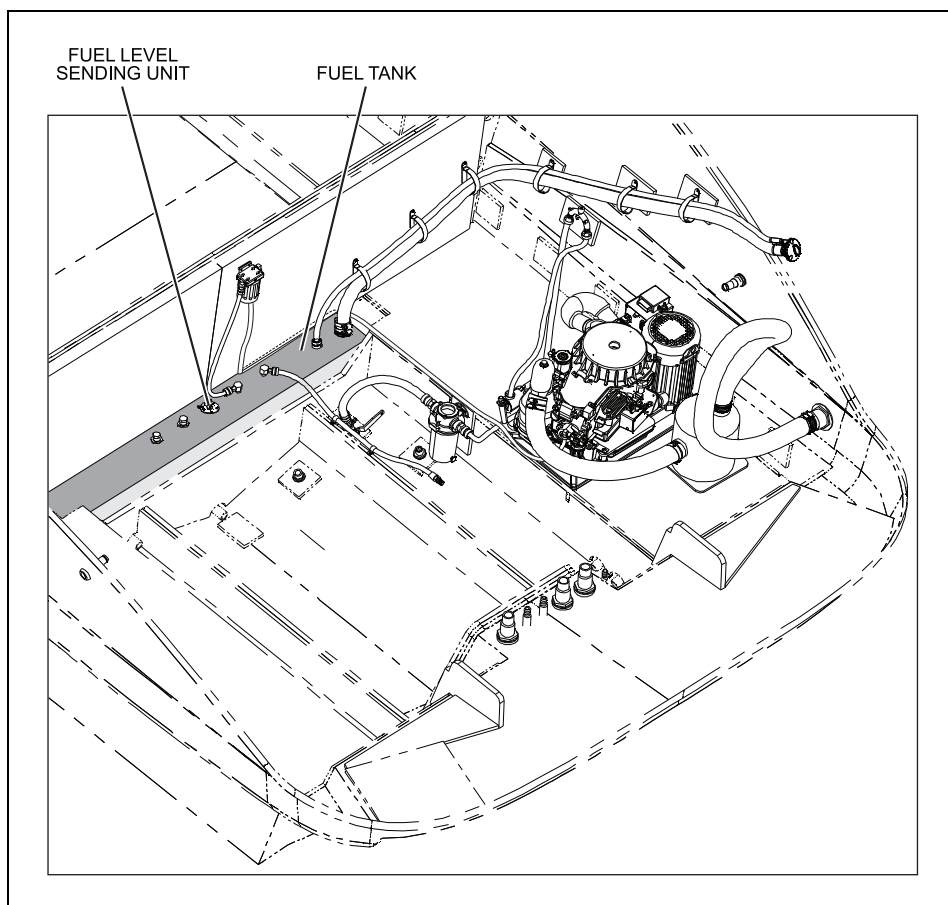


Freshwater Tank: Access is through the forward bunk hatches located under the v-berth mattress.

Fuel Fill Deck Fitting: Located on the starboard aft corner of the deck.

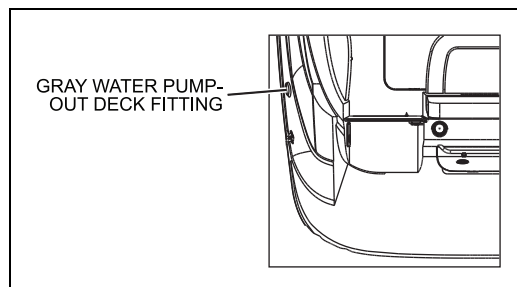


Fuel Tank: Access to the fuel tank fittings is in the forward area of the engine room bilge.



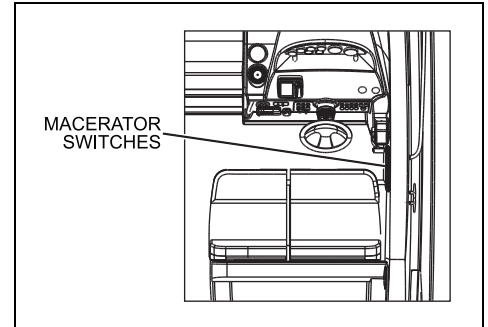
Gray Water Holding Tank (If Equipped): Located on the port side of the engine room.

Gray Water Pump-out Deck Fitting (If Equipped): Located on the port side of the aft deck.

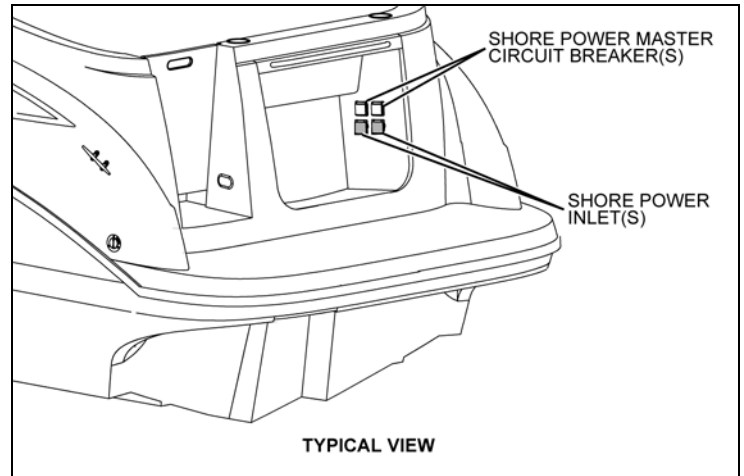


Macerator Underwater Discharge Seacock (If Equipped): Located in the engine room.

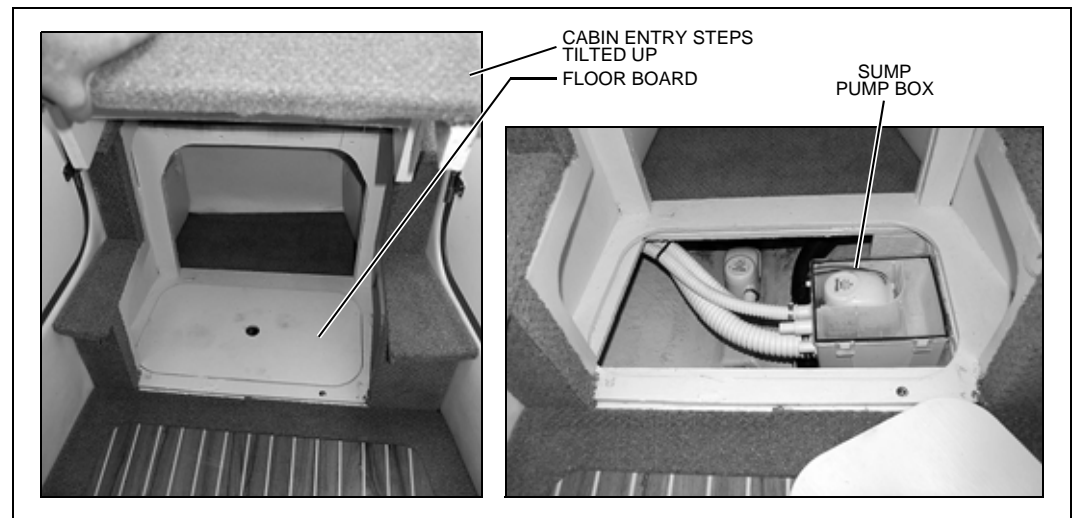
Macerator switches (If Equipped): Located in the side panel storage tub next to the helm seat.



Shore Power Inlet(s) and Master Circuit Breaker(s): Located in the transom storage locker.



Sump Pump Box:
Accessed by first lifting the cabin entry steps and then removing the floor board.



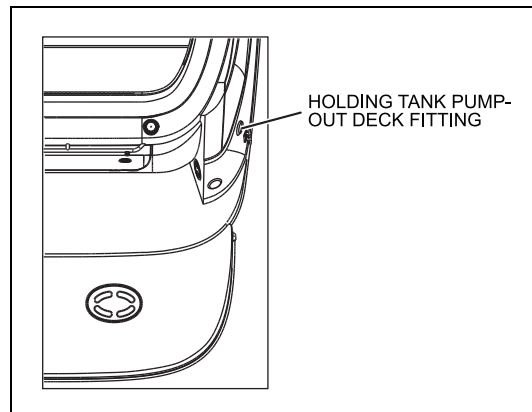
Transom Shower (If Equipped):
Located just aft of the transom gate.




Trim Tab Hydraulic Fluid Reservoir: Located on the starboard side of the engine room, on the aft wall.

Waste Holding Tank: Located on the starboard side of the engine room.

Waste Pump-out Deck Fitting: Located on the starboard aft corner of the deck.



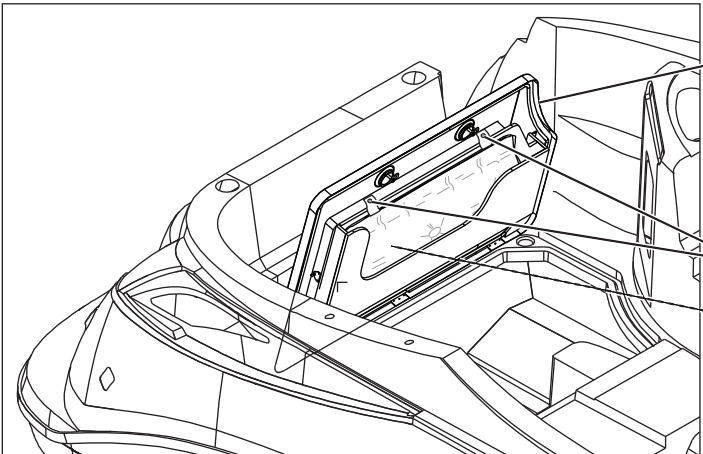
Chapter 3: Propulsion & Related Systems


CAUTION

If improperly stowed, the cockpit dinette table could slide forward, making it impossible to open the engine hatch.

To properly stow and secure the cockpit dinette table:

1. Place the table inside its vinyl storage bag.
2. Slide the bag into the space provided on the underside of the engine hatch.
3. Snap the bag to the securing snaps.





ENGINE COMPARTMENT
HATCH IN OPEN POSITION

VINYL STORAGE BAG
SECURING SNAPS

COCKPIT TABLE INSIDE
VINYL STORAGE BAG

Fire Extinguisher Port


WARNING!

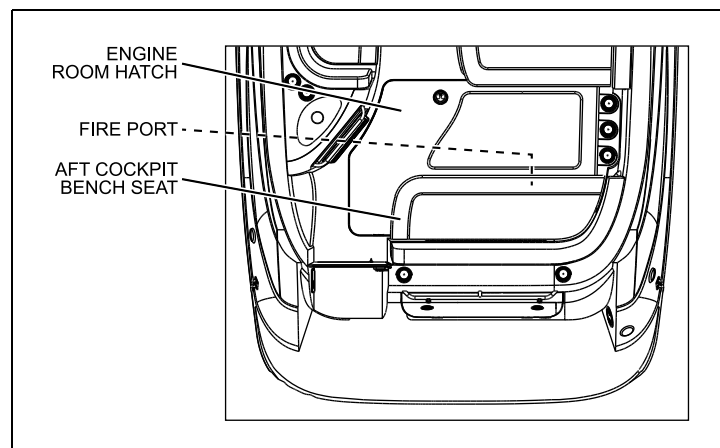


FIRE and EXPLOSION HAZARD!

If you suspect a fire in the engine room, do *NOT* open the engine room hatch!

1. Shut down the engine, generator, and blower.
2. Immediately discharge the entire contents of a portable halon or CO2 fire extinguisher through the fire port.

Your boat has a fire extinguisher port located on the forward face of the aft bench seat base.



Engine


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

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 vapors from engine and bilge areas.
- Draws fresh air into engine and bilge areas through the vents.

To make sure 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.
- Run the bilge blower for at least four minutes **before** starting the engine.
- Keep the blower **On** until your boat has reached planing speed.
- **Always** run the blower when running your boat below planing speed.

Fuel System



WARNING!



FIRE, EXPLOSION, and OPEN FLAME HAZARD!

- Thoroughly inspect the fuel system for leaks every time you take on fuel.
- Fueling instructions are provided in the *Cruiser & Yacht Owner's Manual*, and fuel recommendations are provided in the engine operation manual. Carefully read this information.



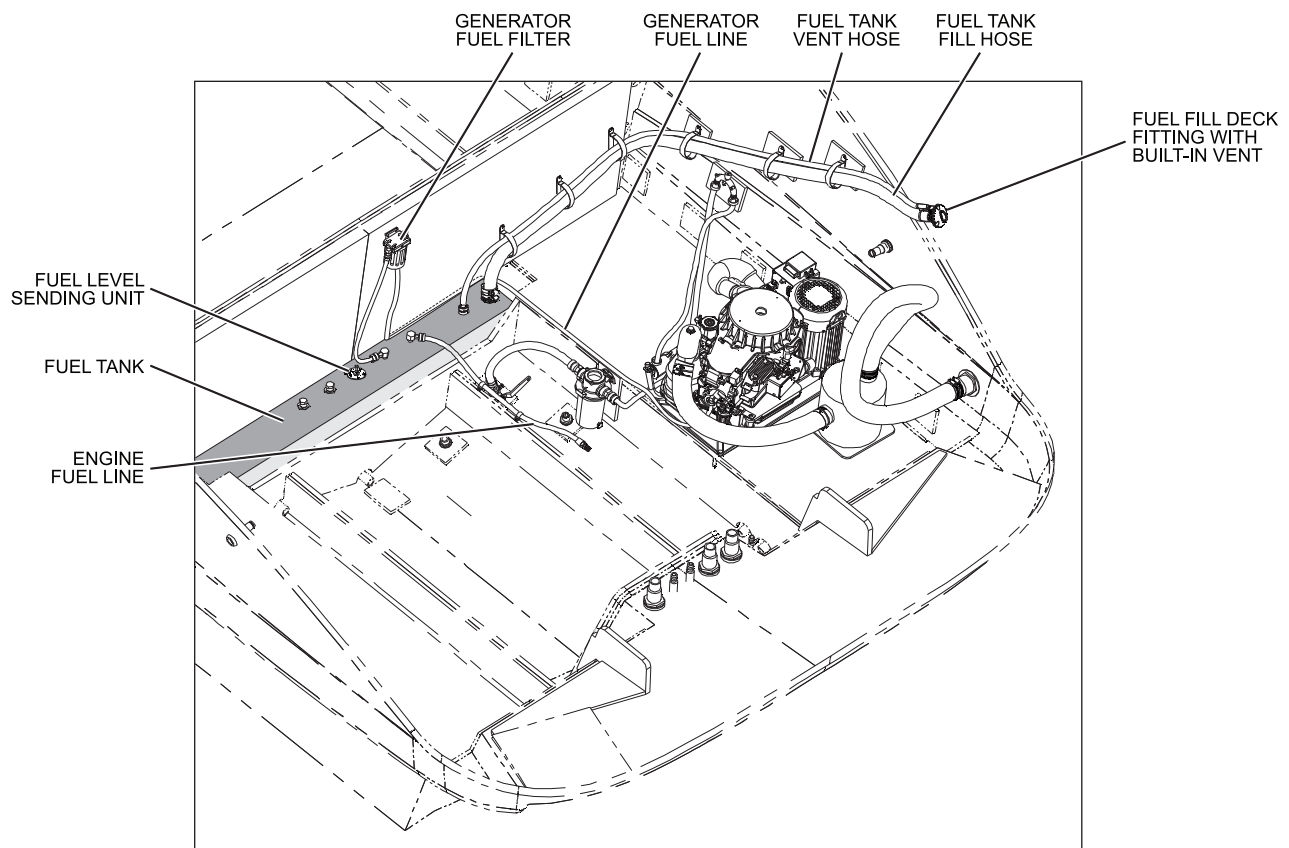
CAUTION

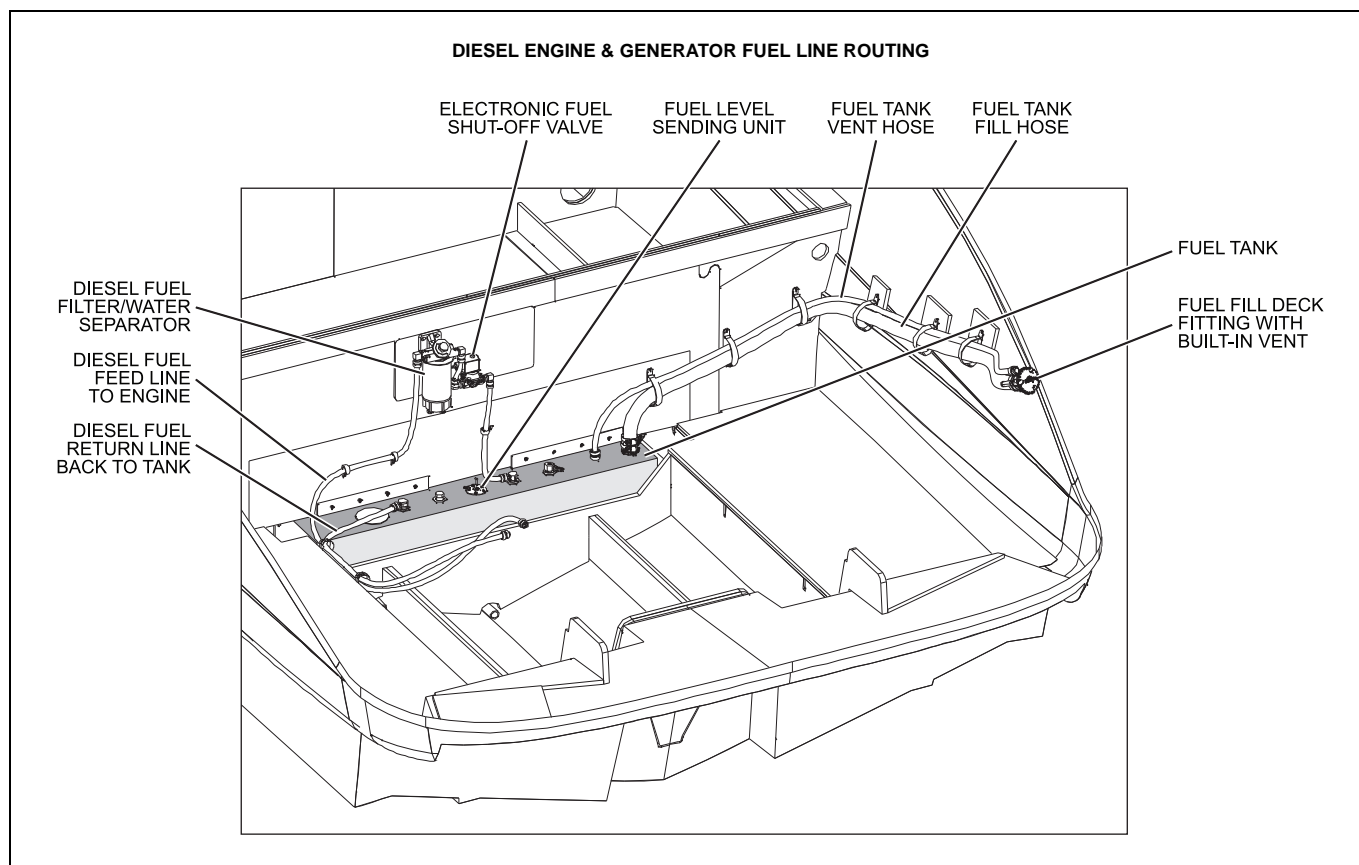
Avoid the storage or handling of gear near the fuel lines, fittings and tank.

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.

GAS ENGINE & GENERATOR (IF EQUIPPED) FUEL LINE ROUTING





Fuel Fill & Vent

- If you have problems filling the fuel tank, check the fuel fill hose and fuel tank vent hose for kinks or collapsed areas.
- 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.
- This spring-loaded valve is opened by fuel pump vacuum.

Gas Engine Fuel Filters

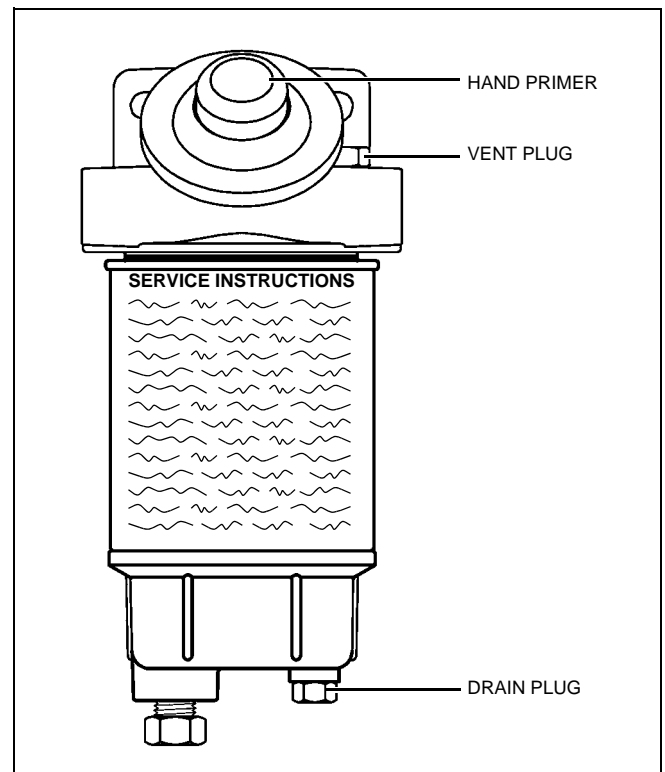
- The fuel pickup tube, located inside the fuel tank, is equipped with a fine mesh screen filter.
- If your boat features an MPI engine, there may be an in-line fuel filter on the fuel line.
- Also, when supplied by the engine manufacturer, a fuel filter is installed on the engine.
- Periodically replace the fuel filters to make sure they remain 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.

Diesel Engine Fuel Filter/Water Separator

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.

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



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!

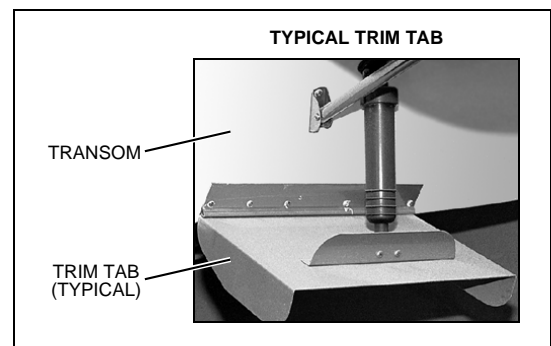
Read **all** of the information about the shift/throttle controls in the shift/throttle manual, the engine operation manual, and the *Cruiser & Yacht Owner's Manual*.

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.



Bow Thruster (If Equipped)

- The bow thruster can help you maneuver your yacht during docking.
- Read the bow thruster user manual **before** using the thruster system, and follow **all** user precautions carefully.

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



WARNING!

- Do **NOT** use the depth finder as a navigational aid to prevent collision, grounding, boat damage or personal injury.
- When your boat is moving, submerged objects will **NOT** be seen until they are already under your boat.
- Bottom depths may change too quickly to allow time for your boat to react.
- If you suspect shallow water or submerged objects, run your boat at very slow speeds.

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)



WARNING!

- The GPS system should **NOT** be relied upon as the **ONLY** aid to navigation.
- An experienced operator **MUST** monitor the GPS system at **ALL** times and keep a look-out for other marine traffic and possible collision situations.

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



WARNING!



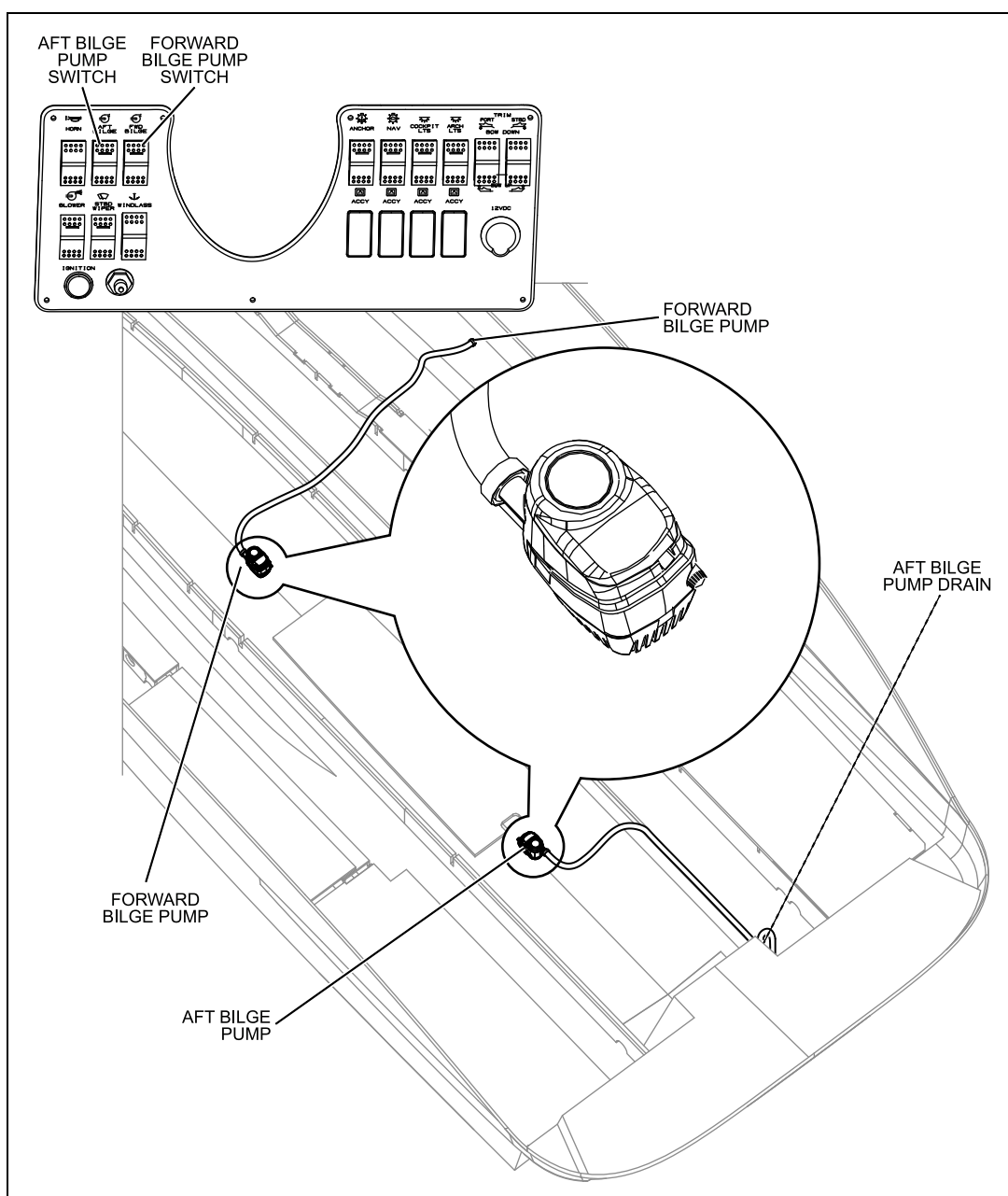
FIRE and/or EXPLOSION HAZARD!

NEVER use the bilge pumps to remove gasoline, oil, or other flammable liquids.

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.

- 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, and unless the batteries are dead, the bilge pump system should keep working even when your boat is unattended.



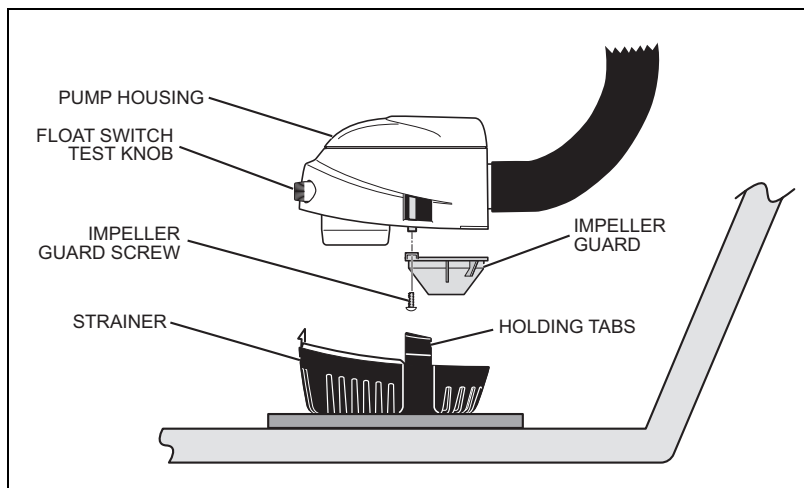
Bilge Pump Testing

- 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!

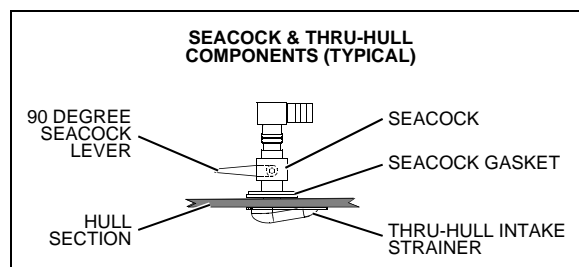
- *BEFORE* using any system that has a seacock, make sure that the system's seacock is *Open*.
- Inspect and lubricate all seacocks annually.

Thru-hull inlet or outlet fittings located near or below the water-line 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.

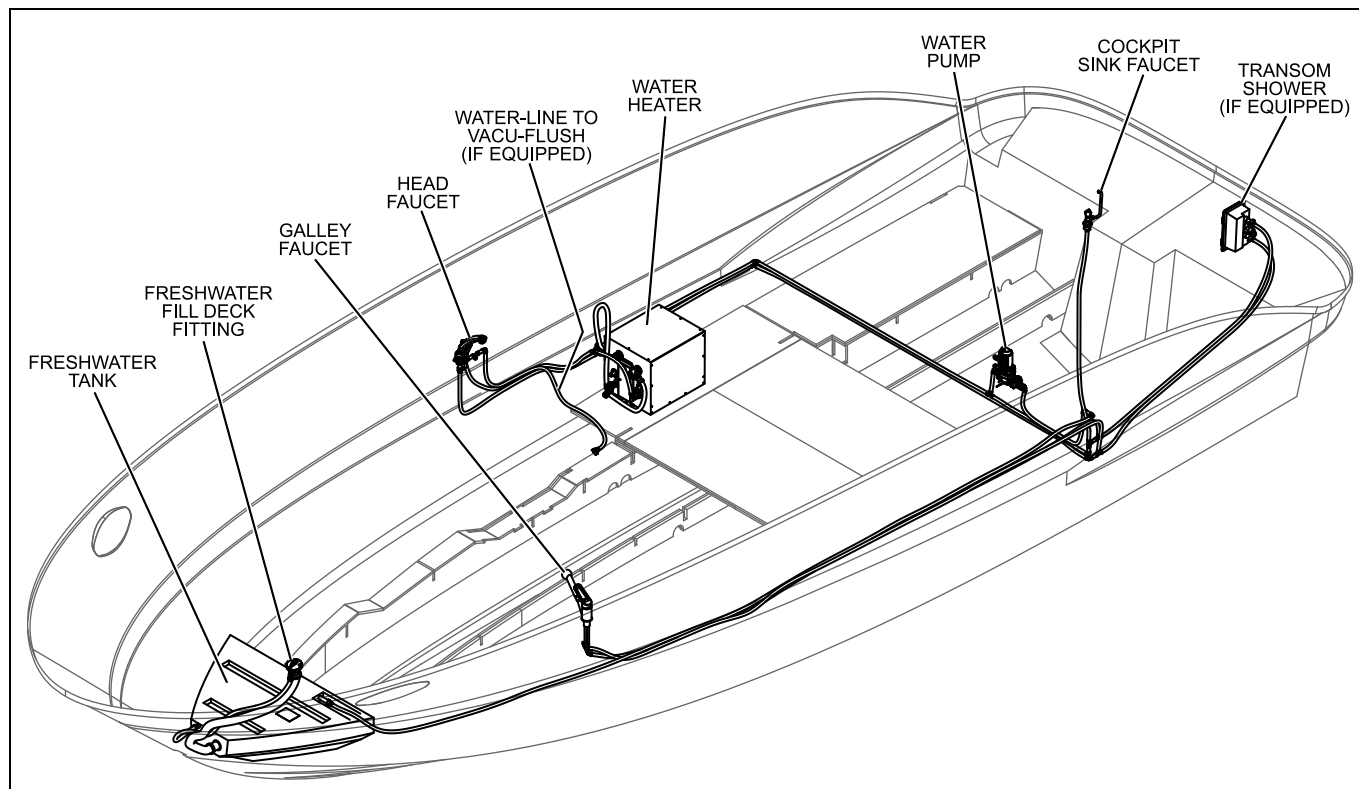
- Seawater strainers are used to filter incoming seawater in *some* seawater intake systems. NOTE: Not all seawater intake systems have seawater strainers.
- If equipped, the seawater strainer is located near the seawater intake system's seacock.
- Check the strainers for leaks and/or debris *every time* 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 **On** the freshwater pump switch.
2. **Open all** of the faucets and showers and let the freshwater system drain completely.
3. 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

 **CAUTION**

FRESHWATER SYSTEM DAMAGE HAZARD!

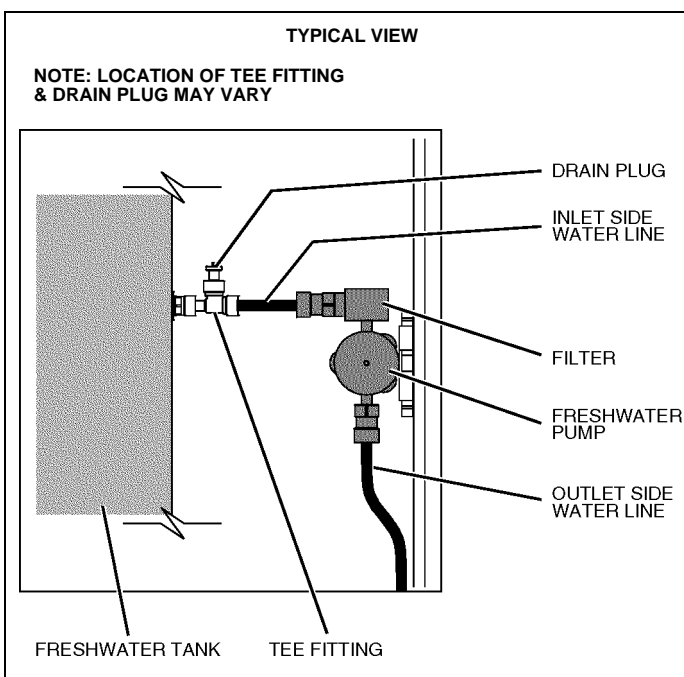
- A faucet **MUST** be **Open** when compressed air is blown through the freshwater system.
- **NEVER** blow compressed air through the water system when **ALL** of the faucets are **Closed**.

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 (If Equipped)

**WARNING!**

**SCALDING HAZARD!**
Water heated by the water heater can be hot enough to scald the skin.

**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.
- Turn the power *Off* and drain the water heater when the chance of freezing exists (see the winterizing instructions on the next page).

NOTICE

If 110-volt AC power is being provided by shore power, but the water heater is not working:

- Make sure the water heater circuit breaker on the 110-volt AC master panel is switched *On*.
- If the circuit breaker is *On*, 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.

- 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!

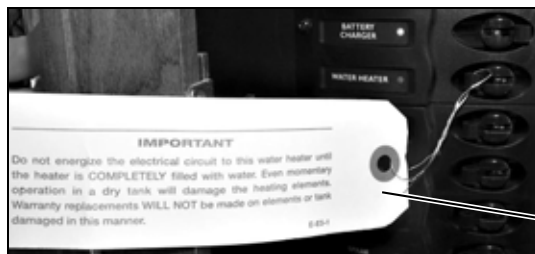
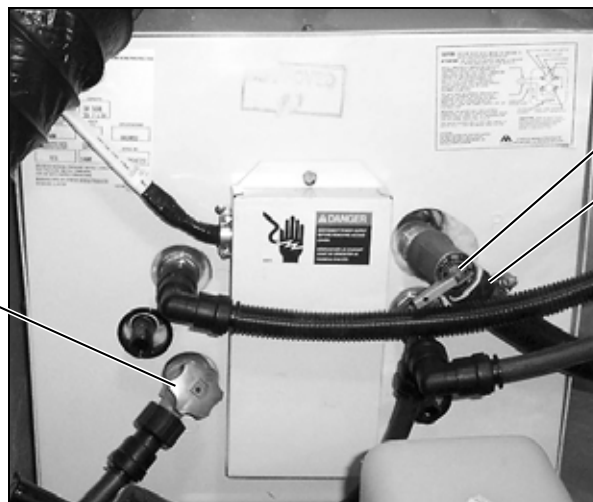
- **NEVER** turn *On* the water heater breaker on the 110-volt AC master panel when the water heater tank is empty.
- Even brief water heater operation with a dry tank **WILL** damage the heating elements.
- Warranty replacements will **NOT** be made on elements damaged in this manner.
- To prevent damage to the water heater after winterizing, always tag the water breaker switch on the 110-volt AC master panel (see photo below).

NOTICE

The freshwater system **MUST** be drained **BEFORE** winterizing the water heater (see the *Freshwater System Winterization Instructions* earlier in this chapter).

1. Turn **Off** the water heater breaker.
 2. Disconnect the hose (A) attached to the pressure relief valve (B), and drain any water from the hose into the bilge or into a bucket.
 3. **Open** the pressure relief valve (B).
 4. **Open** the drain valve (C).
 5. 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.

NOTE: TYPICAL WATER HEATER SHOWN. LOCATIONS OF FITTINGS MAY VARY BY BRAND AND MODEL.



"WATER HEATER IS EMPTY"
TAG ATTACHED TO WATER
HEATER CIRCUIT BREAKER

Preparing the Water Heater for Use After Winterizing



CAUTION

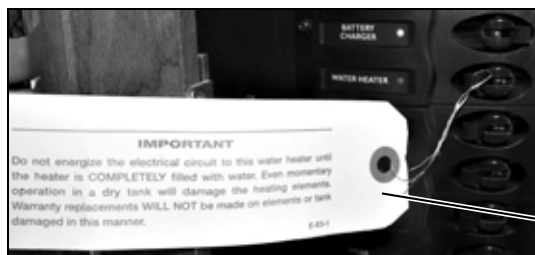
WATER HEATER DAMAGE HAZARD!

- Fill the water heater tank **BEFORE** turning **On** the water heater circuit breaker on the 110-volt AC master panel.
- **NEVER** turn **On** the water heater circuit breaker on the 110-volt AC master panel while the water heater tank is empty.
- To make sure 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.

Perform the following steps to put your winterized water heater back in service:

1. **Close** the drain valve (A).
2. **Close** the pressure relief valve (B).
3. Connect the hose (C) to the pressure relief valve (B).
4. Fill the water heater tank with freshwater.
5. Remove the 'winterized' 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.

NOTE: TYPICAL WATER HEATER SHOWN. LOCATIONS OF FITTINGS MAY VARY BY BRAND AND MODEL.



"WATER HEATER IS EMPTY" TAG ATTACHED TO WATER HEATER CIRCUIT BREAKER

Drain Systems

Deck Drains

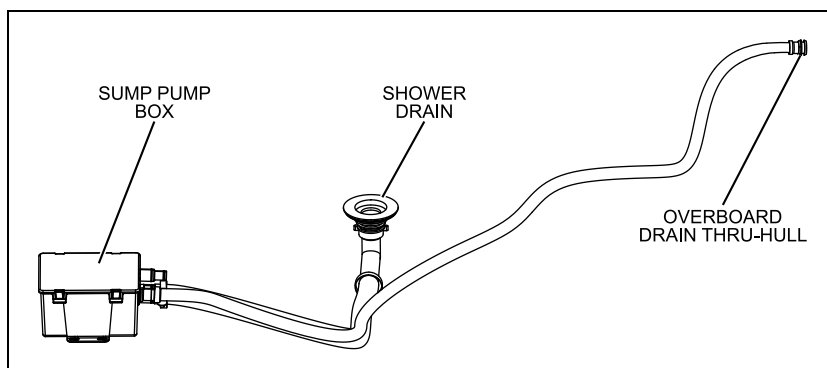
- Water on the deck is gravity drained overboard through the deck drains.
- Keep the deck drains free of debris.

Sink Drains

The sinks are above the waterline and are gravity drained overboard.

Shower Drain System (If Equipped)

- Shower water drains into a sump pump box.
- A float switch turns **On** the sump pump when the drain water rises to a preset level, and the drain water is pumped overboard.
- Read the sump system instruction sheet, paying special attention to the maintenance and cold weather instructions.



Marine Head & Holding Tank

NOTICE

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

Descriptions of your particular head system are provided on the following pages. However, before using your head system read the operation and maintenance manual for your marine toilet.

Winterizing the System

Winterizing instructions are provided in the operation and maintenance manual for your marine toilet.

Holding Tank Cleaning Tip

If possible, perform the following steps near the end of each trip to help clean and flush the holding tank:

1. Several miles from the end of each trip, stop at a pump-out station with a non-potable water source.
2. Pump-out the holding tank.
3. Fill the holding tank 1/2 full of fresh non-potable water. **NOTE: *Never* use a potable (drinkable) water source to perform this step.**
4. Get back underway. The agitation while cruising home will help clean the tank.
5. Upon reaching your destination, stop at another pump-out station and empty and flush out the holding tank, and add marine holding tank deodorizer.

Manual Flush Head (If Equipped)



WARNING!

FLOODING and SWAMPING HAZARD!

- *Close* the head system's seawater intake seacock when leaving your boat unattended for any length of time.
- If this seacock, or any other seacock, is left open a hose failure could flood the bilge, swamp the battery and the engine, and even sink your boat.



WARNING!

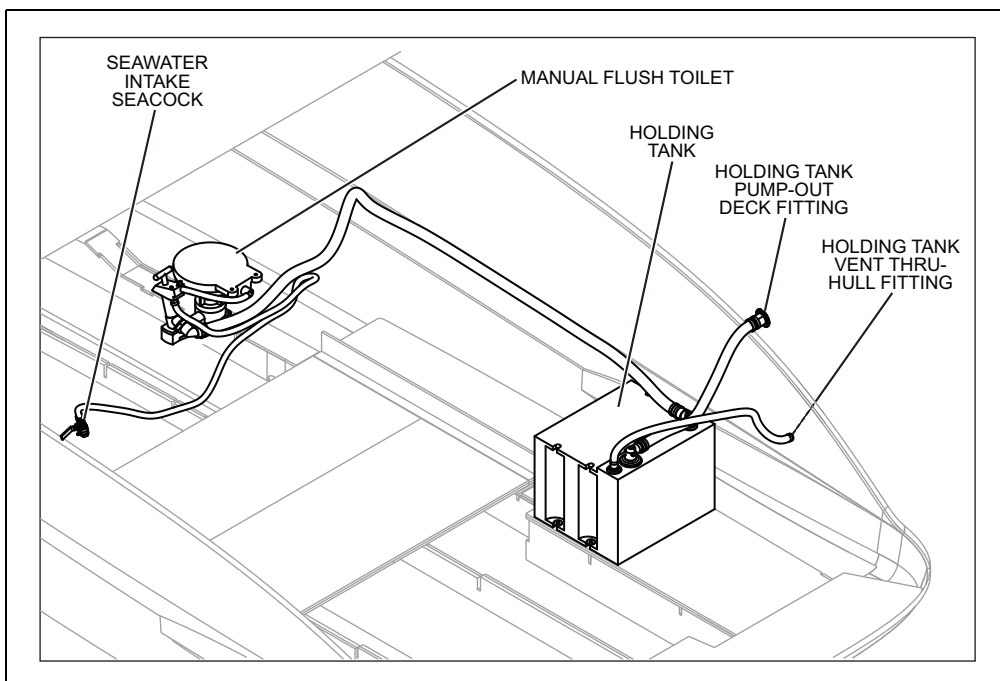
OVERFILLED HOLDING TANK HAZARDS! NEVER overfill the holding tank! An overfilled holding tank is both a serious public health hazard and a product/property damage hazard!

- When the holding tank is full, flushing the toilet will force clogging-waste into the tank's vent system.

Perform the following steps to avoid an overfilled holding tank:

- Frequently check the content level in the holding tank by looking at the side of the tank.
- After *EVERY* trip, and at *EVERY* opportunity during long trips: Empty and flush out the holding tank, and add marine holding tank deodorizer.
- Use rest rooms onshore whenever possible to reduce the amount of waste flushed into the holding tank.

- *Before* using this system, read the toilet operation and maintenance manual.
- Before each trip make sure the holding tank vent system is working properly. Check for obstructions such as insect nests at the vent thru-hull fitting.
- *Never* flush anything except human waste and rapid-dissolving boat or RV toilet tissue.
- **Whenever possible use onshore rest rooms instead of your onboard head.**
- Look at the side of the holding tank often to check the content level.
- Empty the holding tank at every opportunity.
- The dockside pump-out deck fitting is marked WASTE.



Using the Manual Flush Marine Head

1. *Open* the head's seawater intake seacock.
 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.

Vacuum Flush Head System (If Equipped)



WARNING!

OVERFILLED HOLDING TANK HAZARDS!

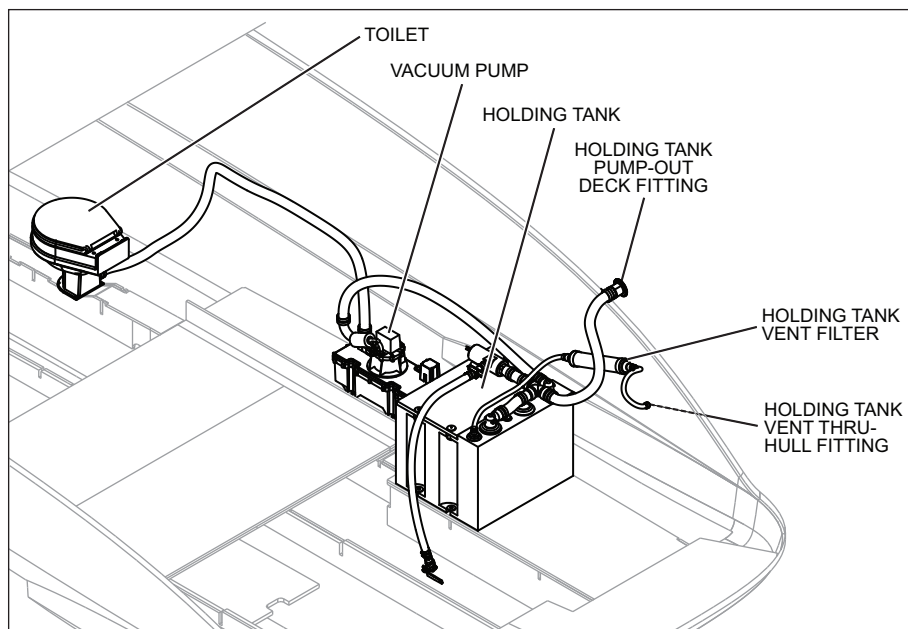
NEVER overfill the holding tank! An overfilled holding tank is both a serious public health hazard and a product/property damage hazard!

- When the holding tank is full, flushing the toilet will force clogging-waste into the tank's vent system.
- If the vent system becomes clogged, further toilet flushing will dangerously pressurize the holding tank.
- The possible hazards of a pressurized holding tank range from human waste leaking through damaged tank fittings, all the way up to an explosive rupture of the tank.

Perform the following steps to avoid overfilling the holding tank:

- Frequently check the content level in the holding tank by looking at the side of the tank.
- After *EVERY* trip, and at *EVERY* opportunity during long trips: Empty and flush out the holding tank, and add marine holding tank deodorizer.
- Use rest rooms onshore whenever possible to reduce the amount of waste flushed into the holding tank.

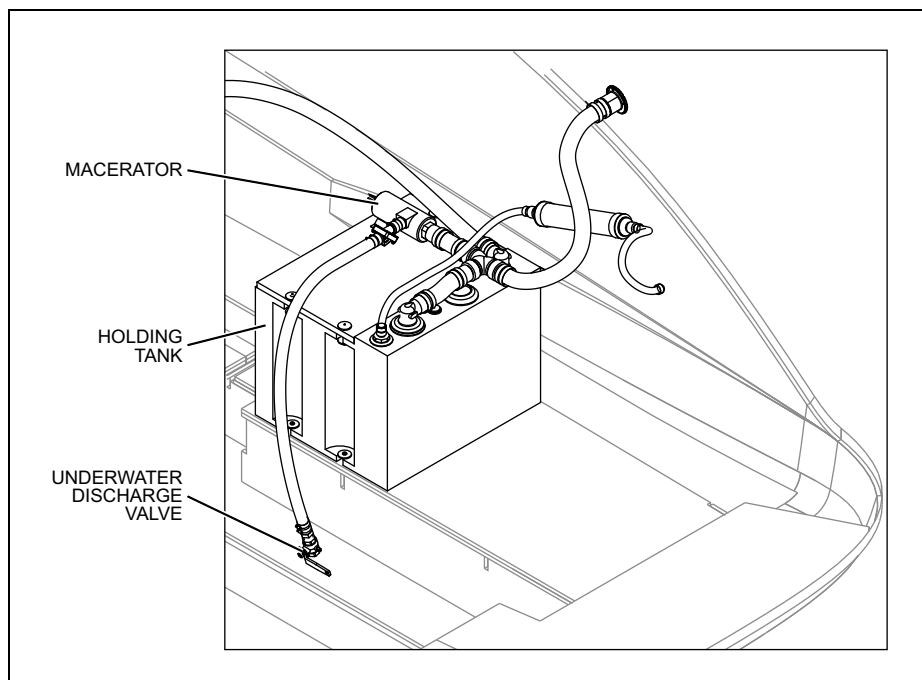
- Before using your vacuum flush head, read the vacuum flush head's operation and maintenance manual.
- The vacuum flush head system uses freshwater from the fresh-water tank and a vacuum pump to flush waste from the toilet into the holding tank.
- The holding tank is plumbed to a fitting on the deck for dockside pump-out. This fitting is marked WASTE.
- Before each trip make sure the holding tank vent system is working properly. Check for obstructions such as insect nests at the vent thru-hull fitting.
- **Immediately** replace the vent filter if:
 - a. Flushing causes a bad odor.
 - b. The holding tank has been overfilled.
 - c. The holding tank is difficult to empty.
- **Never** flush anything except human waste and rapid-dissolving boat or RV toilet tissue into the holding tank.
- **Whenever possible use onshore rest rooms instead of your onboard head.** Using your onboard head *only* when there is no other option will help you avoid overfilling the holding tank.
- Look at the side of the holding tank often to check the content level.
- Empty the holding tank at every opportunity.




Macerator (If Equipped)

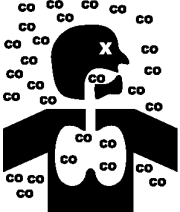
To use the macerator to pump waste directly overboard (where laws permit):

1. ***Open*** the underwater discharge valve.
2. Press both macerator switches at the same time to run the pump (these switches are located in the side panel storage tub next to the helm seat).
3. Release the switches as soon as the holding tank is empty.
4. ***Close*** the underwater discharge valve 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 battery and engine, and even sink your boat.

**CAUTION**

SYSTEM DAMAGE HAZARD!

- *Open* the air conditioner 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 conditioning system for the first time.

Before Each Use

- Turn *On* the air conditioner breaker on the 110-volt AC master panel.
- *Open* the seawater intake seacock. This seacock *must* remain *Open* while you're running the air conditioner.
- Check the seawater strainer for debris. If needed, clean the strainer as described in the *Seawater Systems* section of this chapter.

Chapter 7: Deck Equipment


Cleats & Bow/Stern Eyes


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

Read the section on towing in the *Cruiser & Yacht Owner's Manual* **before**:

- Towing anything behind your boat.
- Being towed by another vessel.


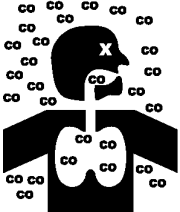
Windlass (If Equipped)

 DANGER!
<p>PERSONAL SAFETY & PRODUCT DAMAGE HAZARD!</p> <p>An unsecured anchor could accidentally release while your boat is moving, damaging your boat and causing serious injury or death.</p> <p>After retrieving the anchor:</p> <ul style="list-style-type: none"> • Secure the anchor with an anchor safety strap, or a chain stopper. • Switch OFF the windlass circuit breaker to prevent accidental operation.

 CAUTION
<p>PRODUCT DAMAGE HAZARD!</p> <p>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.</p> <p>Do NOT pull your boat to the anchor using the windlass, or continue running the windlass if it has stalled or is overloaded.</p>

- Read and follow the manufacturer's instruction manual **before** using the anchor windlass for the first time.
- You can control the windlass from the helm or by using the deck foot switches located next to the windlass.
- 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

 DANGER!	
	<p style="text-align: center;"><i>CARBON MONOXIDE POISONING HAZARD!</i></p> <ul style="list-style-type: none"> • NEVER use full canvas and vinyl enclosures when the engine or generator is running. • For proper fresh air circulation, remove forward, aft, and both side enclosure curtains BEFORE starting the engine or generator. • Read the <i>Carbon Monoxide (CO)</i> section in <i>Chapter 1</i> of this supplement.

 CAUTION
<p style="text-align: center;"><i>PRODUCT or PROPERTY DAMAGE HAZARD!</i></p> <p>Take down and securely stow ALL canvas & vinyl BEFORE your boat is transported by road.</p>

NOTICE
<ul style="list-style-type: none"> • Make sure your dealer explains how to install all canvas and vinyl. • Two people are needed for most of the tasks listed in this section. • BEFORE cleaning and/or stowing your canvas or vinyl, read the sections later in this chapter, <i>Canvas Care</i> and <i>Clear Vinyl Care</i>.

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

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

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



CAUTION

- Soaking in bleach solutions may remove the waterproof finish of the fabric and may also decrease the life of the polyester thread used in the canvas.
- If needed, a water repellent treatment should be reapplied to your canvas. Ask your dealer about the treatments available for your boat's 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.

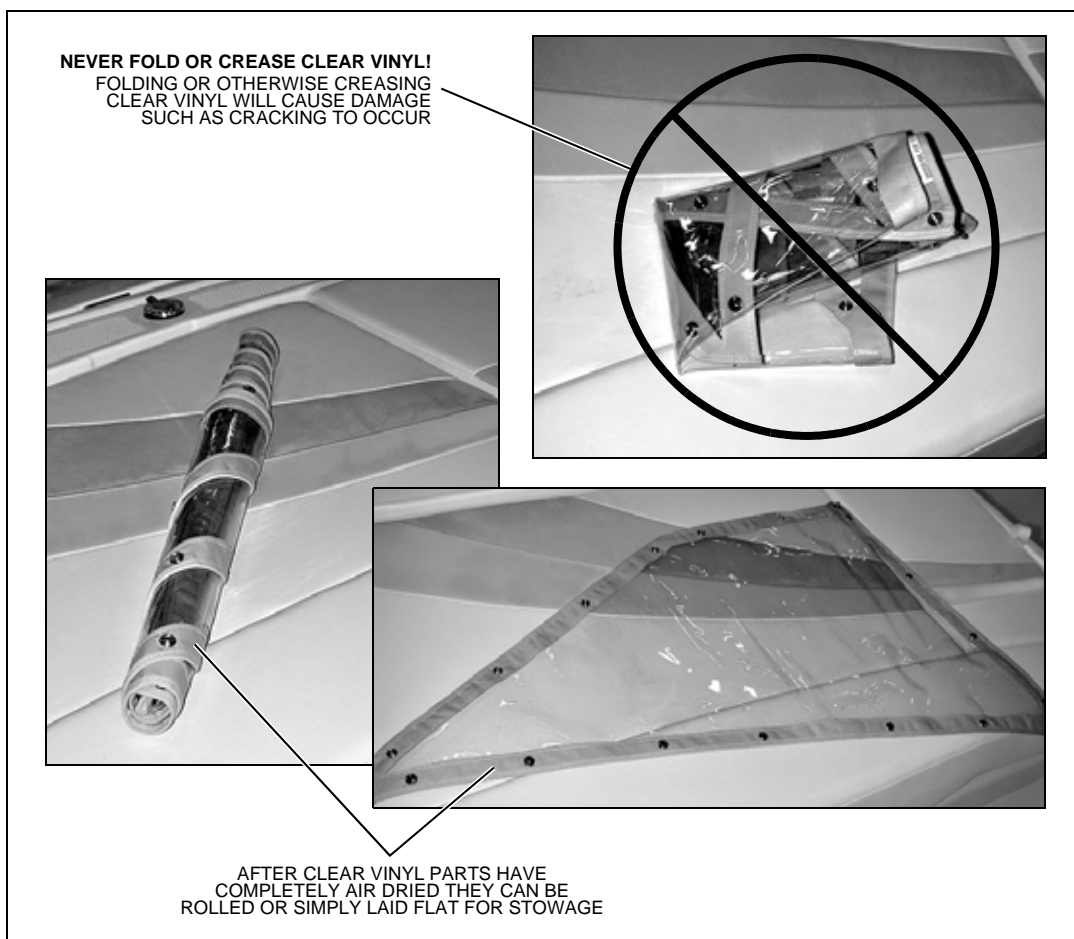
- After each use, especially in saltwater, rinse the clear vinyl with cold freshwater.
- **Before** stowing, the clear vinyl must be completely dry. Air-drying is best, but you can also carefully dry the vinyl with a chamois or soft cotton cloth.

- 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 must 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

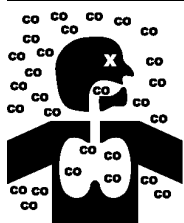
ALWAYS keep an approved ABC-type fire extinguisher in galley area.

- *All* appliances and entertainment systems have their own instruction sheets and/or manuals that 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.

Alcohol/110-Volt Electric Stove (If Equipped)



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!

NEVER use alcohol and electric burners at the same time. To do so will cause overheating, which can destroy the electric elements.

Refrigerator (If Equipped)

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

Audio Equipment

NOTICE

AM radio reception may be impaired anytime the engine is running.

Chapter 9: Lights

Care & Maintenance

Although all lights installed on your boat are of top quality, they will occasionally fail. Always carry spare bulbs of the correct size and wattage, but before replacing non functioning lights, check for other common causes, such as:

- There may be a blown fuse - *replace the fuse.*
- A wire may be damaged or may have come loose - *repair as required.*
- The bulb base may be corroded - *clean the base and coat it with non-conductive electrical lubricant.*

Interior & Exterior Lights



CAUTION

- Be conservative in the use of battery power.
- Prolonged use of cabin interior lights (overnight) **WILL** result in a drained battery.

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

Spotlight (If Equipped)

Read the spotlight operating instructions, included in your owner's packet, **before** using the spotlight.

Navigation Lights

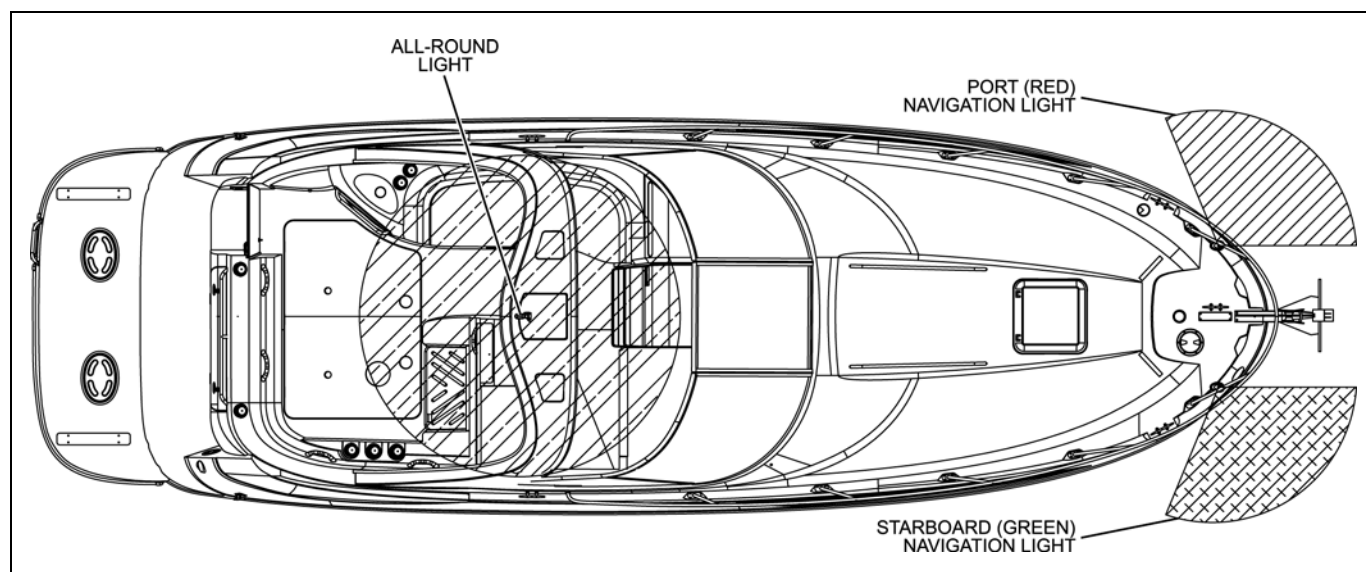


CAUTION


Avoid the storage of gear where it would block navigation lights from view.

NOTICE




Running lights are legally required to show boat direction and right-of-way at night.




Chapter 10: 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 and engine starting.
- The *Electrical* section in *Chapter 8* of the *Cruiser & Yacht Owner's Manual* provides battery care and maintenance instructions.

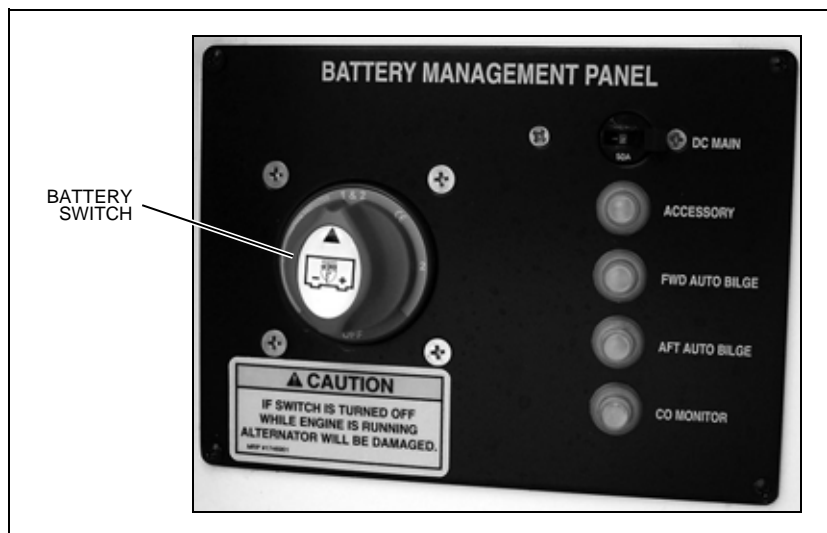
Battery Switch


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.

- 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

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.

BATTERY SWITCH POSITIONS	ENGINE STARTING	ACCESSORIES & LIGHTS	ENGINE ALTERNATOR	BATTERY CHARGER
POSITION 1	Battery <u>1</u> provides starting power	Battery <u>1</u> provides power for accessories and lights	Charges battery <u>1</u>	Charges BOTH batteries
POSITION 2	Battery <u>2</u> provides starting power	Battery <u>2</u> provides power for accessories and lights	Charges battery <u>2</u>	Charges BOTH batteries
POSITION BOTH or 1 & 2	BOTH batteries Provide starting power	BOTH batteries provide power for accessories and lights (not advised unless engine is running)	Charges BOTH batteries	Charges BOTH batteries

Fuses & Circuit Breakers

- Circuit breakers for the engine and main accessory power are on the 12-volt DC push-to-reset circuit breaker panel and on the battery switch panel.
- See the *Component Locations* section in *Chapter 2* for the locations of the battery switch panel and the 12-volt DC push-to-reset circuit breakers.

NOTE: Some equipment may have secondary fuse protection at the unit, or behind the battery switch panel, or at the batteries.

12-Volt DC Accessory Outlets



CAUTION

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

- These accessory outlets can be used with any 12-volt device that draws 15-amps or less.
- The 12-volt DC accessory outlets are protected by a 15-amp breaker on the 12-volt DC push-to-reset circuit breaker panel.
- See the *Component Locations* section in *Chapter 2* for the location of the 12-volt DC accessory outlets.

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, **and** the battery charger circuit breaker on the 110-volt AC master panel is **On**.
- The battery switch(es) 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!

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



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, 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), or inverter 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

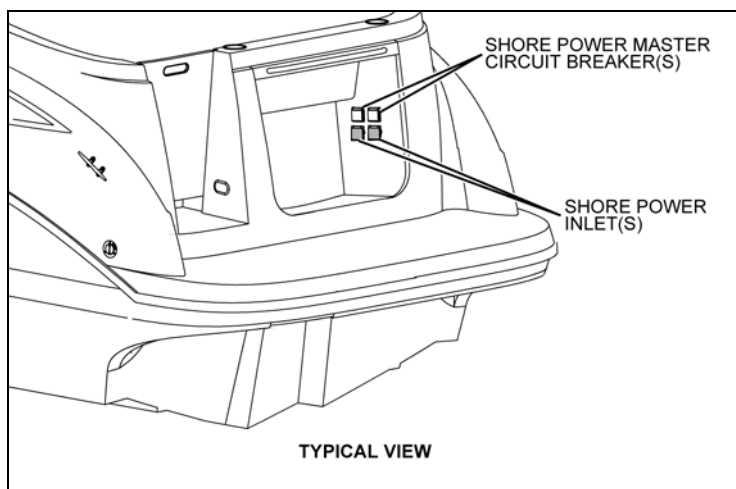

WARNING!



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.

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)


NOTICE

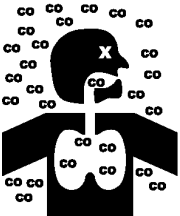
- When using the parallel switch do *NOT* exceed 30 total amps.
- The amperage of each component breaker is shown on the breaker itself.
- The voltage on each line can be read on the voltmeter on the 110-volt AC master panel.

When only one dockside outlet is available, you can use the parallel switch to provide power to both lines.

1. Connect to shore power as described above in the *Connecting to Shore Power* section.
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.
- Run the bilge blowers constantly while the generator is operating.
- 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.

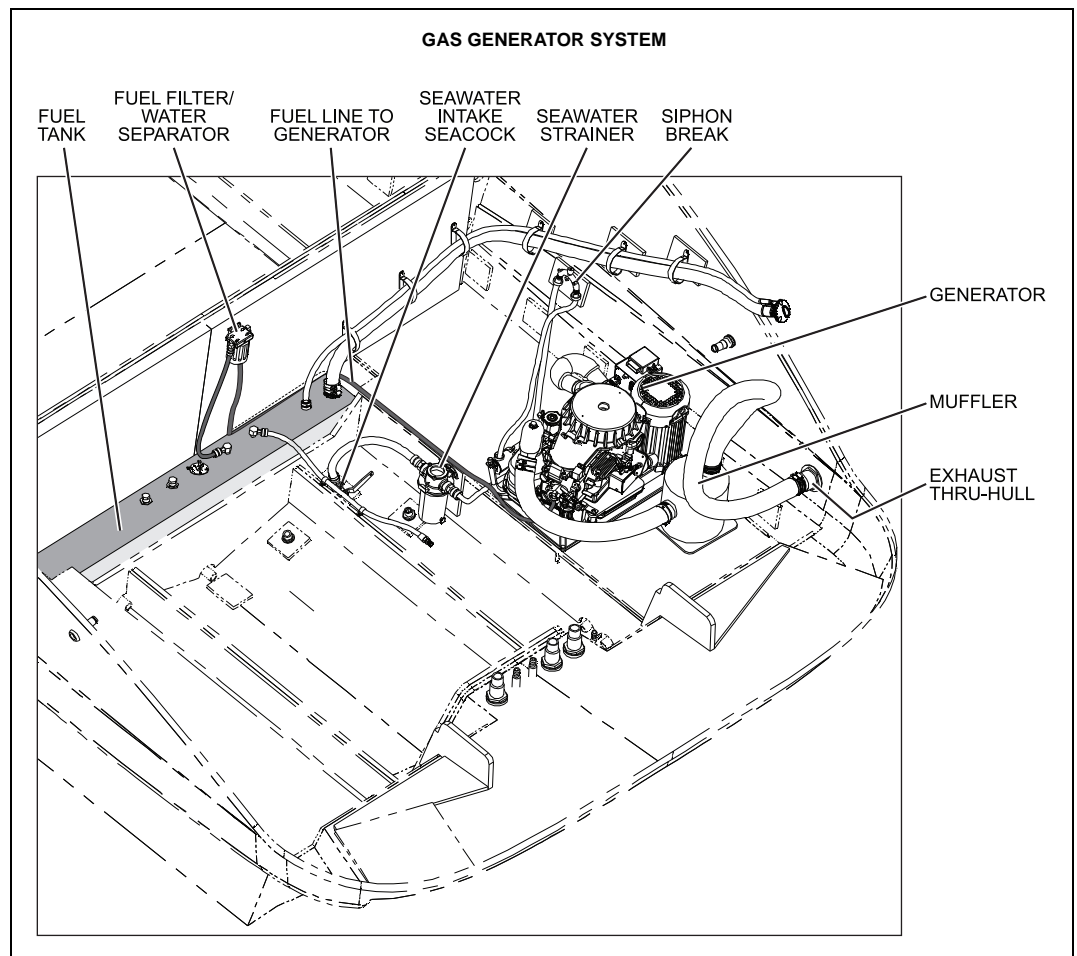
NOTICE

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 both the generator operation manual and the fuel filter water separator instructions.
- **Refer to the generator manual for starting/stopping instructions.**

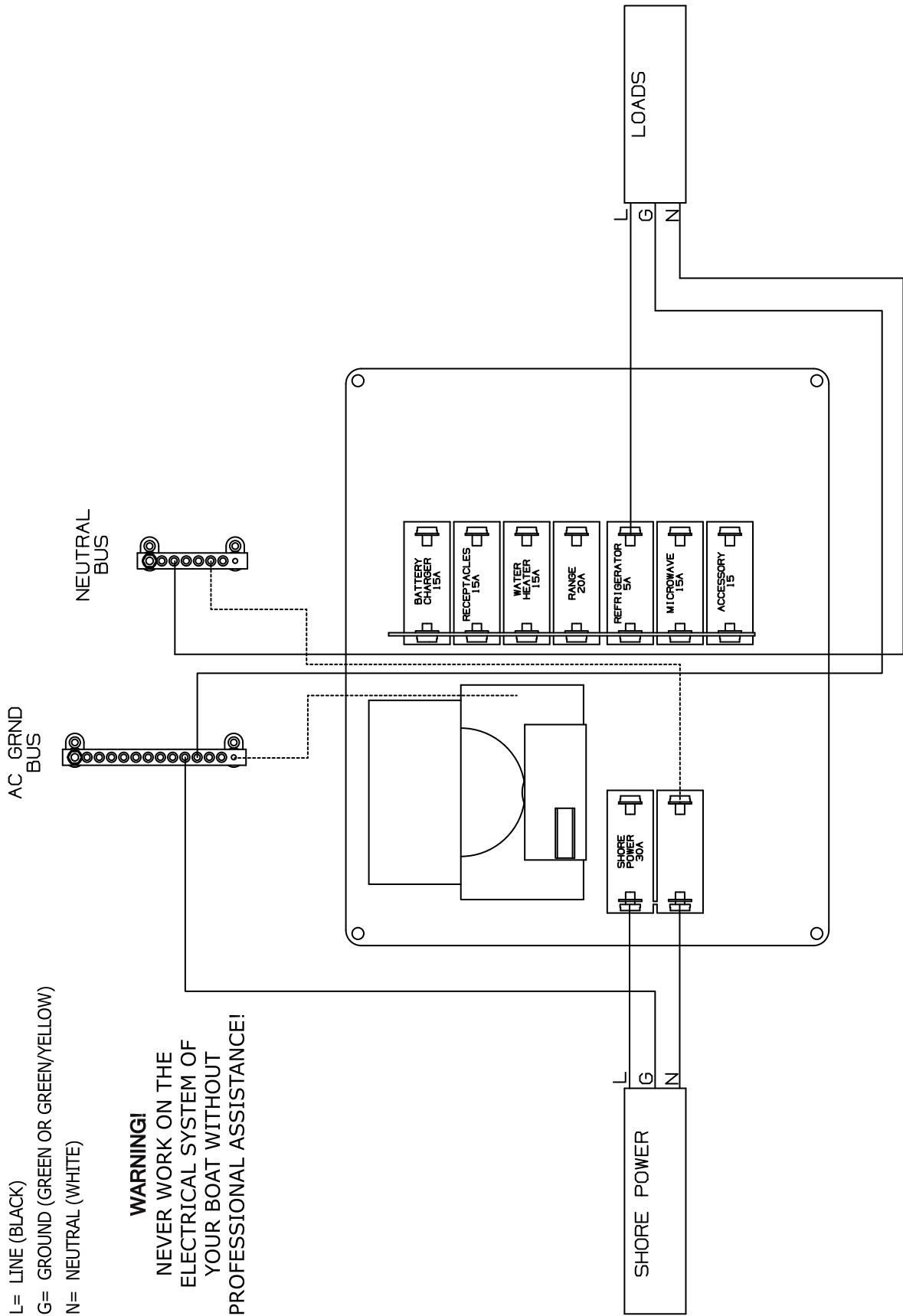
Important Generator Notes:

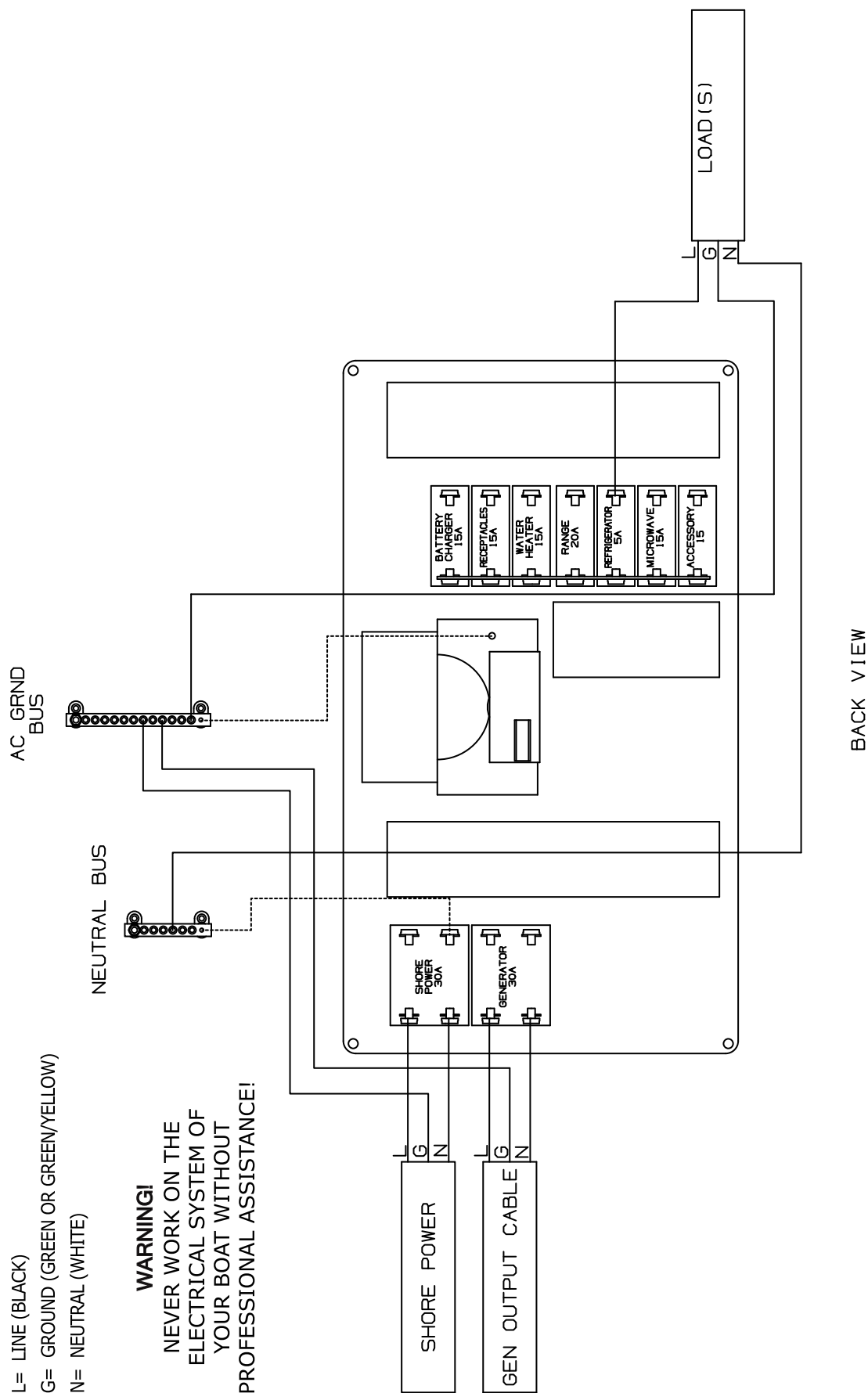
- Polarity has been established in the installation of the generator. Therefore the polarity lights will **not** function in this mode.
- The coolant mixture installed at the factory consists of equal parts of water and antifreeze (Ethylene Glycol).
- Check the generator's seawater strainer for leaks and/or debris **before** each use. If needed, clean the strainer as described in the *Seawater Systems* section of the Plumbing chapter.



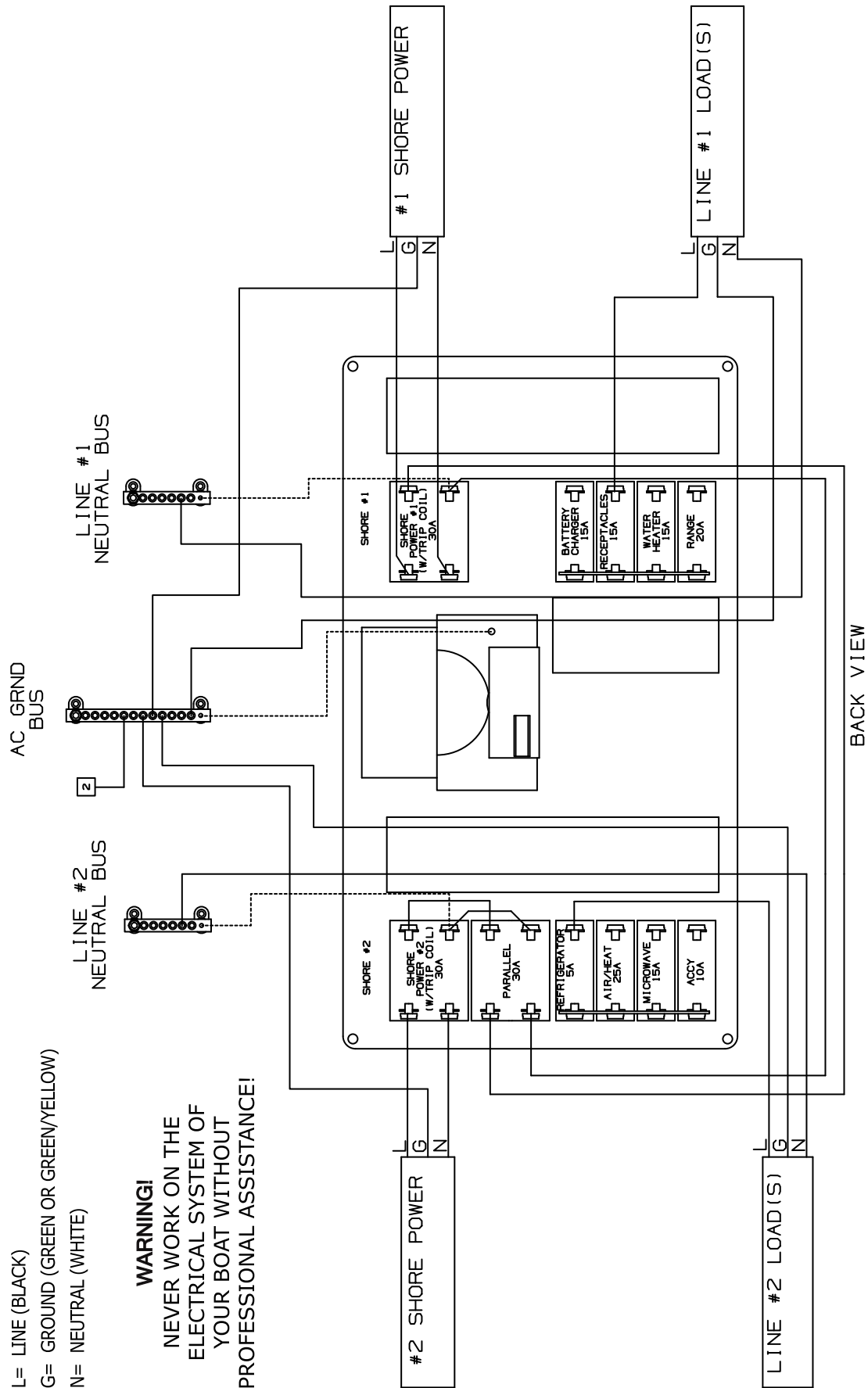
Electrical Harnesses & Schematics

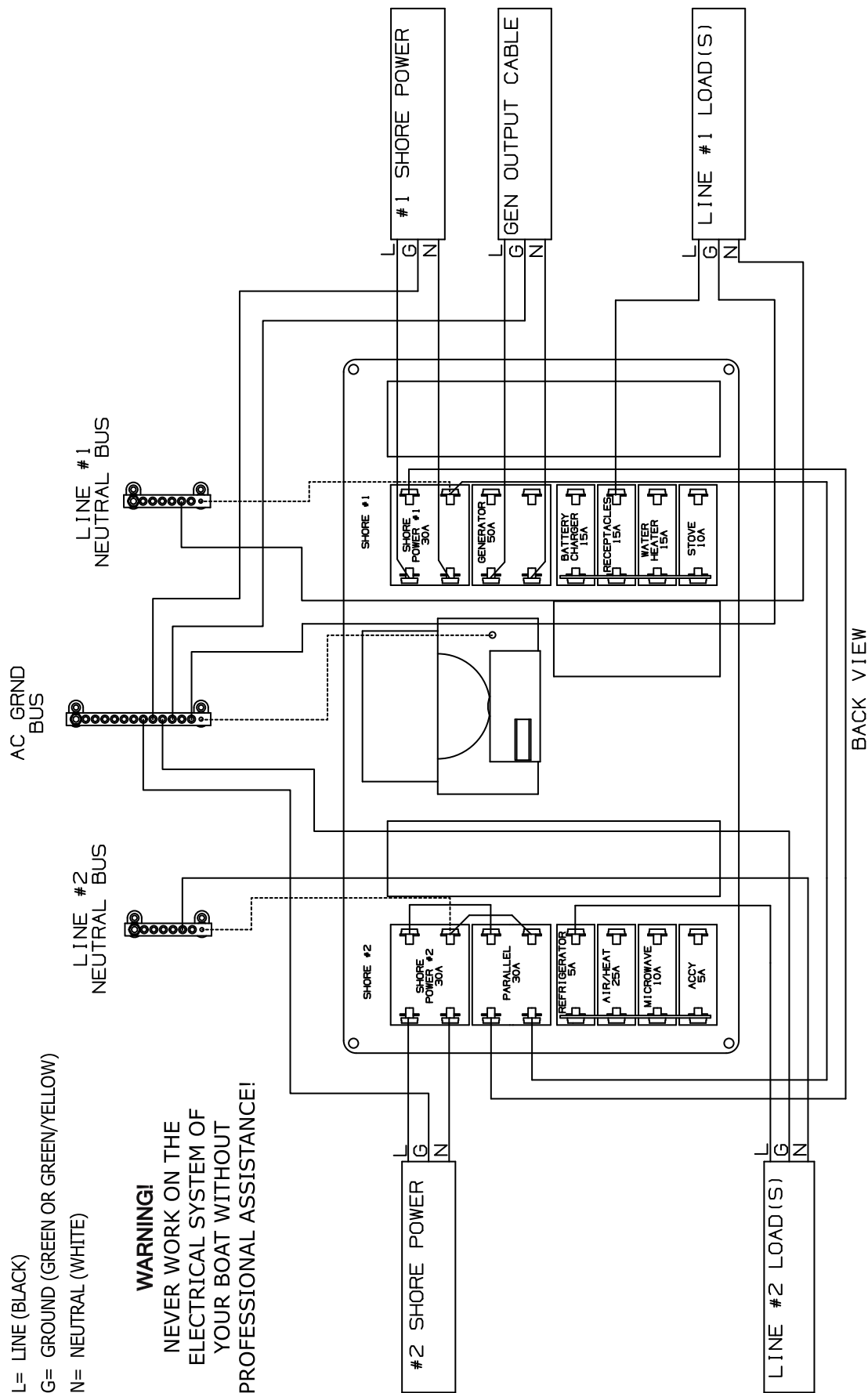
120V Single Shore Power AC Panel



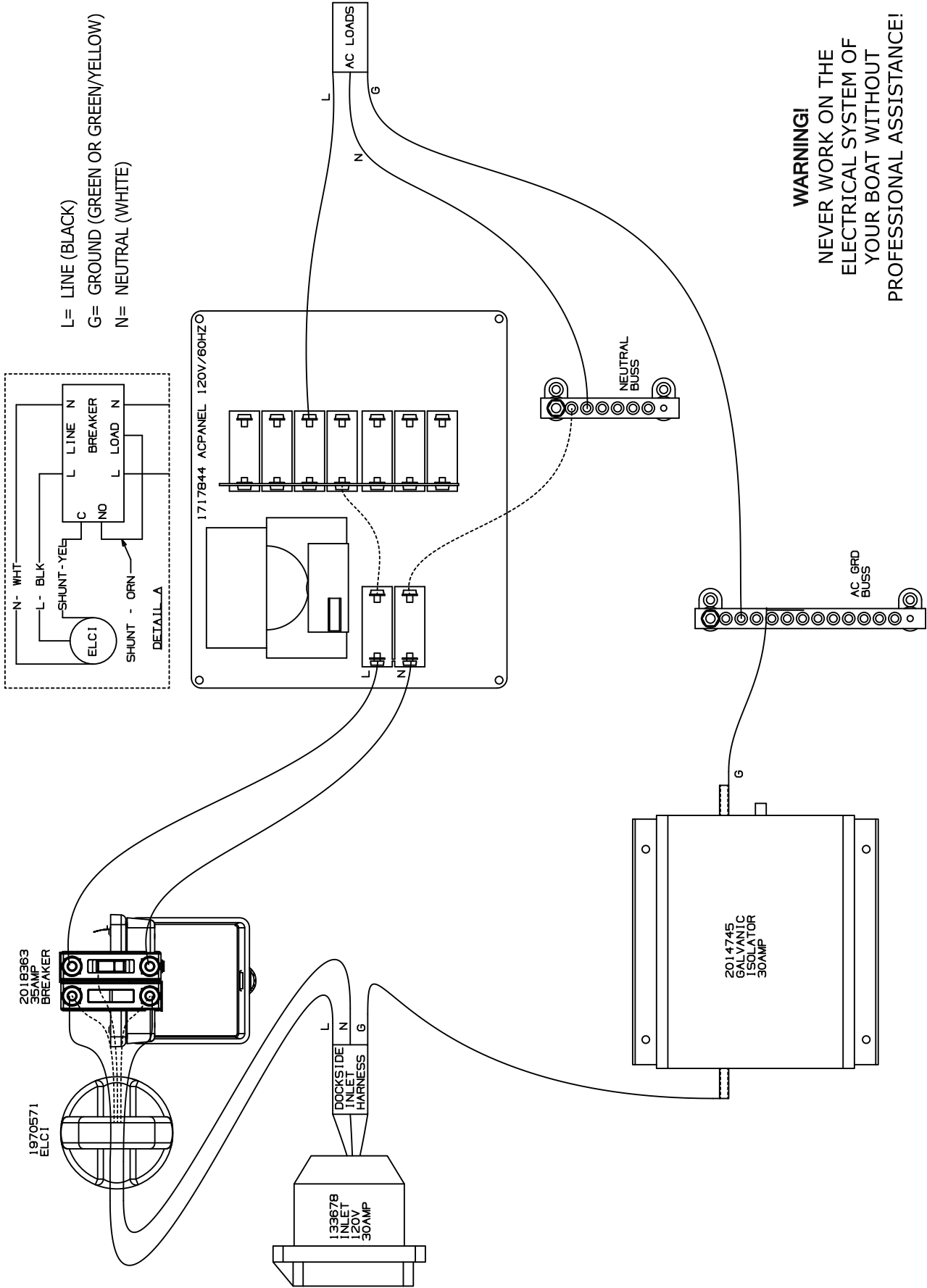
120V Single Shore Power w/Generator AC Pane

120V Dual Shore Power AC Panel

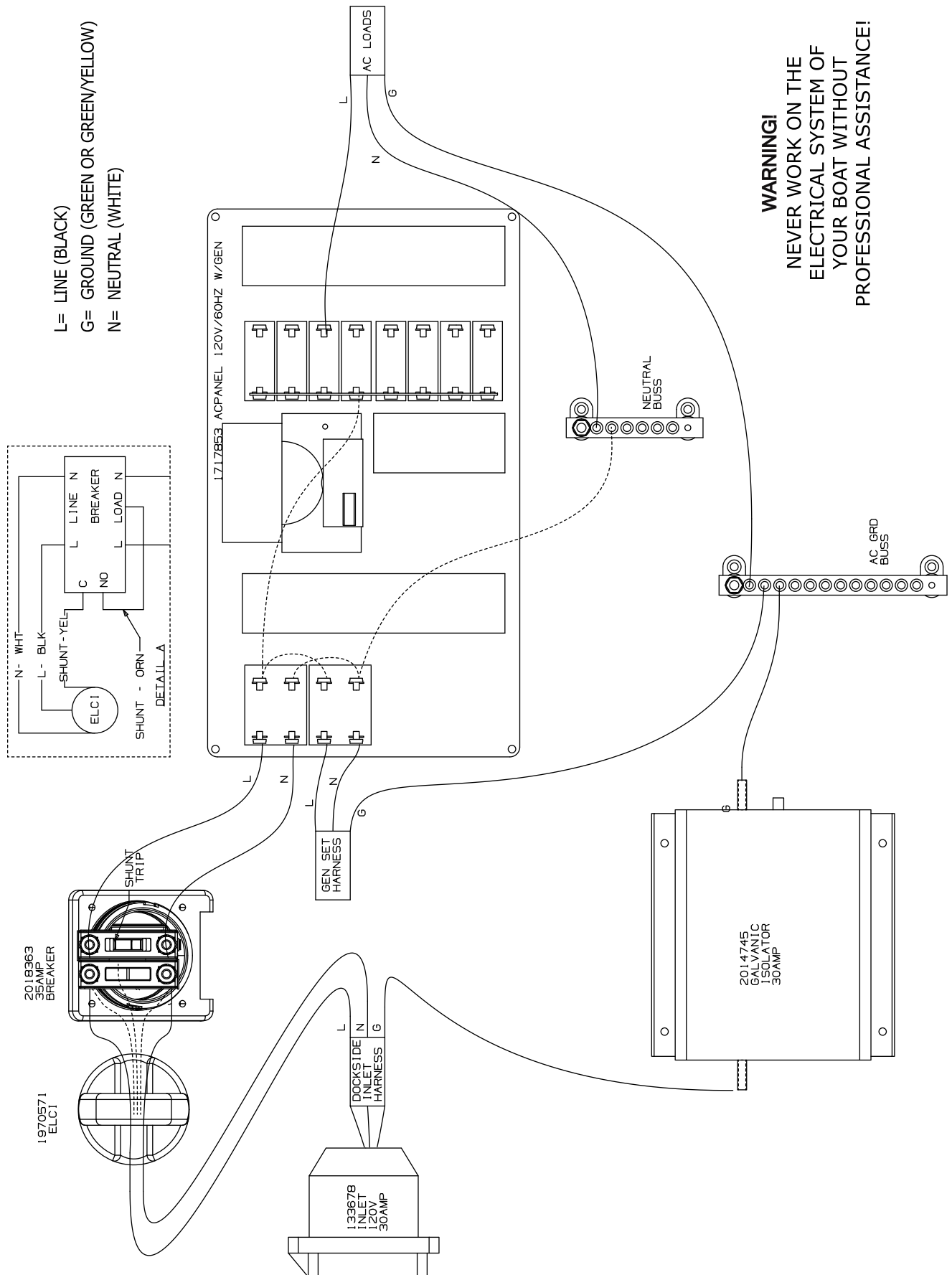


120V Dual Shore Power w/Generator AC Panel

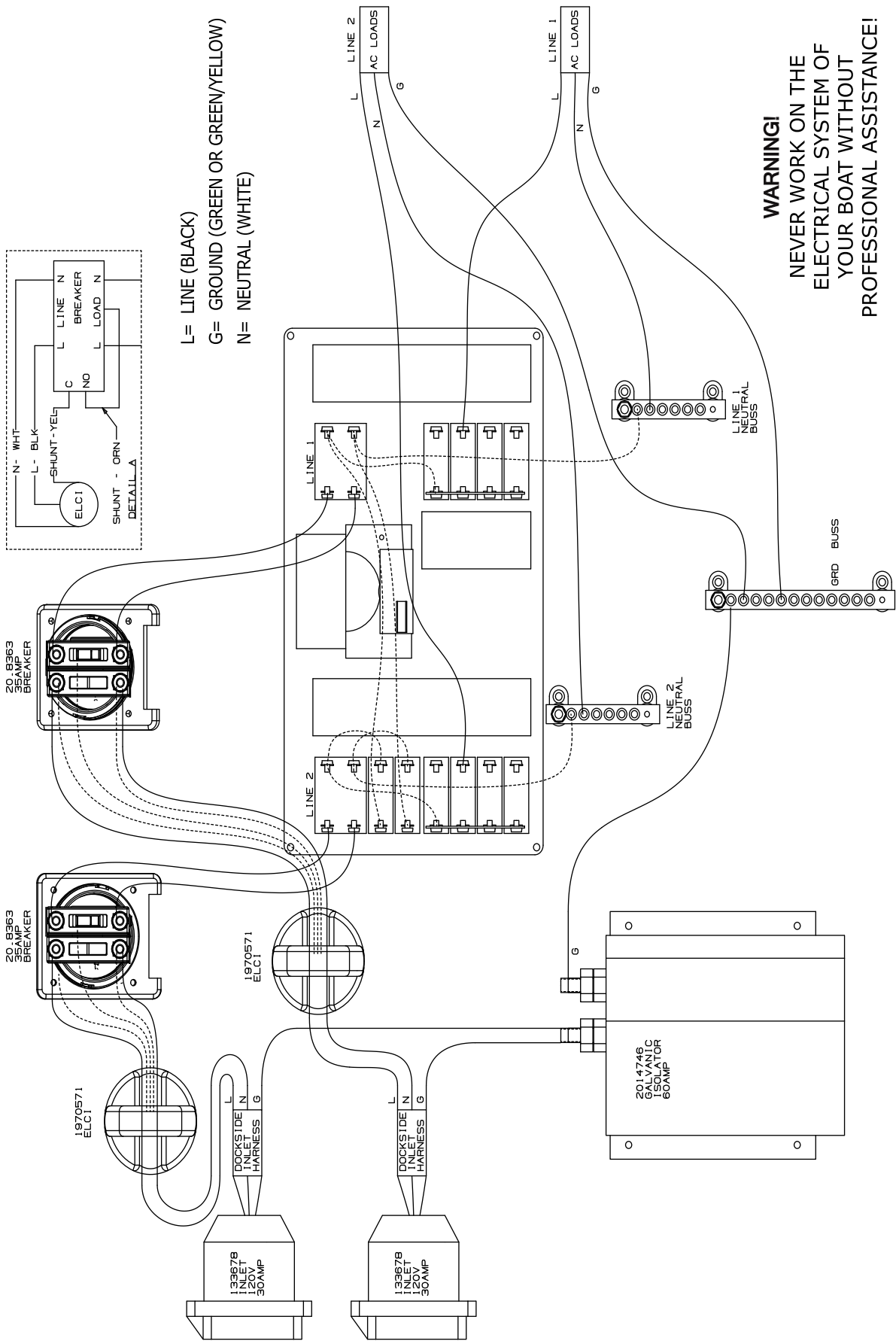
120V Single Shore Power Architecture



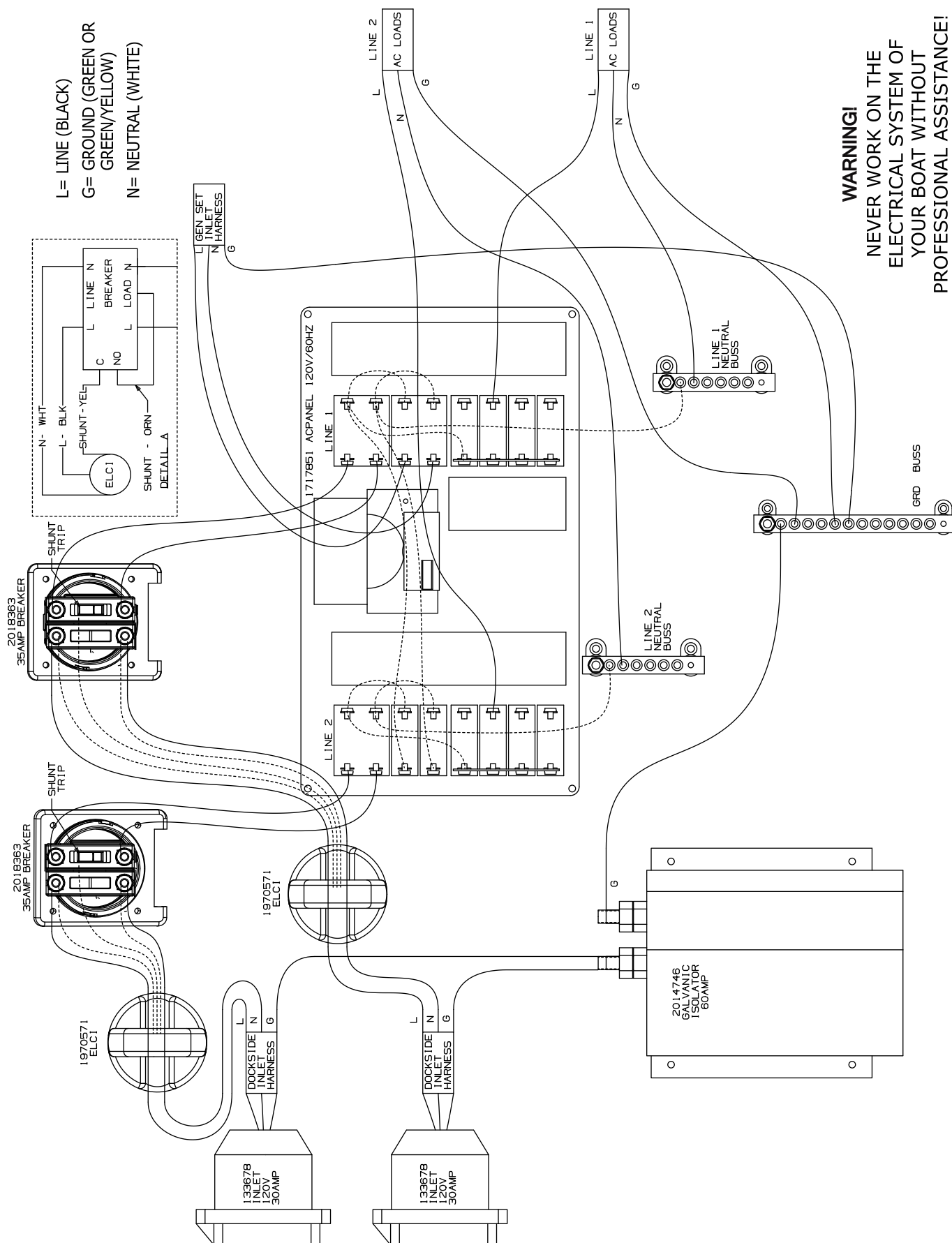
120V Single Shore Power w/Generator Architecture



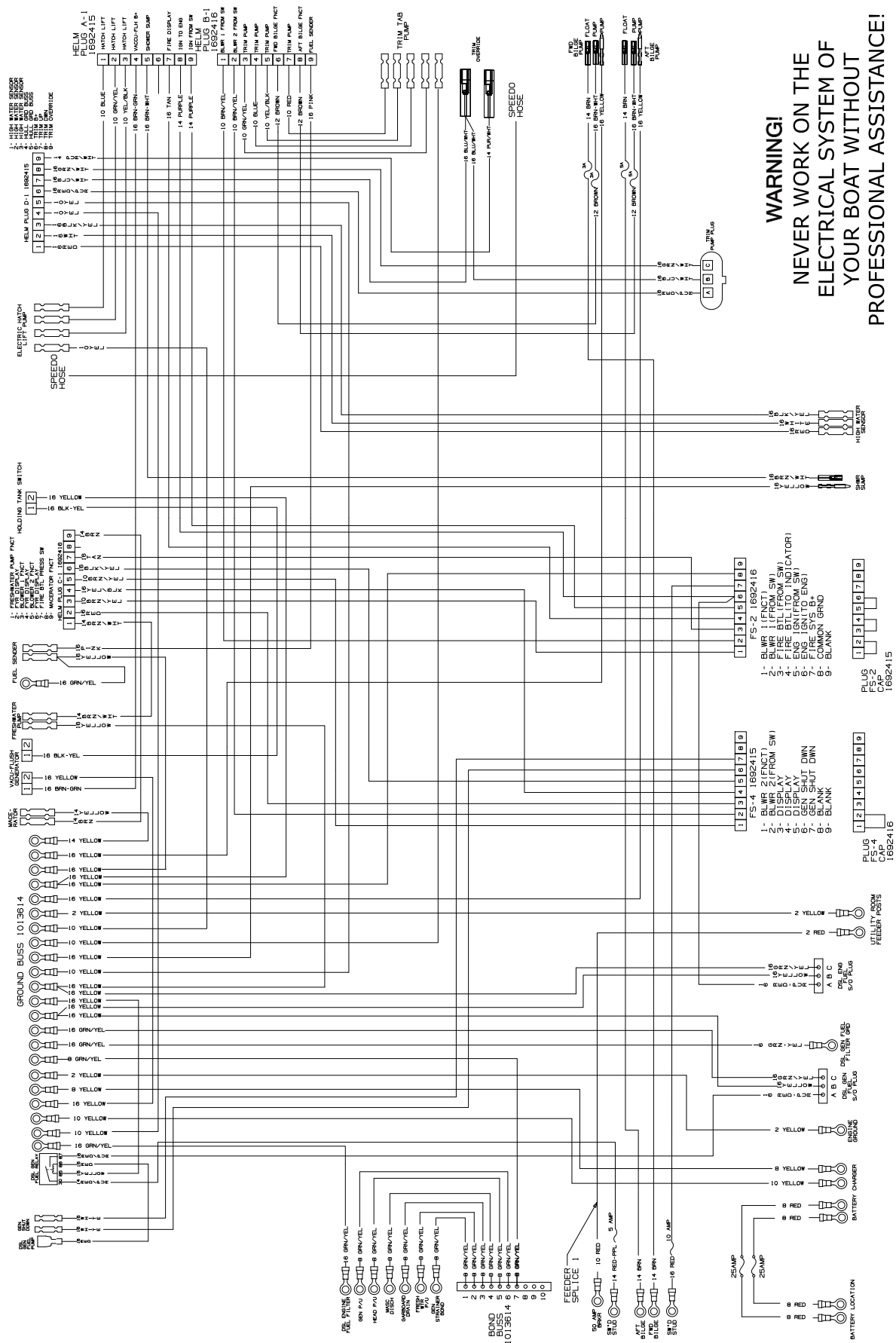
120V Dual Shore Power Architecture



120V Dual Shore Power w/Generator Architecture



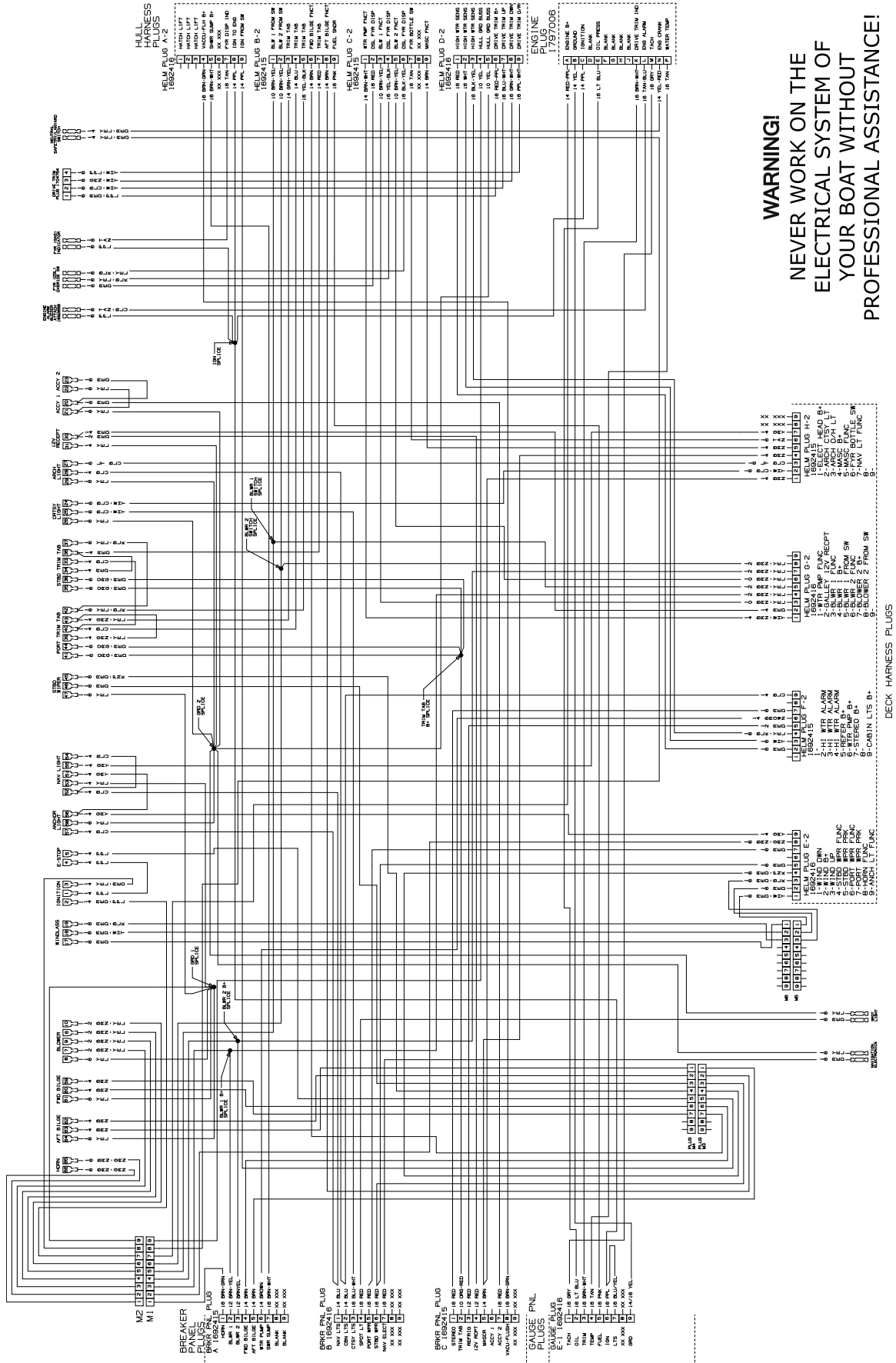
12V Hull Harness



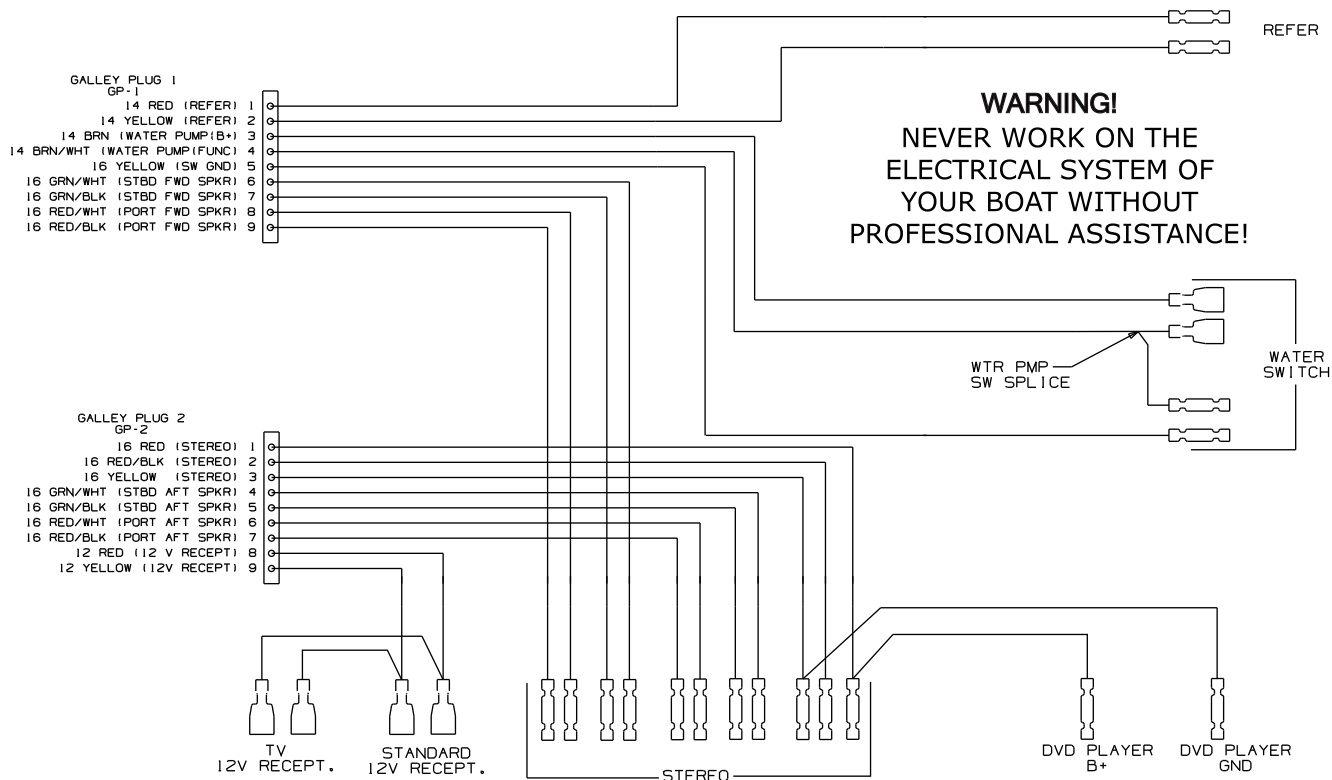
WARNING!

NEVER WORK ON THE ELECTRICAL SYSTEM OF YOUR BOAT WITHOUT PROFESSIONAL ASSISTANCE.

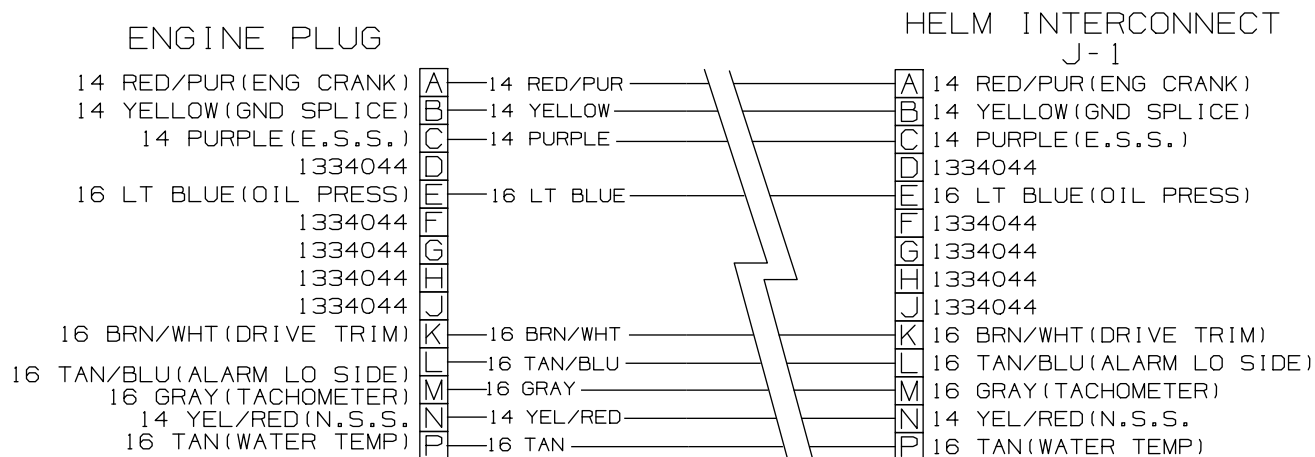
12V Helm Harness



12V Galley Harness

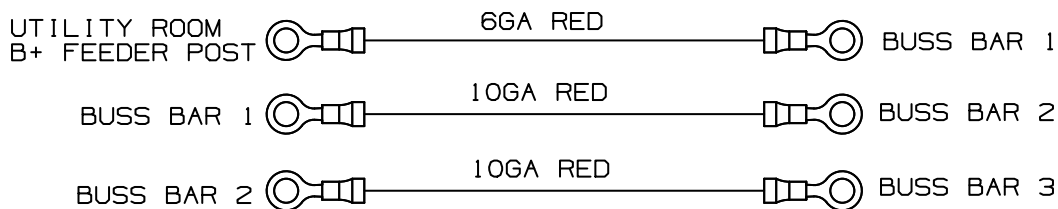
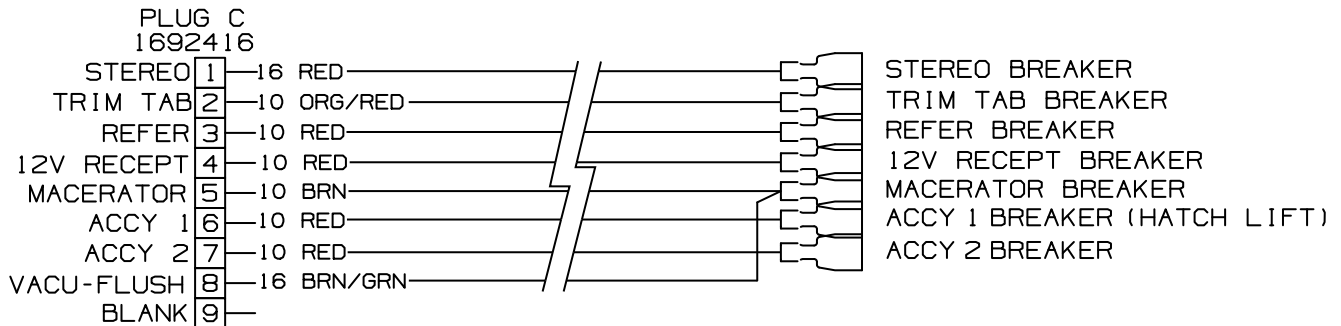
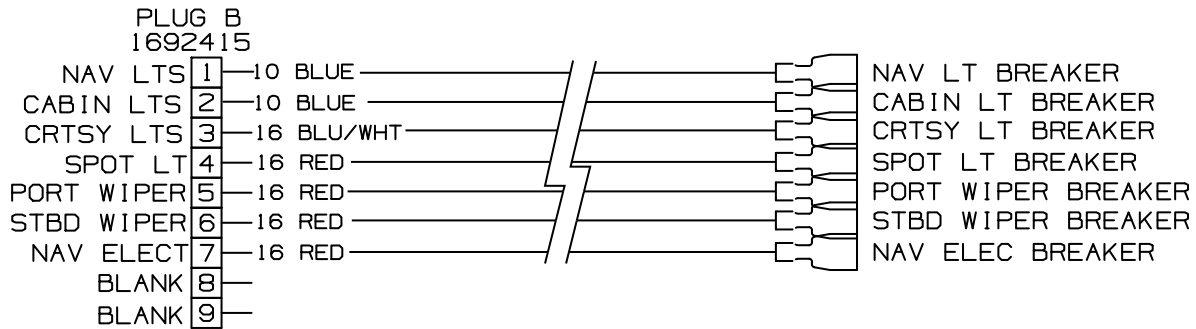
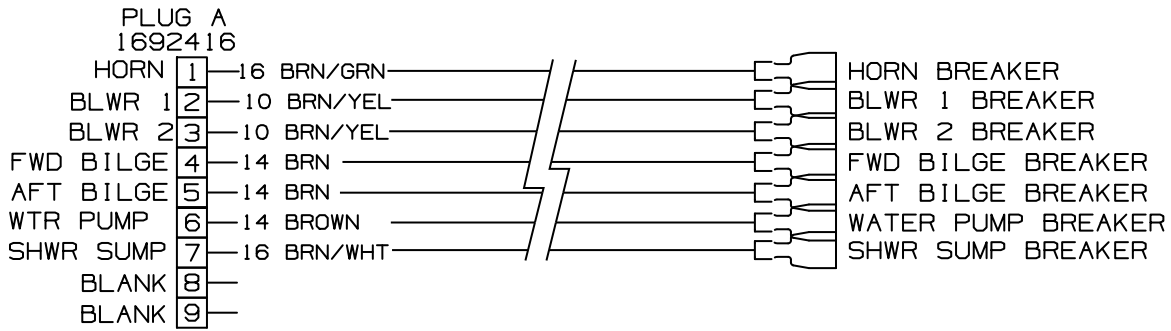


12V Engine Harness



WARNING!
NEVER WORK ON THE ELECTRICAL SYSTEM OF YOUR BOAT WITHOUT PROFESSIONAL ASSISTANCE!

12V Breaker Panel Harness



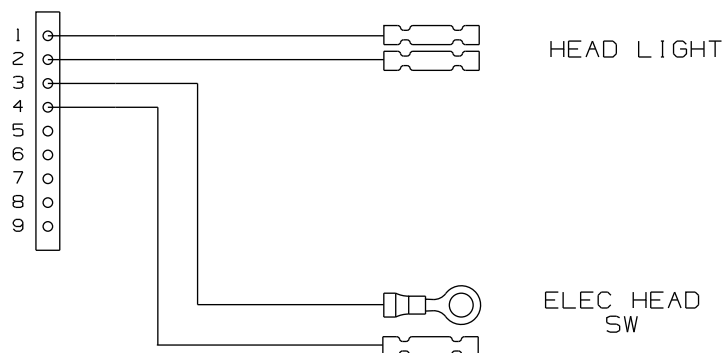
WARNING!
NEVER WORK ON THE
ELECTRICAL SYSTEM OF
YOUR BOAT WITHOUT
PROFESSIONAL ASSISTANCE!

12V Head Harness

HEAD PLUG
1692416

- 1- 16 BLUE (LTS B+)
- 2- 16 YELLOW (LTS GND)
- 3- 12 BROWN (ELEC HD B+)
- 4- 12 YELLOW (ELEC HD GND)
- 5- BLANK
- 6- BLANK
- 7- BLANK
- 8- BLANK
- 9- BLANK

WARNING!
NEVER WORK ON THE
ELECTRICAL SYSTEM OF
YOUR BOAT WITHOUT
PROFESSIONAL ASSISTANCE!



Important Records

Selling Dealer

_____	Name Of Dealership
_____	Address
_____	Phone/FAX/E-mail
_____	Sales Manager
_____	Service Manager

Engine

_____	Manufacturer	_____	Model Name/Number

Engine Serial Number			
_____	Oil Type/SAE	_____	Quarts per Engine
		_____	Filter Type

Propeller

_____	Manufacturer	_____	Pitch

Model Number			

Key Numbers

_____	Ignition	_____	Other
-------	----------	-------	-------

Electronics

_____	Manufacturer	_____	Model Name/Number

Serial Number			
_____	Manufacturer	_____	Model Name/Number

Serial Number			
_____	Manufacturer	_____	Model Name/Number

Serial Number			
_____	Manufacturer	_____	Model Name/Number

Serial Number			
_____	Manufacturer	_____	Model Name/Number

Serial Number			

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

Registration/Documentation Number		
Length	Make	Type
Hull Color		Trim Color
Fuel Capacity	Engine Type	Number of Engines
Distinguishing Features		
Distinguishing Features		

Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number

Operator of Boat

Full Name		
Male or Female	Age	Health
Address		
Address		
Phone/FAX/E-mail		
Operator's Experience		

Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number

Persons Onboard

Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number

Full Name		
Age	Health	Phone Number
Full Name		
Age	Health	Phone Number

Survival Equipment

Marine Radio (Yes/No)	Type	Frequencies
Number of PFDs	Flares (Yes/No)	Mirror (Yes/No)
Smoke Signals (Yes/No)	Flashlight (Yes/No)	Food (Yes/No)
Water (Yes/No)	Anchor (Yes/No)	Raft/Dinghy (Yes/No)
Paddles (Yes/No)	EPIRB (Yes/No)	Other
Other	Other	Other

Vehicle Description

Make	Model
Color	License Number
Where is the Vehicle Parked?	

Trip Expectations

Departing From	
Departure Date	Departure Time
Stopover 1	
Arrive No Later Than: Date	Arrive No Later Than: Time
Stopover 2	
Arrive No Later Than: Date	Arrive No Later Than: Time
Stopover 3	
Arrive No Later Than: Date	Arrive No Later Than: Time
Stopover 4	
Arrive No Later Than: Date	Arrive No Later Than: Time
Stopover 5	
Arrive No Later Than: Date	Arrive No Later Than: Time
Stopover 6	
Arrive No Later Than: Date	Arrive No Later Than: Time
Final Destination Port (If Different Than Home Port)	
Arrive No Later Than: Date	Arrive No Later Than: Time

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

Coast Guard Phone Number
Local Authority Phone Number

Part Number 1964660

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