

# 460 Sundancer

## Owner's Manual Supplement

MRP# 1150457

This owner's manual supplement has been written to provide additional specific information about your boat and should be read carefully. Insert this supplement in your Sport Yacht Owner's Manual as *Section 12 – Supplement*.

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

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

PLEASE KEEP THIS OWNER'S MANUAL PACKET IN A SECURE PLACE AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

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(This book contains 50 pages.)

## WARRANTY INFORMATION

Sea Ray's® warranty is better than ever. Find the warranty information card in your owner's manual packet for complete details. If for some reason the card is missing, contact your Sea Ray dealer for a new one.

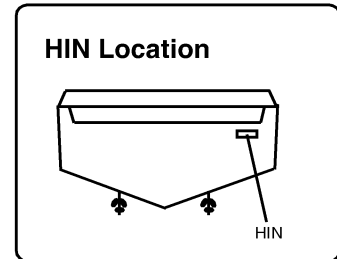
## CONSTRUCTION STANDARDS

Sea Ray's® commitment - Excellence by Design - has enabled us to create a superior craft providing you with comfort, performance, safety and dependability. All our boats comply with the safety standards set by the United

States Coast Guard and are designed, engineered and manufactured in accordance with applicable recommendations and guidelines of the American Boat and Yacht Council (ABYC) certified by the National Marine Manufacturers Association (NMMA).

## HULL IDENTIFICATION NUMBER (HIN)

The "Hull Identification Number," located on the starboard side of the transom, is the most important identifying factor and must be included in all correspondence and orders. Failure to include it only creates delays. Also of vital importance are the engine serial numbers and part numbers when writing about or ordering parts for your engine. Refer to the engine owner's manual for locations.



## SERVICING YOUR SEA RAY®

When your boat needs service beyond regular maintenance it should be taken to an authorized Sea Ray® dealer.

To find a dealer in your area call:

1-800-SRBOATS.  
Fax: 1-314-213-7878

If a problem is not handled to your satisfaction:

1. Discuss any warranty-related problems directly with the service manager of the dealership or your sales person. Give the dealer an opportunity to help the service department resolve the matter for you.
2. If a problem arises that has not been resolved to your satisfaction by your dealer, contact Sea Ray Boats at 1-800-SRBOATS and the appropriate customer service department information will be provided to you.

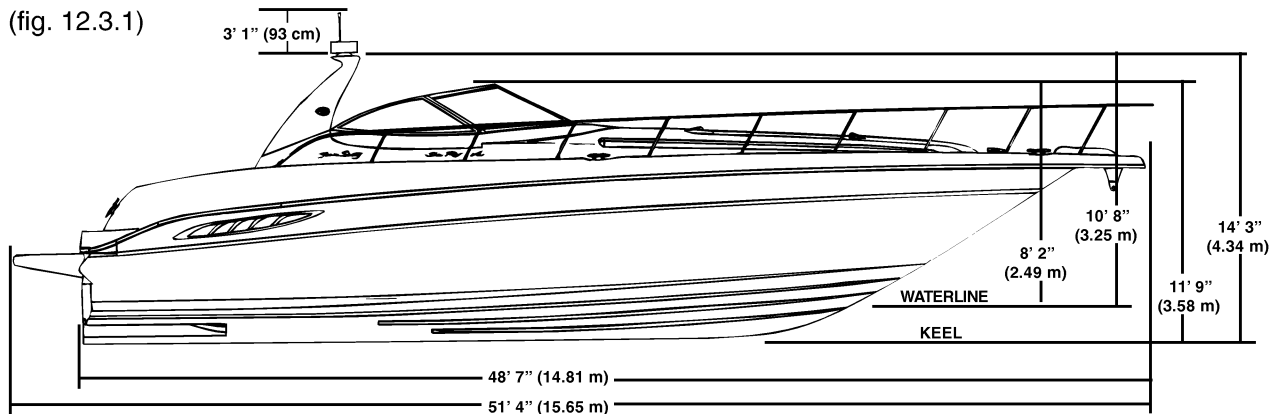
*Sea Ray*

Sea Ray® 460 Sundancer Owner's Manual Supplement • MRP #1150457  
Printed in the U.S.A. June 1998, Revised May 2002, © Sea Ray Boats, Inc.  
Sea Ray Boats, Inc. 2600 Sea Ray Blvd., Knoxville, TN 37914.  
For information call 1-800-SRBOATS, or fax 1-314-213-7878.  
Internet address: <http://www.searay.com>

Note: Not all accessories shown in pictures or described herein are standard equipment or even available as options. Options and features are subject to change without notice.

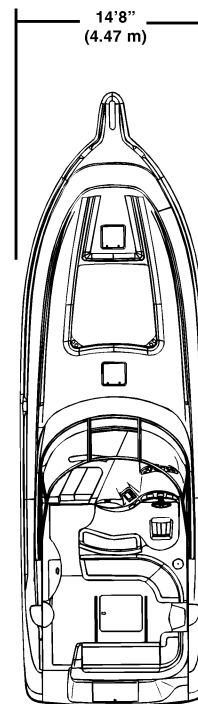
# Specifications & Dimensions

**Profile**  
(fig. 12.3.1)



## SPECIFICATIONS & HEIGHT DIMENSIONS

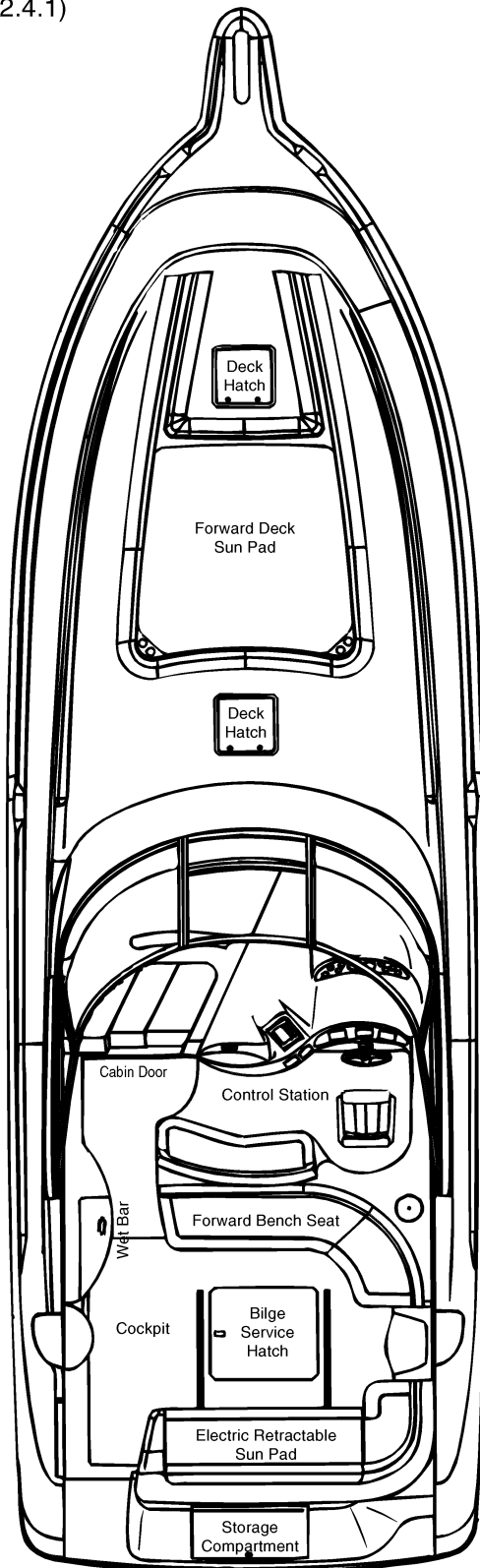
Overall Length .....	45' 6" (13.87 m)
w/Standard Bow Pulpit .....	48' 7" (14.81 m)
w/Standard Platform .....	51' 4" (15.65 m)
Beam .....	14' 8" (4.47 m)
Draft .....	43" (109.2 cm)
Dry Weight .....	28,000 lbs. (12,700 kg)
Fuel Capacity .....	400 gal. (1,514 liters)
Usable Fuel .....	380 gal. (1,438.3 liters)
Water Capacity .....	100 gal. (378.5 liters)
Holding Tank .....	60 gal. (227.1 liters)
Dead Rise .....	15°
Keel To Top Of Windshield .....	11' 9" (3.58 m)
Keel To Top Of Spoiler .....	14' 3" (4.34 m)
Waterline To Top Of Windshield .....	8' 2" (2.49 m)
Waterline To Top Of Spoiler .....	10' 8" (3.25 m)
Spoiler To Top Of Mastlight .....	3' 1" (93 cm)



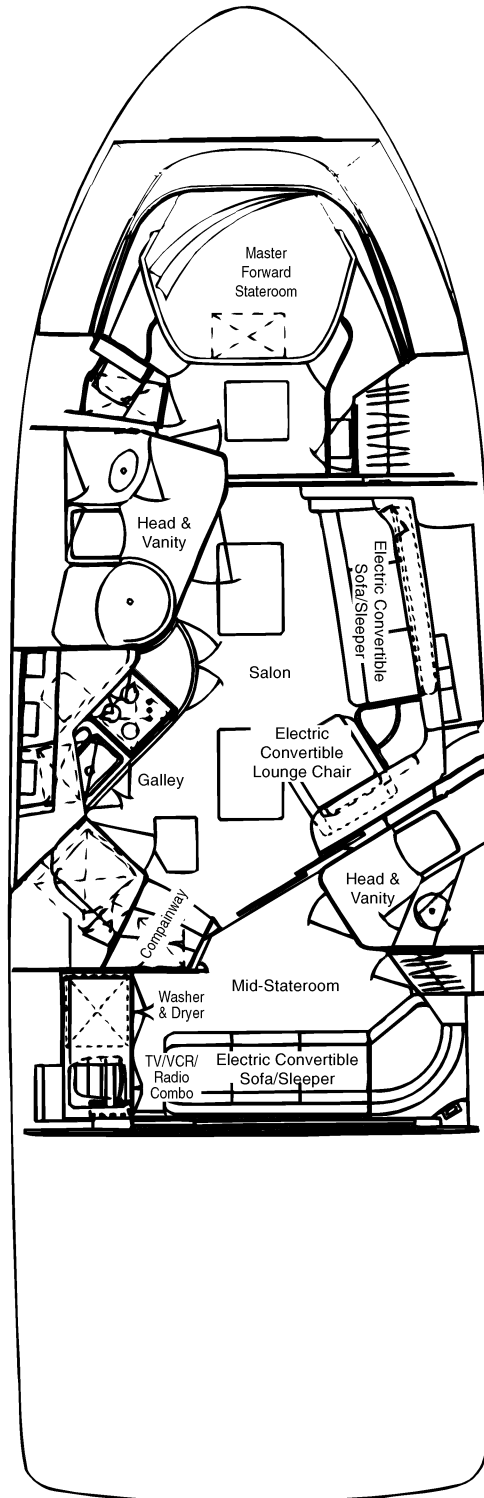
(fig. 12.3.2)

# Standard Accommodation Plans

**Main Deck (Floor Plan)**  
(fig. 12.4.1)

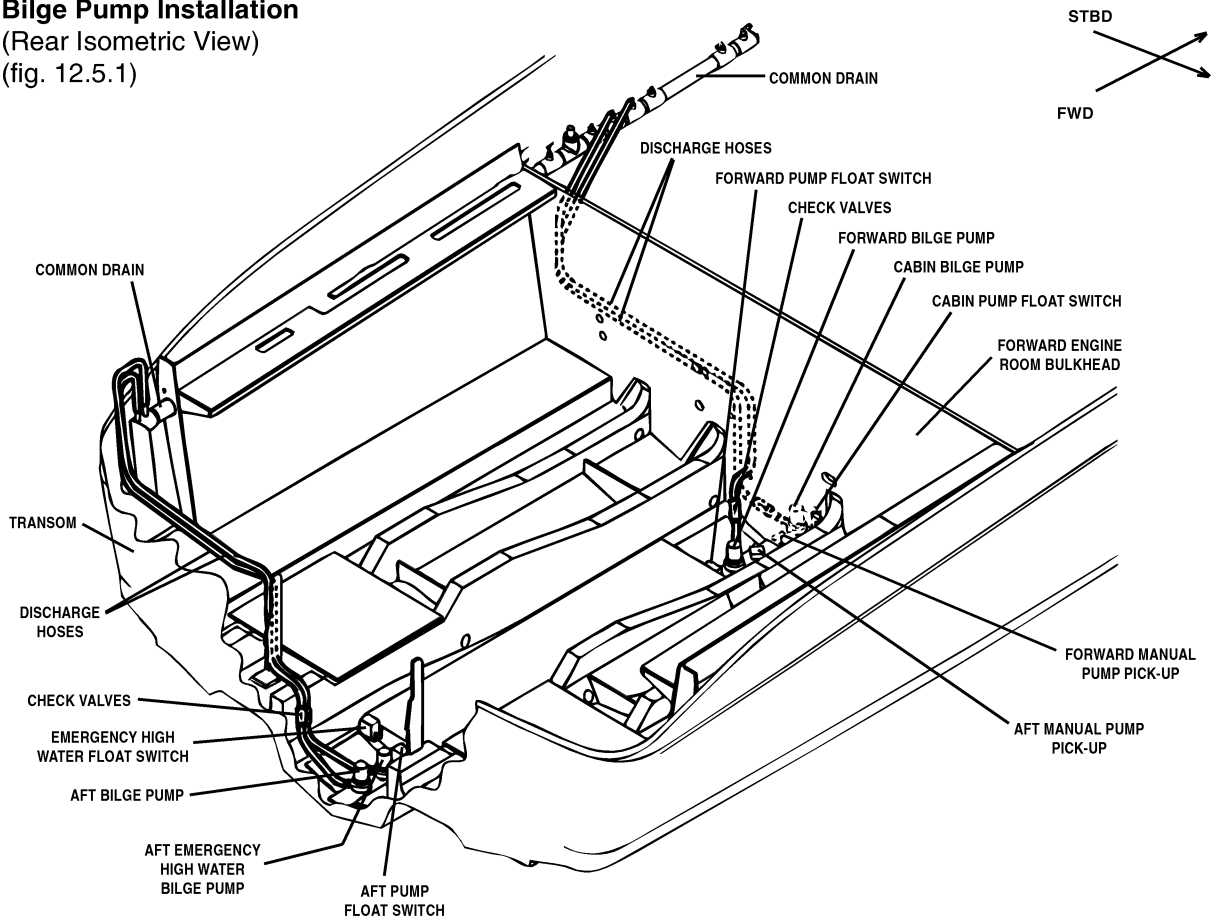


**Mid Deck (Floor Plan)**  
(fig. 12.4.2)

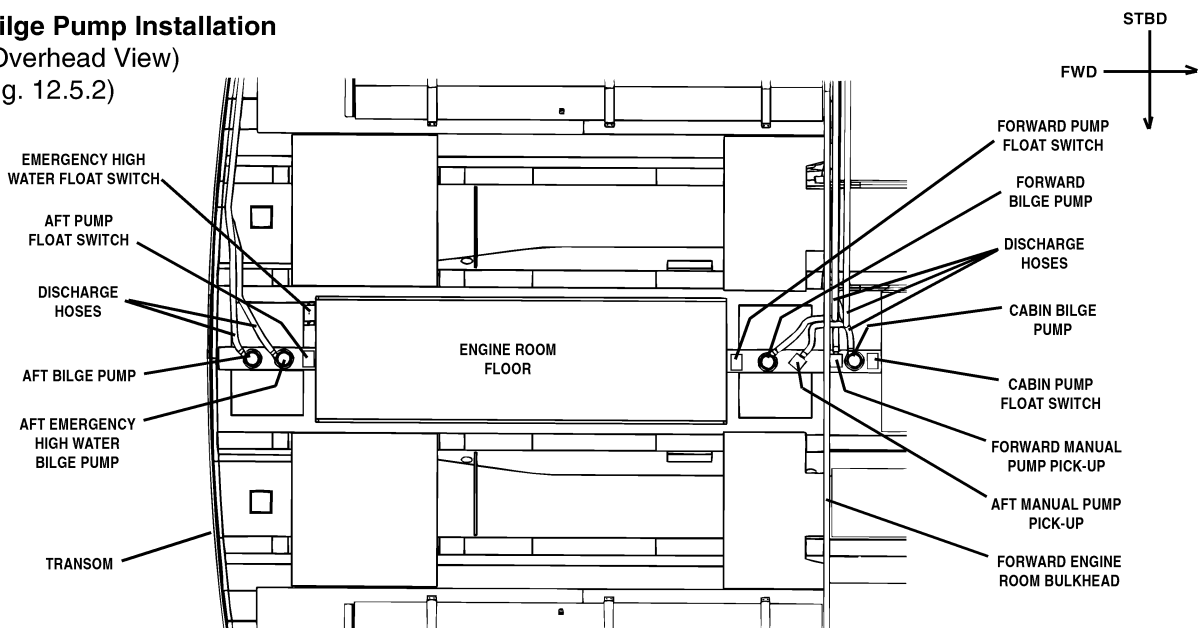


# Bilge Pump Installations

**Bilge Pump Installation**  
(Rear Isometric View)  
(fig. 12.5.1)



**Bilge Pump Installation**  
(Overhead View)  
(fig. 12.5.2)



# Supplemental General Information

## BILGE PUMPING SYSTEM



The 460 DA is equipped with an automatic bilge pump system. A manual bilge pump system is available as an international option to comply with CE standards.

### Manual Bilge Pump (With International CE Option)

The manual bilge pump system is located on the port side of the cockpit under the wet bar.

#### To Operate:

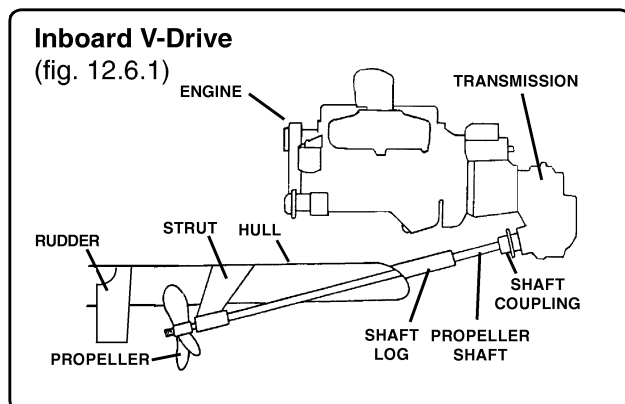
1. Rotate valve to select forward or aft pump.
2. Place handle into pump.
3. Move handle up and down to actuate pump.

REFER TO THE OWNER'S MANUAL AND OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

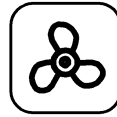
## PROPULSION SYSTEM

The standard engine is an inboard V-drive type propulsion system. This system incorporates an inboard engine with an angled transmission that allows the drive shaft to pass through the hull under the engine.

REFER TO THE OWNER'S MANUAL AND ENGINE OWNER'S MANUAL FOR OPERATING INSTRUCTIONS AND WARRANTY INFORMATION.



## PROPELLERS



Your Sea Ray® has been equipped with a propeller which our tests have shown to be the best suited for general use under normal conditions and load. In some situations you may wish to change propellers to give your boat slightly different performance characteristics. In general, changing to a lower pitch propeller will increase acceleration and load-pulling ability, but with a slight decrease in top speed. Conversely, moving to a higher pitch propeller will attain higher top speed with a light load, but will sacrifice acceleration and power. Your particular requirements should be discussed with your Sea Ray® dealer. **Under no circumstances use a propeller which allows the engine to operate at higher than recommended RPM.**

## HEAD SYSTEM



Head System information can be found in *Section 6 Head System* of the owner's manual. On the next page are illustrations of the 460 DA head system layout.

#### To empty holding tanks:

1. Make sure shut-off valves are open. (see fig. 12.7.1). Follow Dockside Pump-Out and Macerator instructions in *Section 6 Head System*.
2. Valves can be left in the open position after holding tanks are empty.

If one holding tank requires servicing, close opposite tanks shut-off valve and pump out tank to be serviced.

REFER TO THE HEAD SYSTEM OWNER'S MANUAL IN THE OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

## WATER SYSTEM



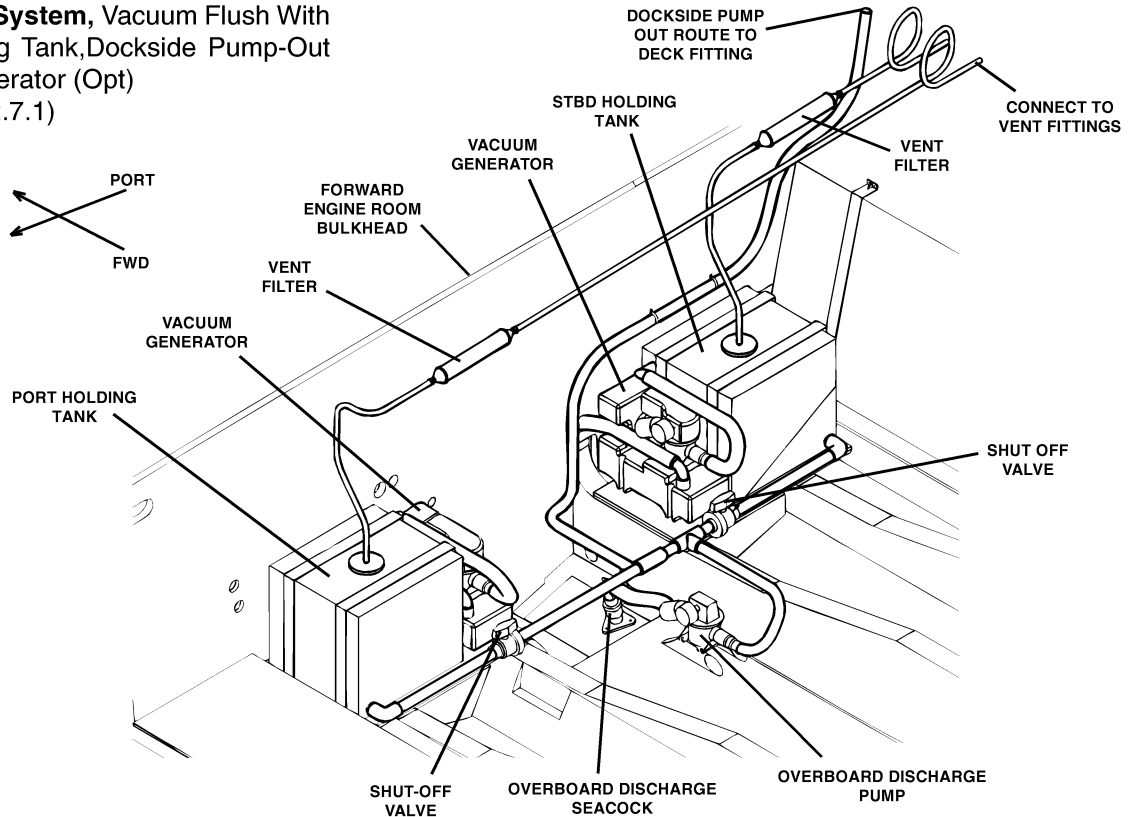
Water System information can be found in *Section 5 Water System* of the owner's manual. On pages 12.8 and 12.9 are illustrations of the 460 DA water system layout.

REFER TO THE OWNER'S MANUAL AND OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

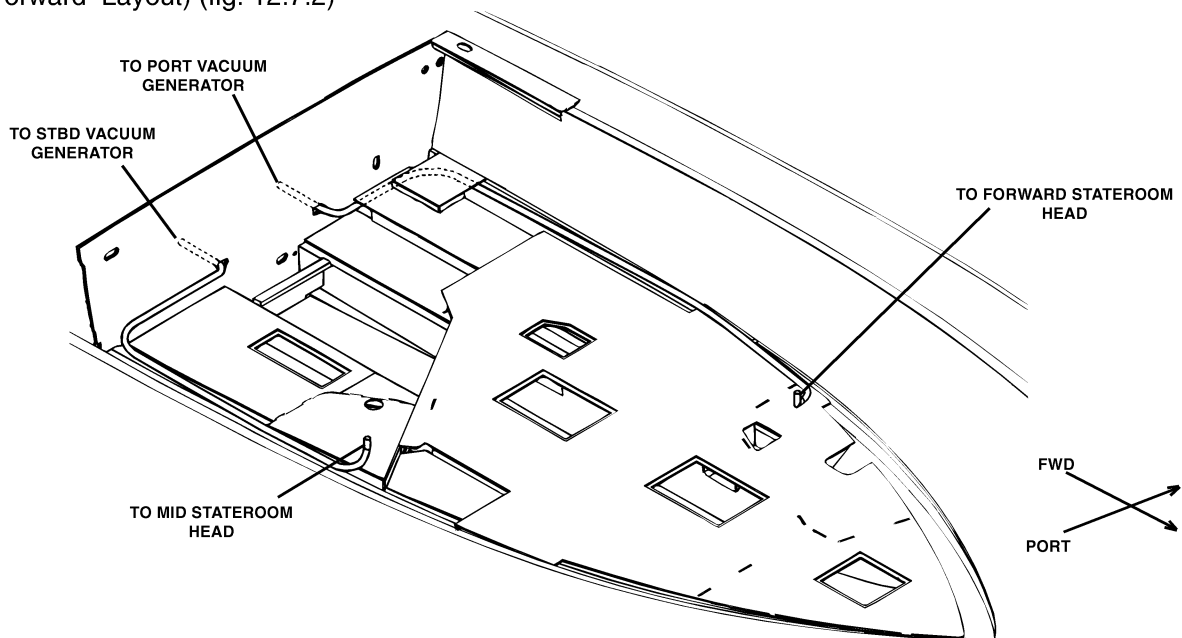
# Supplemental General Information

## 460 SUNDANCER HEAD SYSTEM LAYOUT

**Head System, Vacuum Flush With Holding Tank, Dockside Pump-Out & Macerator (Opt) (fig. 12.7.1)**



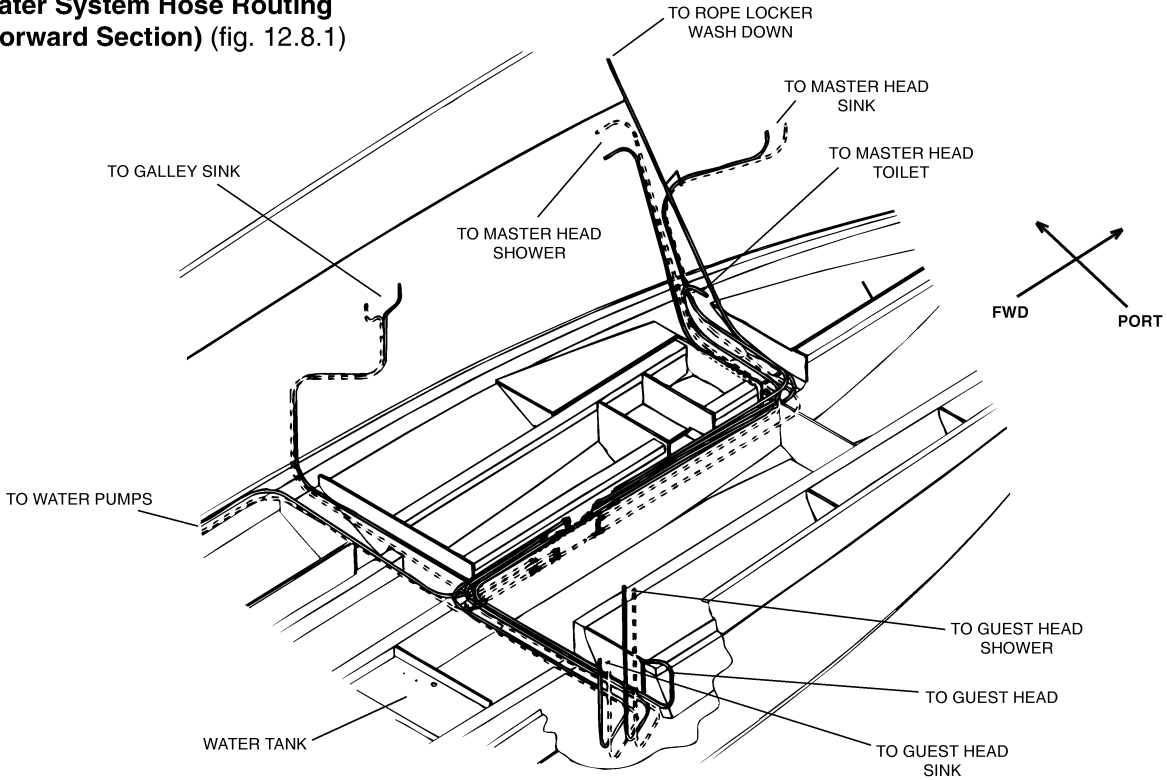
**Head System Hose Routing (Forward Layout) (fig. 12.7.2)**



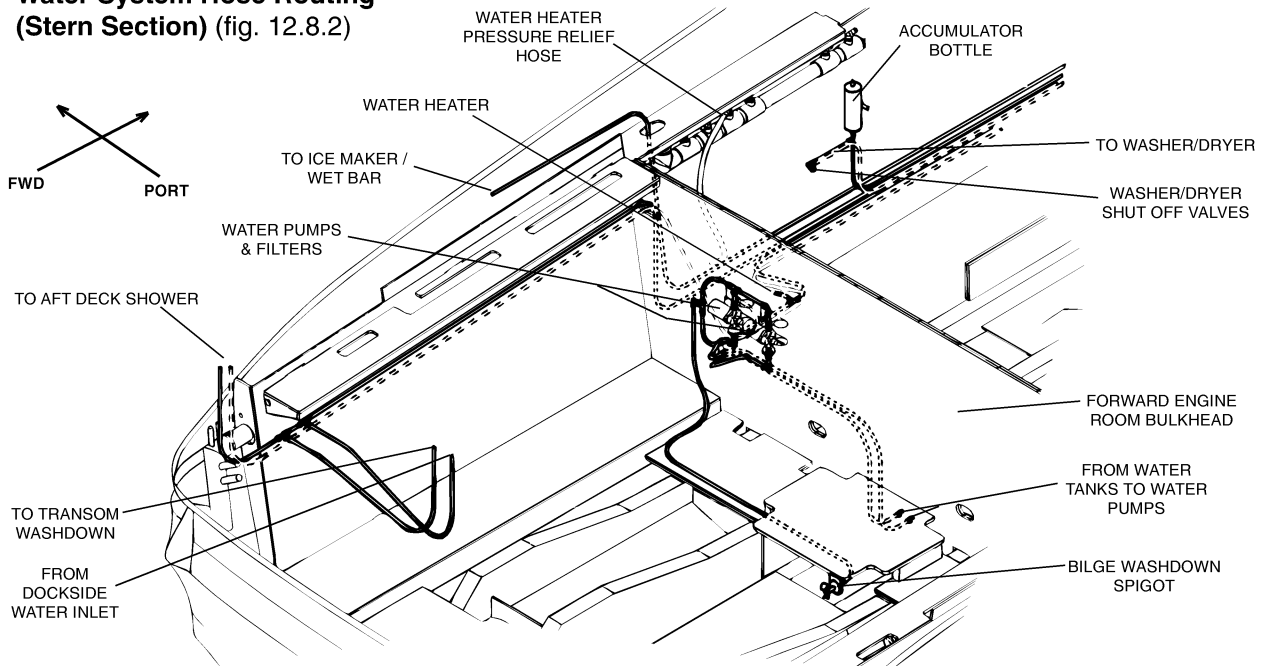
# Supplemental General Information

## 460 SUNDANCER WATER SYSTEM LAYOUT

**Water System Hose Routing  
(Forward Section) (fig. 12.8.1)**



**Water System Hose Routing  
(Stern Section) (fig. 12.8.2)**



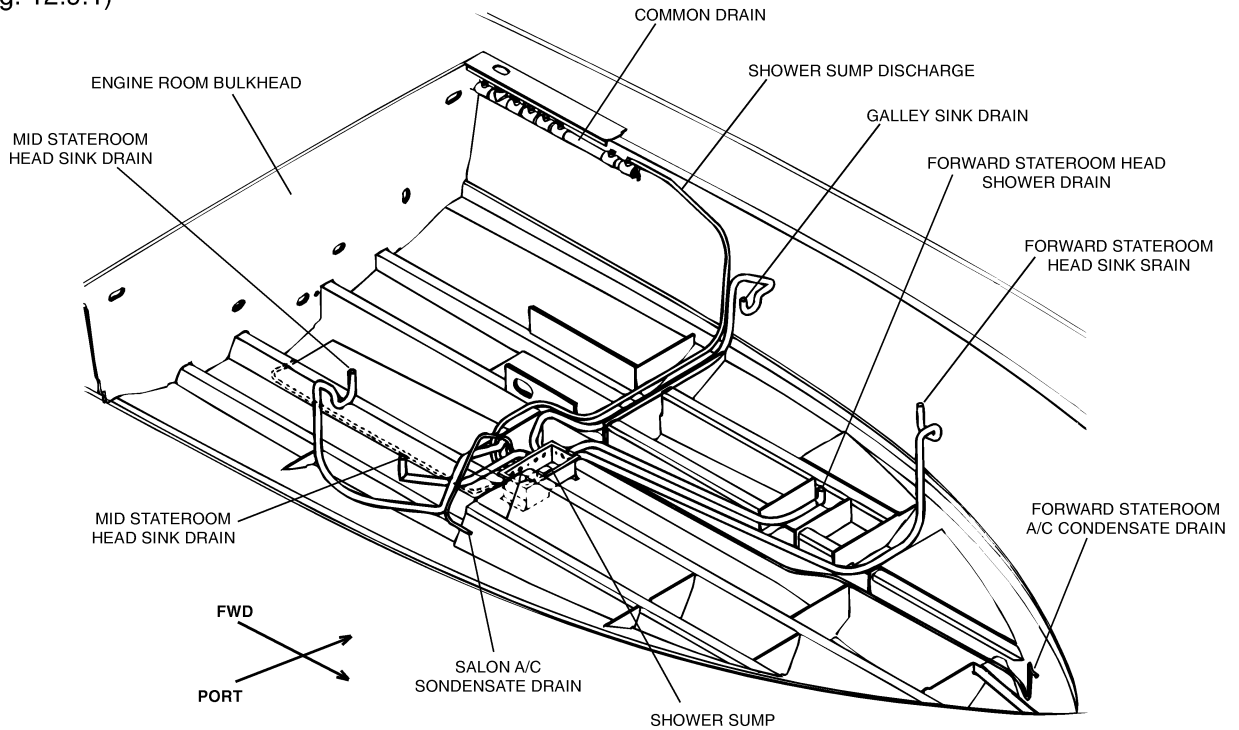


# Supplemental General Information

## 460 SUNDANCER WATER SYSTEM LAYOUT

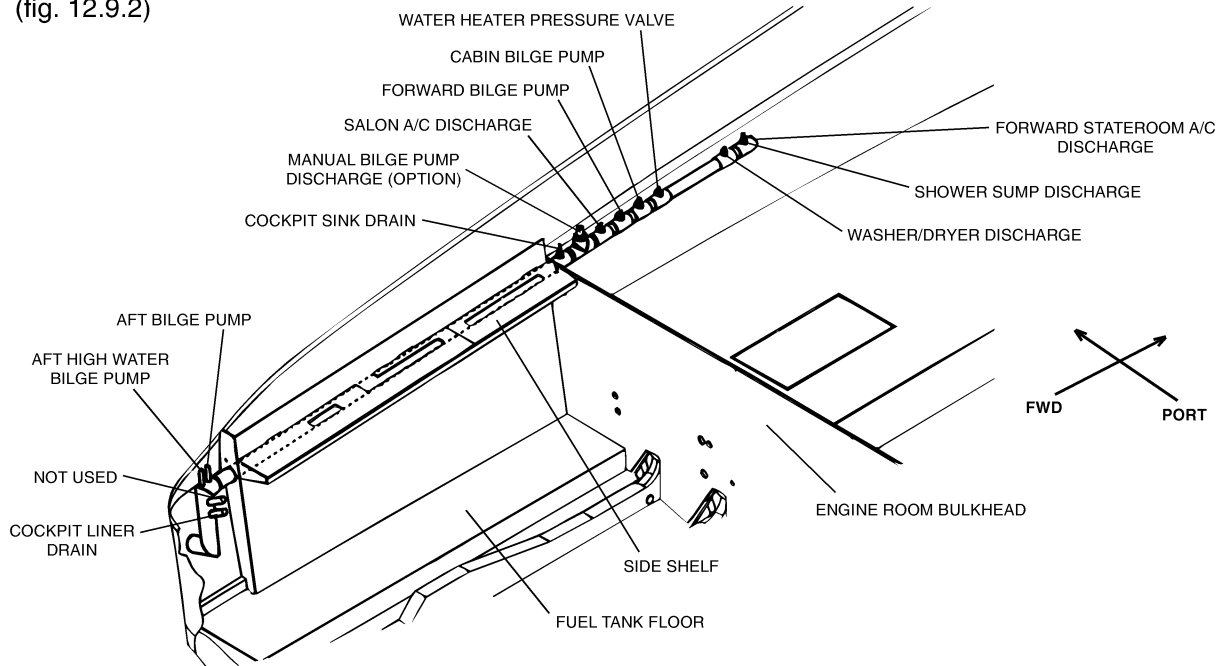
### Grey Water System Layout (Drainage)

(fig. 12.9.1)



### Common Drain

(fig. 12.9.2)



# Supplemental General Information

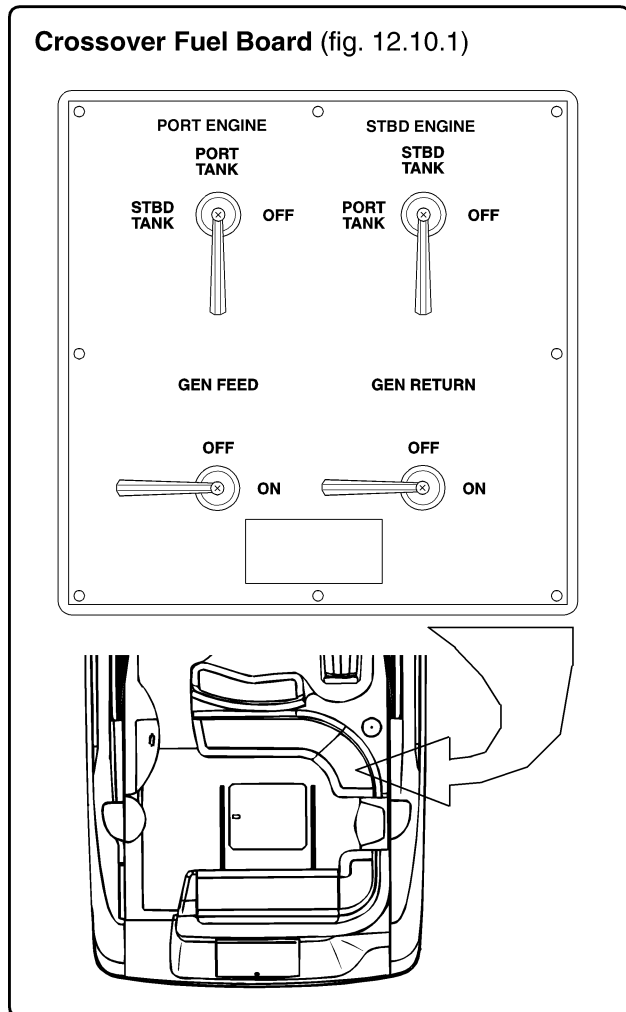
## FUEL SYSTEM

The 460 DA is equipped with a diesel fuel system. A detailed drawing of the fuel system can be found in the *Parts Manual*. Fueling instructions and precautions can be found in the *Owner's Manual*.

## CROSSOVER FUEL SYSTEM

The crossover fuel system allows the engines to draw fuel from either tank. This allows switching to an alternate tank in case of fuel contamination or for even fuel weight distribution. Each engine and the generator are equipped with valves on the crossover fuel board. The generator only draws fuel from the port fuel tank utilizing valves offering OPEN, CLOSED and RETURN settings only.

The crossover fuel board is located on the starboard side of the cockpit. Access board through forward starboard cockpit seat base.



## FUEL RECOMMENDATIONS



The quality of the fuel is very important for satisfactory engine performance and long engine life. Fuel should be clean and free of contamination. Your fuel tanks should be kept full of fuel whenever possible. This will reduce the amount of water condensation and reduce the possibility of contamination.

Recommended Fuel: **#2 Diesel fuel**

### Fuel Filters: (Diesel)

Primary and secondary fuel filters are installed on your Sea Ray® to keep the fuel as clean as possible. Primary fuel filters are the Racor® water separating fuel filters installed on the port and starboard sides of the bilge on the transom. The secondary fuel filters are located on the engines and should be replaced in accordance with the Engine Owner's Manual.

**Use of any methanol, gasohol or alcohol based fuel additive will damage the fuel filter.**

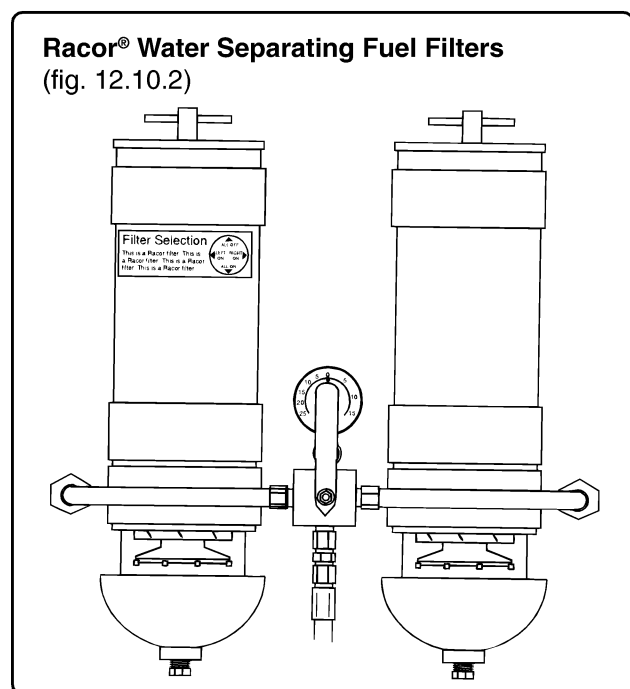
### Primary Fuel Filter Selection Valve:

Arrow Up: ALL OFF

Arrow Right: RIGHT ON

Arrow Down: ALL ON

Arrow Left: LEFT ON

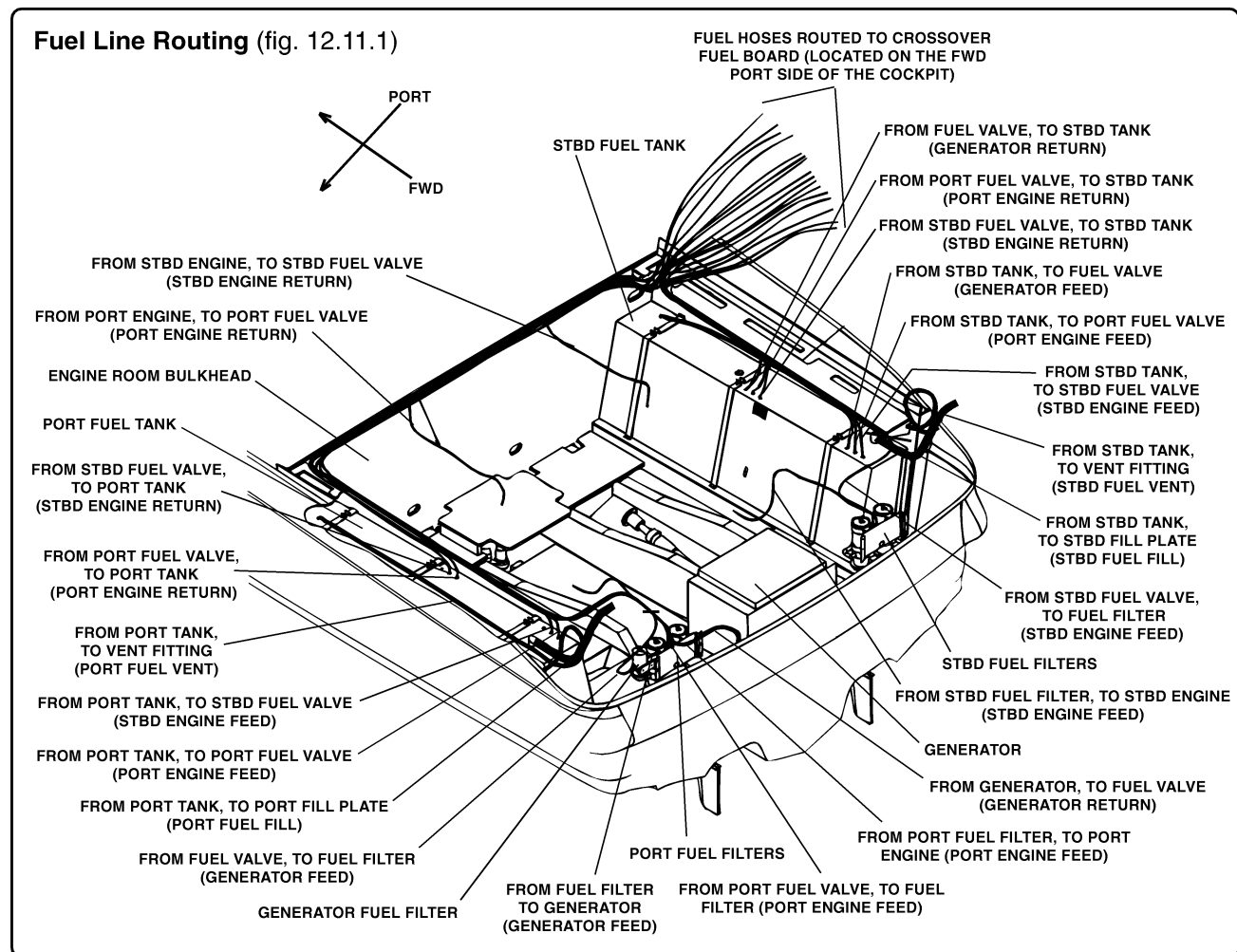


# Supplemental General Information

Maximum efficiency can be accomplished by the on-line selection of the left or right fuel filter individually. This will give you a clean, efficient filter on-line while allowing maintenance on the off-line filter.

**NOTE: IN ROUGH SEAS, ALLOW APPROXIMATELY 15% RESERVE WHEN PLANNING FUEL CONSUMPTION.**

**REFER TO THE ENGINE OPERATOR'S MANUAL FOR MORE DETAILED INFORMATION.**

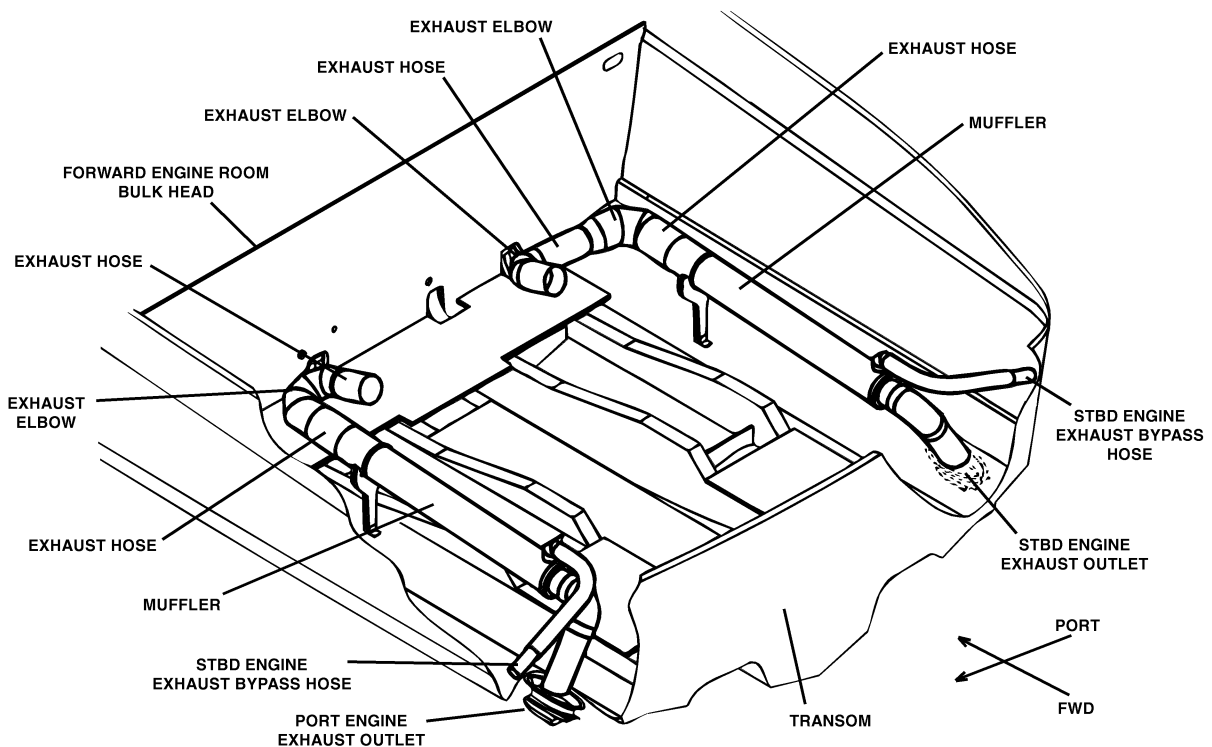


# Supplemental General Information

## EXHAUST SYSTEM

General exhaust system information can be found in *Section 2 Bilge & Underwater Gear* of the owner's manual. Below is an illustration of the 460 DA exhaust system as installed with the standard engine. REFER TO THE ENGINE OWNER'S MANUAL FOR INSTRUCTIONS AND WARRANTY INFORMATION.

**Engine Exhaust System Installation**  
(Port & Starboard) (fig. 12.12.1)

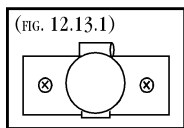


# Supplemental General Information

## ELECTRICAL INSTALLATIONS

This owner's manual supplement contains electrical schematics for your boat. These electrical schematics were generated by technicians at the engineering division for technical reference and service technicians. Sea Ray® does not recommend that you attempt to work on the boat's electrical system yourself. Instead we recommend that you take your boat to your authorized Sea Ray® dealer for service. Sea Ray® reserves the right to change or update the electrical system on any model at any time without notice to the consumer and is NOT obligated to make any updates to units built prior to changes.

## 12 VOLT ACCESSORY RECEPTACLE



Your Sea Ray® Sport Yacht has a 12 volt accessory receptacle at the control station. It is a cigarette lighter style receptacle to be used with any 12 volt accessories using this type of plug.

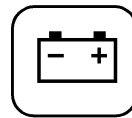
## 120 VOLT AC/12 VOLT AC TRANSFORMERS

Your Sport Yacht is equipped with two 120 volt AC lighting transformers. These will allow operating the 12 volt AC lighting while your Sport Yacht is using the 120 volt AC shore power or generator. This helps relieve some of the lighting load from the DC system.

Read and understand the information for the transformers in your Owner's Manual Packet. These transformers look like hockey pucks. The transformer for lights over the couch is located behind the main distribution panel, the transformer for lights over the galley is located under the galley sink next to the refrigerator.

## BATTERY

Refer to the owner's manual for battery disconnect and maintenance.



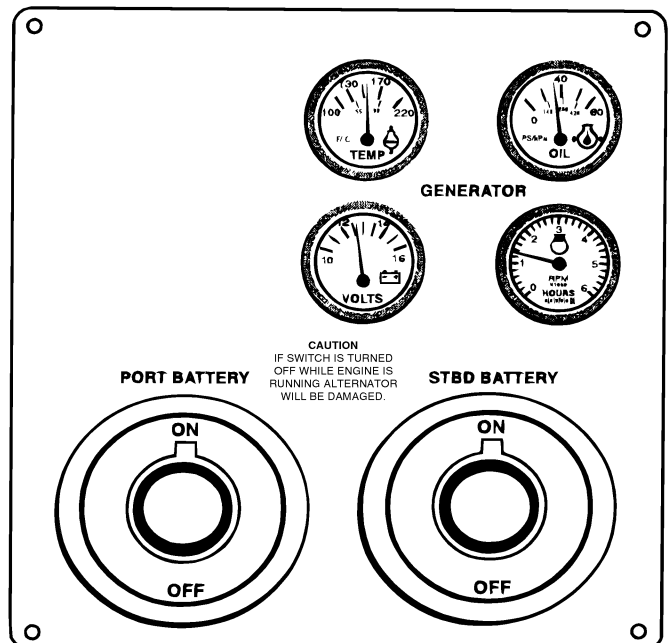
### Battery Specifications:

Group: 27  
Cold Cranking Amps: 575  
Reserve Capacity: 165 Minutes

Sea Ray® recommended batteries are available through your Sea Ray® dealer.

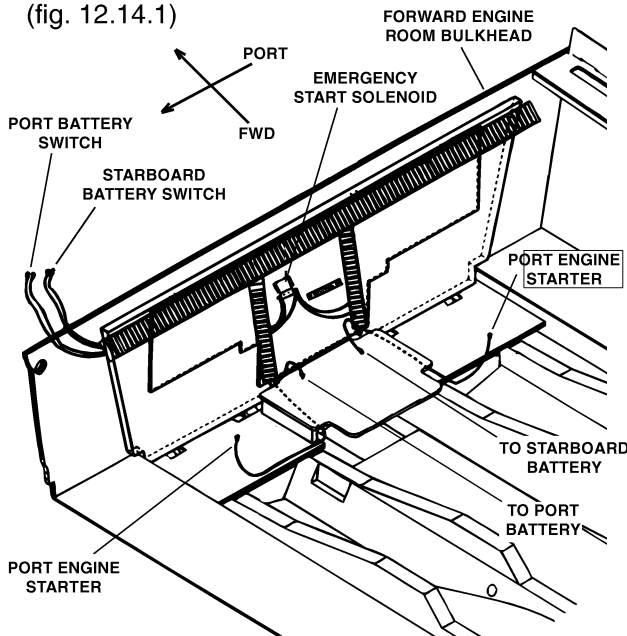
**ALWAYS DISCONNECT BATTERY CABLES BEFORE DOING ANY WORK ON THE ENGINE'S ELECTRICAL SYSTEM OR ALTERNATOR WIRING TO PREVENT ARCING OR DAMAGE TO THE ALTERNATOR.**

## Battery Switch Panel & Generator Gauges (fig. 12.13.2)

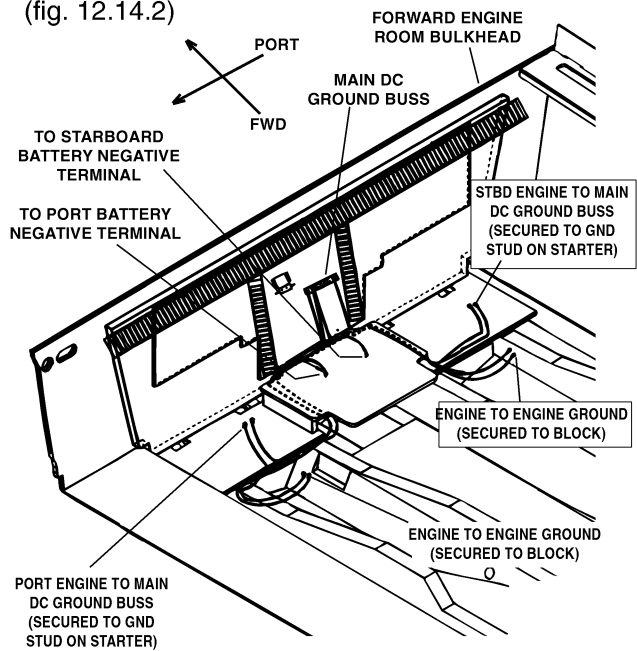


# Supplemental General Information

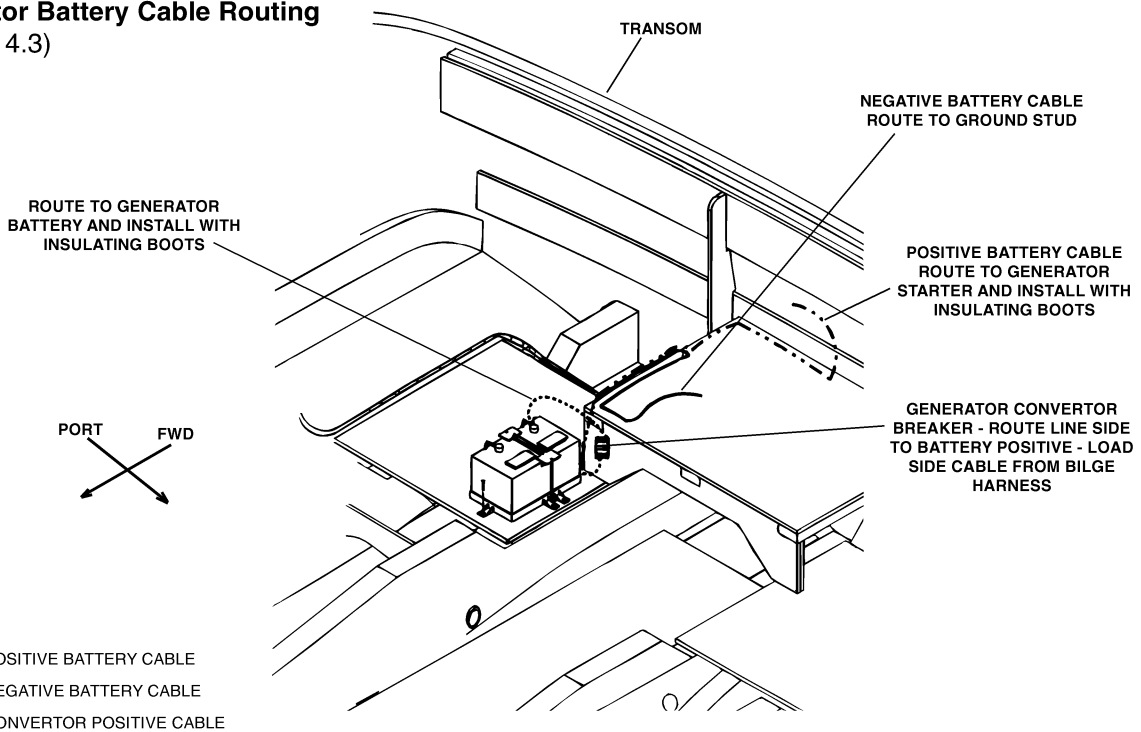
**Positive Battery Cable Routing**  
(fig. 12.14.1)



**Negative Battery Cable Routing**  
(fig. 12.14.2)



**Generator Battery Cable Routing**  
(fig. 12.14.3)



# Supplemental General Information

## VENTILATION SYSTEM / BILGE BLOWER



Sea Ray® Sport Yachts are equipped with electric bilge blowers to remove fumes from the engine compartment and provide ventilation through the deck vents before starting the engine and when operating below cruising speeds. The bilge blowers are located inside the port and starboard sides of the transom.

Bilge blower switches are located on the control station switch panel and on the DC distribution panel.

The Sea Ray® 460 DA blower switches have a two way switching capability. The blower module allows the blowers to be turned ON and OFF at either the control station or the DC distribution panel. Also, they can be turned ON at one station and turned OFF at the other.

### Blower Switch Lights:

**Lights On:** When the blowers are turned ON, the lights in the switches will come on and stay on, indicating that the blowers are functioning correctly.

**Lights Blinking:** If the lights are blinking, it is an indication that one of the blower breakers has tripped and the switch is not receiving power. Reset the tripped breakers.

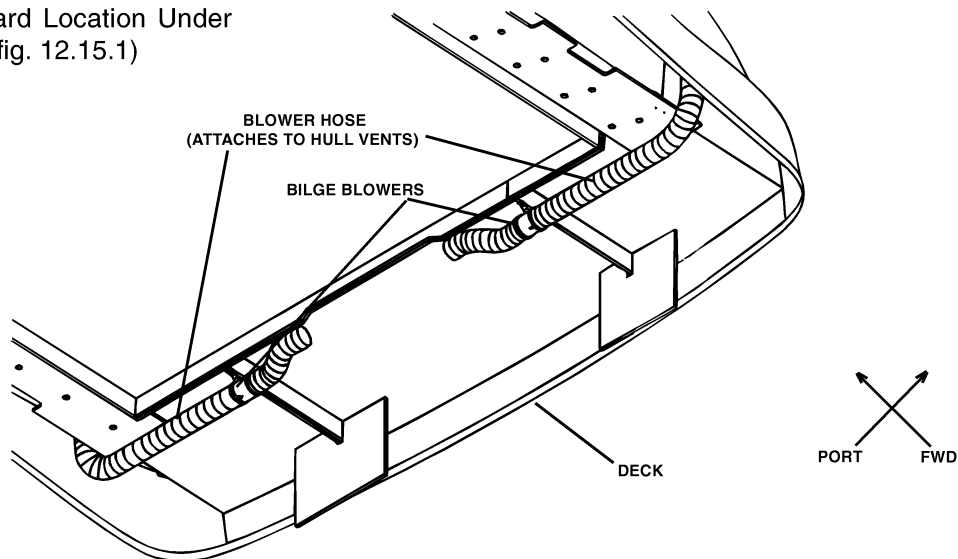
### ! CAUTION

While the engine is running, the battery terminal clamps must not be loosened or detached nor should the battery switch(es) be turned off, otherwise the alternator and other electronic units will be damaged.

### ! DANGER

- Never use an open flame in the battery storage area.
- Avoid striking sparks near the battery.
- A battery will explode if a flame or spark ignites the free hydrogen given off during charging.

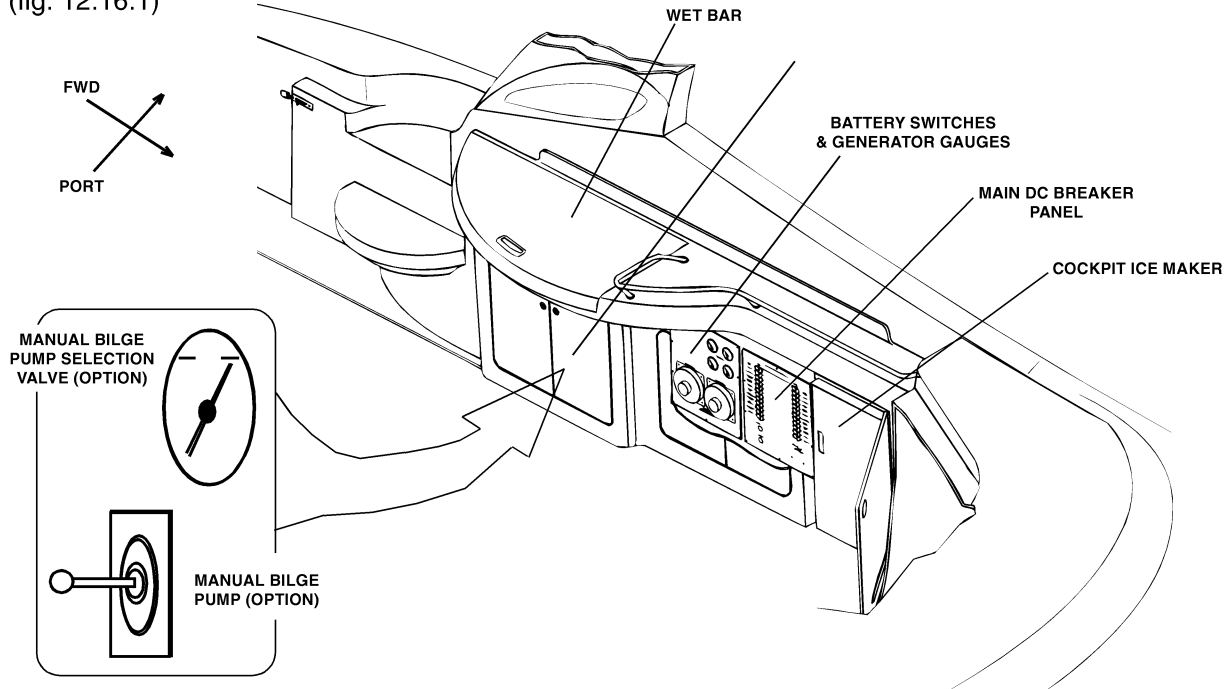
**Typical Bilge Blower Installation**  
(Port & Starboard Location Under  
Cockpit Floor) (fig. 12.15.1)



# Supplemental General Information

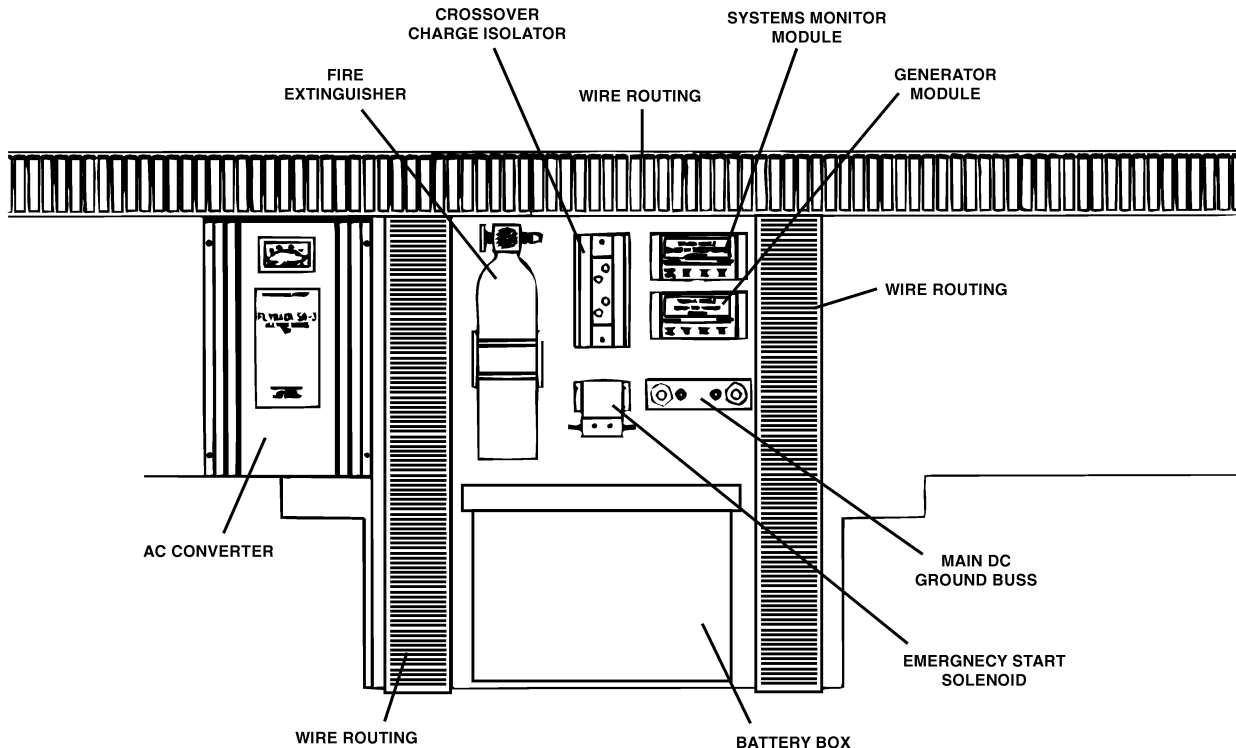
## Accessory Locations (Port Side Panel)

(fig. 12.16.1)



## Bilge Component Board

(Forward Bilge Bulkhead) (fig. 12.16.2)





# Supplemental General Information

## FIRE EXTINGUISHING SYSTEM



The 460 DA is offered with the standard automatic fire extinguishing system. Your boat should also be equipped with approved fire extinguishers.

Following are United States Coast Guard (USCG) requirements and American Boat & Yacht Council (ABYC) recommendations for boats not equipped with the automatic fire extinguishing system option for open boats over 40 feet (4.9 meters) but less than 65 feet (7.9 meters).

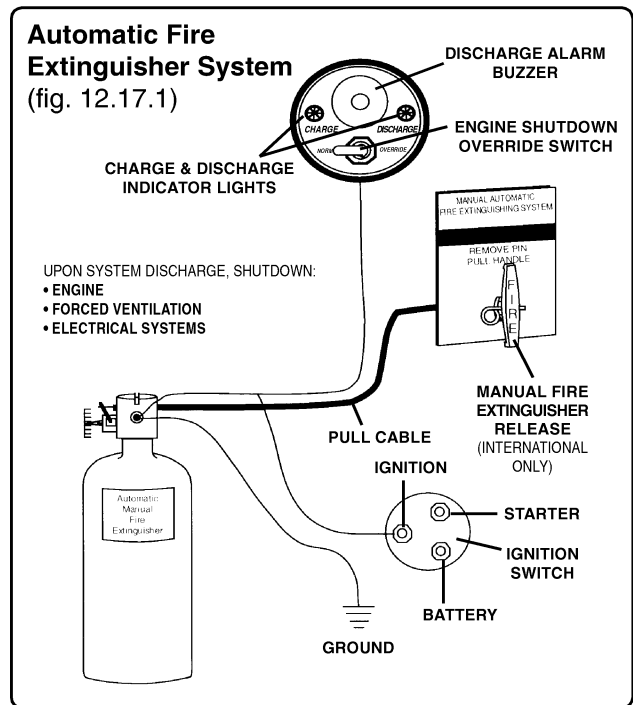
<u>Standard</u>	<u>Boat</u>	<u>Qty.</u>	<u>*Qty.</u>	<u>Type</u>
USCG	460 DA	3	2	B1 / ABC
ABYC	460 DA	4		B1 / ABC

\*Boats with approved fixed extinguishing system, (automatic fire extinguisher system).

Location: Outside engine compartment, steering position, crew's quarters, and galley.

Note: To be ABYC compliant Sea Ray Boats, Inc. follows ABYC construction standards and recommendations.

REFER TO THE OWNER'S MANUAL AND OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.



### **! WARNING**

- In case of fire **DO NOT** open engine compartment.
- Shut down engines, generator and blowers.

# Supplemental General Information

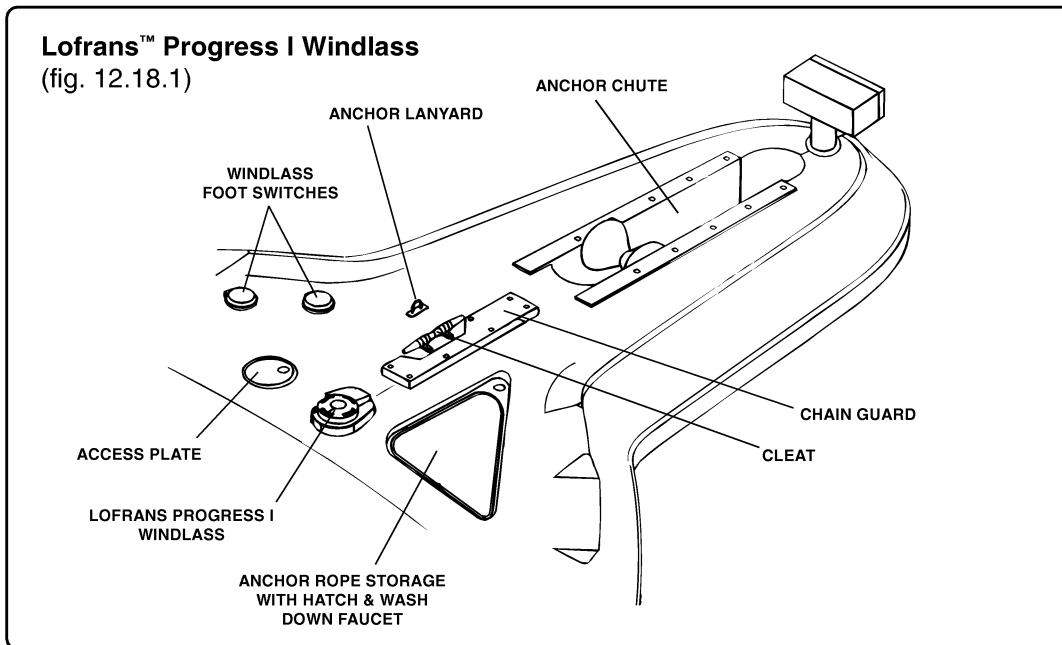
## ANCHORING



To anchor, bring the bow into the wind or current and put the engine in neutral. When the vessel comes to a stop, lower, do not throw, the anchor over the bow. The anchor line should be 5 to 7 times the depth of water.

## ANCHORING ARRANGEMENT

The 460 DA is equipped with a windlass and an anchor chute. Stow the anchor in the chute when not in use. Note: Before using the anchor, be sure the anchor safety line is removed from the anchor and the anchor is secured to the windlass chain.



# Supplemental General Information

## BOW THRUSTER (OPTION)

The optional Bow Thruster is electrically driven and gives the operator more maneuverability of the bow. A control panel mounted at the control station is operated by hand to control port or starboard direction. Go out away from other boats and obstructions to get the feel of Bow Thruster operation.

The Bow Thruster will add the following equipment to your yacht:

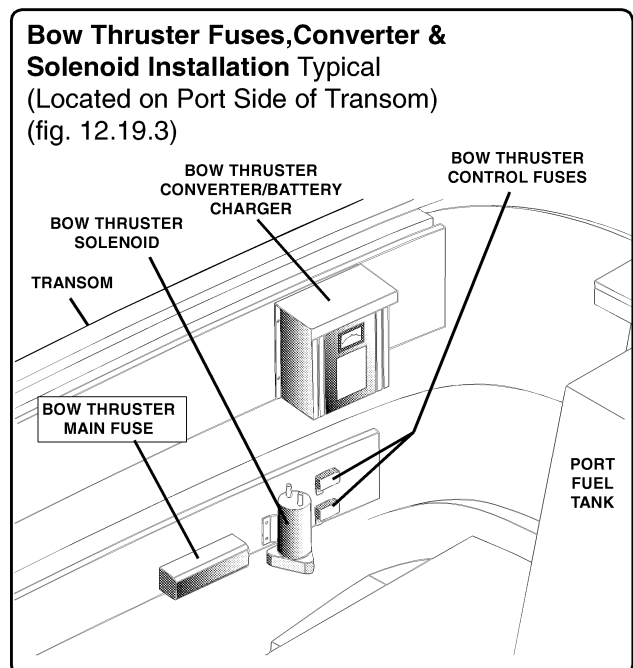
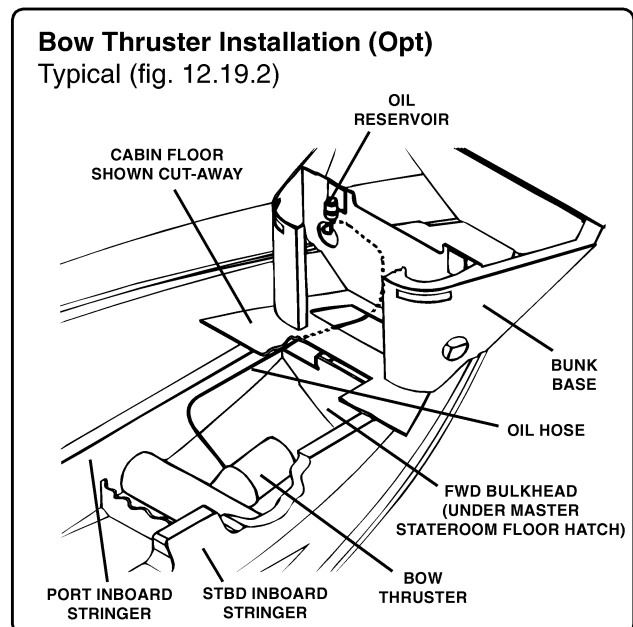
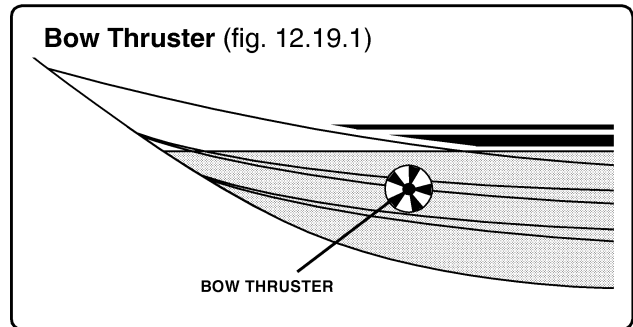
- Bow Thruster – located under the access hatch in the master state room.
- Batteries – Two (2) Group 8D-3 volt batteries connected in series to provide 24 volts DC, located on the aft port side of bilge (see fig. 12.24.1).
- Main Switch – Located on the dash. It controls the battery solenoid on the transom (see fig. 12.17.3 and 12.21.1).
- Converter – Domestic-24 volt / 12 amp, International- 120/240 volt/20 amp, located on the transom (see fig.12.17.3).
- Fuse Protection – Two (2) 350 amp in-line fuses located on the transom (see fig.12.17.3).

Remember – if breakers or fuses fail, always replace with the same amperage device. Never alter overcurrent protection.

Due to the high amperage requirements of the bow thruster, the converter will not assist in thruster operation. It's sole purpose is to recharge the thruster batteries.

After operating the bow thruster, it is recommended that you turn on the bow thruster converter and allow the batteries to be fully recharged. Also, if the bow thruster is not being used regularly, the batteries will need to be fully recharged every 2-3 weeks.

**REFER TO OWNER'S PACKET FOR INSTRUCTION AND WARRANTY INFORMATION.**



# Supplemental General Information

## LIFE SAVING EQUIPMENT (Personal Flotation Device (PFD) )

**STORAGE:** The 460 DA offers lifesaving equipment storage in the helm companion seat compartment.

**OPERATION:** Wear PFD according to manufacturer recommendations. See pamphlet *Federal Requirements And Safety Tips For Recreational Boats* in the owner's packet or get one from your dealer.

**MAINTENANCE:** Rinse with fresh water and let dry thoroughly. Do not store in a damp compartment. Avoid the possibility of mildew.

## BOAT STORAGE

**WET STORAGE PROCEDURES:** Special care for boats that are moored: If permanently moored in salt water or fresh water, your boat will collect marine growth on its bottom. This will detract from the boat's beauty and greatly affect its performance. There are two methods of preventing this:

- Periodically haul the boat out of the water and scrub the bottom with a bristle brush and a solution of soap and water.
- Paint the hull below the waterline with a good grade of antifouling paint. DO NOT paint the engine drive surfaces.

**NOTE:** There are EPA regulations regarding bottom paint application. Consult your marine paint dealer for proper application methods.

**SECURITY CONSIDERATIONS:** Be conscious of the

security of your boat. Always remove the keys from the ignition, lock hatches, lock the cabin door. Remove and stow any removable electronic gear (fishfinders, LORAN, etc.) and personal gear (fishing poles, etc.) normally left aboard your boat.

## TROUBLESHOOTING

### List of Reference Manuals and Drawings

**PERFORMANCE:** Refer to the owner's manual.

**ENGINE:** Refer to the owner's manual and/or the engine manual.

**ELECTRICAL:** Refer to electrical section of the owner's manual and electrical schematics in this owner's manual supplement. Only a qualified marine electrical technician may service the boat's electrical system.

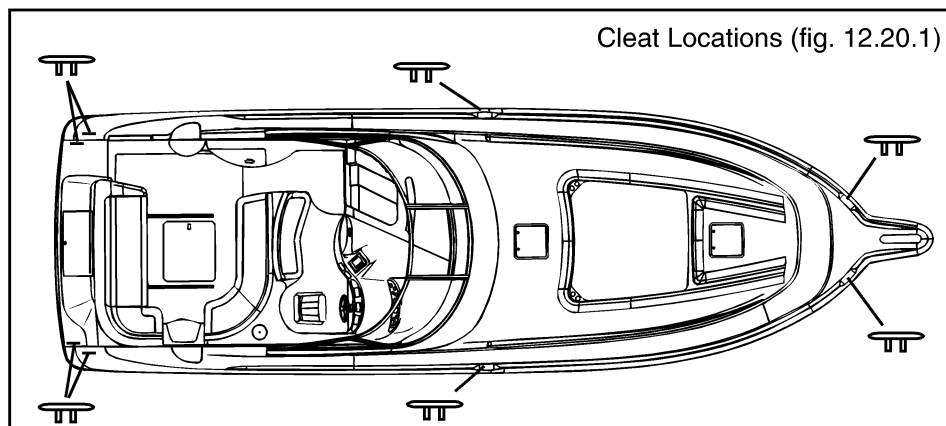
### Repair and Parts Facilities

To find a Sea Ray® dealer in your area, call: Sea Ray® Customer Service: 1-800-SRBOATS  
FAX: 1-314-213-7878

To find repair and parts facilities for equipment installed on your boat, refer to the original equipment manuals (OEMs) found in the owner's manual packet.

## CLEATS

Cleats are intended for mooring use only. Do not use cleats for towing or lifting the boat. Figure 12.19.1 illustrates the location of cleats on your boat.



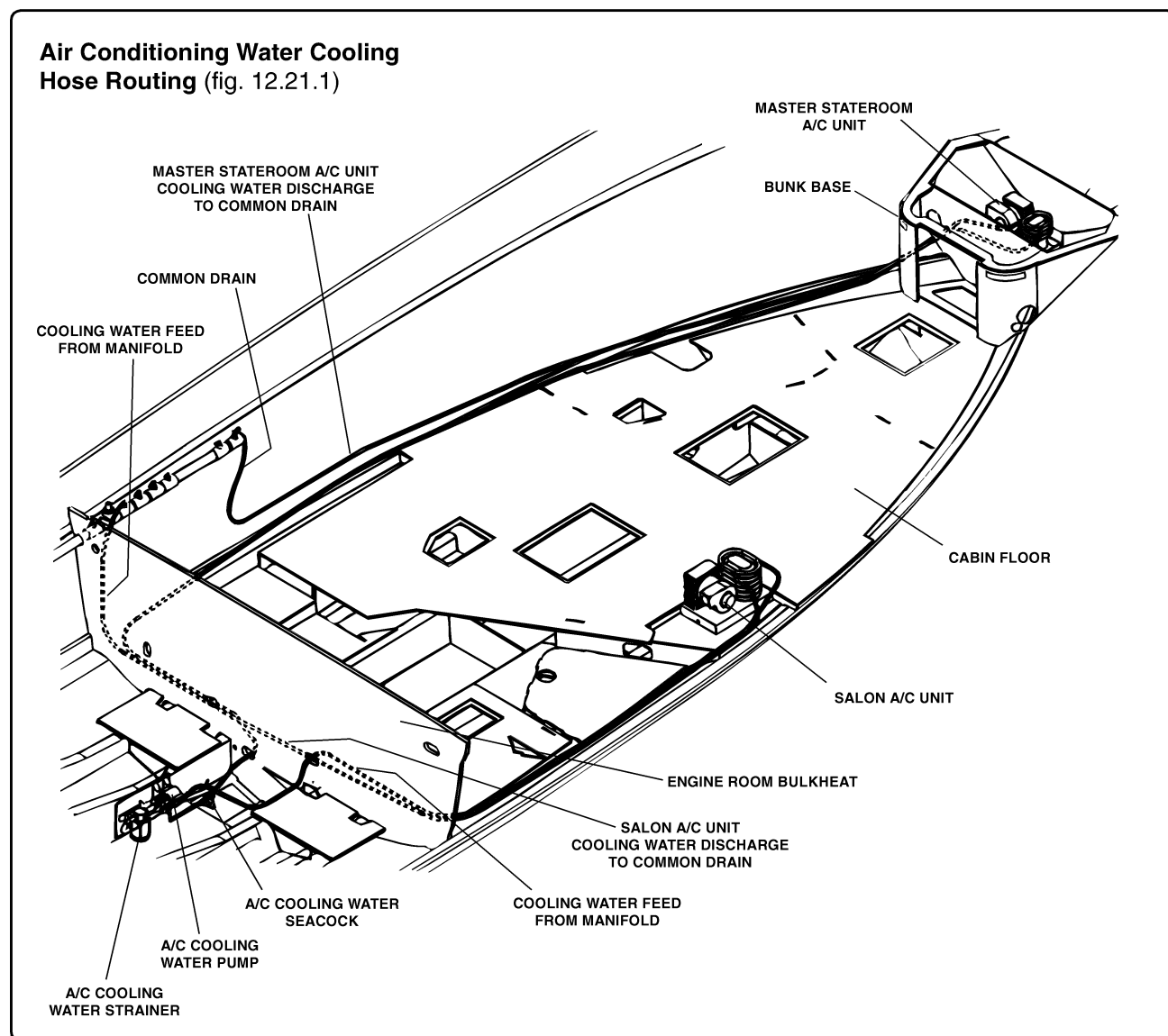
# Accessories

## AIR CONDITIONING / HEATING SYSTEM



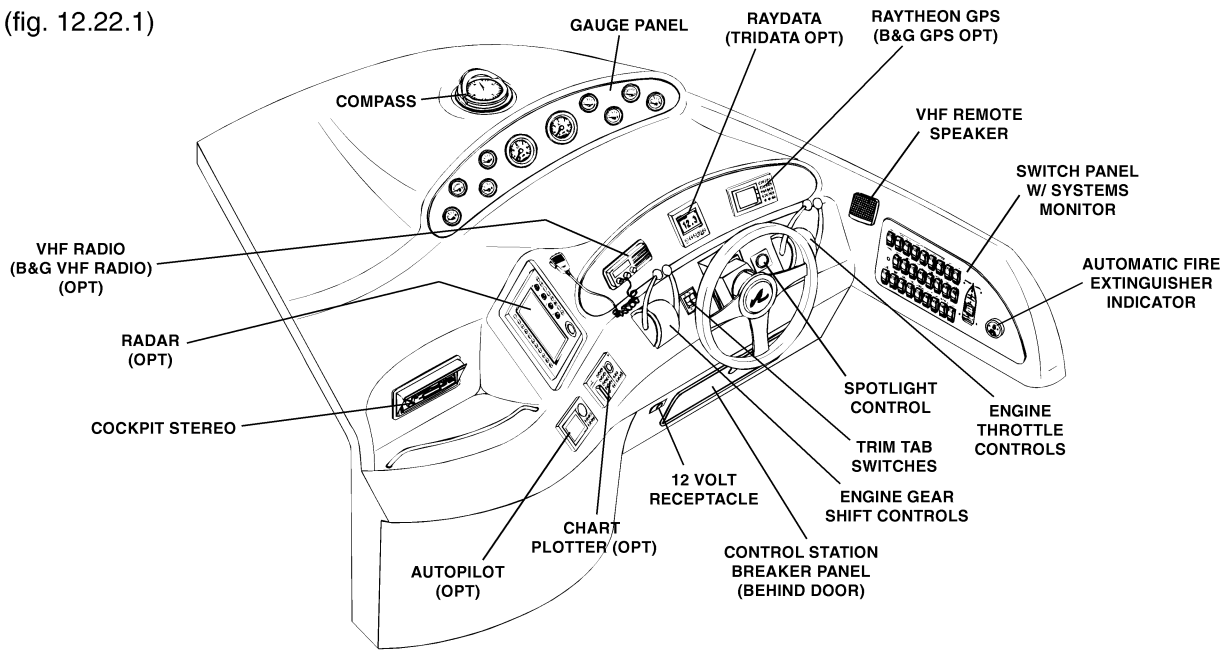
Air Conditioning and Heating System information can be found in *Section 8 Accessories* of the owner's manual.

REFER TO THE OWNER'S MANUAL AND OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

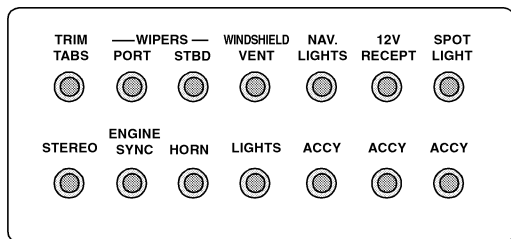


# Control Station Layout

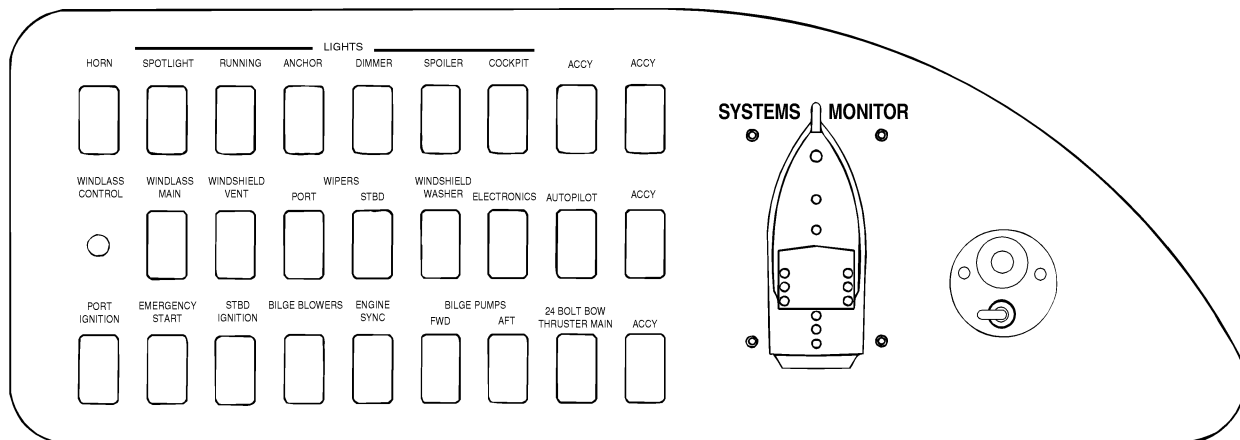
**Control Station**  
(fig. 12.22.1)



**Control Station Breaker Panel**  
(fig. 12.22.2)



**Switch Panel**  
(fig. 12.22.3)



# Instruments & Controls

## SYSTEMS MONITOR PANEL

The systems monitor panel, located at the control station, monitors critical engine functions, bilge pumps, high water emergency bilge pump, shower sump pump (if installed) and generator shutdown. It is equipped with a test button to test the indicator lights and the engine alarm buzzer. The panel is protected by a 5 amp fuse installed in the circuit breaker which is on the main DC breaker panel.

Each engine is equipped with three alarm senders – water temperature, oil pressure and transmission temperature – which are connected to the alarm buzzer and appropriate indicator light on the systems monitor panel.

The warning buzzer and corresponding indicator light will be activated if the cooling system water temperature rises too high, the engine oil pressure gets too low, or the transmission temperature rises too high. Refer to the Engine Operator's Manual for proper gauge readings or aid in finding and correcting the problem.

**Note:** Engines equipped with electronic fuel injection (EFI) or multi port injection (MPI) are equipped with one engine indicator light. If the alarm sounds and the light activates, pay particular attention to the engine gauges to distinguish the problem.

It is recommended that the system indicator lights and alarm be tested at least once every five hours of operation. To test, push the test switch on the systems monitor panel. All indicator lights and alarm should activate.

In the event the bilge high water alarm and light are activated, immediate attention to the bilge is required.

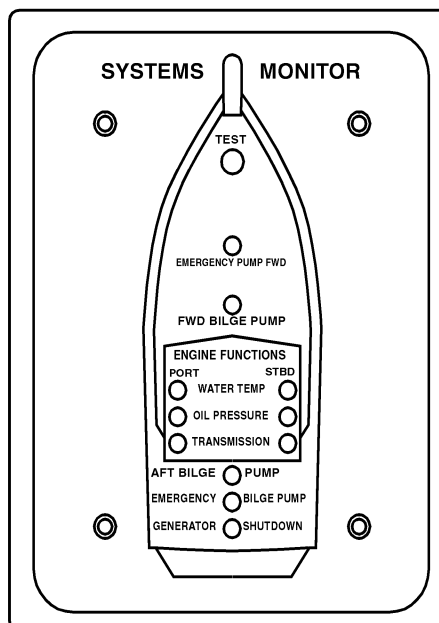
### CAUTION

**IF THE ENGINE INDICATOR(S) AND ALARM COME ON WHILE RUNNING, QUICKLY CHECK AND NOTE THE OIL PRESSURE AND WATER TEMPERATURE GAUGE READINGS. TURN OFF ENGINE IMMEDIATELY. Check for leaks and see if the cooling water pickup is blocked or clogged. If necessary, clear the water pickup of any foreign matter. DO NOT RESTART THE ENGINE UNTIL CAUSE FOR ALARM SOUNDING HAS BEEN FOUND AND CORRECTED.**

### NOTICE

**If an engine stalls during docking or slow maneuvering, the buzzer will sound until the engine is restarted. The buzzer will also sound while the engines are cranking and will continue until they start.**

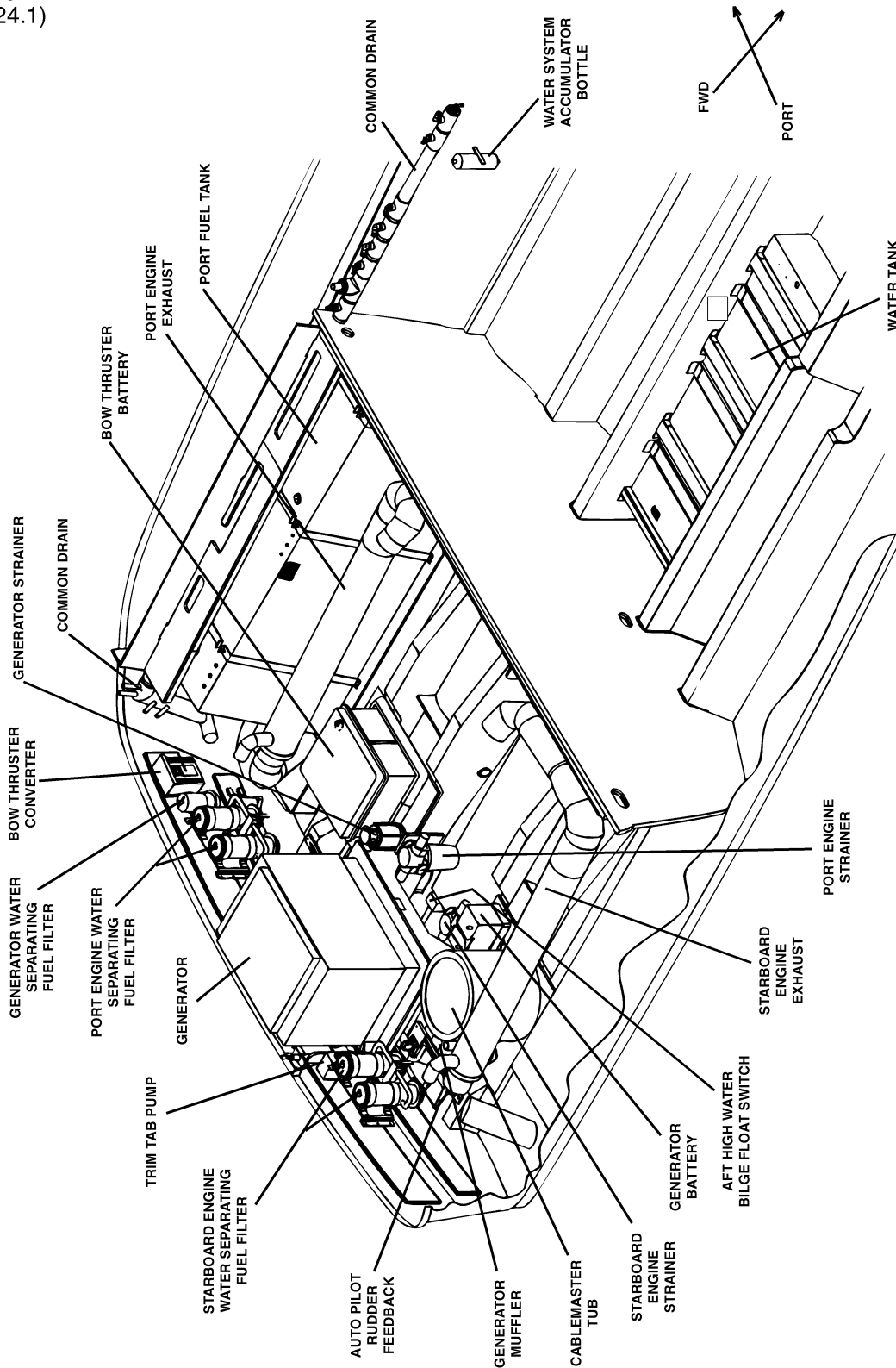
Light	Indicates (When Lit)
SUMP PUMP (IF SUPPLIED)	SHOWER SUMP PUMP IS RUNNING
EMERGENCY PUMP	FWD EMERGENCY BILGE PUMP IS RUNNING
FWD BILGE PUMP	BILGE PUMP IS RUNNING
WATER TEMPERATURE	ENGINE COOLING SYSTEM IS TOO HOT
OIL PRESSURE	ENGINE OIL PRESSURE IS TOO LOW
TRANSMISSION TEMPERATURE	TRANSMISSION TEMPERATURE IS TOO HOT
AFT BILGE PUMP	BILGE PUMP IS RUNNING
EMERGENCY BILGE PUMP	EMERGENCY BILGE PUMP IS RUNNING
GENERATOR SHUTDOWN	GENERATOR OIL PRESSURE IS TOO LOW



(fig. 12.23.1)

# Bilge Layout

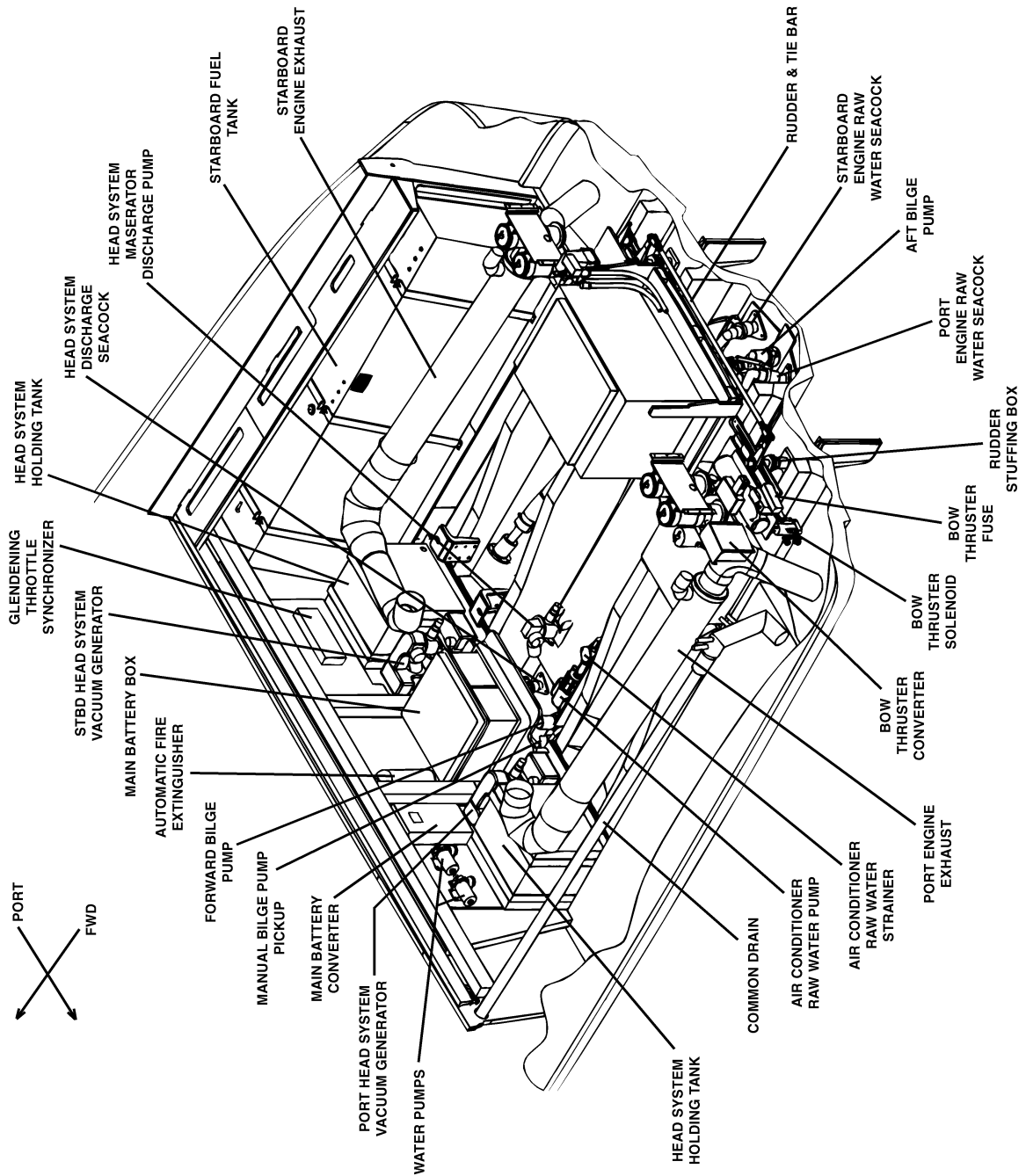
Bilge Layout  
(fig. 12.24.1)





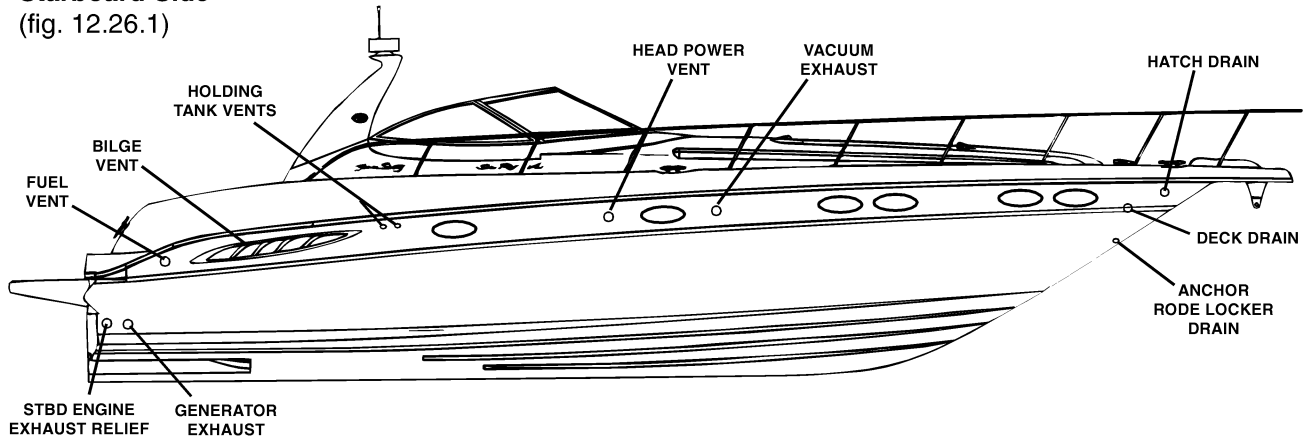
# Bilge Layout

Bilge Layout  
(fig. 12.25.1)

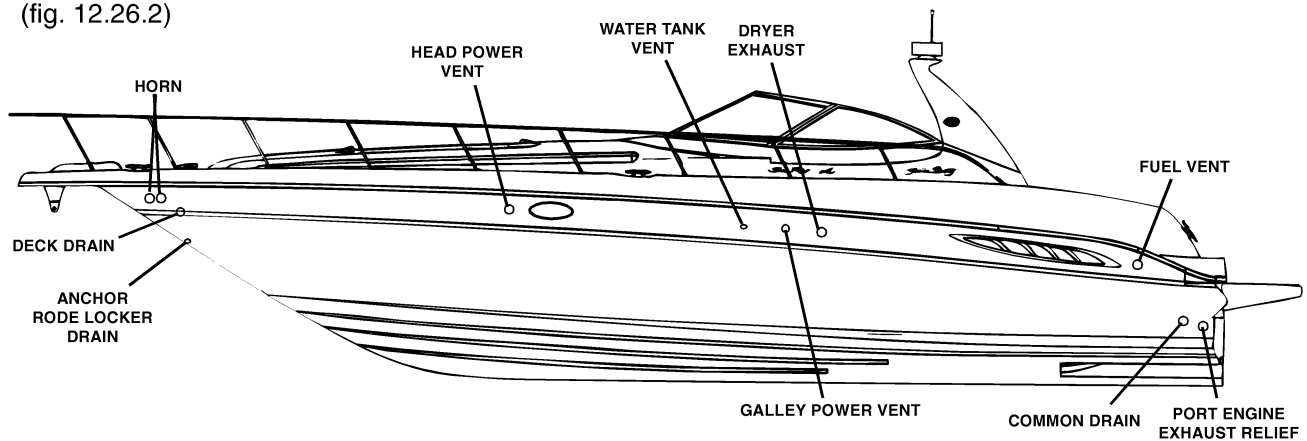


# Location of Through-Hull Fittings

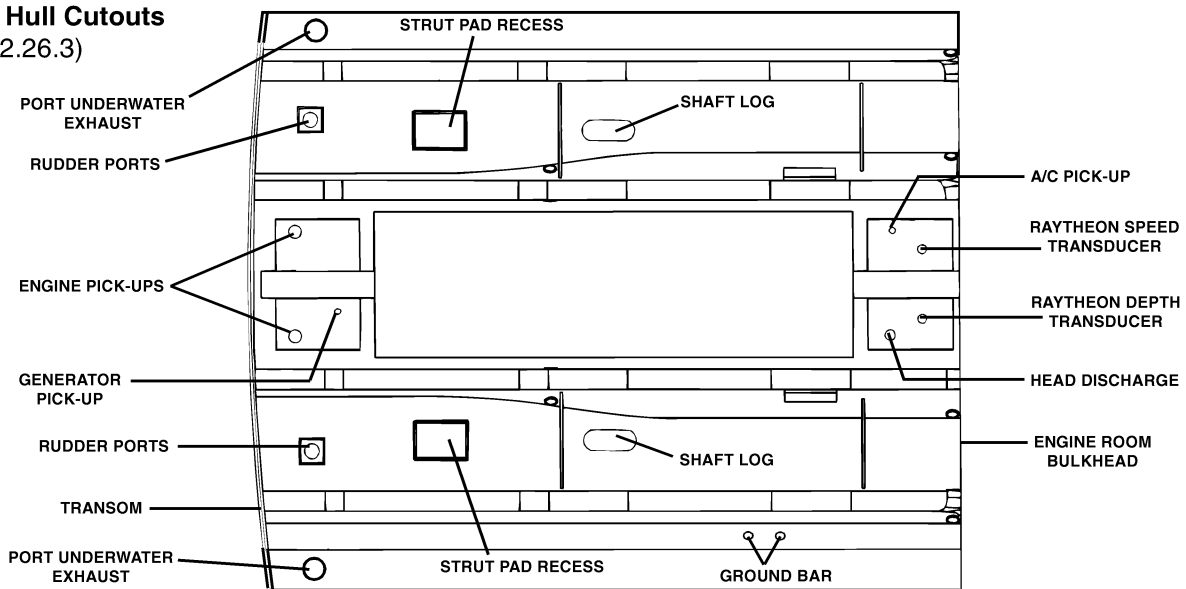
**Starboard Side**  
(fig. 12.26.1)



**Port Side**  
(fig. 12.26.2)



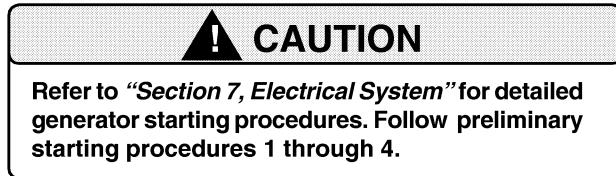
**Bilge Hull Cutouts**  
(fig. 12.26.3)



# Generator Supplement

## GENERATOR STARTING ADDENDUM

Sea Ray® strongly urges you to fully comply with the manual provided by the generator manufacturer. The



generator is warranted separately by the generator manufacturer, not Sea Ray®. Follow the recommended maintenance and warranty schedule in your Generator Operator's Manual included in the Owner's Manual Packet. Generator abuse or improper maintenance may adversely affect claims made under generator manufacturer separate warranty.

## STARTING THE GENERATOR

**NOTE: PRE-START GENERATOR PRIOR TO GETTING UNDERWAY AS THERE IS A POSSIBILITY THAT IT WILL NOT PICK UP WATER IF STARTED UNDERWAY. MAKE SURE THE "MAIN GENERATOR" BREAKERS ARE "OFF" AND THERE IS NO LOAD ON THE GENERATOR BEFORE STARTING IT.**

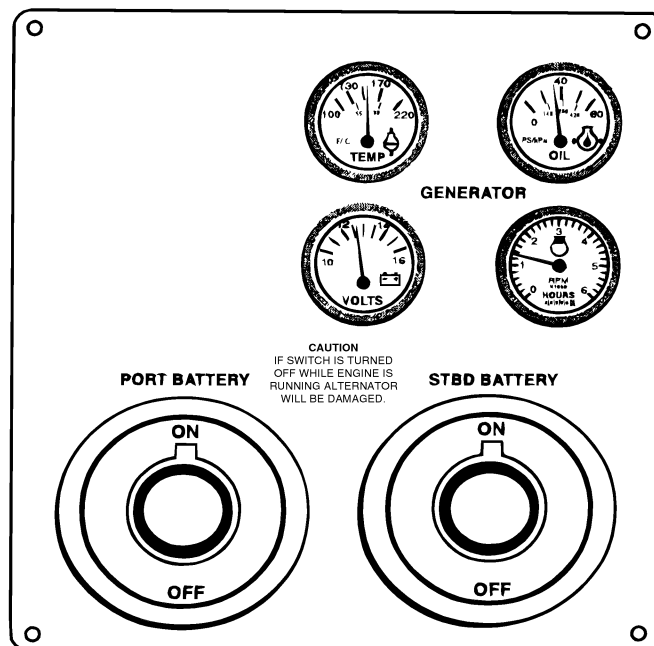
**To start the generator: (Switches located on the 12 volt distribution panel or on the generator set.)**

1. Check the fuel tank levels. The generator draws from the port or starboard fuel tank(refer to Section 4 "Crossover Fuel System").
2. Check the oil and coolant levels. See your Generator Operator's Manual for proper readings.
3. Check generator for coolant drain plug installations.
4. Open the generator seacock.
5. Press and release the "GENERATOR" switch on the main distribution panel. This puts the generator into the preheat mode and the light in the switch will begin to flash for approximately 30 seconds. The generator can be started at any time during this period.  
At the end of the 30 second period the preheat cycle is complete and the light begins to flash rapidly, indicating that the generator must be started in the next few seconds or the cycle must be repeated.
6. Push and hold the "GENERATOR" switch until the unit starts, then release the switch.
7. Once the generator is started, the light will stay on continuously.

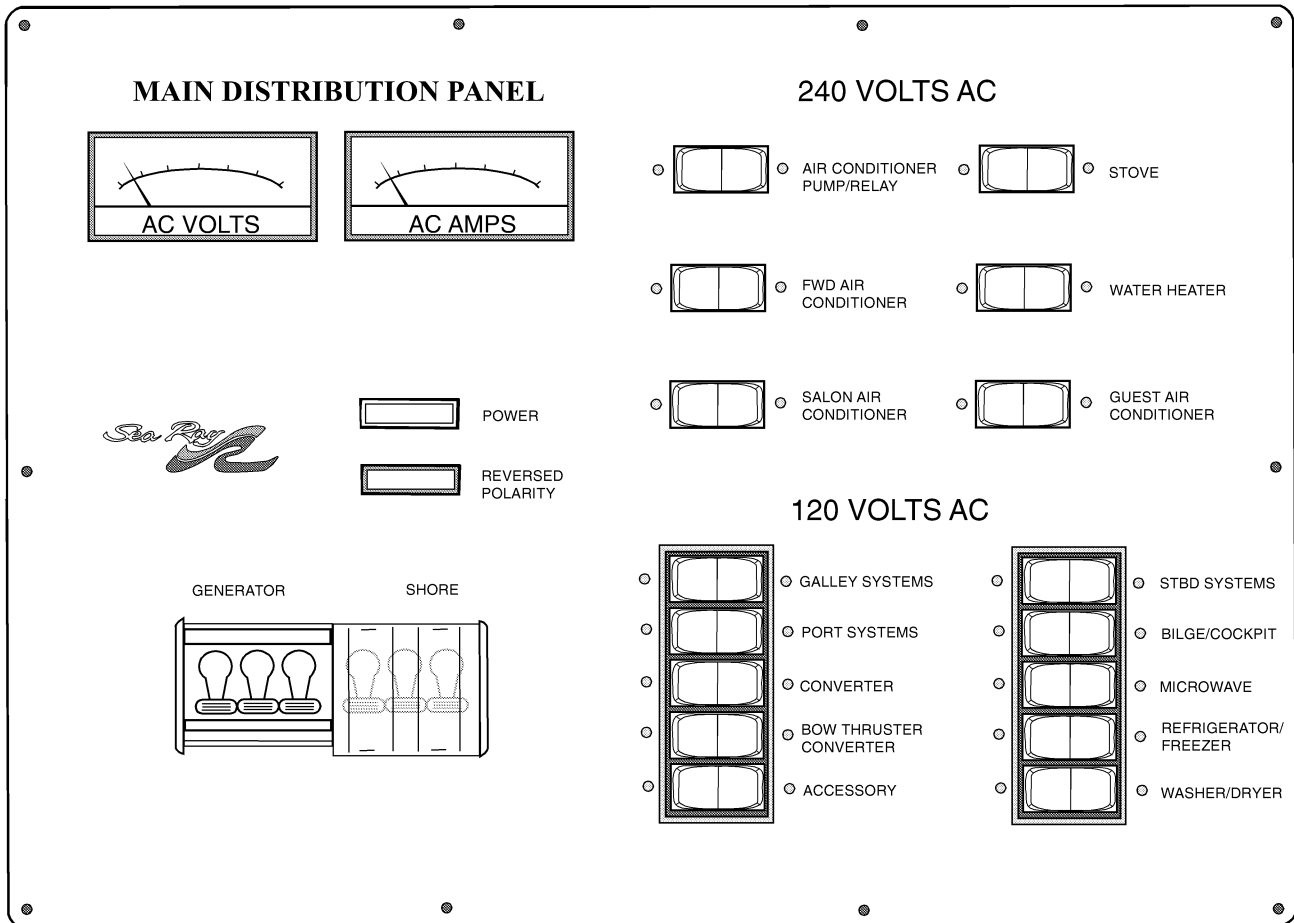
## Bypass Switch

To start the Westerbeke® generator from the generator mounted controls, a bypass switch, located on the side of the generator mounted control box, must be turned ON. The bypass switch must be OFF to start and stop the generator from the DC main distribution panel.

**Battery Switch Panel & Generator Gauges**  
(fig. 12.27.1)

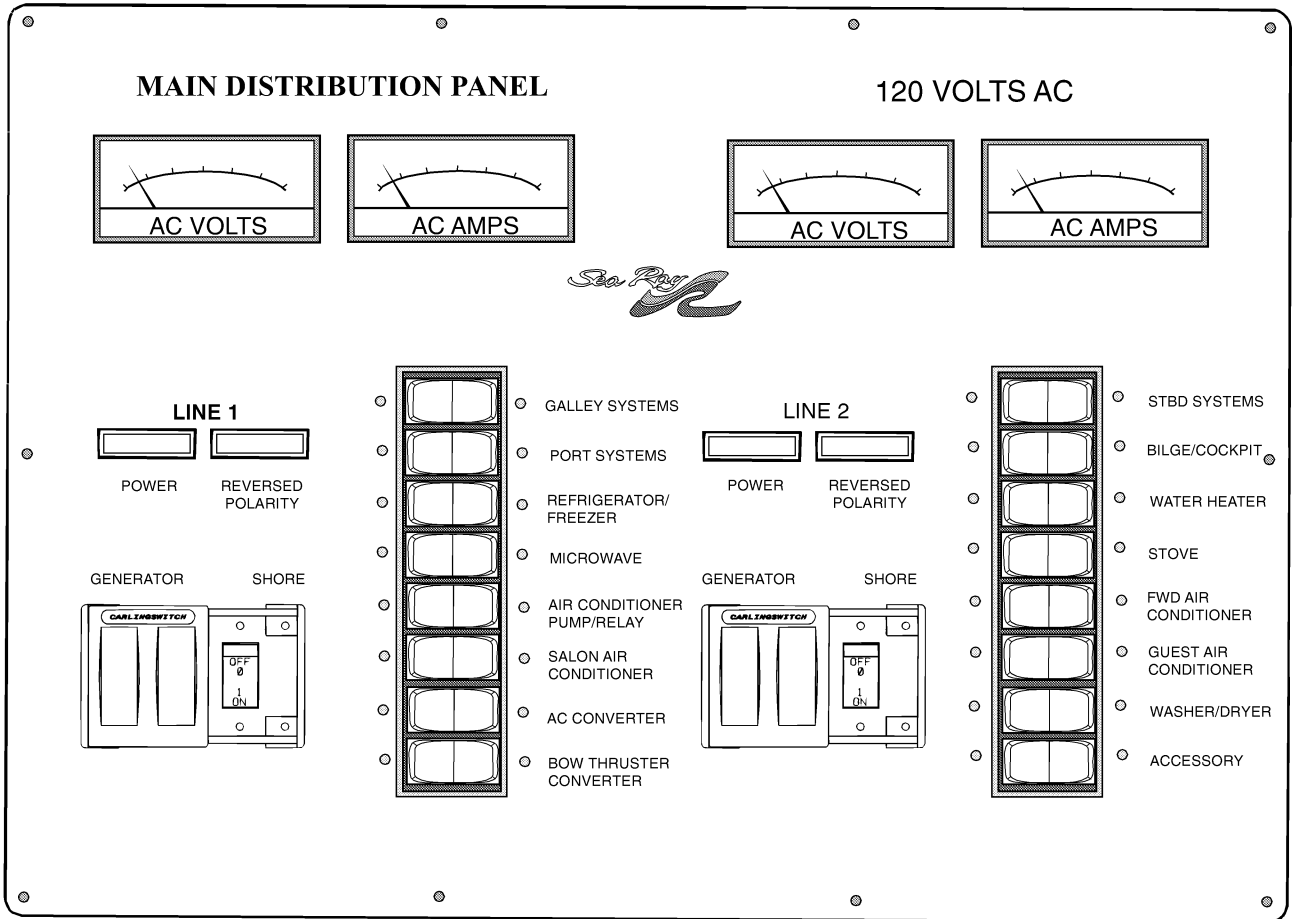


# Standard AC Main Distribution Panel (240V)



(fig. 12.28.1)

# Optional AC Main Distribution Panel (120V)



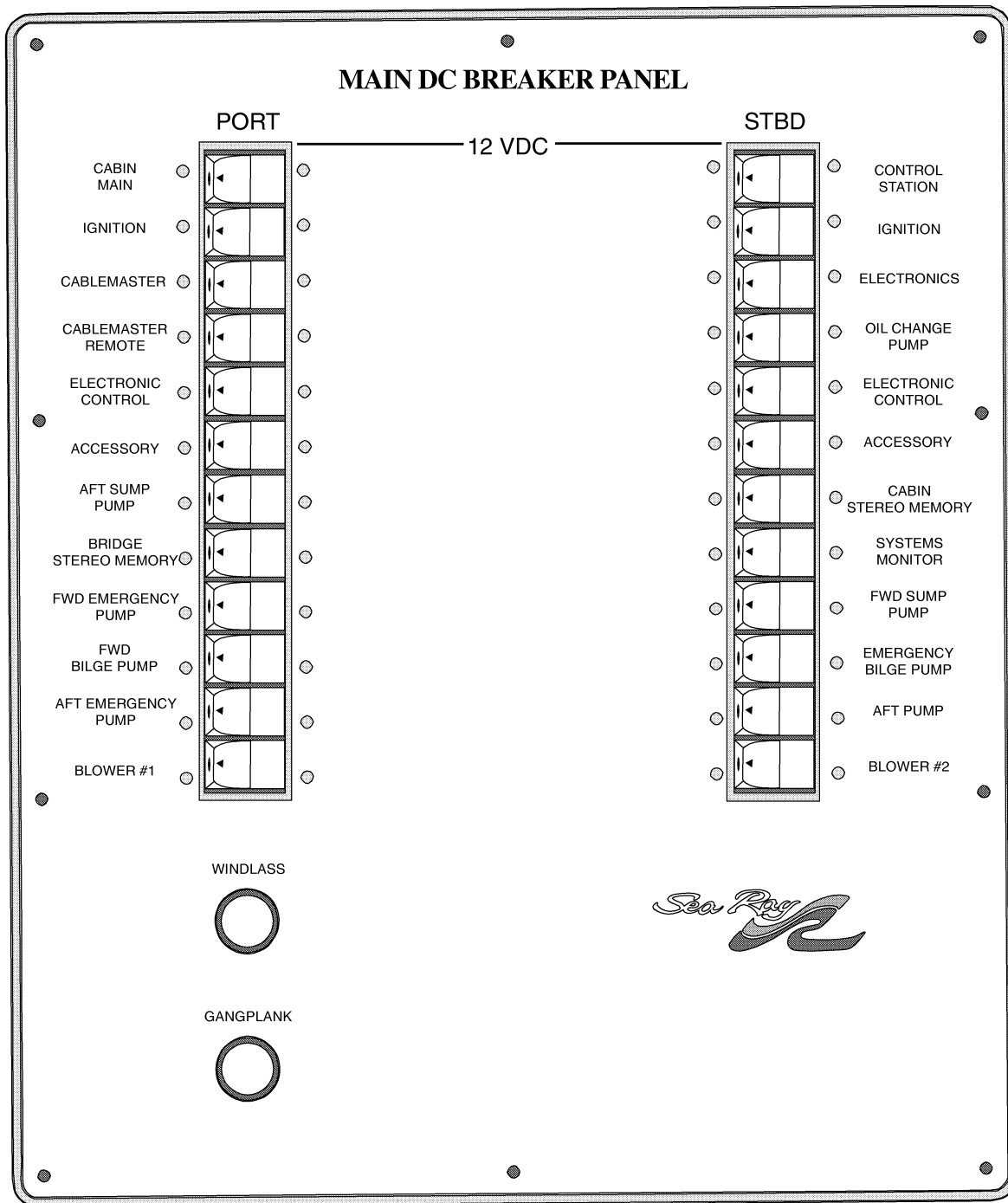
(fig. 12.29.1)

# Main DC Distribution Panel

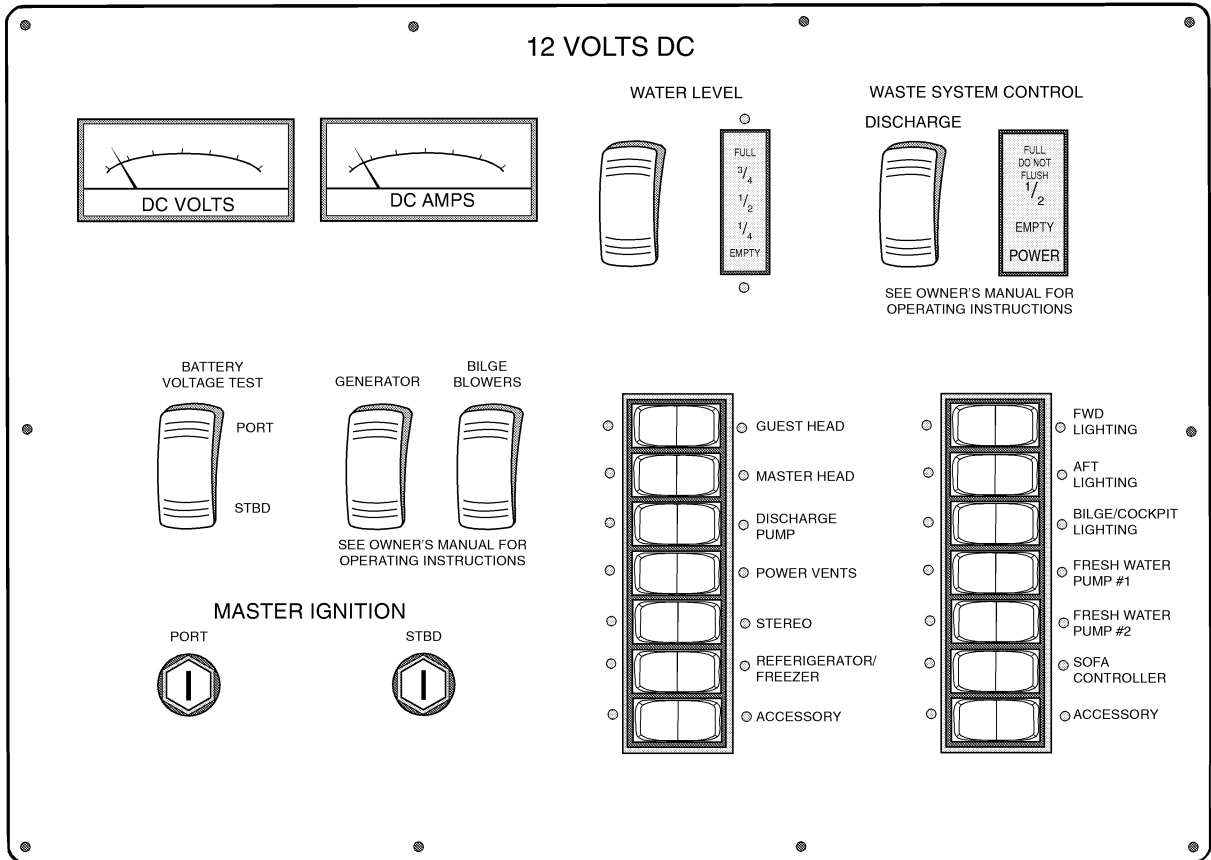
## Main DC Distribution Panel

Located Under Entertainment Center

(fig. 12.30.1)

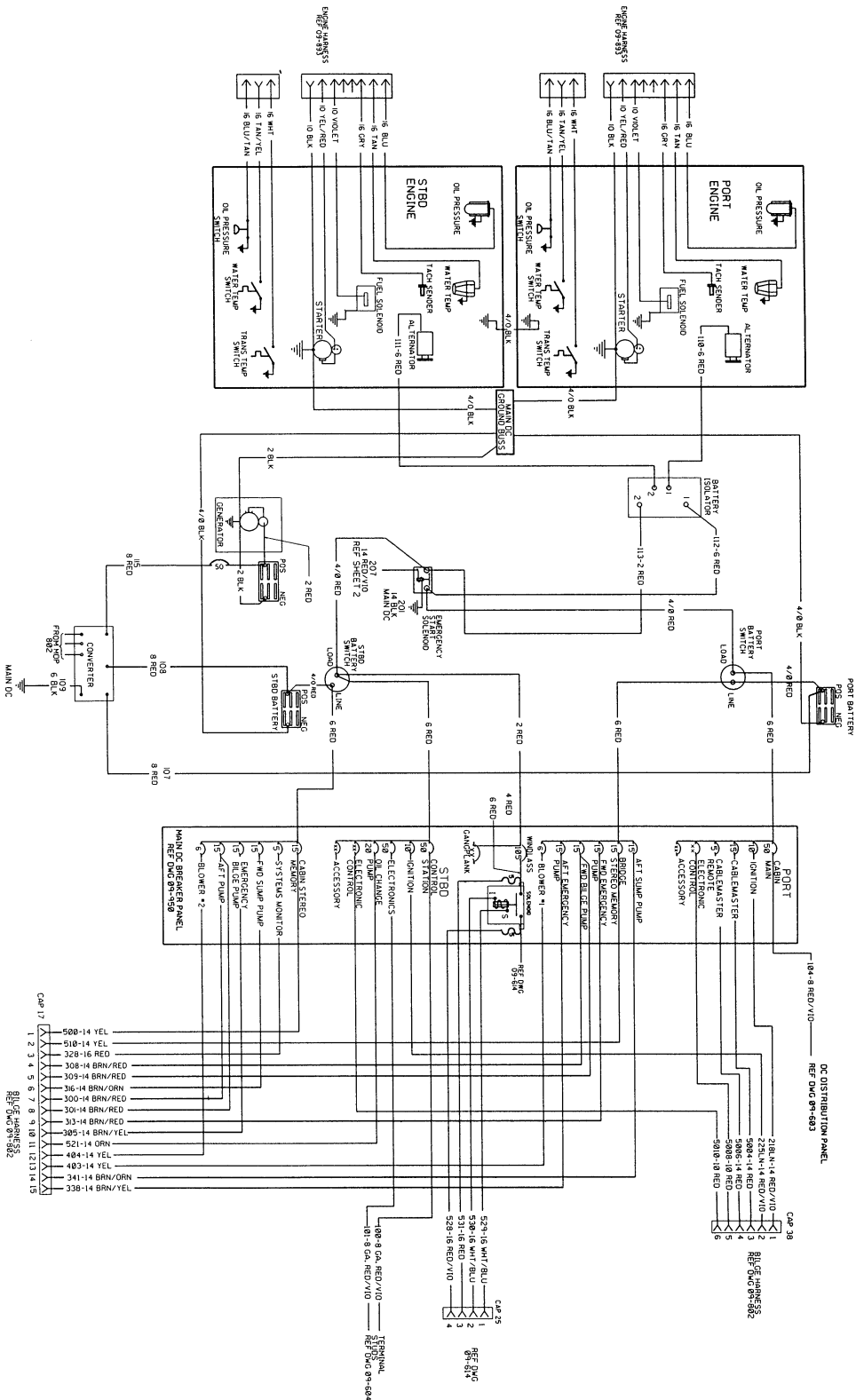


# DC Breaker & Control Panel (12V)



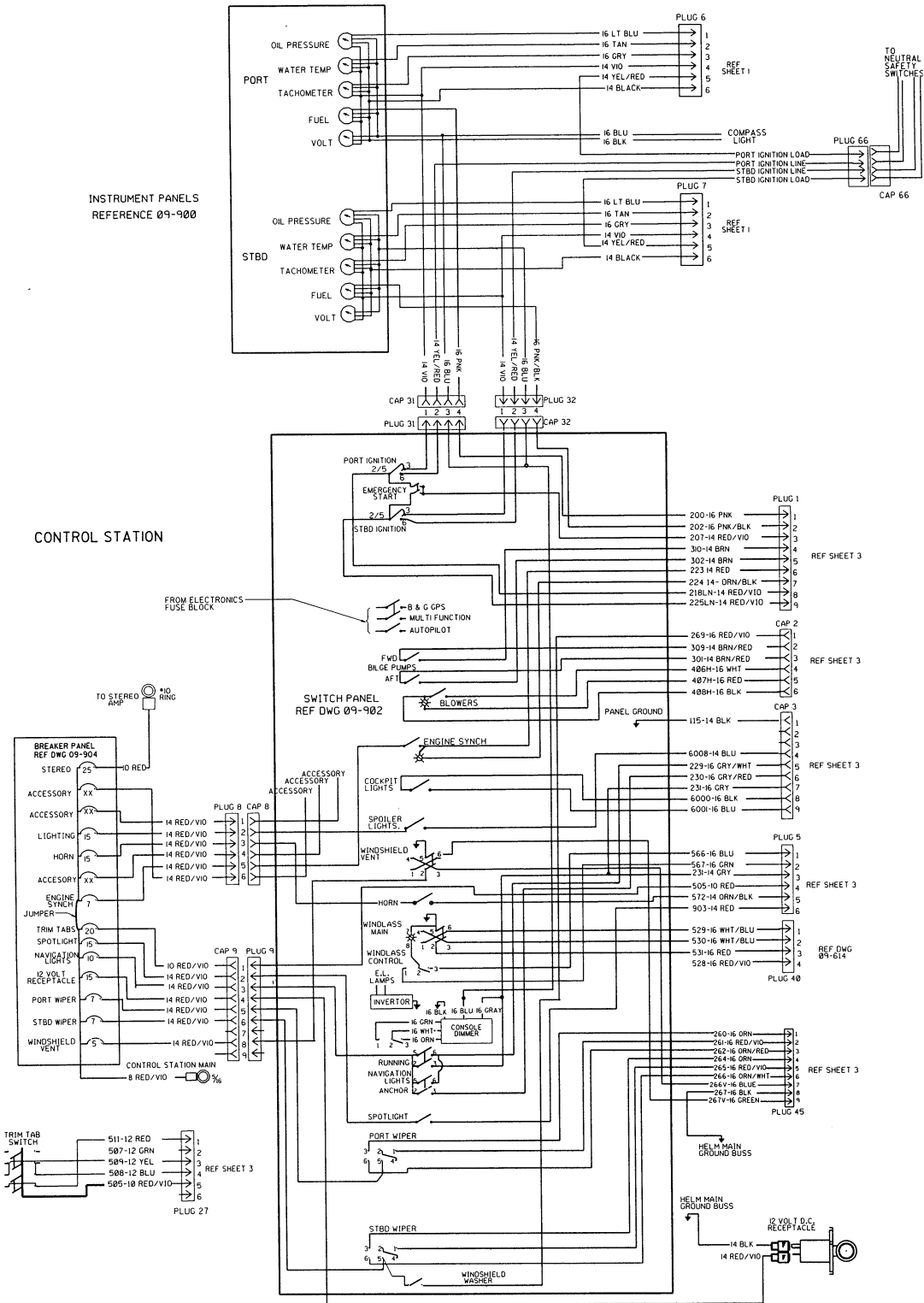
(fig. 12.31.1)

# DC Wiring Schematic (1 of 2)

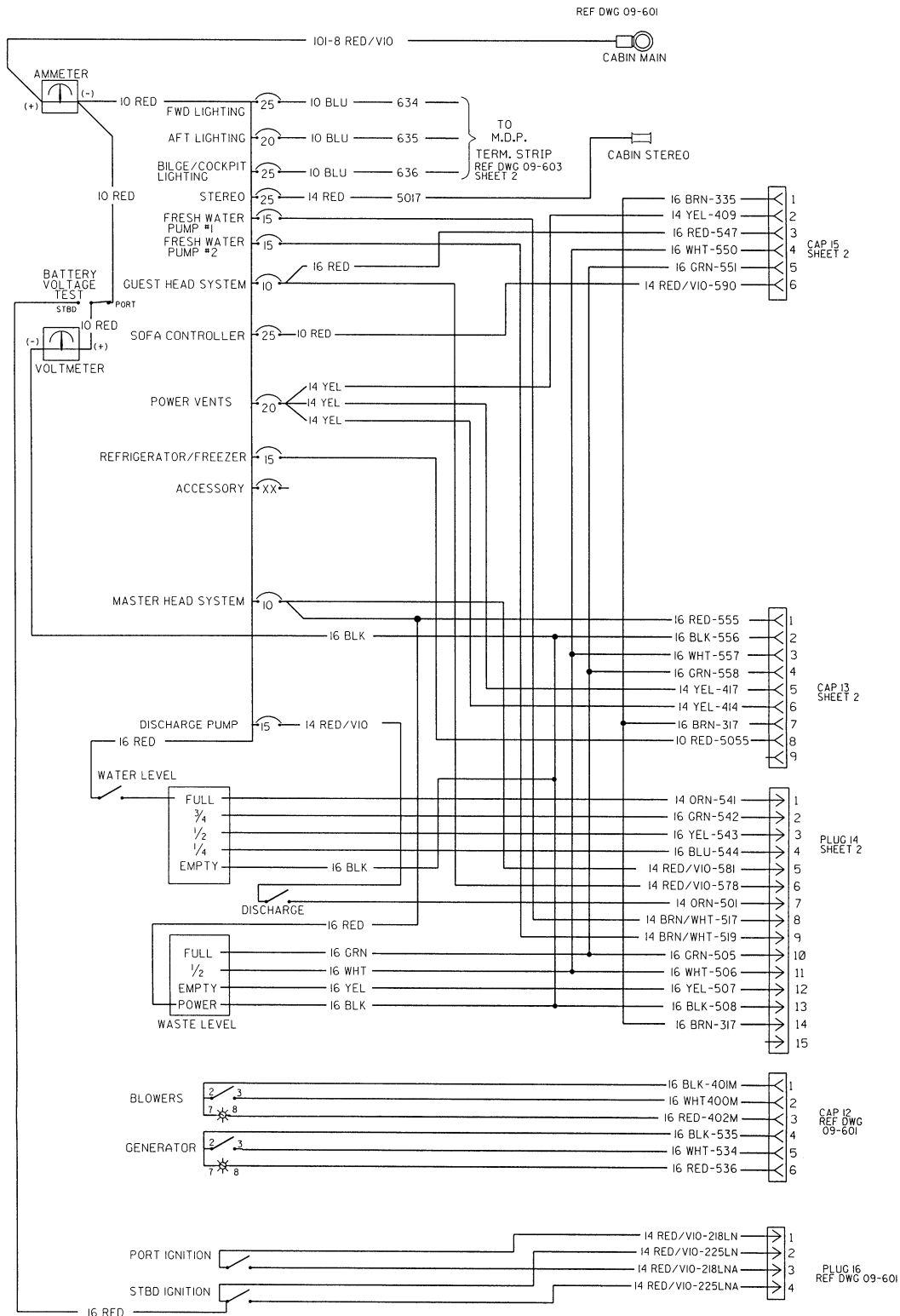




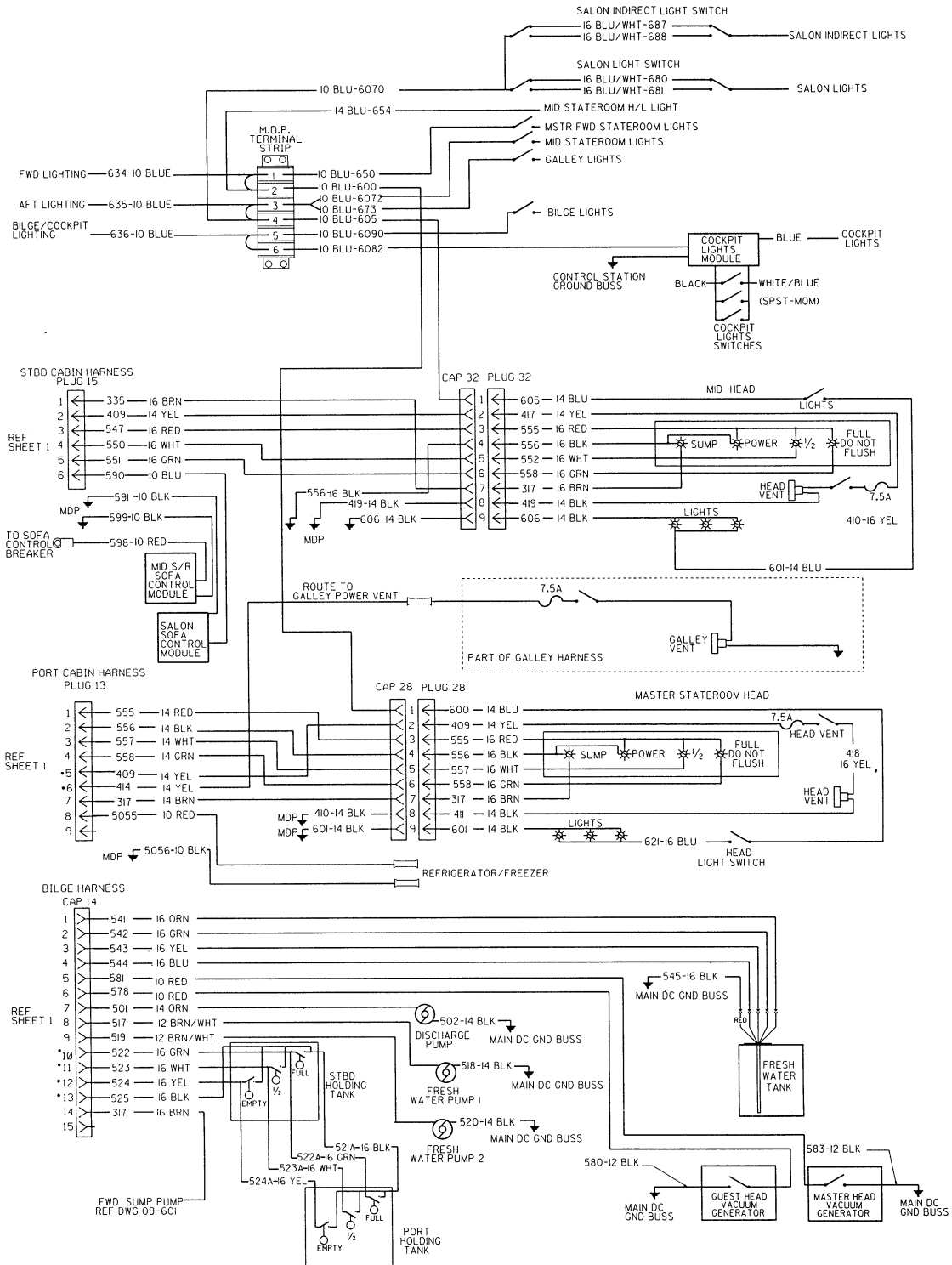
# DC Wiring Schematic (2 of 2)



# DC Cabin Wiring Schematic (1 of 2)

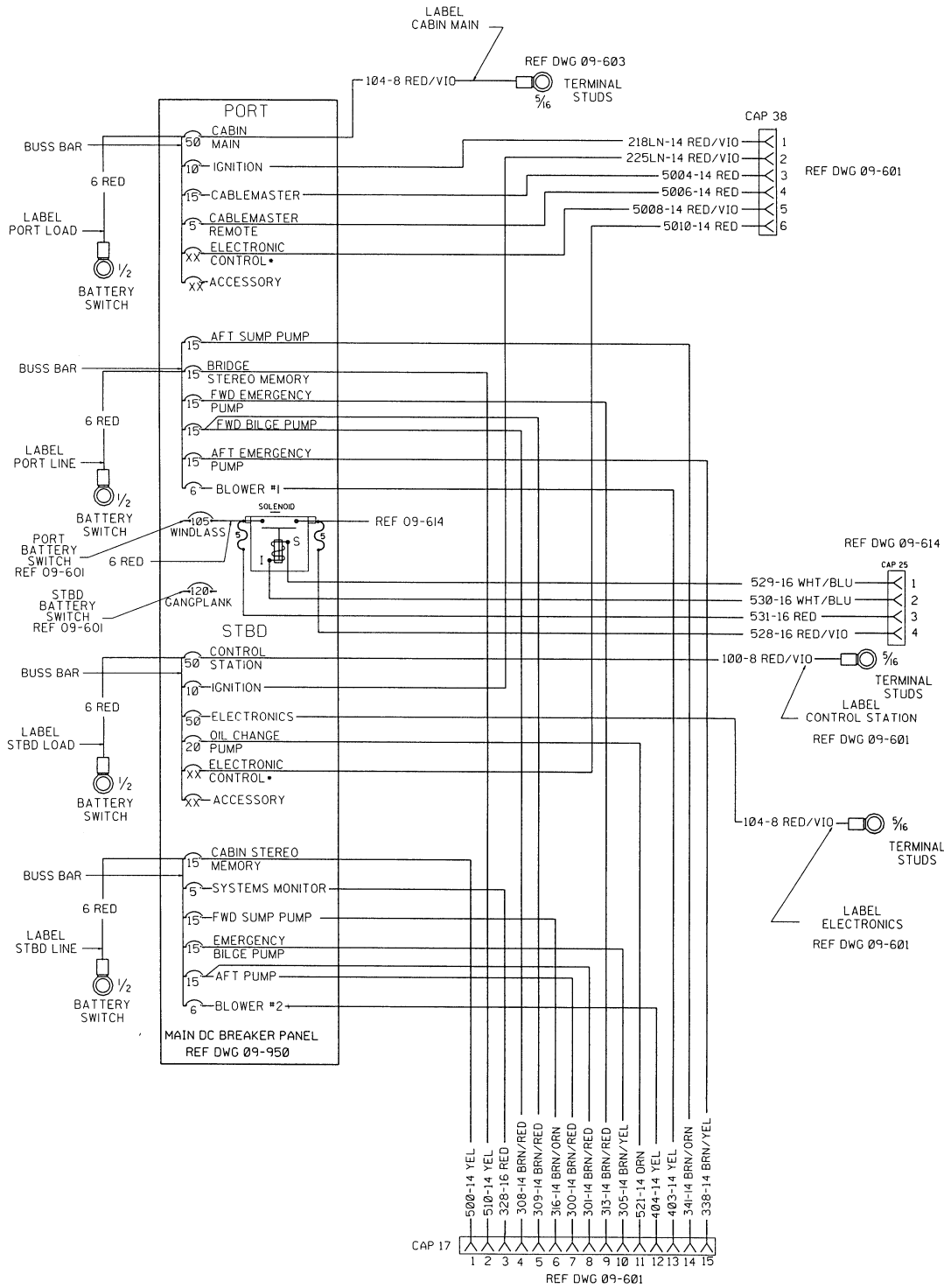


# DC Cabin Wiring Schematic (2 of 2)



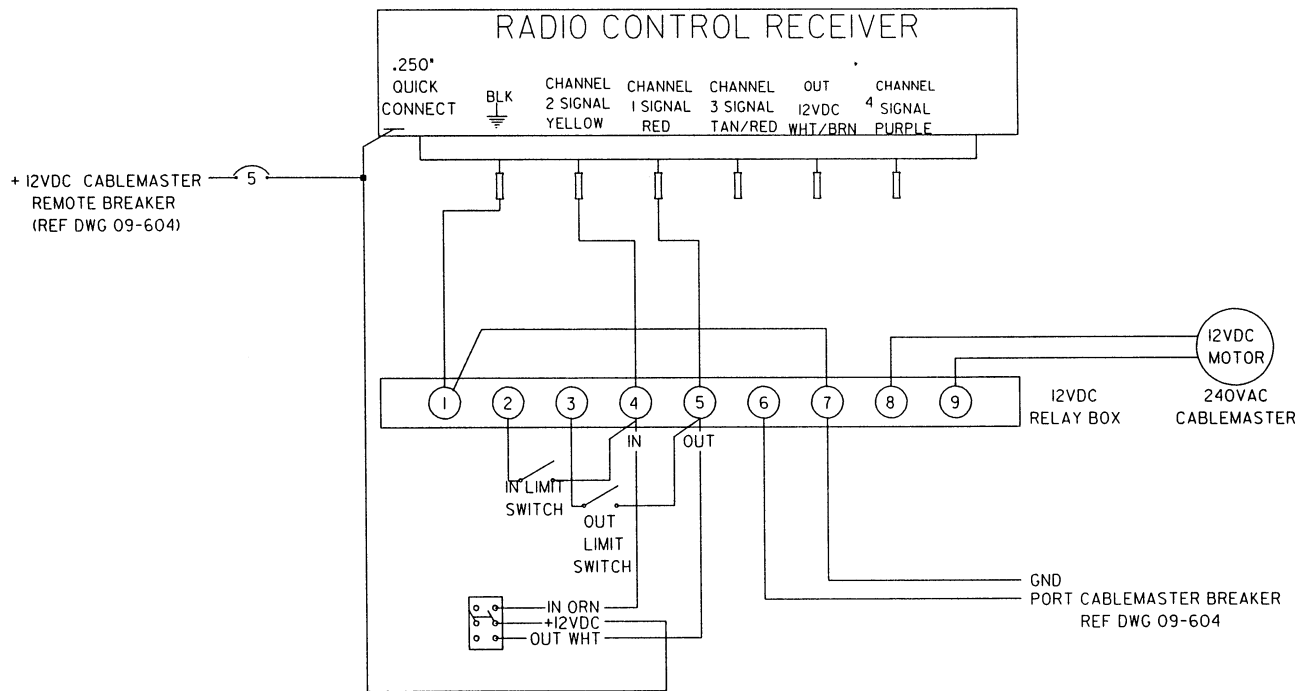
\* DUE TO SIMILARITIES IN PANELS,  
SPECIFIC WIRE NUMBERS WILL NOT MATCH  
PANEL SCHEMATIC

# Main DC Breaker Panel Wiring Schematic

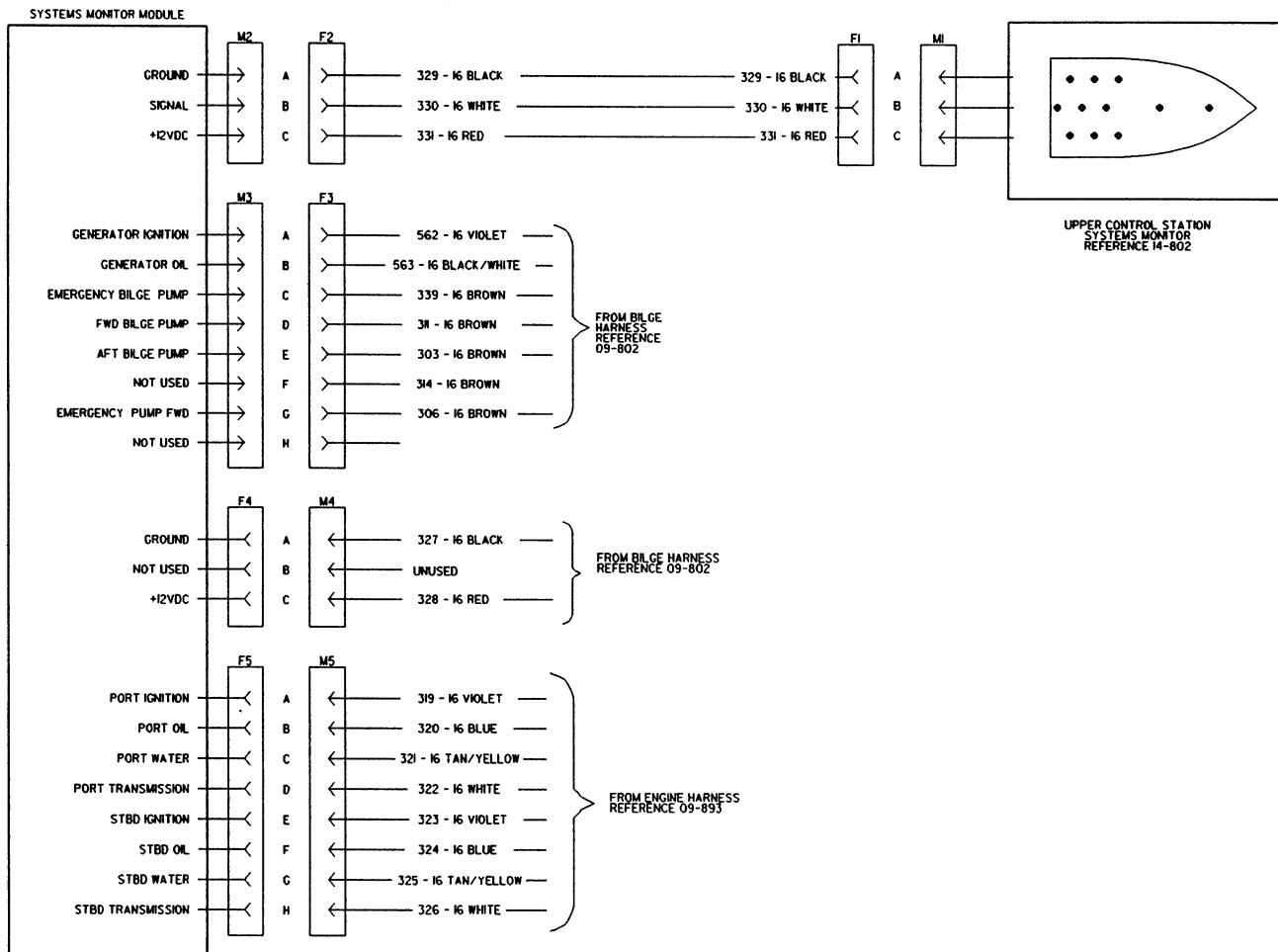


\* FOR VOLVO ELECTRONICS CONTROLS, USE 15 AMP BREAKER

# Cablemaster Remote Wiring Schematic (Option)



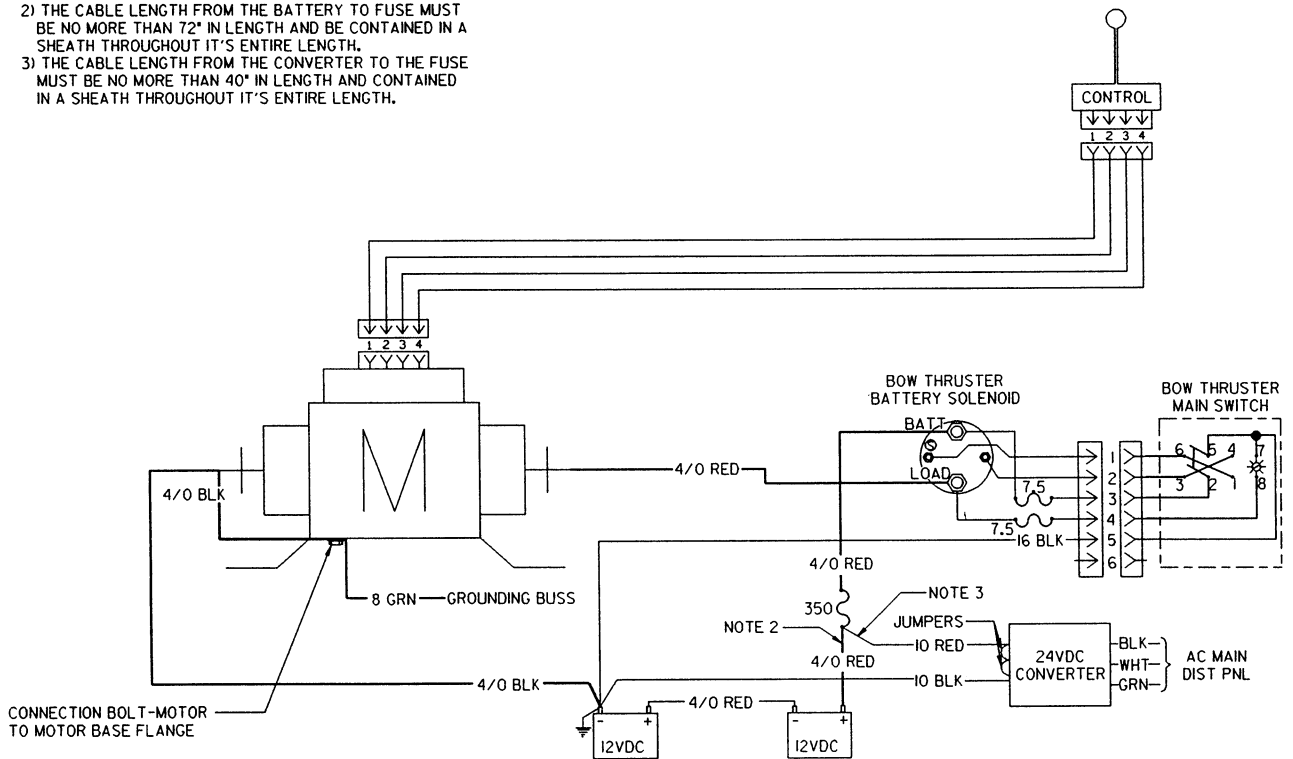
# Systems Monitor Schematic



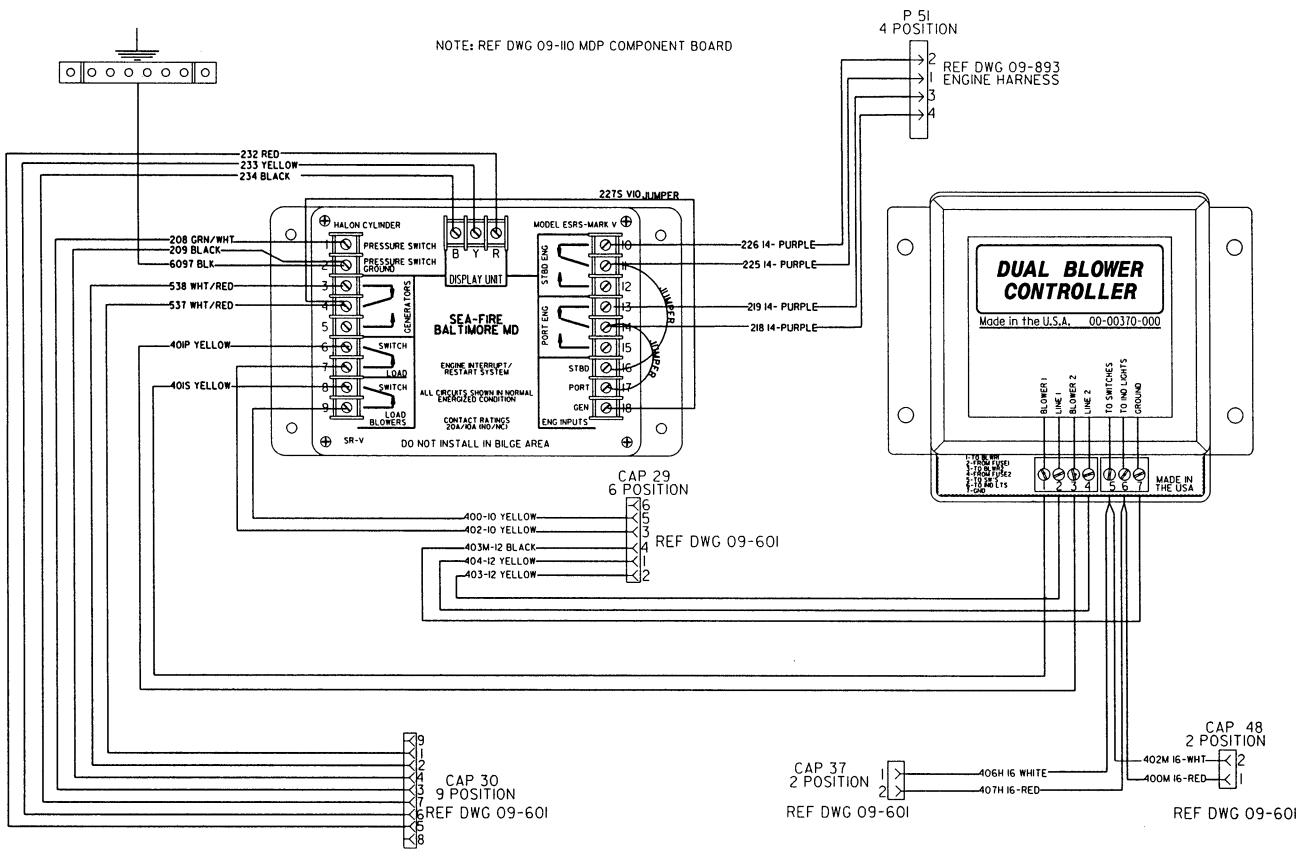
# Bow Thruster Schematic (Option)

**NOTES:**

- 1) ENSURE TOTAL POSITIVE AND NEGATIVE CABLE LENGTHS FROM BATTERY TO MOTOR ARE NO LONGER THAN 65 FEET.
- 2) THE CABLE LENGTH FROM THE BATTERY TO FUSE MUST BE NO MORE THAN 72" IN LENGTH AND BE CONTAINED IN A SHEATH THROUGHOUT IT'S ENTIRE LENGTH.
- 3) THE CABLE LENGTH FROM THE CONVERTER TO THE FUSE MUST BE NO MORE THAN 40" IN LENGTH AND CONTAINED IN A SHEATH THROUGHOUT IT'S ENTIRE LENGTH.

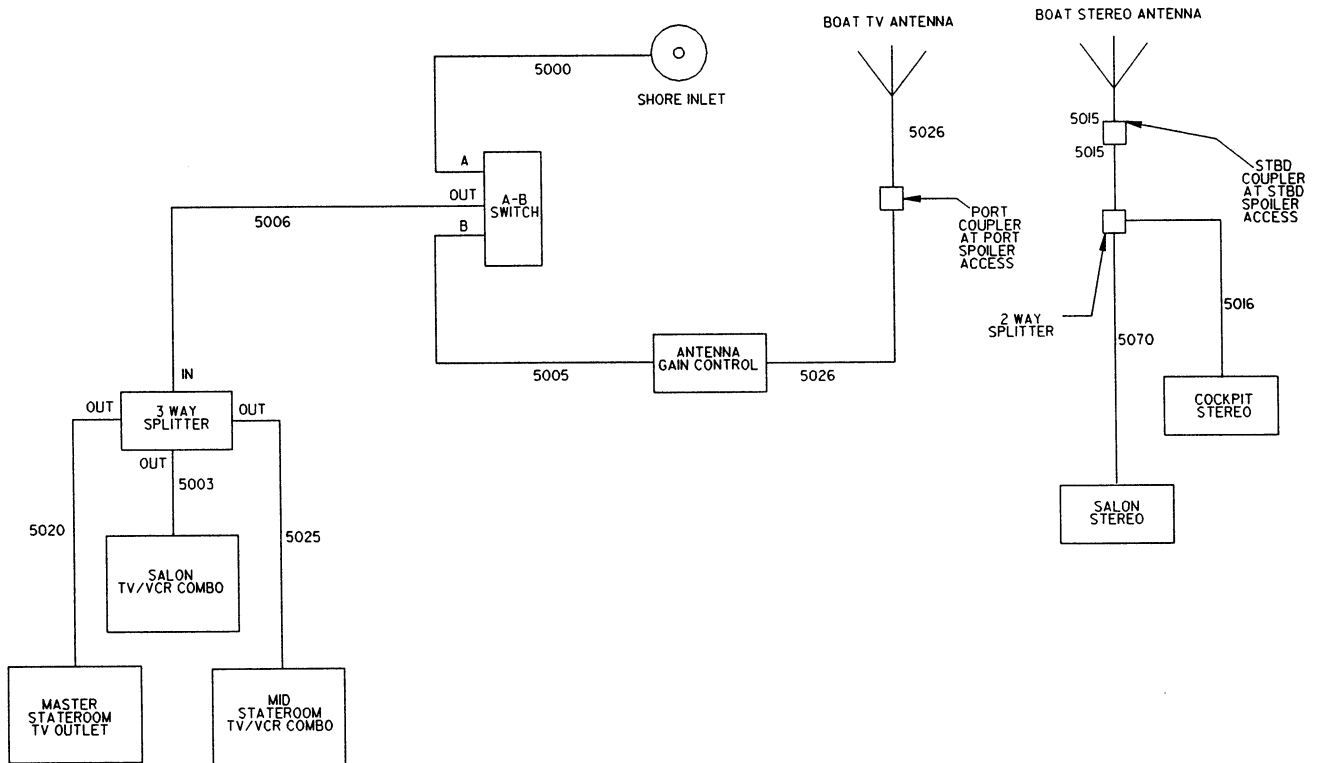


# Extinguisher / Blower Schematic

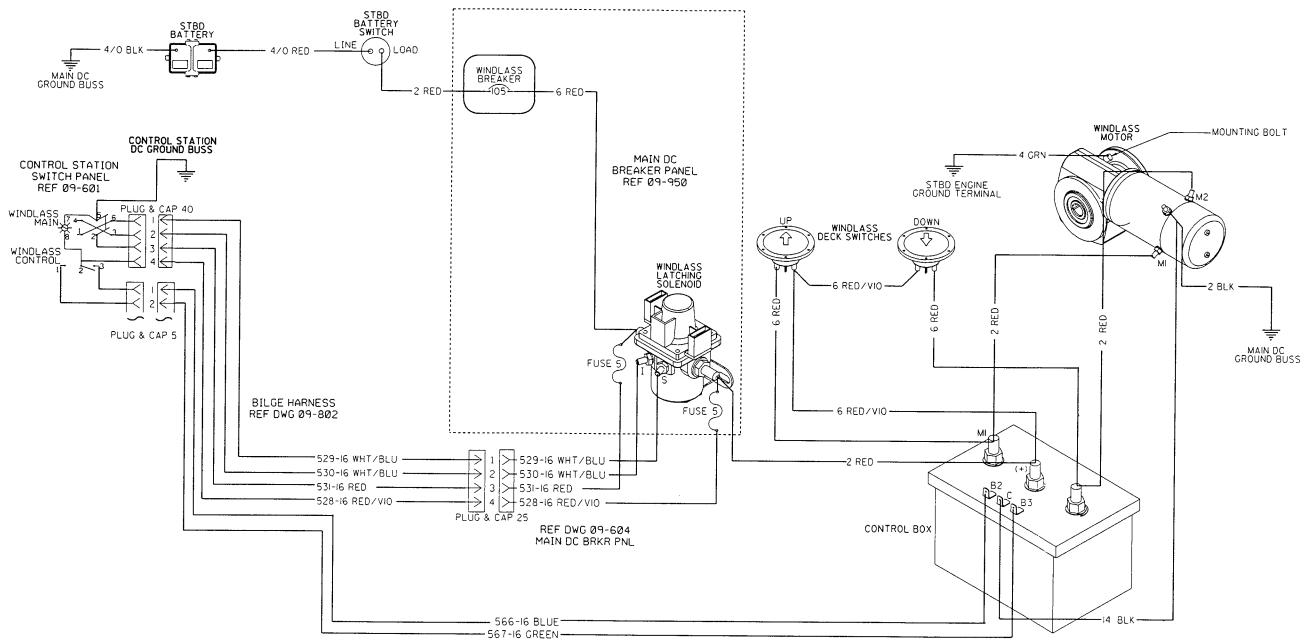




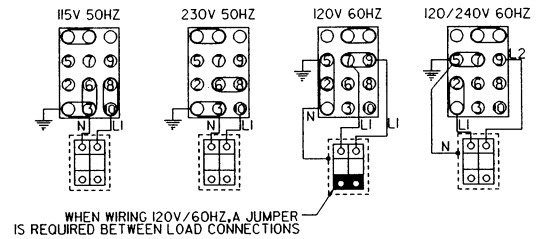
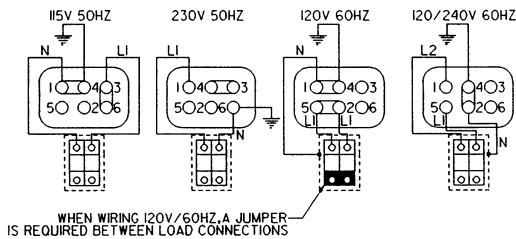
# TV & Stereo Antenna System



# Windlass Wiring Diagram



# Westerbeke® Diesel Generator High Voltage Wiring

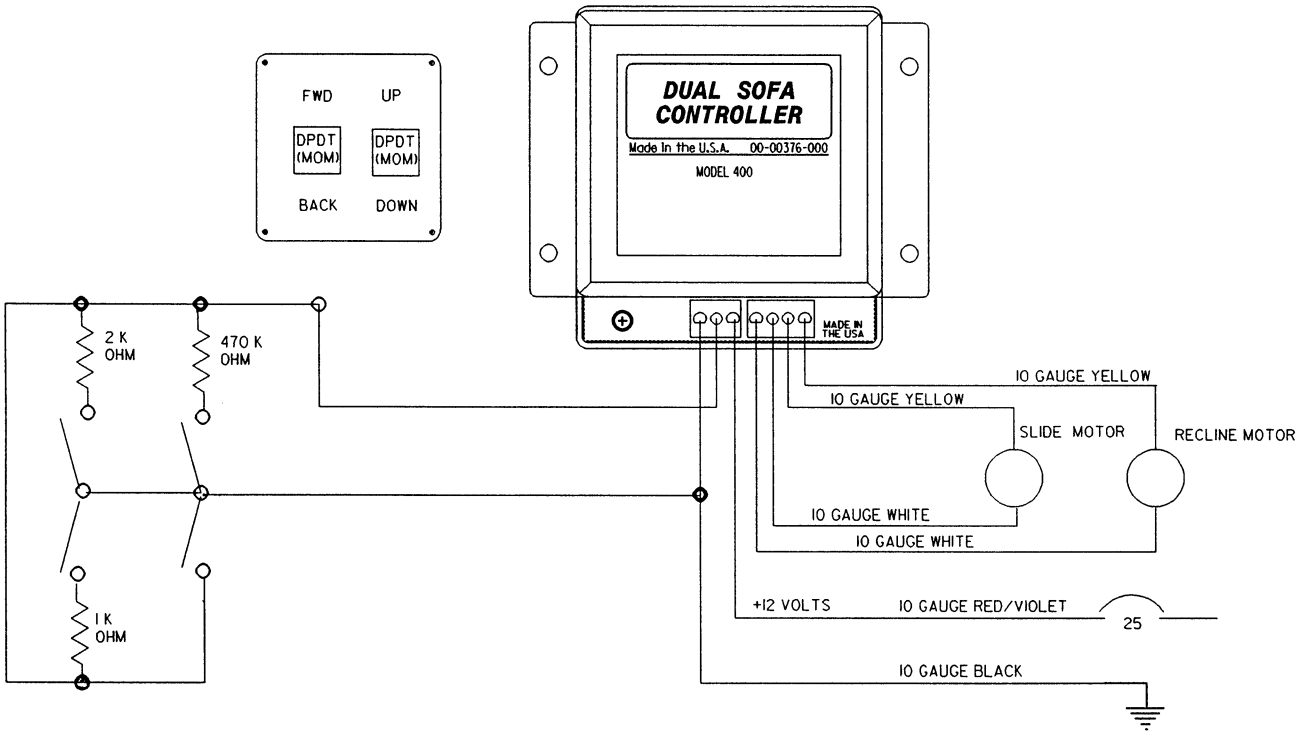


MODEL	RATING	BREAKER	VOLTS/HZ	MODEL	RATING	BREAKER	VOLTS/HZ
3.5KW BCG+A+B	15 AMP	42712	230V/50HZ	5.7KW BTD	25 AMP	42705	230V/50HZ
5.0KW BCG	25 AMP	42713	230V/50HZ	6.0KW BTD	30 AMP	42706	230V/50HZ
4.0KW BCDA+B	20 AMP	42704	230V/50HZ	6.8KW BTG+A	30 AMP	42714	230V/50HZ
7.0KW BCG	30 AMP	42714	230V/50HZ	7.0KW BTG	35 AMP	42715	230V/50HZ
4.5KW BCG+A+B	20 AMP	42232	120V/60HZ OR 120/240V/60HZ	7.6KW BTD	35 AMP	42707	120V/60HZ OR 120/240V/60HZ
5.0KW BCDA+B	25 AMP	42705	120V/60HZ OR 120/240V/60HZ	8.0KW BTD	35 AMP	42707	120V/60HZ OR 120/240V/60HZ
				8.5KW BTG+A	40 AMP	42236	120V/60HZ OR 120/240V/60HZ
				9.0KW BTG	40 AMP	42236	120V/60HZ OR 120/240V/60HZ

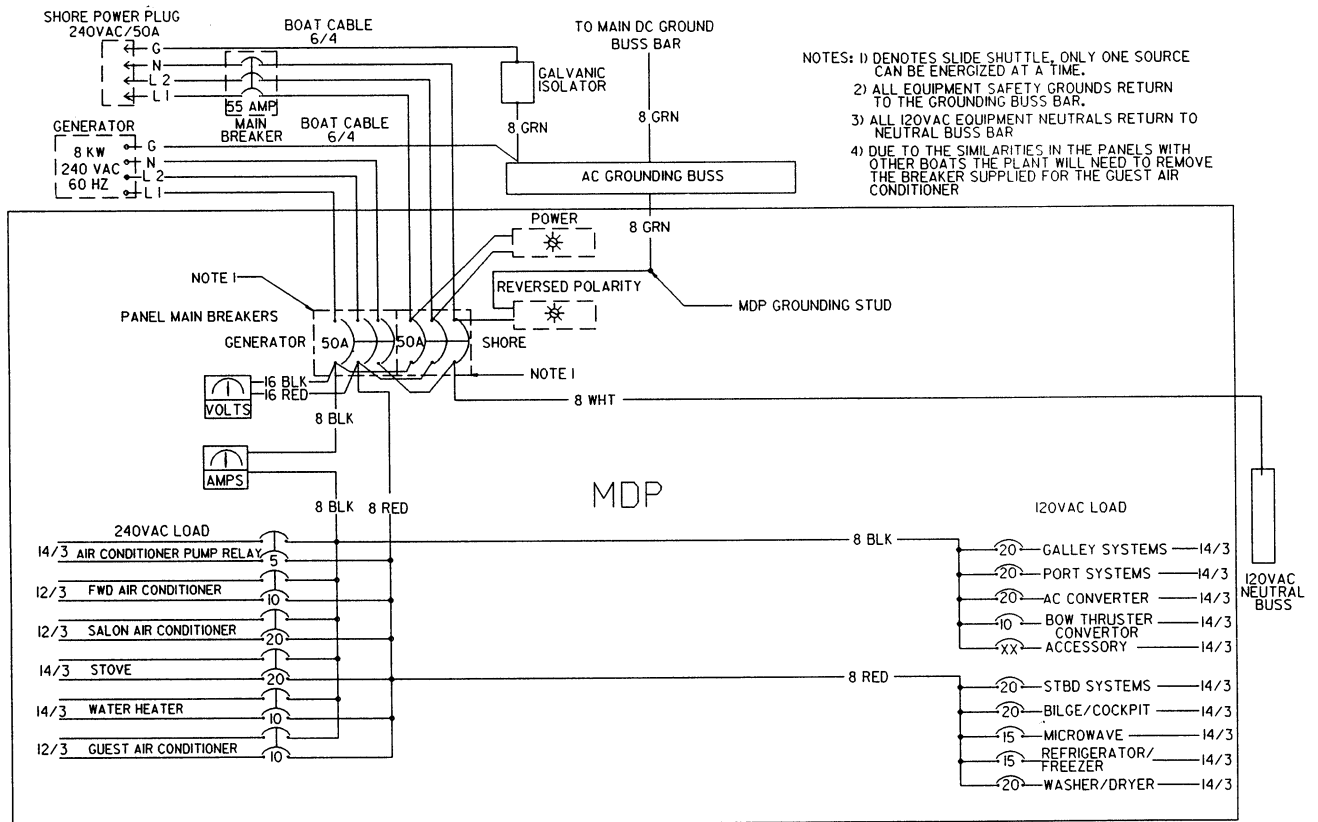
MODEL	RATING	BREAKER	VOLTS/HZ	MODEL	RATING	BREAKER	VOLTS/HZ
10.0KW BTG	50 AMP	42716	230V/50HZ	16.0KW BEDA	70 AMP	42710	230V/50HZ
12.0KW BTG	60 AMP	42717	230V/50HZ	16.0KW BEC	70 AMP	42718	230V/50HZ
7.5KW BTD	35 AMP	42707	230V/50HZ	20.0KW BED	90 AMP	T80	230V/50HZ
8.3KW BTD	40 AMP	42708	230V/50HZ	25.0KW BEDA	120 AMP	T80	230V/50HZ
9.4KW BTDA	40 AMP	42708	230V/50HZ	20.0KW BED	90 AMP	42711	230V/50HZ
12.0KW BTDA+B	60 AMP	42709	230V/50HZ	32.0KW BEDA	150 AMP	42703	120V/60HZ OR 120/240V/60HZ
10.0KW BTD	50 AMP	42698	120V/60HZ OR 120/240V/60HZ	20.0KW BEDA	90 AMP	42711	120V/60HZ OR 120/240V/60HZ
11.0KW BTD	50 AMP	42698	120V/60HZ OR 120/240V/60HZ	25.0KW BED	100 AMP	42702	120V/60HZ OR 120/240V/60HZ
12.5KW BTDA	60 AMP	42709	120V/60HZ OR 120/240V/60HZ	20.0KW BEG	90 AMP	42696	120V/60HZ OR 120/240V/60HZ
15.0KW BTDA+B	70 AMP	42710	120V/60HZ OR 120/240V/60HZ				
12.5KW BTG	60 AMP	42717	120V/60HZ OR 120/240V/60HZ				
15.0KW BTG	70 AMP	42718	120V/60HZ OR 120/240V/60HZ				

# Sofa Control Schematic



# AC Wiring Schematic (240 Volt/60 Cycle)

## (Standard)

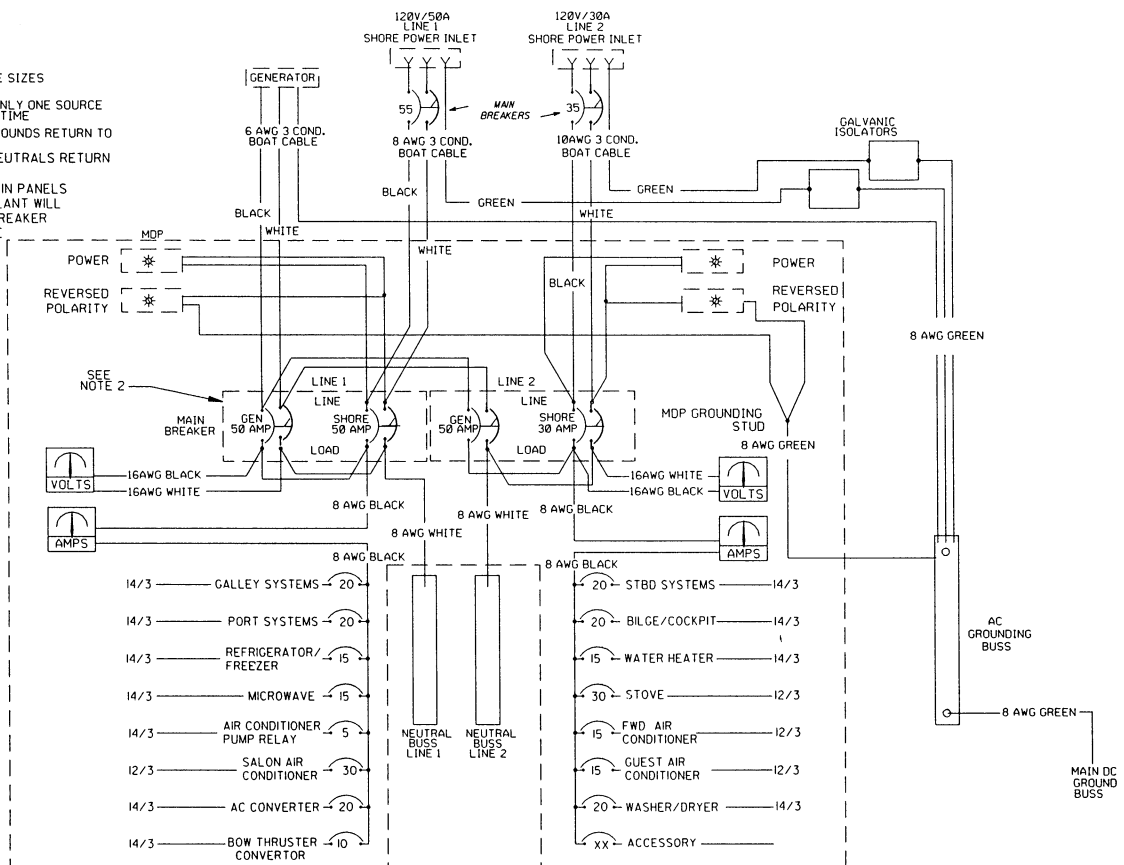


# AC Wiring Schematic (120 Volt/60 Cycle)

## (Option)

**NOTES:**

1. MAIN BREAKER JUMPER WIRE SIZES  
LINE -#8      LOAD -#8
2. DENOTES SLIDE SHUTTLE, ONLY ONE SOURCE  
CAN BE ENERGIZED AT ONE TIME
3. ALL EQUIPMENT SAFETY GROUNDS RETURN TO  
THE GROUNDING BUSS BAR
4. ALL 120VAC EQUIPMENT NEUTRALS RETURN  
TO NEUTRAL BUSS BAR
5. DUE TO THE SIMILARITIES IN PANELS  
WITH OTHER BOATS THE PLANT WILL  
NEED TO REMOVE THE BREAKER  
SUPPLIED FOR THE  
GUEST AC

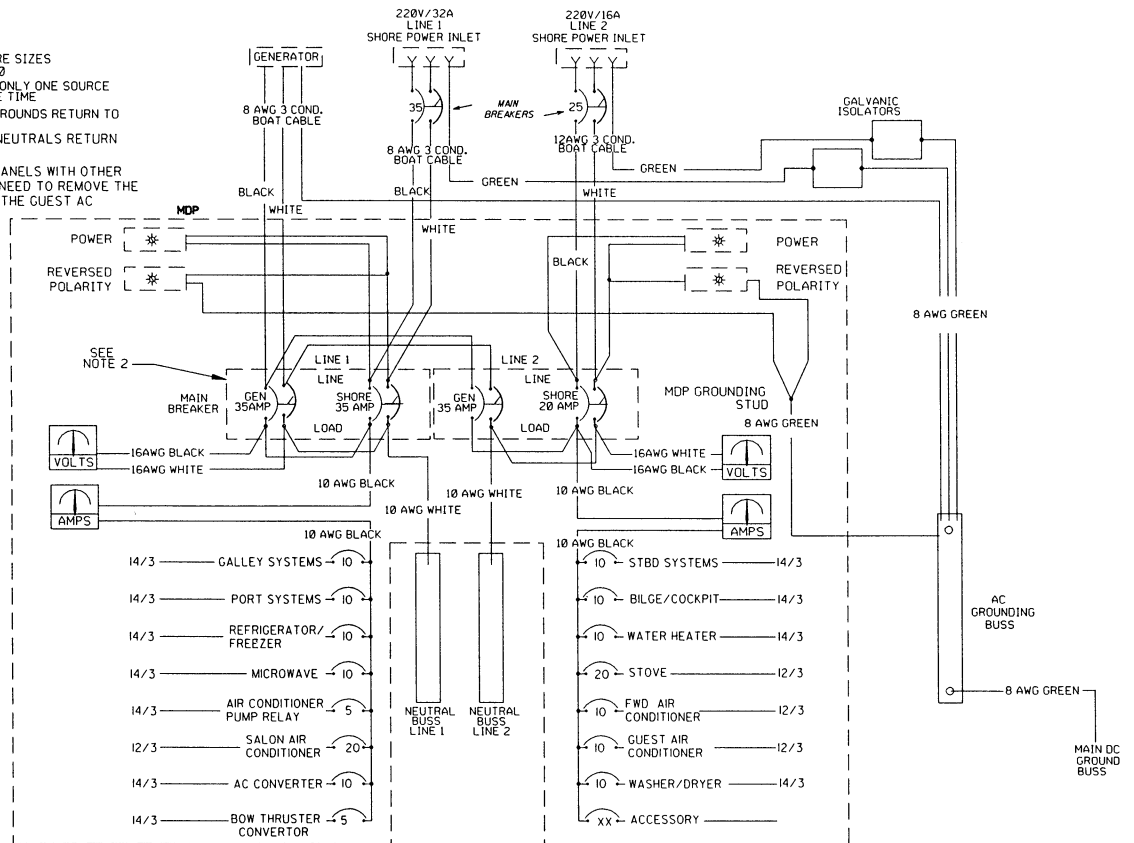


# AC Wiring Schematic (220 Volt/50 Cycle)

## (International Option)

**NOTES:**

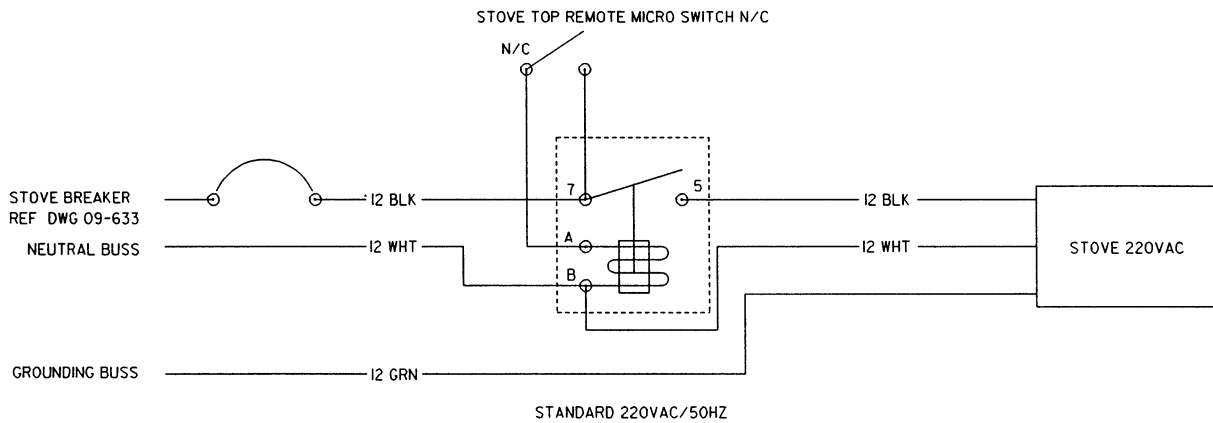
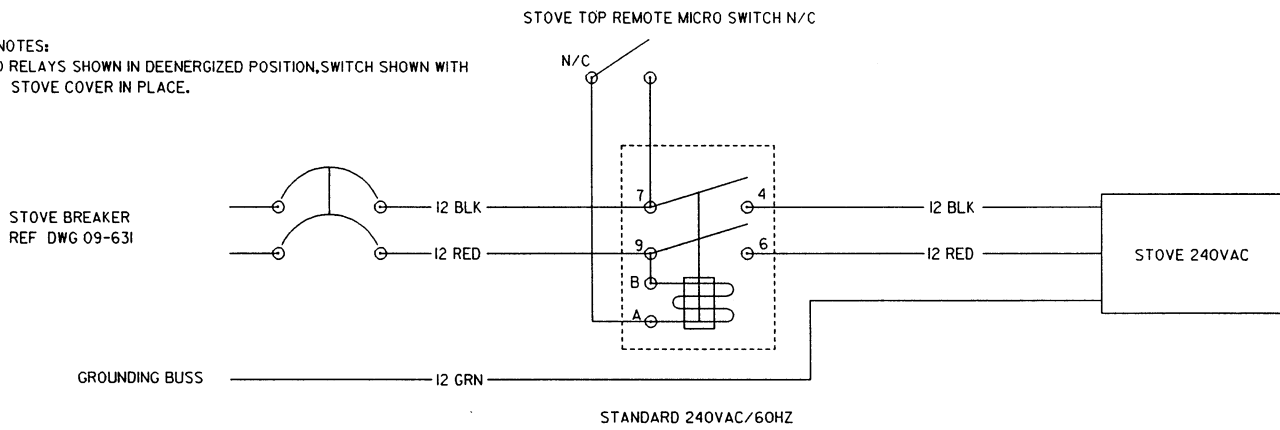
1. MAIN BREAKER JUMPER WIRE SIZES  
LINE - #8      LOAD - #10
2. DENOTES SLIDE SHUTTLE, ONLY ONE SOURCE CAN BE ENERGIZED AT ONE TIME
3. ALL EQUIPMENT SAFETY GROUNDS RETURN TO THE GROUNDING BUSS BAR
4. ALL 120VAC EQUIPMENT NEUTRALS RETURN TO NEUTRAL BUSS BAR
5. DUE TO SIMILARITIES IN PANELS WITH OTHER BOATS THE PLANT WILL NEED TO REMOVE THE BREAKER SUPPLIED FOR THE GUEST AC



# Stove Top Switch Wiring Diagram

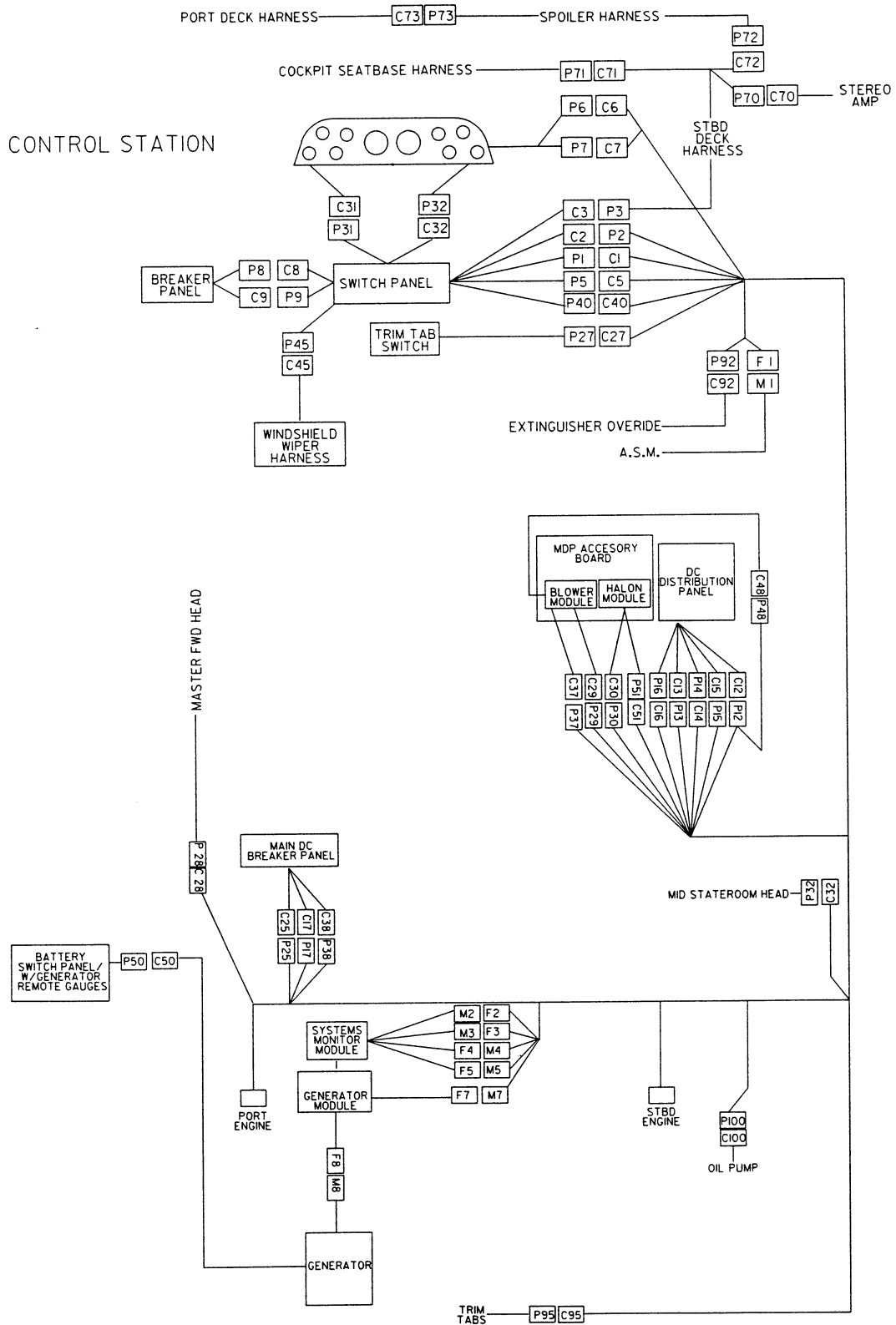
**NOTES:**

1) RELAYS SHOWN IN DEENERGIZED POSITION, SWITCH SHOWN WITH STOVE COVER IN PLACE.





# Interconnect Diagram



# International Homologations

This vessel and its systems have been constructed in accordance with standards and specifications in effect at the time of manufacture as published by the various regulatory authorities listed below.

1. Ministere De La Mer - France
2. Registro Italiano Navale - Italy
3. Det Norske Veritas - Norway
4. Securite des Nauires - Canada
5. J.C.I. (Japan Craft Inspection) - Japan
6. N.K.K. (Nippon Kaiji Kyokai) - Japan
7. B.S.I. (British Standards Institute) - England
8. Ministerio Obras Publicas Y Transporters - Spain
9. EC Directive - European Community

Further information may be obtained from Sea Ray® Customer Service: 1-800-SRBOATS.