

2400 SE Sport Express Cruiser Owner's Manual Supplement

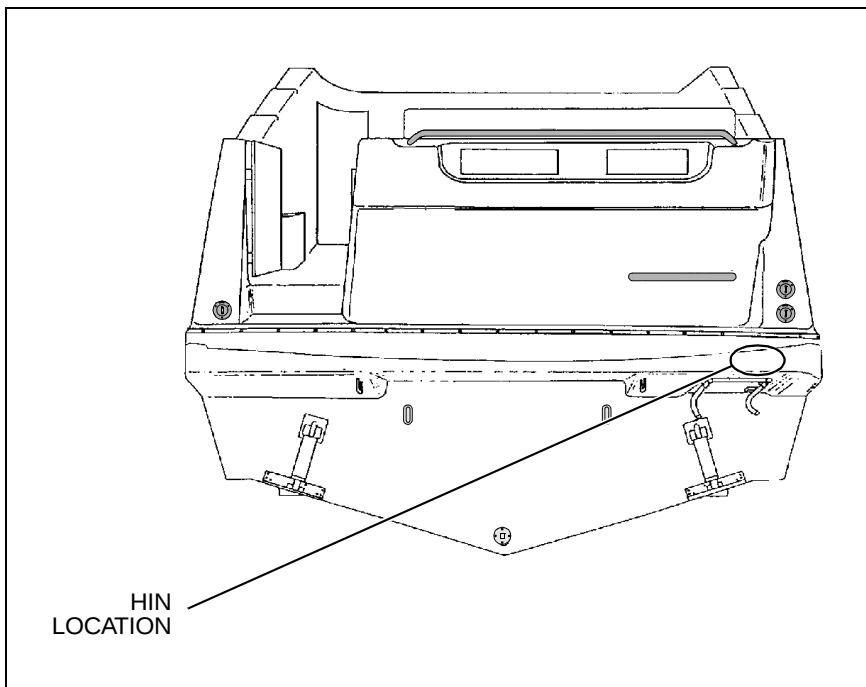
MAXUM®

Engine Serial Number: _____

Hull Identification Number: _____

Hull Identification Number

- The Hull Identification Number (HIN) is located on the starboard side of the transom.
- Record the HIN (and the engine serial number) in the space provided above.
- Please refer to the HIN for any correspondence or orders.



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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!**

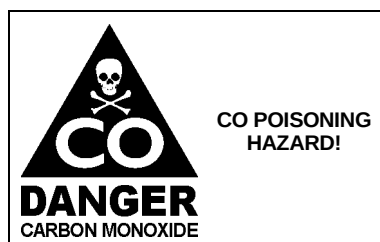
This box alerts you to hazards or unsafe practices which *COULD* result in severe personal injury or death if the warning is ignored.

 **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.



Chapter 1: Welcome Aboard!

This *Owner's Manual Supplement* provides specific information about your boat that is not covered in the owner's manual. Please study the *Cruiser & Yacht Owner's Manual* and this *Supplement* carefully. Keep the *Cruiser & Yacht Owner's Manual* and this *Supplement* on your boat in a secure, yet readily available place.

Dealer Service

- Ask your dealer to explain all systems before taking delivery of your boat.
- Your dealer is your key to service.
- 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 Maxum dealer.

Warranty Information

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

Boating Experience

 **WARNING!**

CONTROL HAZARD!

A qualified operator *must* be in control of the boat at *all* times. *DO NOT* operate your boat while under the influence of alcohol or drugs.

If this is your first boat or if you are changing to a type of boat you are not familiar with, obtain handling and operating experience before assuming command of the boat.

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

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

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

Safety Standards

 DANGER!	
	<i>FALLING and ROTATING PROPELLER HAZARD!</i>
	NEVER allow anyone to ride on parts of the boat <i>not</i> designed for such use.
	• Sitting on seat backs, lounging on the forward deck, bow riding, gunwale riding or occupying the transom platform while underway is especially hazardous and will cause personal injury or death.

 DANGER!	
	<i>ROTATING PROPELLER and CARBON MONOXIDE POISONING HAZARD!</i>
	• NEVER allow anyone to occupy, or hang from, the back deck or swim platform while the engine(s) are running. • Teak surfing, dragging, or water skiing within 20 feet of a moving watercraft can be fatal.

 DANGER!	
<i>PERSONAL SAFETY HAZARD!</i>	
ALWAYS secure the anchor and other loose objects <i>before</i> getting underway. The anchor and other items that are <i>not</i> properly secured can come loose when the boat is moving and cause personal injury or death.	

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

In addition to this *Owner's Manual Supplement*, please read the *Cruiser & Yacht Owner's Manual* and all accessory instructions for important safety standards and hazard information.

Engine & Accessory Guidelines

NOTICE

When storing your boat please refer to your engine's operation and maintenance manuals.

- Your boat's engines and accessories were selected to provide optimum performance and service.
- Installing different engines or other accessories may cause unwanted handling characteristics.
- Should you choose to install different engines or to add accessories that will affect the boat's running trim, have an experienced marine technician perform a safety inspection and handling test before operating your boat again.
- **Certain modifications to your boat will result in the cancellation of your warranty protection. Always** check with your dealer **before** making any modifications to your boat.

Engine & Accessories Literature

- The engine and accessories installed on your boat come with their own operation and maintenance manuals.
- Read and understand 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.

Qualified Maintenance



WARNING!

To maintain the integrity and safety of your boat, allow only qualified personnel to perform maintenance on, or in any way modify: The steering system, propulsion system, engine control system, fuel system, environmental control system, electrical system or navigational system.

- Failure to maintain your boat's systems (listed in the warning above) as designed could violate the laws in your jurisdiction and could expose you and other people to the danger of bodily injury or accidental death.
- Follow the instructions provided in the *Cruiser & Yacht Owner's Manual*, this *Owner's Manual Supplement*, the engine owner's manual and **all** accessory literature.

Structural Limitations

The transom platform and bow platform are designed to be lightweight for proper boat balance. The load limit for these platforms and the command bridge is 30 pounds per square foot, evenly distributed.

Special Care For Moored Boats

NOTICE

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

- Whether moored in saltwater or freshwater, your boat **will** collect marine growth on its hull bottom.
- This **will** detract from the boat's beauty, greatly affect its performance and may damage the gelcoat.
- There are two methods of slowing marine growth:
 1. Periodically haul the boat out of the water and scrub the hull bottom with a bristle brush and a solution of soap and water.
 2. Occasionally re-paint the hull below the waterline with a good grade of anti-fouling paint.

Sacrificial Anodes (Zincs)

NOTICE

Do not paint between the zinc and the metal surface it contacts and do not paint over the zincs.

Your boat is equipped with sacrificial anodes to protect underwater metal parts from excessive deterioration. Check sacrificial anodes regularly and replace if they have deteriorated more than 70%.

There are many factors that determine the rate at which sacrificial anodes deteriorate, including:

- Water temperature
- Salinity
- Water pollution

Stray current from the boat or dock may cause complete deterioration in just a few weeks. If there is rapid anode deterioration, measure electrolytic corrosion around your boat with a Corrosion Test Meter. If sacrificial anodes are **not** bonded correctly, they will **not** provide protection.

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 <i>will</i> cause BRAIN DAMAGE or DEATH. • Teak surfing, dragging, or water skiing within 20 feet of a moving watercraft can be fatal.

Facts about CO

- 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.

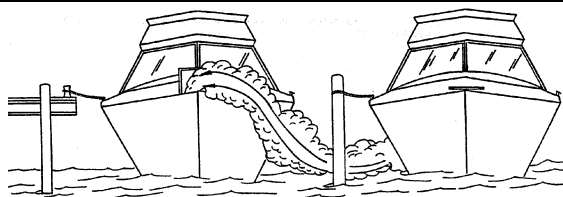
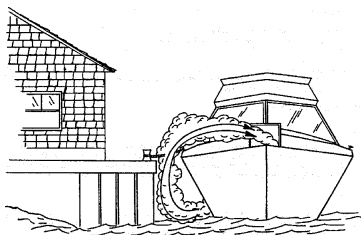
Factors That Increase the Effects of CO Poisoning

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

Where and How CO Can Accumulate

Stationary Conditions That Increase CO Accumulations Include:

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

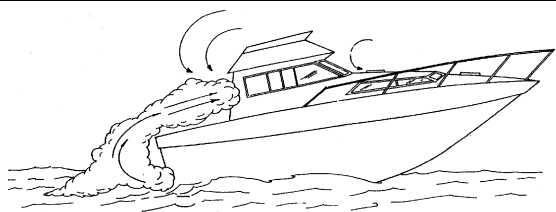


- B. Mooring too close to another boat that is using its engine, generator, or other fuel burning device.

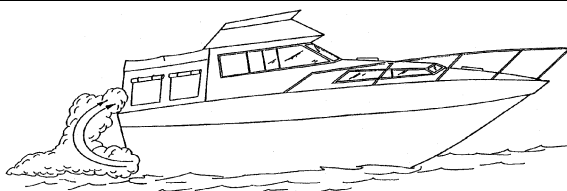
To correct stationary situations A and/or B:

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

Running Conditions That Increase CO Accumulations Include:



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



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

To correct running situations C and/or D:

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

How to Protect Yourself and Others From CO

- Know where and how CO may accumulate in and around your boat (see above).
- Maintain fresh air circulation throughout the boat at **all** times.
- 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 swim platform while the engine(s) are running.
- **Never** enter the areas under swim platforms where exhaust outlets are located. Although CO can be present without the smell of exhaust fumes, if exhaust fumes are detected on the 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.
- Install and maintain CO alarms inside your boat. **Do not** ignore any alarm. Replace alarms as recommended by the alarm manufacturer.
- Follow the checklists provided on the next page.
- Get a Vessel Safety Check.

For information on how to get a free VESSEL SAFETY CHECK, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or United States Power Squadrons®.

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

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.
- ☐ Confirm that water flows from the exhaust outlet when the engines and generator are started.
- ☐ Listen for any change in exhaust sound, which could indicate an exhaust component failure.
- ☐ Test the operation of each CO alarm 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 Qualified 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** metal exhaust parts for cracking, rusting, leaking, or loosening and 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).

Carbon Monoxide Alarm System

 **DANGER!**



CARBON MONOXIDE POISONING HAZARD!

- The house battery switch **must** be in the **On** position for the CO Monitors to work.
- If your boat will be unattended for an extended period of time, turn **Off** the house battery or the CO Monitors **will** drain the house battery.

NOTICE

The stereo memory and CO monitor(s) place a small, but constant drain on the battery. If your boat will be unattended for an extended amount of time, plug into shore power with the battery charger turned **On**, or disconnect the battery if shore power is **not** an option.

- Do not** disconnect the alarm system.
- Read and understand the manufacturer's instructions for your CO alarm system. If you did **not** receive an instruction manual, call (800) 383-0269 and one will be mailed to you.

If your boat is **not** equipped with a carbon monoxide alarm, consider purchasing one from your dealer or marine supply store.

More Information

For more information about how you can prevent carbon monoxide poisoning on recreational boats and other ways to boat more safely, 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)

3069 Solomon's Island Road
Edgewater, MD 21037-1416
www.abycinc.org
410-956-1050

For information on how to get a free VESSEL SAFETY CHECK, visit www.vesselsafetycheck.org or contact your local U.S. Coast Guard Auxiliary or United States Power Squadrons®.

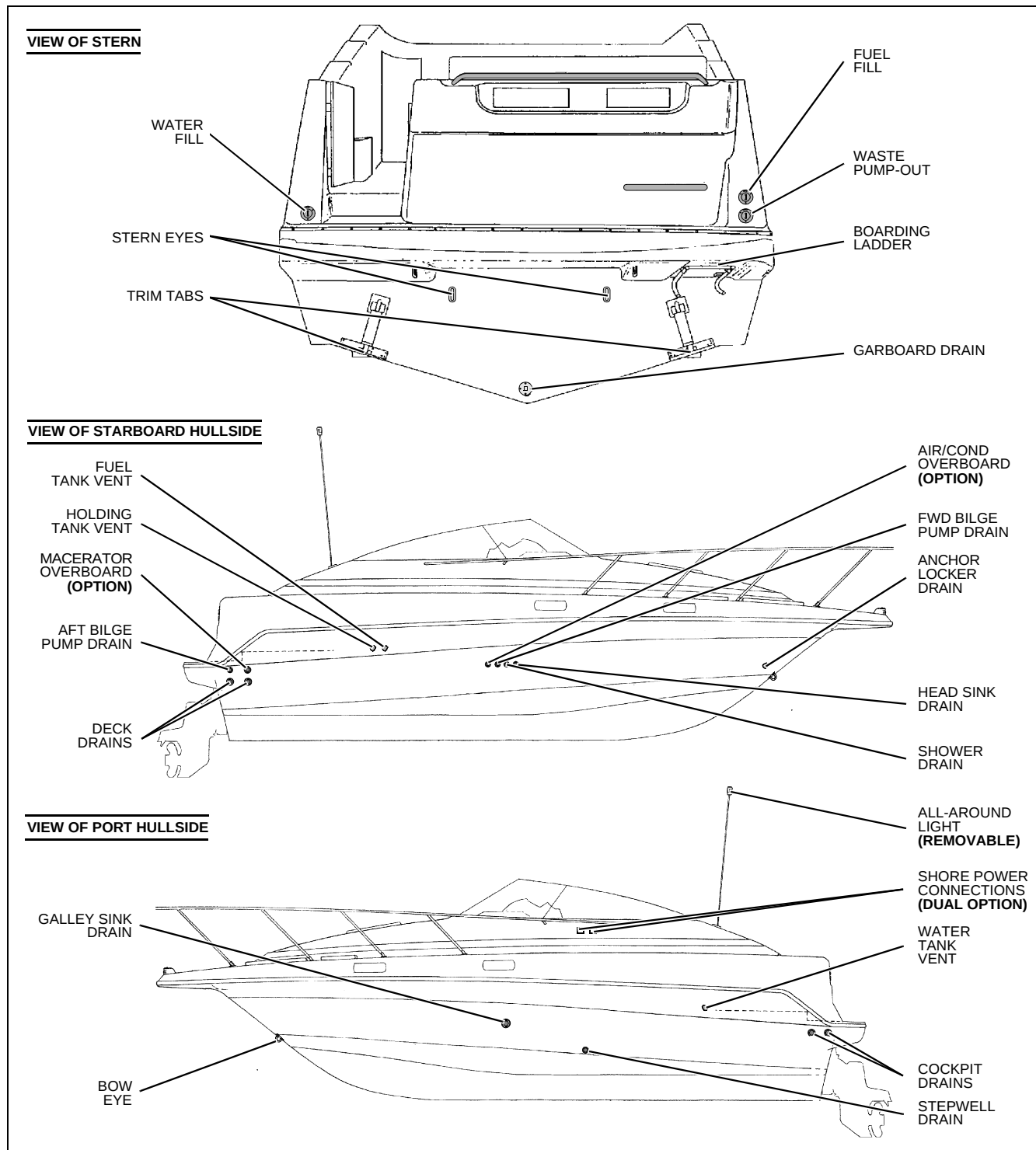
- U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: <http://www.cgaux.org>
- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: <http://www.usps.org>

Chapter 2: Features/Systems

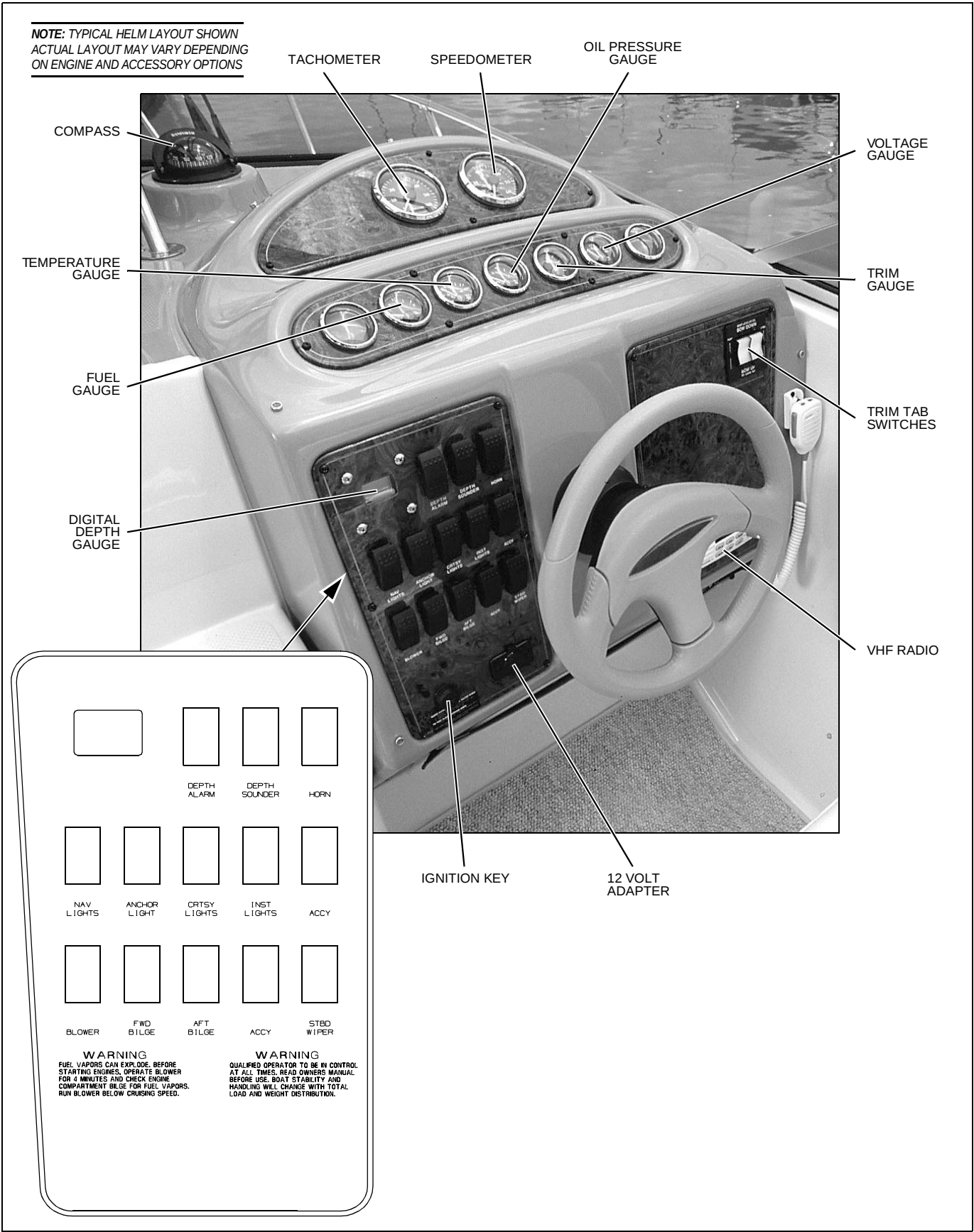
Dimensions and Tank Capacities

Overall Length	Bridge Clearance	Beam	Draft	Fuel Capacity (gal)	Freshwater Capacity (gal)	Waste Holding Tank Capacity (gal)
25' 4"	6' 9"	8' 6"	2' 11"	70	13	13

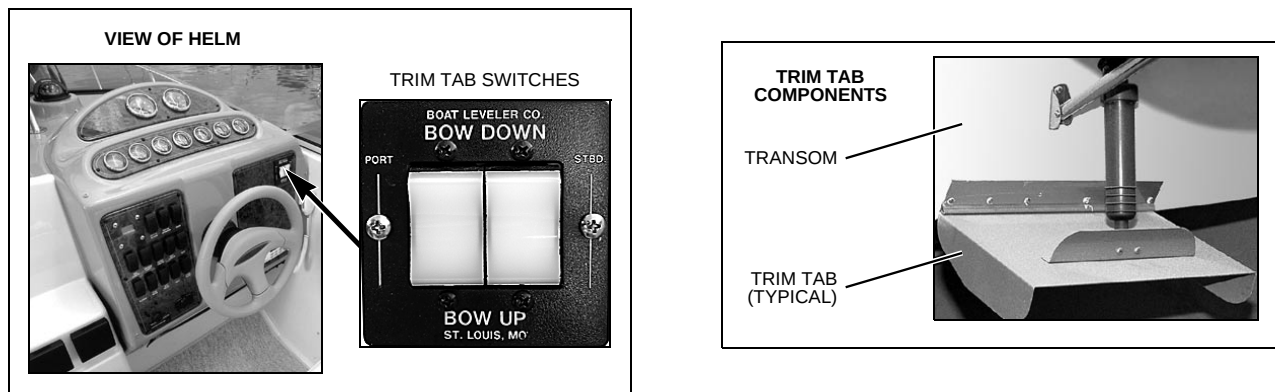
Hull Exterior Hardware & Drains



Helm Layout



Trim Tabs



WARNING!

LOSS OF CONTROL HAZARD!

Improper use of trim tabs will cause loss of control!

- *Do not* allow anyone unfamiliar with trim tabs to operate them.
- *Do not* use trim tabs in a following sea as they will cause broaching or other unsafe handling characteristics.
- *Do not* use trim tabs to compensate for excessive unequal weight distribution.

The trim tabs may be used to help keep your boat level at cruising speeds.

The trim tabs are controlled by two rocker switches at the helm. **Before** using the trim tabs read and understand the trim tab operation manual included in your boat's owner's packet.

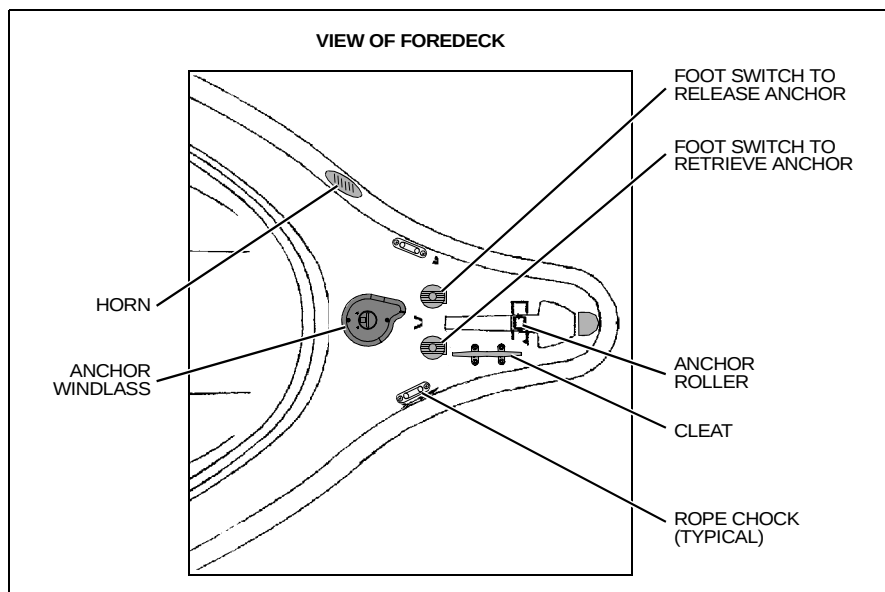
Observe the following:

- Once cruising speed is reached, the port or starboard trim switch may be used (one at a time) to level the boat.
- Perform trim tab adjustment with several short touches to the switch rather than one long one.
- After each short touch allow several seconds for the hull to react.
- The trim tab hydraulic fluid reservoir is located in the engine compartment. The fluid level must be checked periodically (at least once a year) and refilled as necessary.

Anchor Windlass (Option)

Your boat may feature an **optional** anchor windlass. Read and follow the manufacturer's instruction manual supplied in your boat's owner's packet **before** using the anchor windlass for the first time.

- The windlass can be controlled from a switch at the helm or from the deck foot switches (see illustration).
- Make sure that the windlass breaker is turned **On** before using the anchor windlass.
- To haul the anchor, use engine power (**not** the windlass) to move the boat to, and directly above, the anchor. Use the windlass to dislodge the anchor from the bottom by pulling it straight up.



CAUTION!

PRODUCT DAMAGE HAZARD!

Do not pull the boat to the anchor using the windlass or continue to operate the windlass if it has stalled or is overloaded.

Electrical System

Read and understand this section and the electrical section of the *Cruiser & Yacht Owner's Manual*. Electrical routing drawings are provided in Chapter 3 of this *Supplement*; wiring diagrams in Chapter 4.

⚠ DANGER!



EXTREME FIRE, SHOCK & EXPLOSION HAZARD!

- To minimize the risks of fire and explosion, **NEVER** install knife switches or other arcing devices in the fuel compartments.
- NEVER** substitute automotive parts for marine parts. Electrical, ignition and fuel system parts were designed and manufactured to comply with rules and regulations that minimize risks of fire and explosion.
- DO NOT** modify the electrical systems or relevant drawings.
- Have qualified personnel install batteries and/or perform electrical system maintenance.
- Make sure that *all* battery switches are turned **OFF** *before* performing any work in the engine spaces.

⚠ WARNING!



FIRE & EXPLOSION HAZARD!

- Fuel fumes are heavier than air and *will* collect in the bilge areas where they can be accidentally ignited.
- Visually and by smell (sniff test), check the engine and fuel compartments for fumes or accumulation of fuel.
- ALWAYS** run the bilge blowers for at least four minutes prior to engine and/or generator starting, electrical system maintenance or activation of electrical devices.
- Minimize the danger of fire and explosion by *not* exposing the batteries to open flame or sparks. **NEVER** smoke anywhere near the batteries.

⚠ CAUTION!



SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

NEVER disconnect the battery cables while the engine is running since it can cause damage to your boat's electrical system components.

NOTICE

Electrical connections are prone to corrosion. To reduce corrosion caused electrical problems, keep *all* electrical connections clean and apply a spray-on protectant that is designed to protect connections from corrosion.

12 Volt DC System

Fuses and Circuit Breakers

The engine is protected by a large circuit breaker located on the engine. The accessories are protected by circuit breakers on the battery switch panel and by the accessory circuit breakers located below the steering wheel. Wires are color-coded to indicate which accessory each fuse services. Some items, such as radios and bilge pumps, may be fused individually at the unit. Some items are fused at the battery switch. Autofloat switches are fused at the battery.

Batteries

The batteries supply electricity for lights, accessories and engine starting.

The Electrical section of Chapter 8, in the *Cruiser & Yacht Owner's Manual*, provides battery, care and maintenance instructions.

Battery Switch

The battery switch (located in the aft deck storage area) has four (4) positions (see photograph on right);

Position 1 -

- Provides power for engine starting and accessories, from battery "1".
- Battery 1 (only) will be charged by engine alternator when engine is running at high idle or faster.

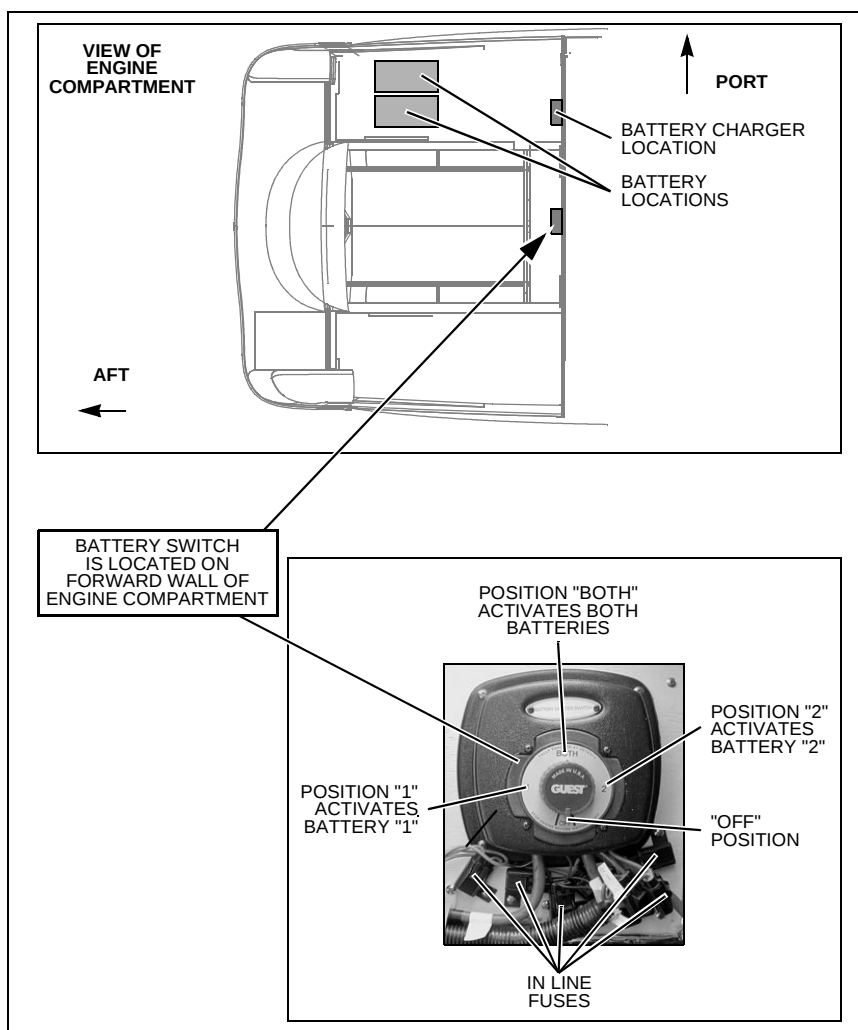
Position 2 -

- Provides power for engine starting and accessories, from battery 2.
- Battery 2 (only) will be charged by engine alternator when engine is running at high idle or faster.

Position BOTH -

- If batteries are low; provides power for engine starting from both batteries.
- BOTH position also allows charging of *both* batteries by engine alternator when engine is running at high idle or faster.

- Turn the battery switch **OFF** when the boat will be unoccupied for long periods of time.



Battery Switch Positions

Battery Switch Position	Engine Starting	Accessories and Lights	Engine Alternator	Battery Charger
POSITION <u>1</u>	Battery <u>1</u> Provides Start- ing Power	Battery <u>1</u> Provides Power for Accessories and Lights	Charges Battery <u>1</u>	Charges BOTH Batteries
POSITION <u>2</u>	Battery <u>2</u> Provides Start- ing Power	Battery <u>2</u> Provides Power for Accessories and Lights	Charges Battery <u>2</u>	Charges BOTH Batteries
<u>BOTH</u> POSITION	<u>BOTH</u> Batter- ies Provide Starting Power	<u>BOTH</u> Batteries Provide Power for Accessories and Lights (not advised unless engine is running)	Charges <u>BOTH</u> Batteries	Batteries will <i>NOT</i> Charge Properly

Battery Charger

Your boat is equipped with a battery charger. Thoroughly read and understand the battery charger manual *before* using the charger.

- The battery charger will charge the boat's batteries whenever the boat is plugged into 120 volt shore power.
- For proper charging; turn the battery switch to any position *except* "BOTH".

**CAUTION!**

The battery charging systems (alternators and battery charger) are designed to charge conventional lead-acid batteries. Before installing gel-cell (or other new technology) batteries, consult with the battery manufacturer about charging systems requirements.

Shore Power/110 Volt AC System

DANGER!



FIRE, EXPLOSION & SHOCK HAZARD!

- **DO NOT** alter shore power connectors and use only compatible connectors.
- **Before** connecting or disconnecting the shore power cord to your boat, make sure *all* breakers and switches on the AC master panel are turned **OFF**.
- To prevent shock or injury from an accidental dropping of the “hot” cord into the water, **ALWAYS** attach the shore power cord to the boat inlet first; then to the dockside connection. When disconnecting from shore power, disconnect the shore power cord from the dockside connection first.
- **NEVER** leave a shore power cord connected to the dockside connection only.
- Only use shore power cords approved for marine use. **NEVER** use ordinary indoor or outdoor extension cords that are *not* rated for marine use.

WARNING!



SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- Monitor the polarity indicator lights **EVERY TIME** you connect to shore power.
- When connecting to shore power and you encounter a reversed polarity light (RED colored), **DO NOT** energize the main breaker switches. Instead, **IMMEDIATELY** disconnect the shore power cord (**ALWAYS** from the dockside receptacle first) and notify marina management.

WARNING!



SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- Periodically check the shore power cord(s) for deterioration or damage. Damaged or faulty cords should **NEVER** be used since the danger of fire and electrical shock exists.
- **DO NOT** pinch shore power cords 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 should accidentally become immersed in water, **THOROUGHLY** dry the blades and contact slots *before* reusing.

CAUTION!

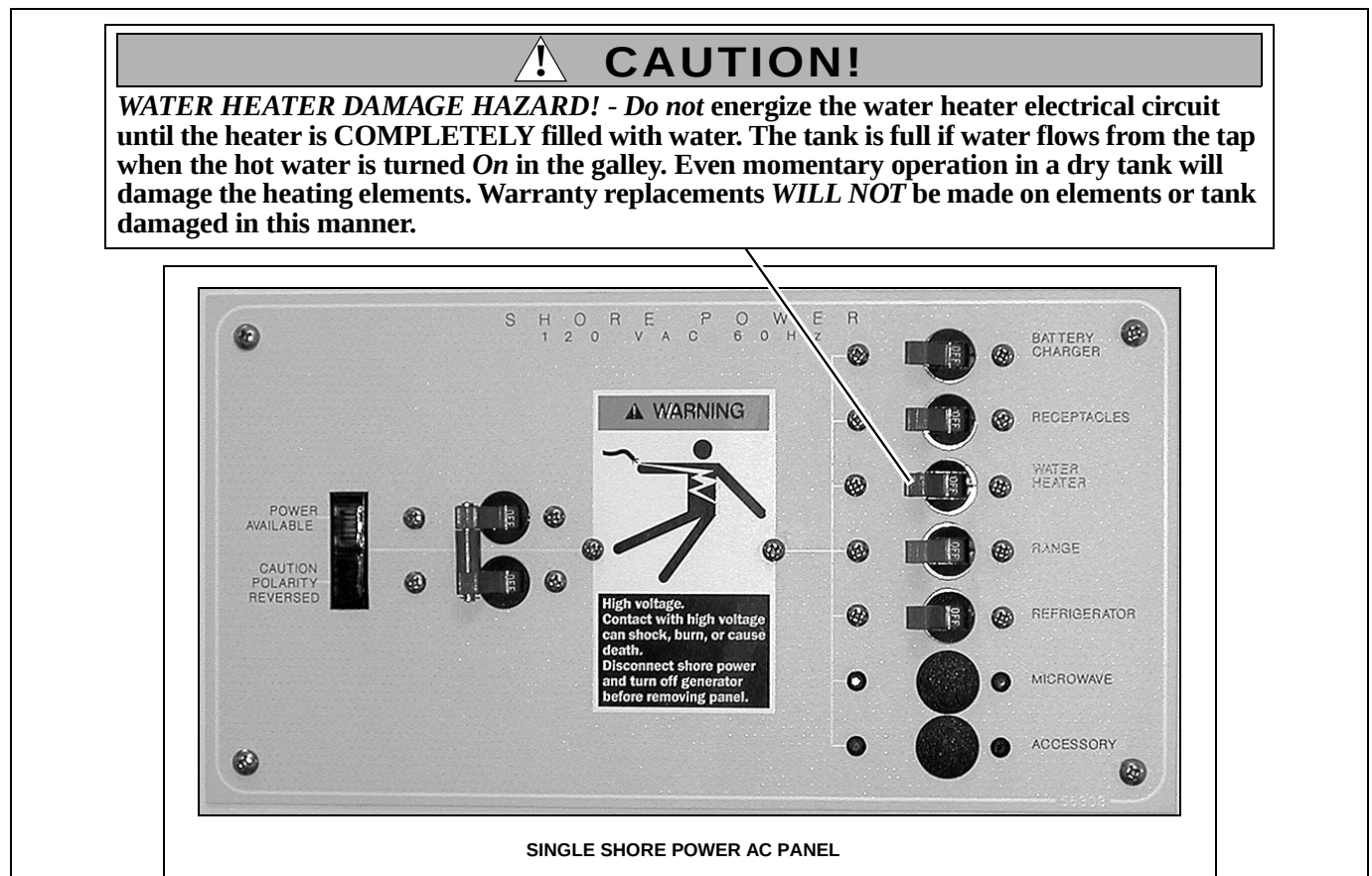


ELECTRICAL SYSTEM DAMAGE HAZARD!

- **NEVER** connect dockside power to your boat outside North America unless you have purchased the international electrical conversion option.
- The simultaneous use of several AC components can result in an overloaded circuit. It may be necessary to turn *Off* one or more accessories in order to use another accessory.
- Use double insulated or three-wire protected electrical appliances whenever possible.

NOTICE

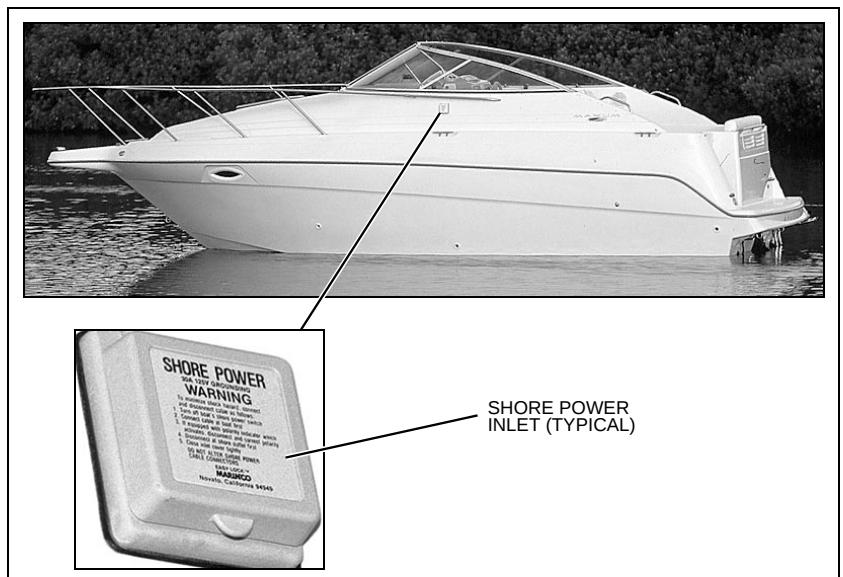
Some dockside installations may be rated less than 30 amps, therefore, you may need to purchase lower amp adapters. Whenever a lower amp adapter is used, however, there will be a corresponding drop in supplied power from the dockside system.



- Standard 110 volt AC systems feature one, 110v/30 amp, shore power receptacle.
- If your boat is equipped with an **optional** air conditioning system, a second (dual) 30 amp inlet has been installed. Dual shore power inlets are labeled line 1 and line 2, which corresponds to the line 1 and line 2 master breakers on the AC panel.
- The **optional** dual shore power system is designed so that each line is independent of the other.

Connecting to Shore Power

1. Monitor the AC panel's polarity indicator lights as follows:
 - A **GREEN** light illuminating after the power cord is plugged into the boat's external power receptacle indicates acceptable electrical power in which you may energize the main breaker switches.
 - A **RED** light, however, indicates reversed polarity, which could cause electrical system damage and possibly electrical shock injuries. In this case, ***DO NOT*** energize the main breaker switches.
2. Turn the AC system **On** by turning the main ship/shore breaker to the "DOCK-SIDE" position.
3. Turn **On** the master breakers and individual component breakers as required.



Navigation & Communication Equipment

The owner's packet contains operation manuals for **all** navigation & communication equipment installed on your boat. Thoroughly read and understand these manuals **before** using these systems. Additionally, read the warnings below carefully and follow all safety recommendations.

VHF Radio

Your boat may include a VHF (Very High Frequency) radio at the helm. The VHF radio can be used to access weather reports, summon assistance or contact other vessels as permitted by the FCC (Federal Communications Commission). Be sure to contact the FCC for licensing, rules and regulations concerning VHF radio usage.

Compass

NOTICE

Compass accuracy can be affected by many factors. Have a qualified technician calibrate your compass. Make sure the technician gives you a deviation card which shows the corrections to apply in navigational calculations. Keep a copy of the deviation card at the helm.

Depth Finder



WARNING!

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

Audio Equipment

Instruction manuals for the audio equipment, installed on your boat, is included in your boat's owner's packet. Read and understand these manuals.

NOTICE

AM radio reception may be impaired in areas where reception is limited or anytime the engine is running.

Lighting

Navigation and Interior Lights

Read and understand the navigation light section of the *Cruiser & Yacht Owner's Manual*. The navigation and interior lights installed on your boat are of top quality, but that they may occasionally fail for a variety of reasons:

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



CAUTION!

- Avoid the storage of gear where it would block navigation lights from view.
- Be conservative in the use of battery power. Prolonged operation of cabin interior lights (overnight) will result in a drained battery.

Appliances

All appliances installed on your boat come with their own manuals that contain detailed operating instructions and important safeguards. Thoroughly read and understand these manuals **before** using your boat's appliances.

- Make sure the AC breaker is turned **On** for the appliance you wish to turn **On**.

NOTICE

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



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.

Propulsion

Engine

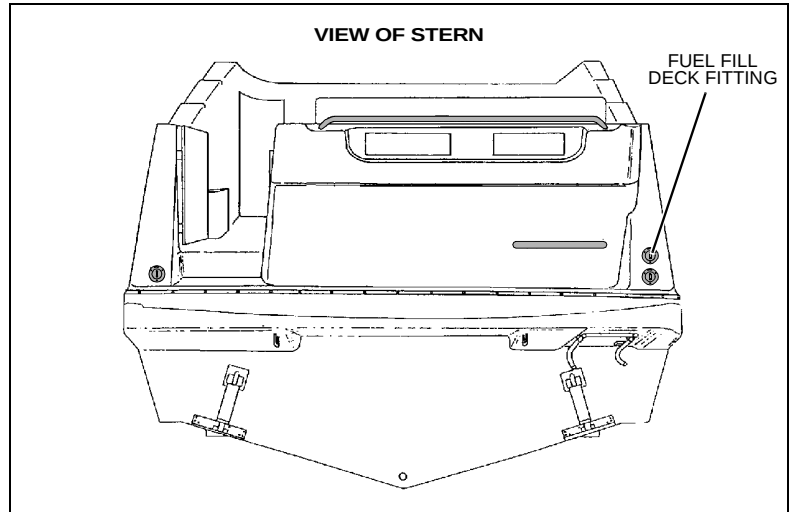
The owner's packet contains detailed engine operation and maintenance manuals. Be sure to read and understand these manuals **before** operating or performing maintenance to the engine.

Fuel System

Fuel Fill and Vent

The fuel fill is located on the starboard aft deck. The fuel fill fitting is marked "GAS". The fuel tank vent is located in the hull amidships.

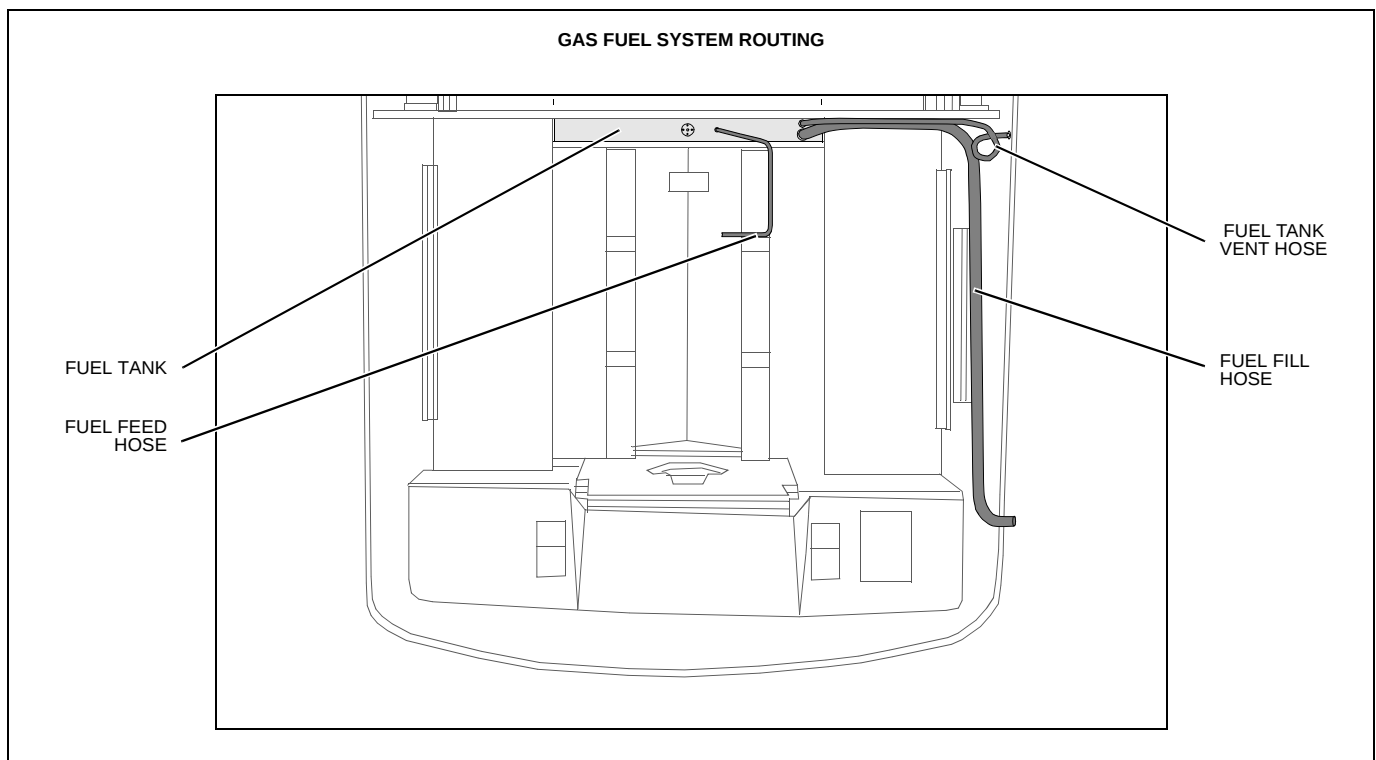
If you experience difficulty filling the fuel tank, check to see if the fuel fill hose is kinked or collapsed. If there are no visible signs of a problem, contact your local dealer.



Fuel Filters

All fuel tanks are equipped with a fine mesh screen filter on the fuel pickup tube (located inside the fuel tank). In addition, when supplied by the engine manufacturer, a filter is installed on the engine.

Replace the fuel filter periodically to make sure it remains clean and free of debris. Consult your selling dealer or local marina concerning fuel additives that help to prevent fungus or buildup in your fuel tank.



Anti-siphon Valve

Your boat is equipped with an anti-siphon valve. This valve will prevent fuel from siphoning from the tank in the event of a fuel line rupture.

NOTICE

If an engine running problem is diagnosed as fuel starvation, check the anti-siphon valve. In the event the valve is stuck or clogged, it should be changed or replaced while the engine is shut down. Under NO circumstances should the anti-siphon valve be removed, except in an emergency.



WARNING!



FIRE/EXPLOSION HAZARD

It is very important that the fuel system be inspected thoroughly the first time it is filled and at each subsequent filling. For your safety and the safety of your passengers, the fueling instructions in the *Owner's Manual* must be carefully followed.



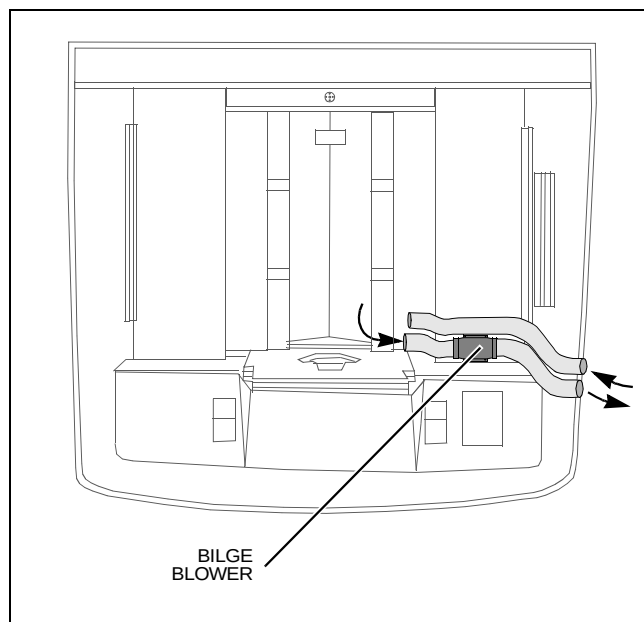
CAUTION!

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

Engine Room Ventilation System

The bilge blower removes fumes from the engine compartment and draws fresh air into the compartment through the deck vents. The bilge blower is turned **On** by a switch at the helm. To ensure fresh air circulation, run the bilge blower:

- For at least four minutes **before** starting the engine.
- During starting.
- Anytime your boat is running below cruising speed.



WARNING!



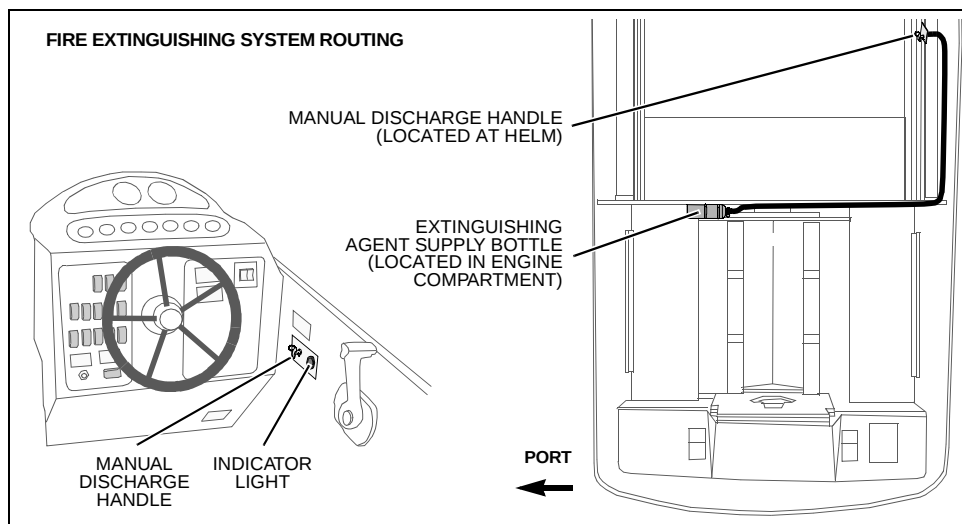
EXPLOSION HAZARD!

- Running the blower system is *not* a guarantee that explosive fumes have been removed. If you smell fuel, **DO NOT** start the engine. If the engine is already running, **IMMEDIATELY** shut **OFF** the engine and *all* electrical accessories and investigate.
- **DO NOT** obstruct or modify the ventilation system.

Fire Extinguishing System (Option)

Your boat may feature an **optional** fire extinguishing system. This system is designed to automatically activate whenever direct heat from a fire is detected in the engine compartment. The system can also be activated manually by pulling the red T-handle located at the helm.

Read and understand the fire extinguishing system's instruction and maintenance manual **before** using your boat for the first time.

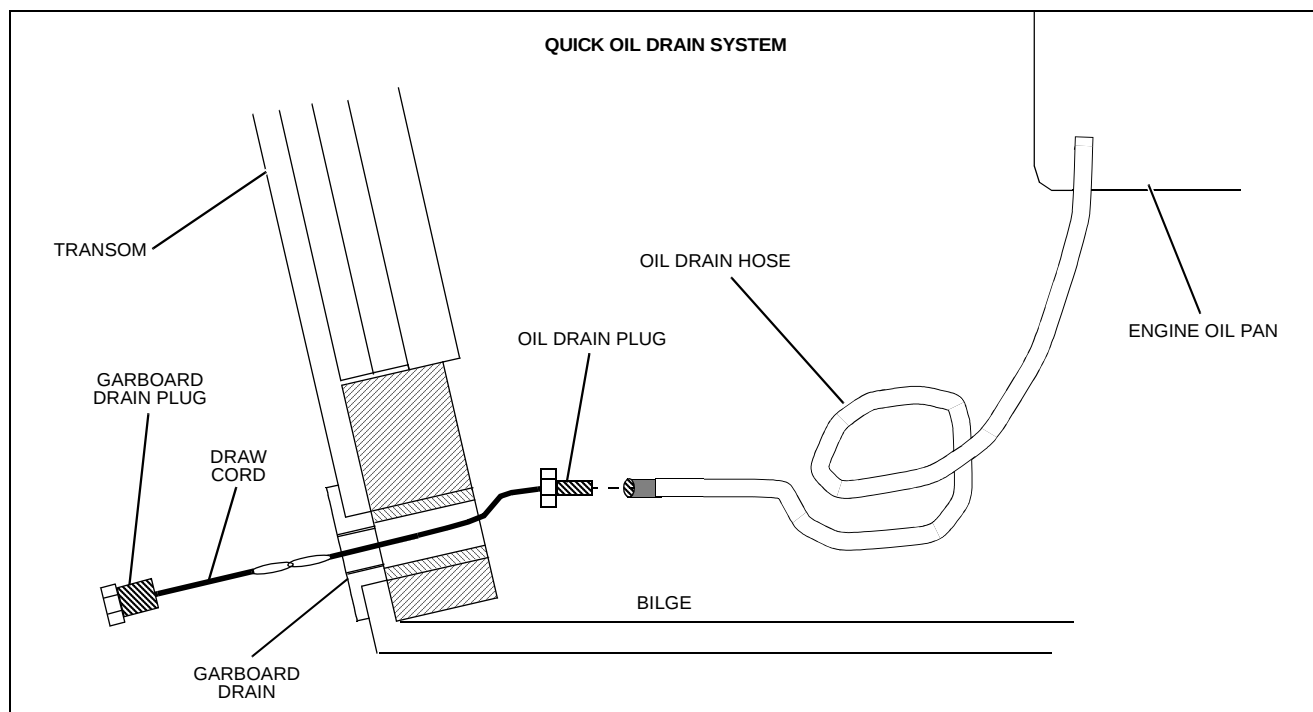


Quick Oil Drain System

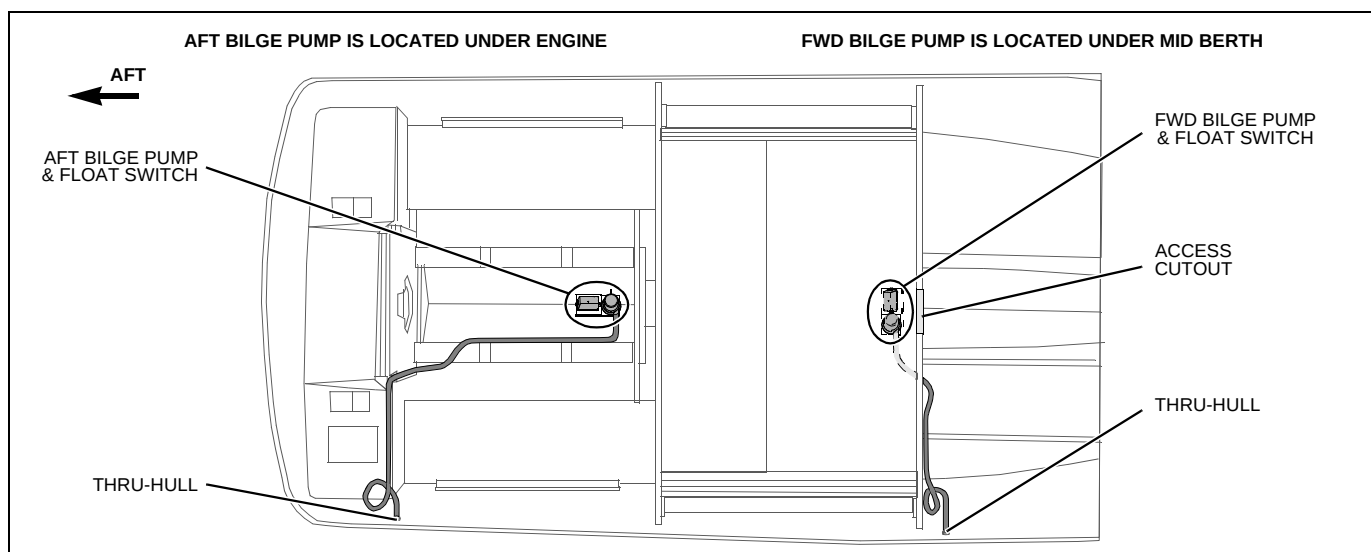
To drain the engine oil:

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

Always dispose of waste oil in accordance with local regulations.



Bilge Pumps



Your boat is equipped with two automatic impeller-type bilge pumps which are used to pump water out of the bilge. Bilge pumps are controlled by automatic bilge pump float switches (autofloat switches) and/or switches at the helm. Bilge pumps are wired directly to the battery so they will normally function even when the boat is completely shut down and left unattended.

NOTICE

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

Bilge Pump Testing

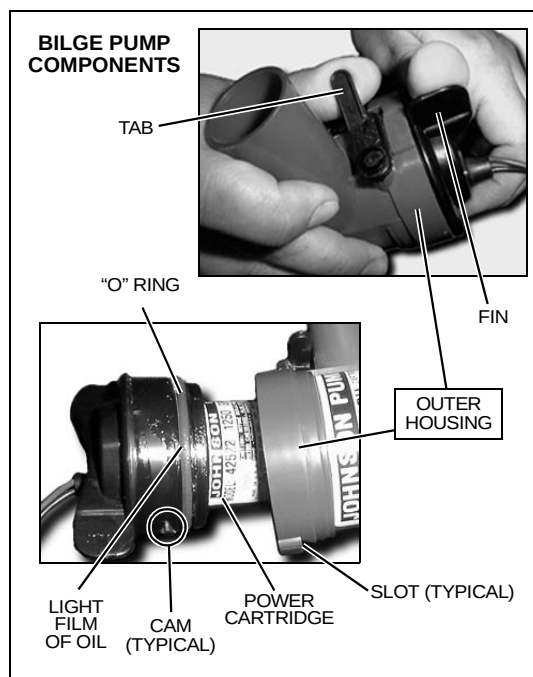
Bilge pumps are critical to the safety of your boat. Check the bilge pumps often to make sure they are working. Individually test each pump as follows:

1. Turn **On** bilge pump switch at helm.
2. Make sure water in 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 no problems are found, check the bilge pump housing for clogging debris as follows:

1. Remove power cartridge:
 - a. Lift tab while rotating fins counter-clockwise.
 - b. Lift out power cartridge.
 - c. Clear outer housing of debris.
2. Reinstall power cartridge:
 - a. Make sure "O" ring is properly seated.
 - b. Coat "O" ring with a light film of vegetable or mineral oil.
 - c. Align two cams on either side of power cartridge with two slots on outer housing and press power cartridge into housing while twisting clockwise.
3. Check reinstallation by trying to twist fins counter-clockwise without lifting tab; cartridge should stay in place.



Autofloat Switches

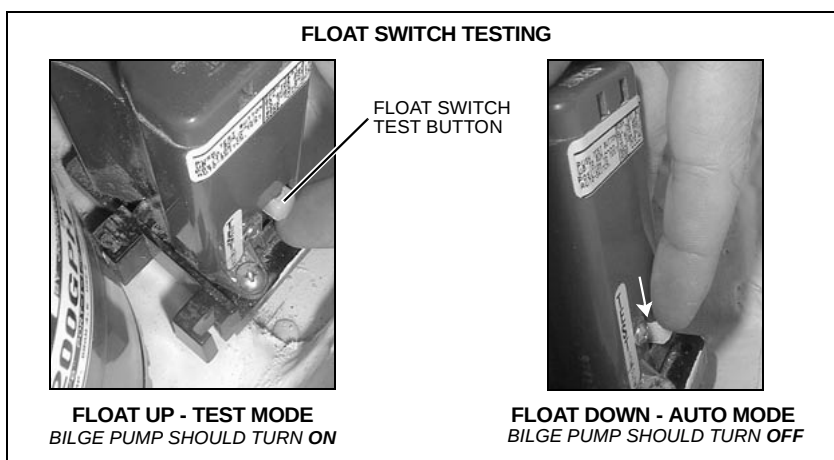
Automatic bilge pumps use electromagnetic float (autofloat) switches to turn **On** the pump whenever water rises above a preset level in the bilge. One autofloat switch is mounted next to each automatic bilge pump. Autofloat switches are wired directly to the battery and will normally function even when the boat is completely shut down and left unattended.

Test the autofloat switches often as follows:

1. Push float switch test button *up* to turn **On** bilge pump.

If the pump does **not** turn **On**, check the inline fuse. If the fuse is good but the switch doesn't work, it may indicate a bad switch or possibly a low battery.

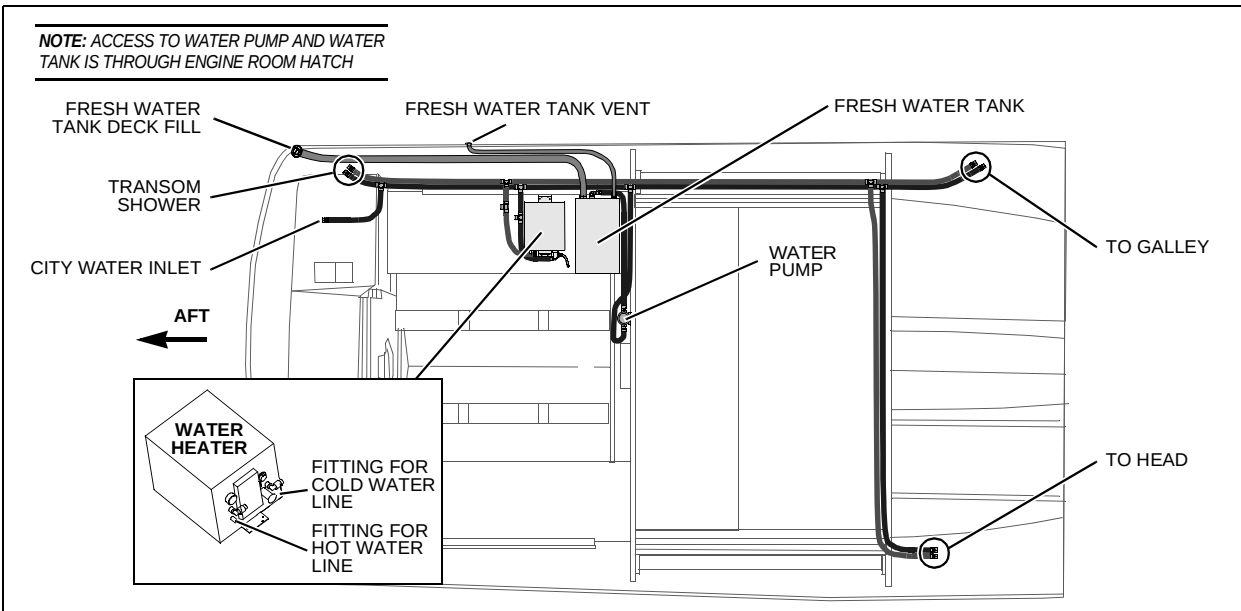
2. Push test button all the way *down* to return the float switch to auto mode.



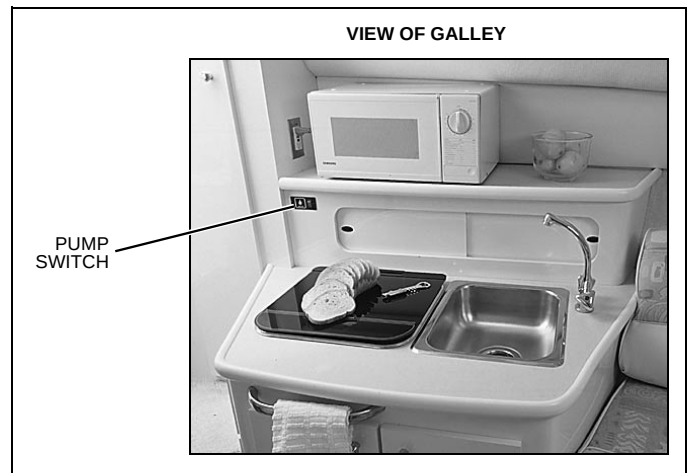
CAUTION!

When test is completed on each float switch, you **MUST** push the test button *all the way down* to the auto position to return the switch to auto mode!

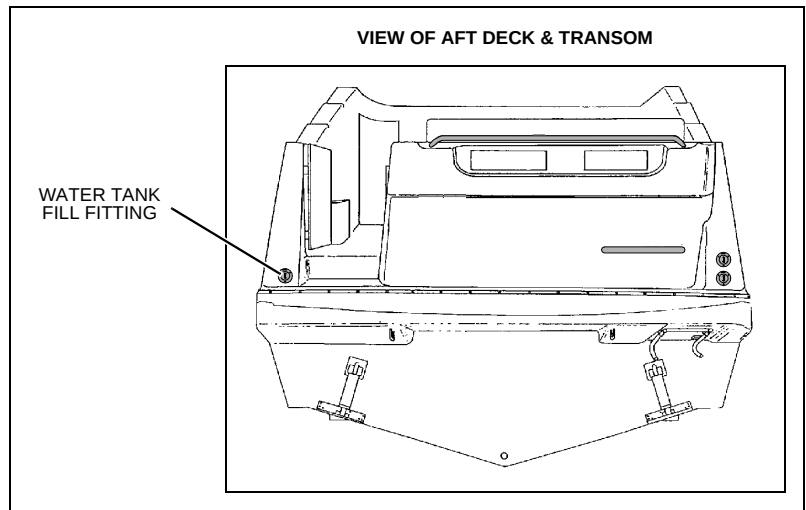
Freshwater System



Your boat features a pressure-demand freshwater (potable) system. These pressure type (demand) systems operate when the water pump switch in the galley is in the **On** position (see photo on the right).



- The water tank fill fitting is located on the port stern (see illustration on the right).
- When your boat is to be left unattended for long periods of time, pump the water tank dry to prevent stored water from becoming stagnant and distasteful.
- Should it become necessary to disinfect the freshwater system, ask your dealer about treatments available for your boat's system.
- Inspect and clean the water filter, located on the water pump, often.
- The water tank is located in the engine room.



Freshwater System Winterization



CAUTION!

WATER SYSTEM DAMAGE HAZARD!

Never blow compressed air through the water system when *all* of the faucets are *Closed*.

1. Turn **On** the water system switch.
2. **Open all** of the faucets and showers and let the water system drain completely.
3. Turn **Off** the water system switch.

Any remaining water **must** be removed from the water lines. There are two ways to remove the remaining water from the lines:

- Compressed Air
- Gravity Draining

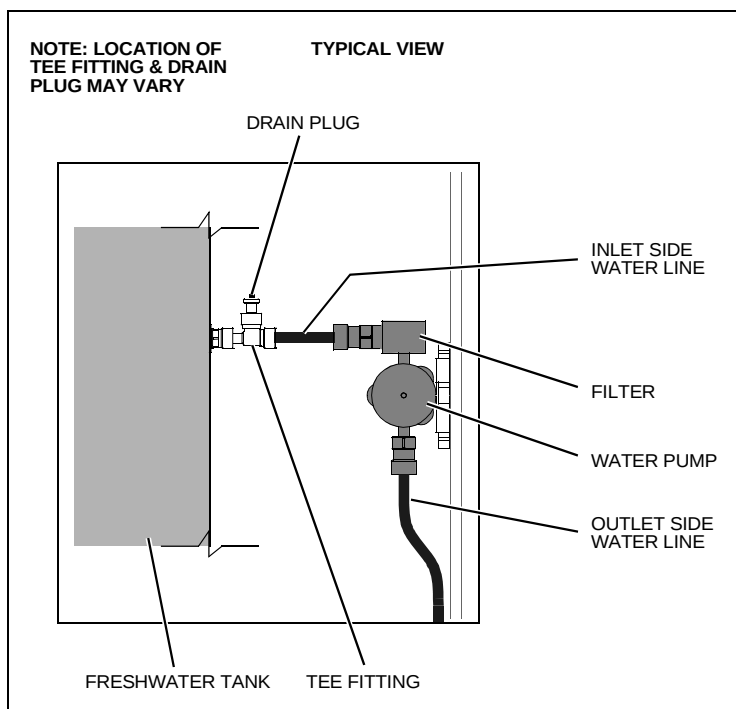
Compressed Air

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

1. Remove the water line from the outlet side of the water pump (opposite side from filter).
2. **Open** the faucet that is furthest away from the water 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 **Open** 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, replace the drain plug.



Water Heater

! WARNING!

! HOT HAZARD!
Water heated by the water heater can reach temperatures high enough to scald the skin.

! CAUTION!

WATER HEATER DAMAGE HAZARDS!

- **DO NOT** energize the AC water heater electrical circuit until the heater is *completely* filled with water. Even momentary operation in a dry tank will damage the heating elements. Warranty replacements *will not* be made on elements or tank damaged in this manner. The tank is full if water flows from the tap when the hot water is turned **On** in the galley.
- The water heater should be drained and the power turned **Off** when the possibility of freezing exists.

- The water heater is located in the engine room on the port side.
- The water heater is connected to the AC power system, therefore, you **must** verify that the water heater breaker on the AC panel is turned **On before** water will be heated.
- Be sure to read the manufacturer's instruction manual supplied in your boat's owner's packet and observe the following warnings.

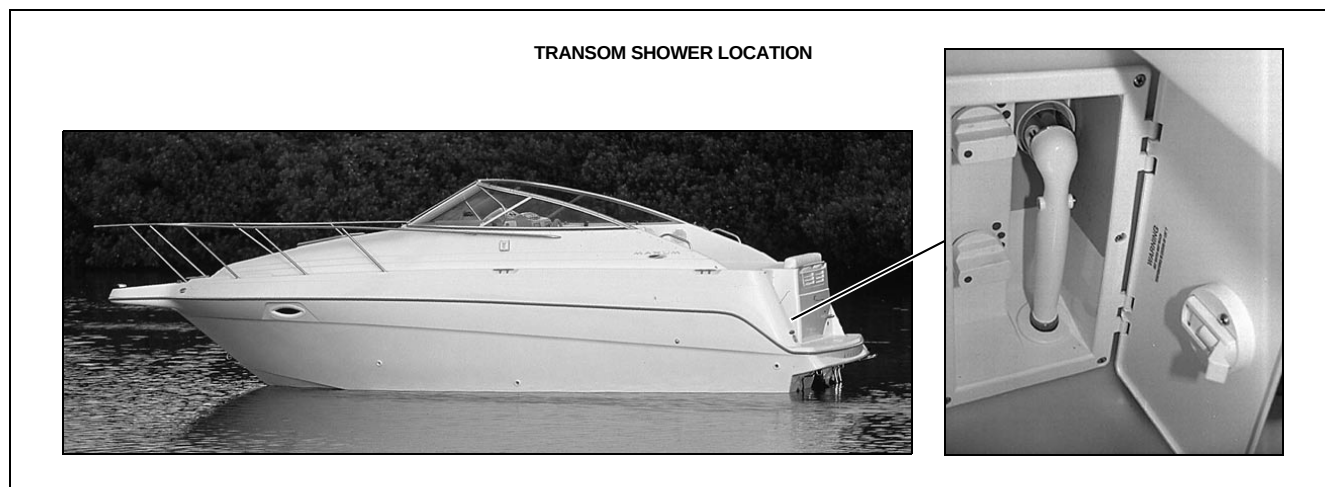
Winterizing the Water Heater

1. Turn **Off** the water heater breaker.
 2. Disconnect the hose (A) attached to the pressure relief valve (B).
 3. If there is any water in this hose, drain it into the bilge or into a bucket.
 4. **Open** the pressure relief valve (B).
 5. **Open** the drain valve (C).
- Leave the pressure relief and drain valves **Open** until you fit out the boat after storage.

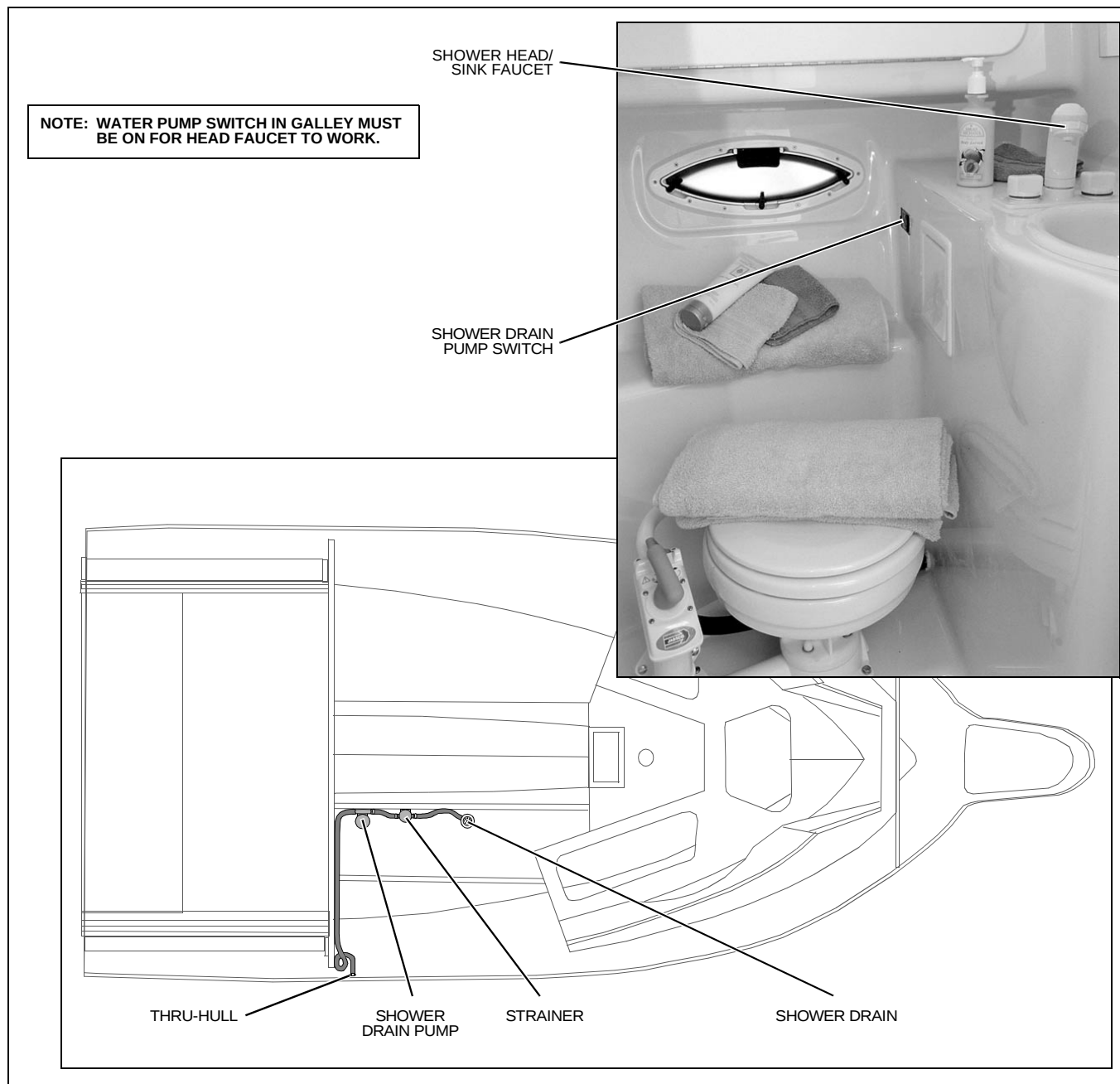


Transom Shower

The transom shower is located near the transom door. The water pump switch in the galley must be **On** for the transom shower to work.



Sink & Shower Drain Systems



Gray water (water from sinks and showers) above the waterline is gravity drained overboard, while gray water below the waterline is pumped overboard. Turn the shower drain pump **On** whenever the shower is used. Turn the pump **Off** after **all** of the water has drained out of the shower.

- The shower drain pump is turned **On** by a switch near the sink (see illustration above).
- If the shower does **not** drain, clean the strainer of debris.
- The shower drain pump and strainer are located under the refrigerator. Remove the refrigerator to gain access to the strainer and pump.

Marine Head and Holding Tank

NOTICE

Check with local authorities for regulations regarding the legal use of marine head systems.

Your boat comes equipped with a marine head (toilet) and waste holding tank system. Be sure to read the manufacturer's operation and maintenance manual (included in your boat's owner's packet).

- The marine head installed on your boat uses seawater to flush waste from the toilet. The seawater intake valve (seacock) is located in the engine compartment.
- Waste is routed directly from the head to the holding tank.
- The holding tank is plumbed to a fitting on the deck for dockside pump-out.
- The holding tank may also be plumbed to an **optional** macerator pump for pumping waste overboard (where regulations permit). The macerator pump switches are located at the helm. To turn **On** the pump, press both of the macerator switches at the same time.
- You can determine the content level of the holding tank by looking at the tank located in the engine compartment on the starboard side. Empty the holding tank at every opportunity.

If you are unable to pump water into the bowl, the probable cause is debris in the pump diaphragm. To remedy this:

1. Shut **Off** the seawater intake valve (seacock).
2. Dismantle the pump. The pump is generally held together with six screws (the problem will be obvious when the pump body is split open).
3. Reassemble the pump.
4. **Open** the seacock.

Using The Marine Head

1. **Open** the head's seacock valve (located in the engine compartment).
2. **Before** using the head, pump enough water into the bowl to wet the sides.

After use, pump until the bowl is thoroughly cleaned. Pump a few more times to clean the lines.

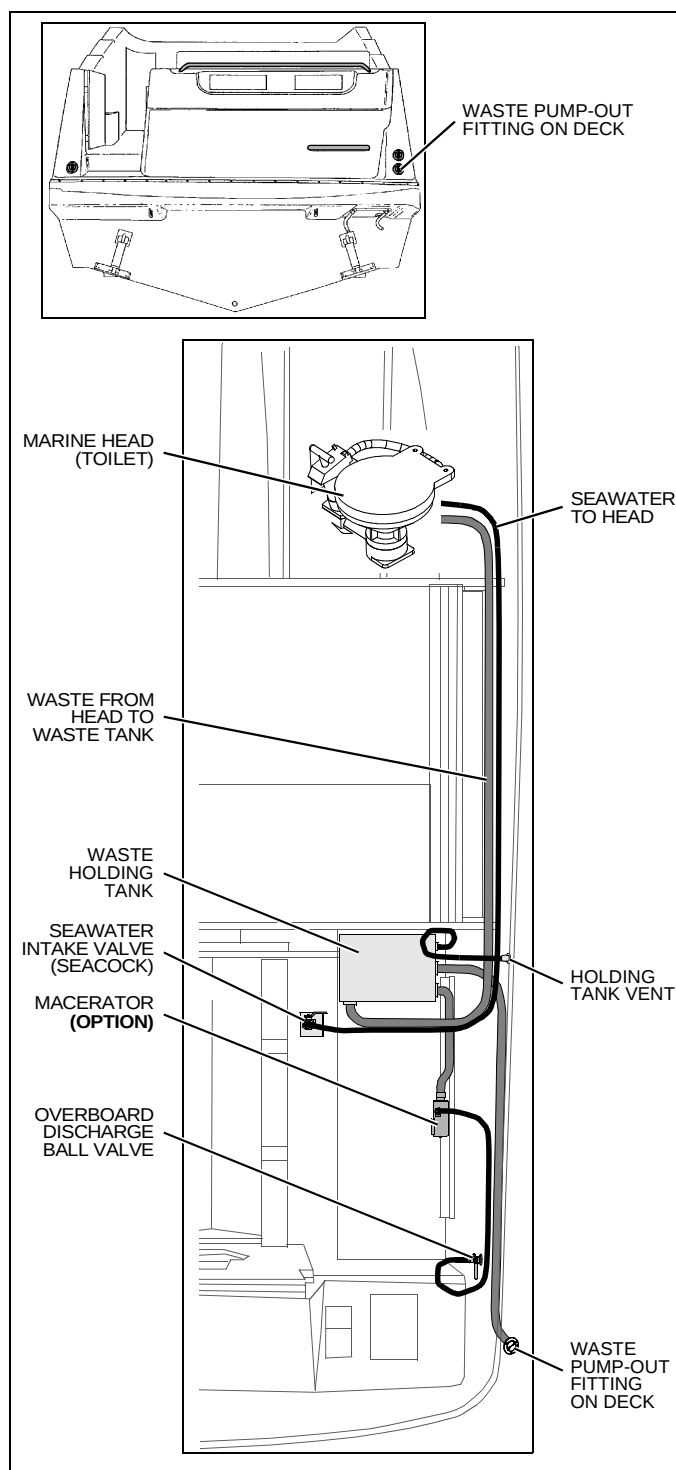
If excess waste causes the water to rise in the bowl, stop pumping until the water recedes.

Close the intake seacock **before** getting underway and leave it closed while the boat is underway or whenever the boat is left moored in the water.

Winterizing The Head

1. Shut **Off** the intake seacock.
2. Pump the head until the bowl is dry.
3. Remove the drain plug in the base and pump again to remove **all** of the water.

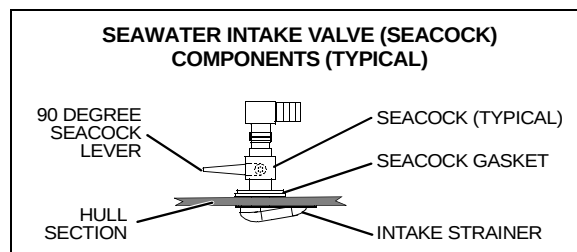
Do **not** fill the bowl with anti-freeze.



Seawater Systems

Seacocks

A seacock is a valve that is used to manage the intake of seawater through the hull and below the water line. Seacocks are controlled by a 90° lever and are used on the seawater intake systems for the **optional** air conditioning system and marine head (toilet) system. **Before** using any of these systems, make sure that the system's seacock is **Open** and remains in the **Open** position until the system is shut **Off**.



CAUTION!

SYSTEM DAMAGE HAZARD!

- **Before** using a seawater intake system, make sure that the system's seacock is in the **Open** position **before** the system is started and keep the seacock **Open** until the system is shut **Off**.
- **Close** seacocks whenever the systems will **not** be used for long periods of time

Seawater Strainers

Seawater strainers are used in water pick-up systems to filter incoming seawater. The typical layout is one strainer for each of the following: **Optional** generator and **optional** air conditioning system.

Seawater strainers are located near the system's seawater intake valves (seacocks). Check the seawater strainers **every time you use your boat** for leaks and/or debris. If debris is found, clean the seawater strainer as follows:



CAUTION!

FLOODING HAZARD!

- The seacock that sends seawater to the strainer **must** be **CLOSED** **before** disassembling the seawater strainer to prevent the boat from taking on water through the seawater strainer assembly.
- Keep the seacock **CLOSED** until the seawater strainer is completely reassembled.

SYSTEM DAMAGE HAZARD!

- **After** reassembling the seawater strainer, make sure that the seacock valve is **OPEN** **before** using the component/system.

1. Make sure the component/system that the strainer is connected to is turned **Off**.
2. **Close** the intake seacock that sends seawater to the strainer you are about to clean. The seacock **must** remain **Closed** until the strainer is completely reassembled.
3. Take apart the seawater strainer.
4. Remove debris.
5. Reassemble the seawater strainer.
6. **Open** the seacock **before** turning **On** the component or system.

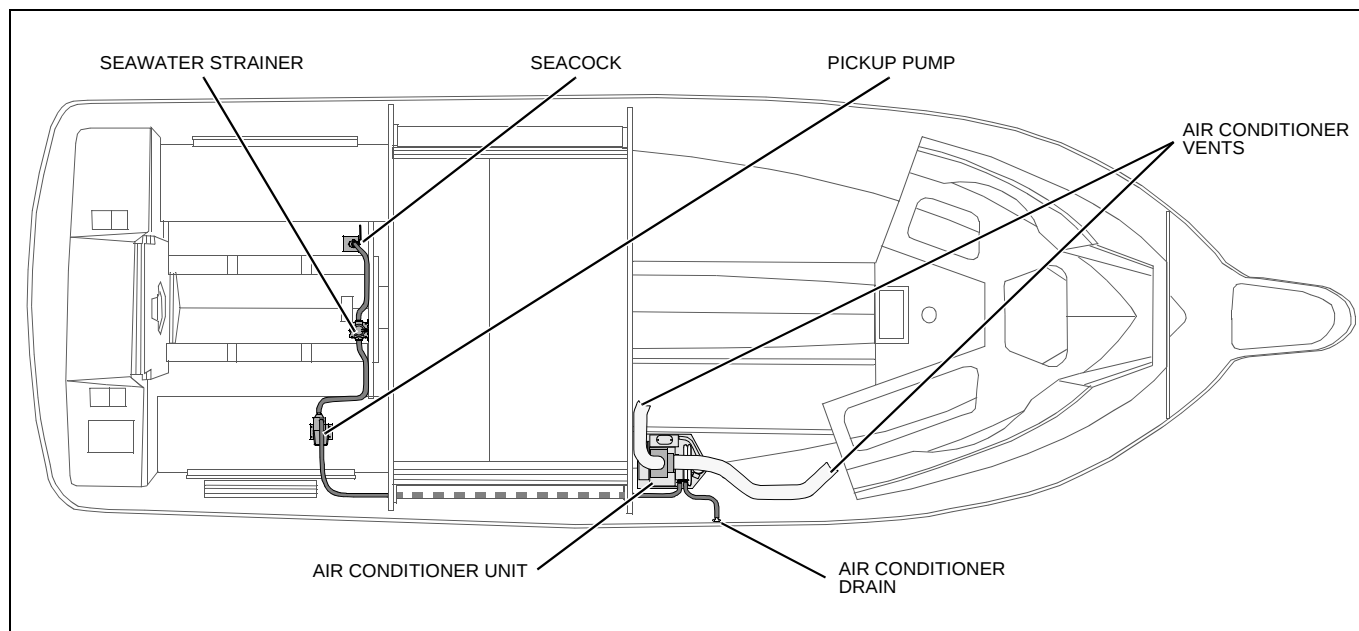
Air Conditioning System (Option)

 **DANGER!**



CARBON MONOXIDE POISONING HAZARD!

Dangerous carbon monoxide gas (CO) can be brought into the boat through the air conditioning system.



Your boat may be equipped with an **optional** air conditioning system. Please refer to the air conditioner manual for detailed operating instructions.

- **Before** operating the air conditioning system, make sure the breakers on the AC main distribution panel are activated and make sure the system's seawater pickup seacock is **OPEN** (see the Seawater Systems section on the previous page). The seacock **must** remain **OPEN** anytime the air conditioner is in use.

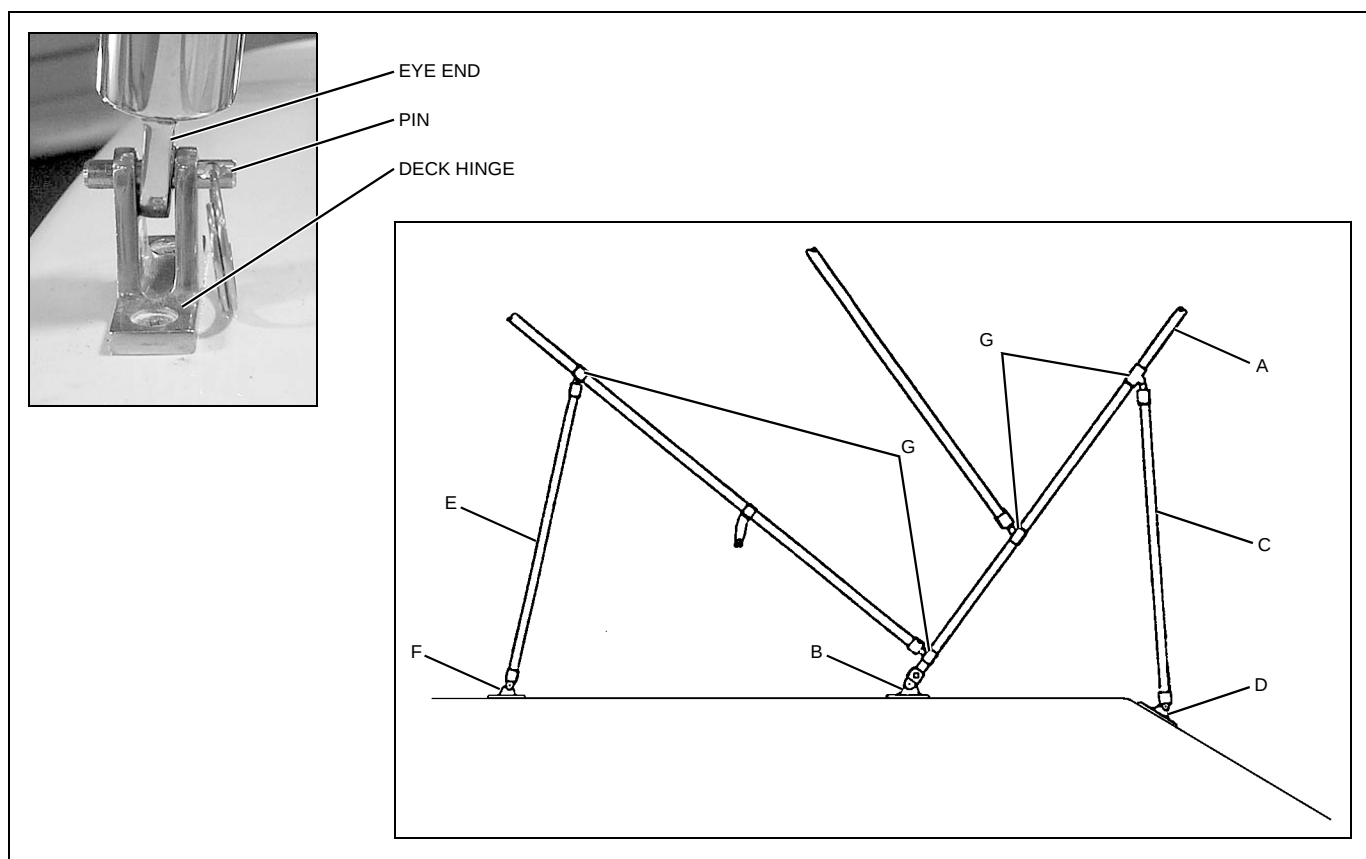
 **CAUTION!**

SYSTEM DAMAGE HAZARD!

The air conditioning system's seacock **must** be **OPENED** before turning **On** the air conditioner and **must** remain **Open** during use.

- Check the seawater strainer *every time you use your boat* for leaks and/or debris. If debris is found, clean the seawater strainer (see the Seawater Systems section on the previous page).

Canvas Top Installation



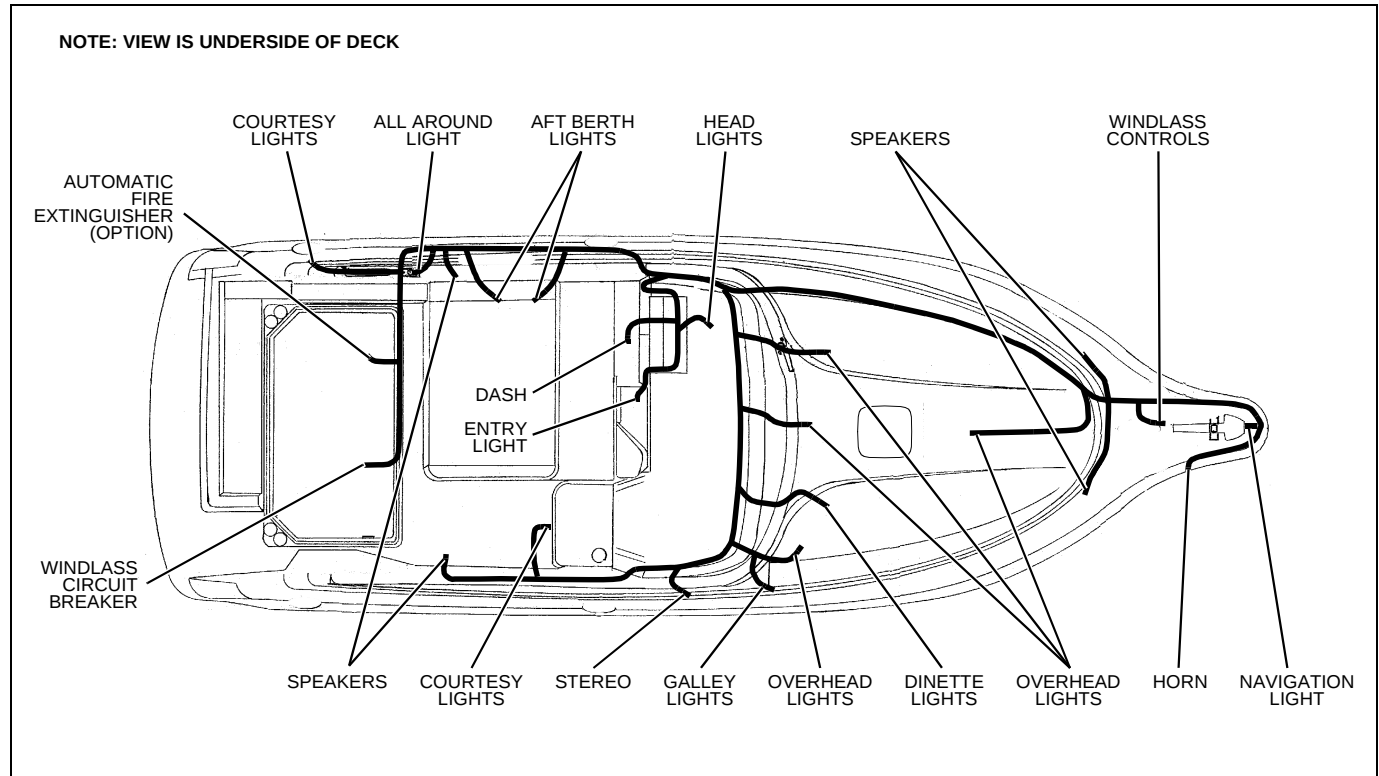
1. Slide the eye ends of the main bow (A) into the mid deck hinges (B), and insert the pins.
2. Slide the eye ends of the aft legs (C) into the aft deck hinges (D) and insert the pins.
3. Slide the eye ends of the forward legs (E) into the forward deck hinges (F) and insert the pins.

No adjustments to the bow jaw slides (G) should need to be made as they are preset during manufacturing. **Before** attempting to adjust the jaw slide positions, obtain the correct measurements from your selling dealer.

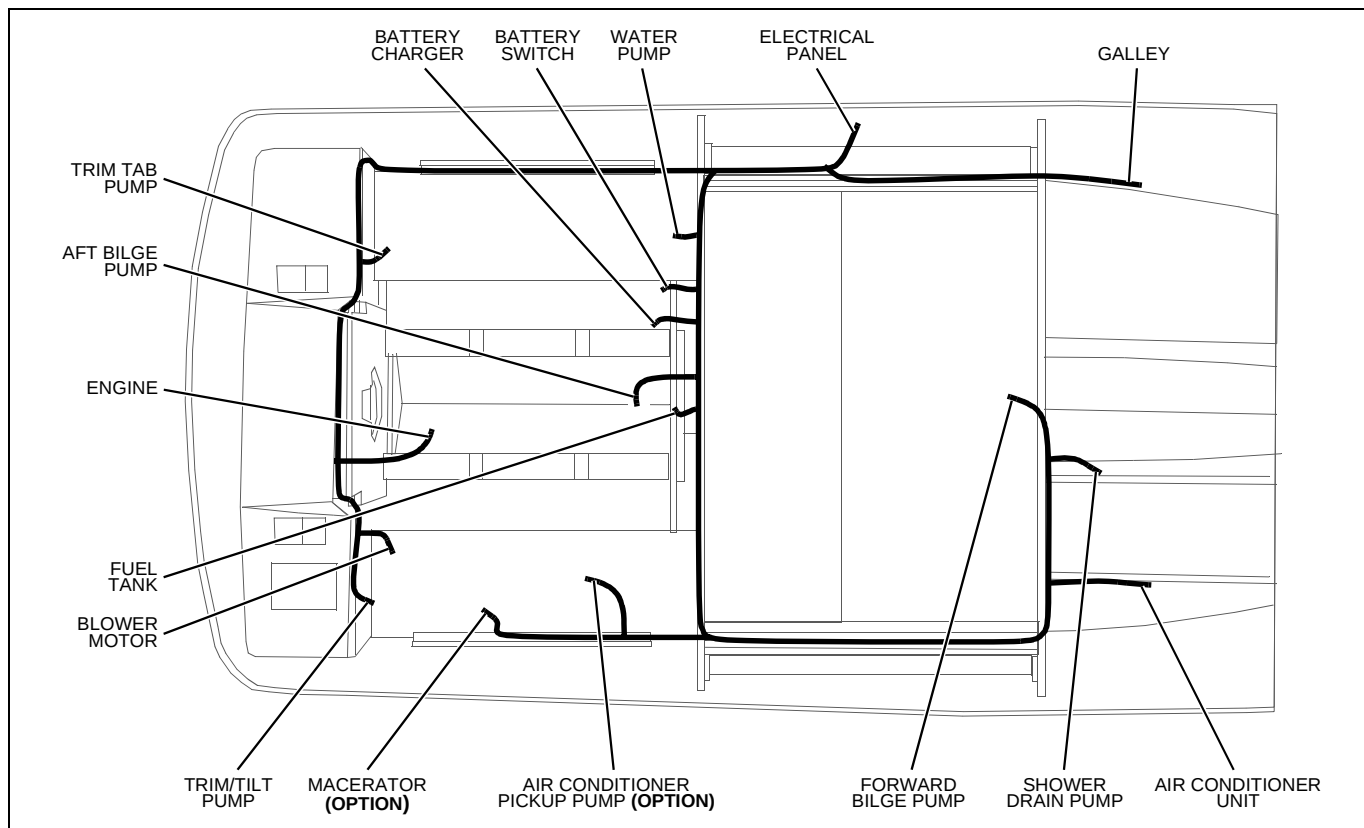
Chapter 3: Electrical Routings

Direct Current Electrical System

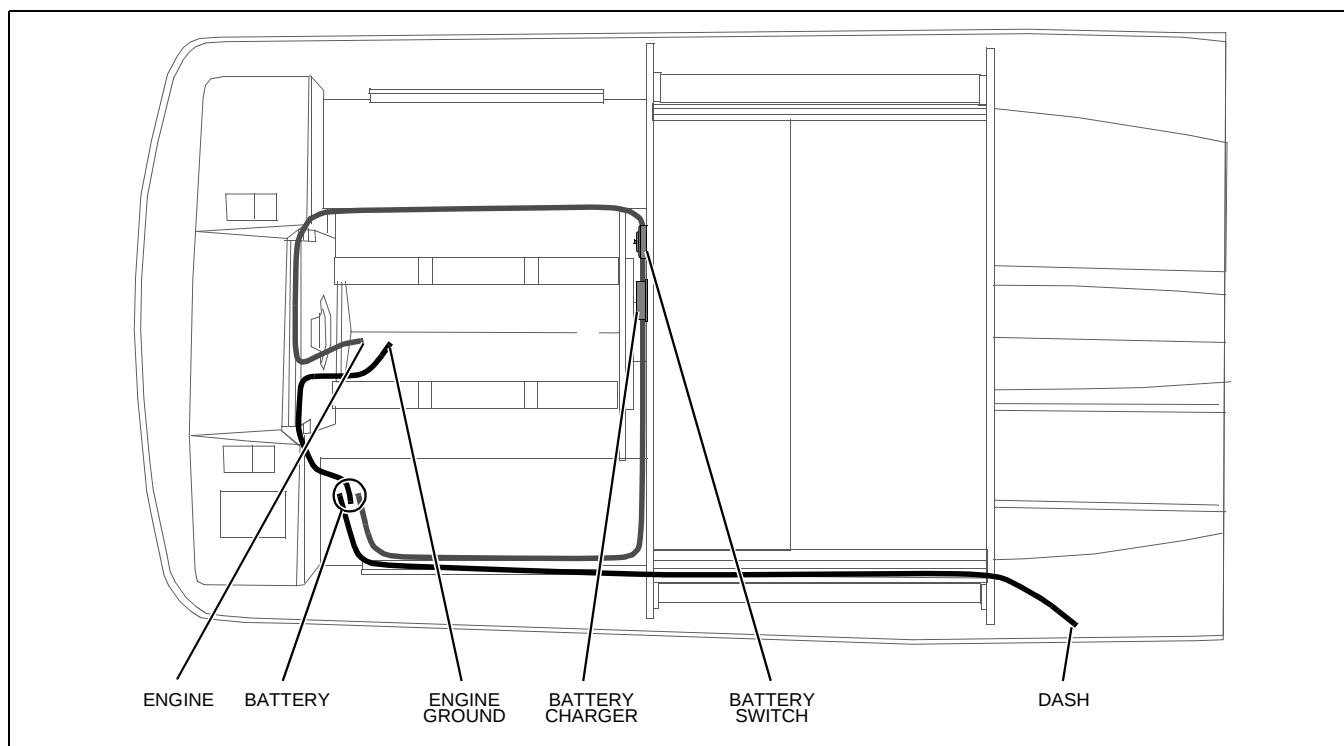
Deck Electrical Harness



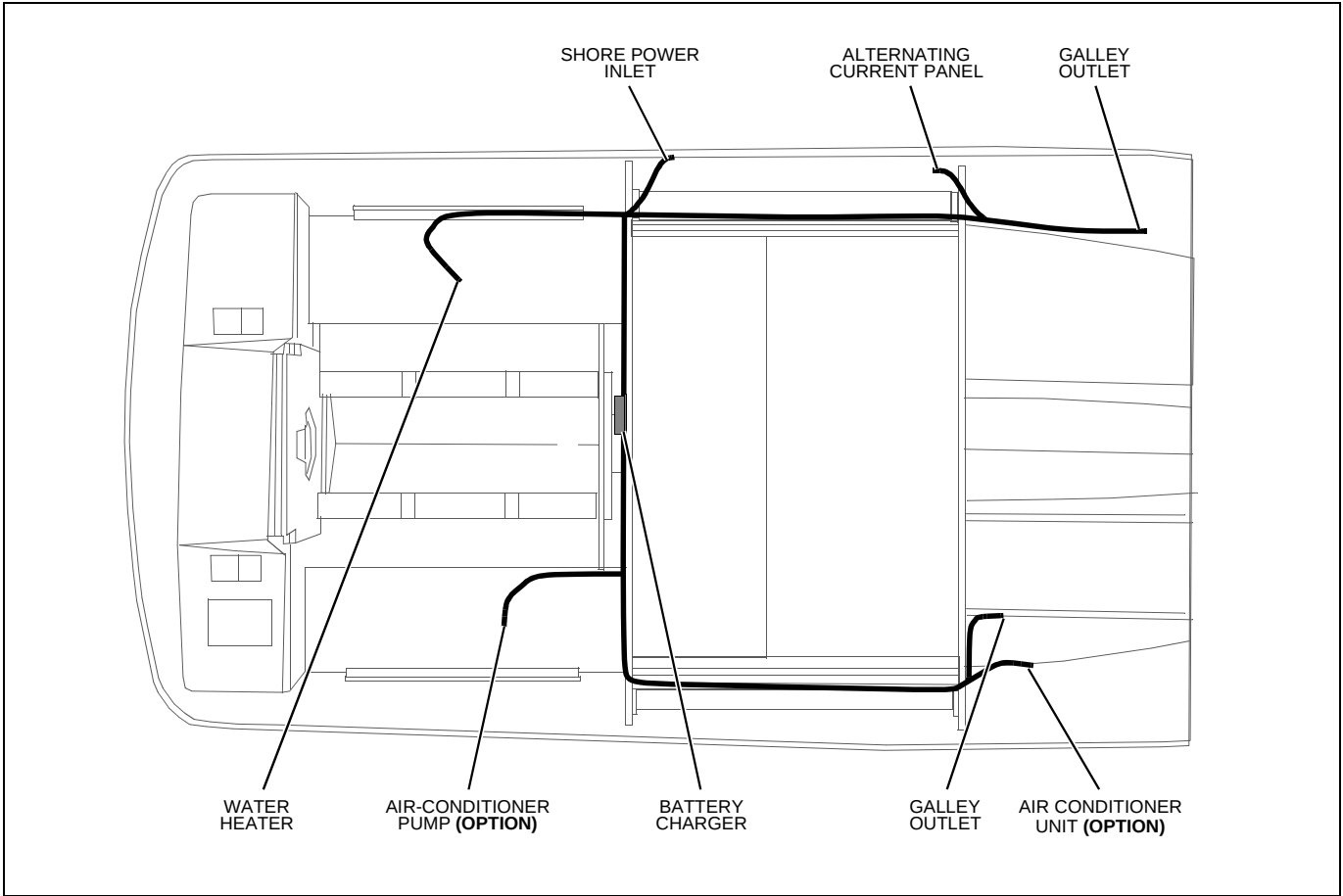
Hull Wiring Harness



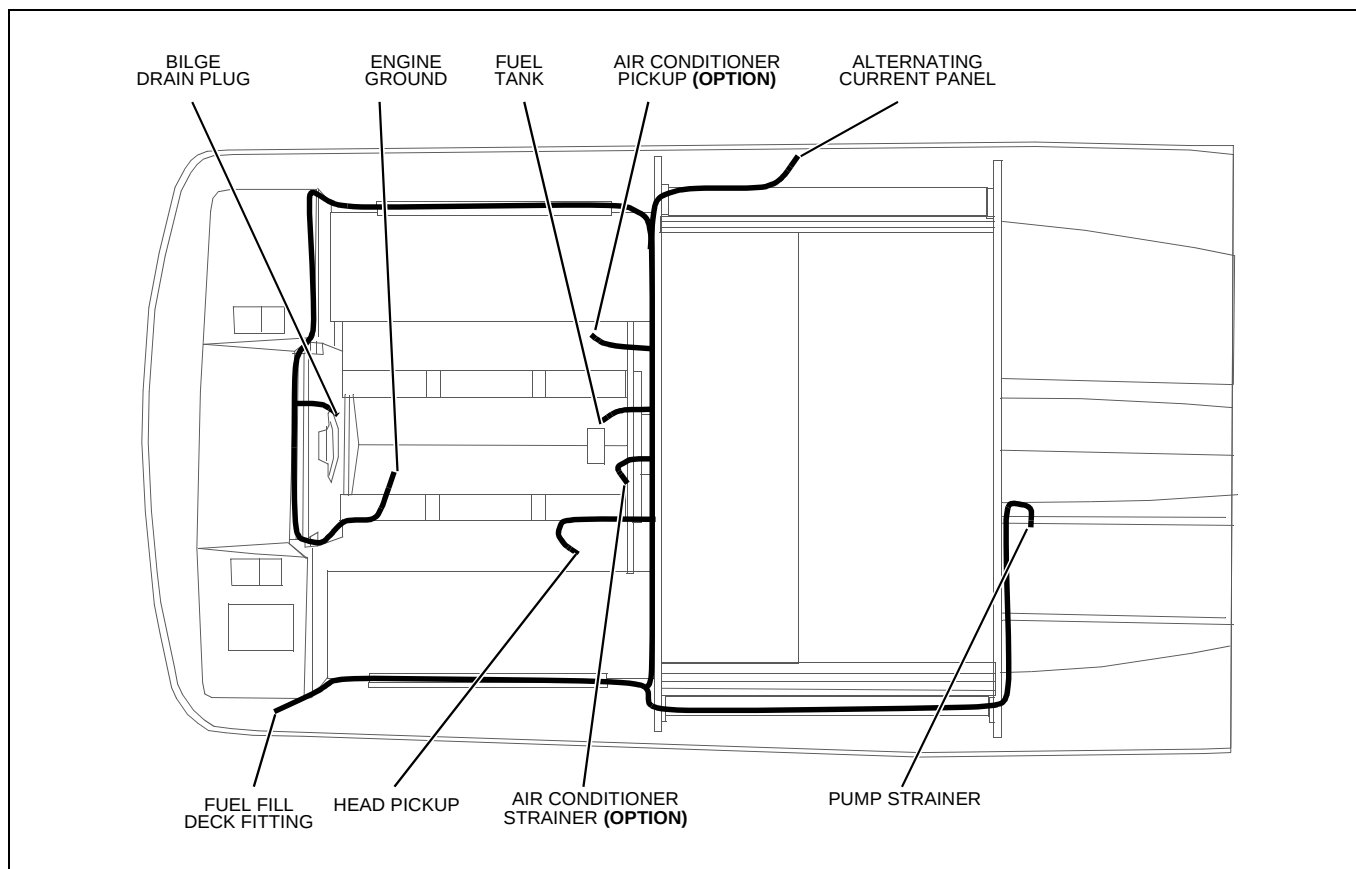
Battery System



Alternating Current Electrical System

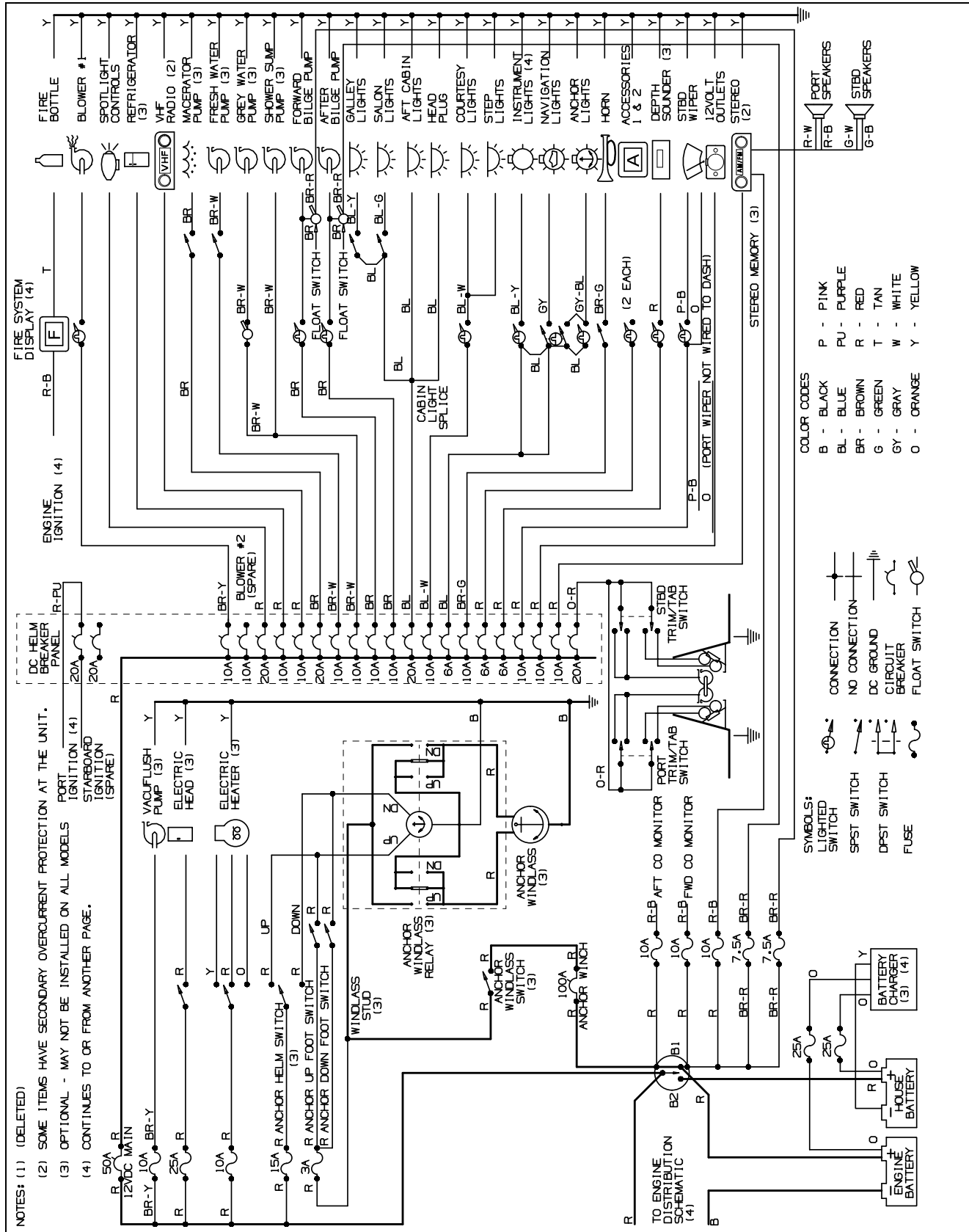


Bonding Harness

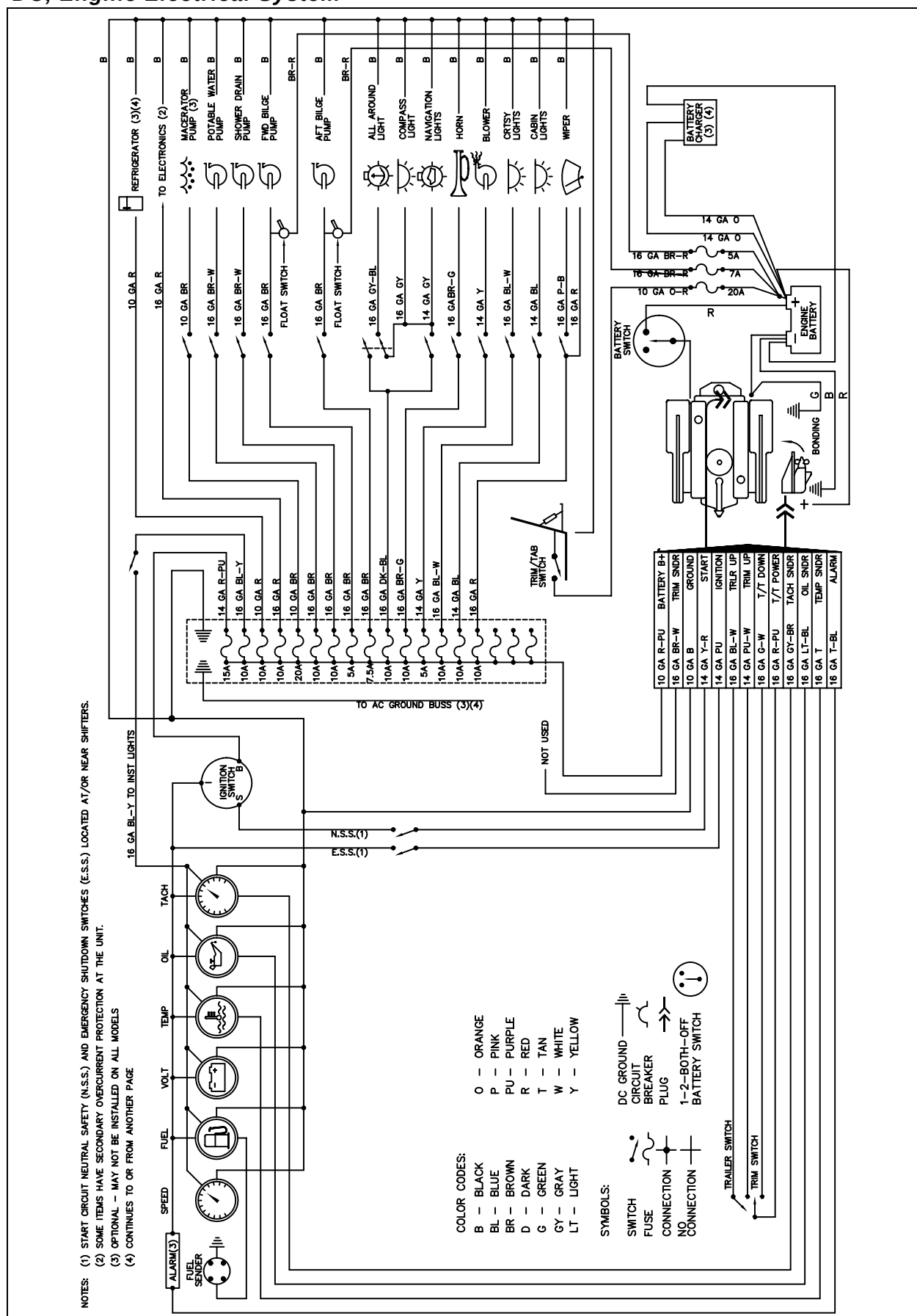


Chapter 4: Wiring Diagrams

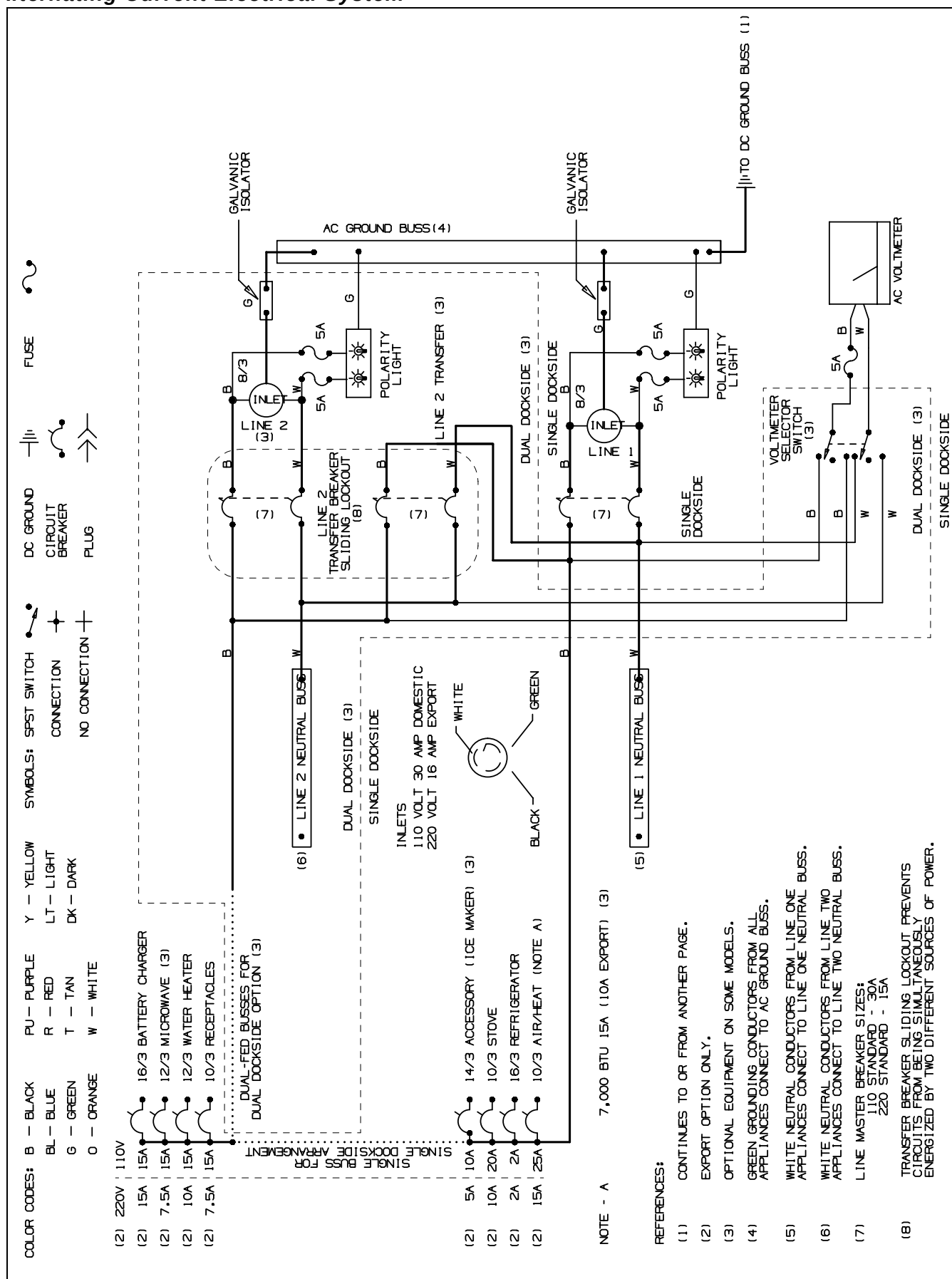
12V DC, Accessory Electrical System



12V DC, Engine Electrical System



Alternating Current Electrical System



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			

Plumbing

_____	Fresh Water Tank Capacity
-------	---------------------------

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			

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		

Operator of Boat

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

Persons on Board

Full Name		
Age	Health	Phone Number
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 or 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

[illegible]

Part Number 1700658

Maxum Marine • P.O. Box 9029 • Everett, WA 98206 • 360-435-5571