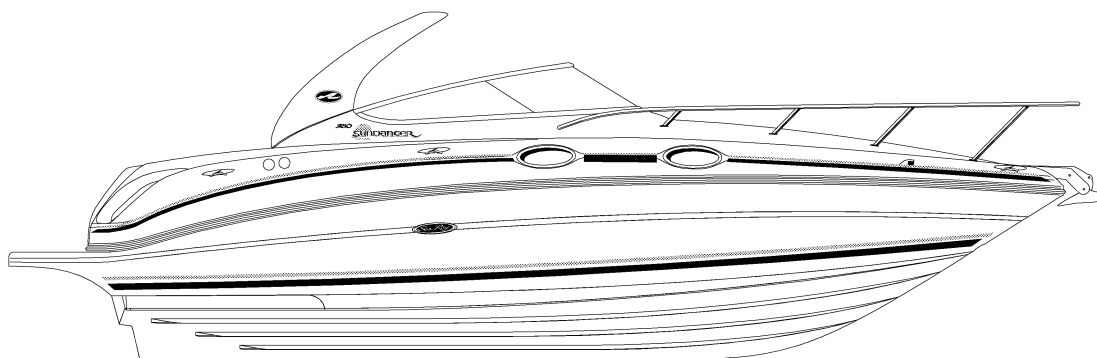


Owner's Manual Supplement

280 Sundancer



Sea Ray

**1-800-SRBOATS
www.searay.com**

Sea Ray® • Owner's Manual Supplement • 280 Sundancer • MRP #1773960

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For information call 1-800-SRBOATS. or fax 1-314-213-7878 Domestic/International
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.

INTRODUCTION & TABLE OF CONTENTS

This owner's manual supplement has been written to provide additional specific information about your boat and should be read carefully.

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

If this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before "assuming command" of the craft. Your dealer or 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.

Life Saving Equipment (PFD)	4	Anchoring	30
Troubleshooting	4	Anchoring Arrangement	30
Repair and Parts Facilities	4	Location Of Through-Hull Fittings	31
Docking / Lifting / Trailering	5	Canvas	32
Bow & Stern Eye / Cleat Location	5	Electrical Installation	33
General Arrangements & Dimensions	6	Battery Switch (Opt)	33
Accommodation Plan	7-8	Lighting Locations	34
Deck Occupancy Plan	9	Cockpit & Cabin Switch Locations	
Accessory Locations	10	& Functions	35
Dash Layout	11-12	Generator Installation	36
Engine Compartment Layout	13-15	Ground Fault Interrupter (GFI) Outlet	
Water System	16	Loctions & Associated Loads	37
Grey Water System (Option)	18	Electric Switch Pads & Electronic	
Head System	19	Interface Modules (EIM)	38
Macerator (Option)	20	Bilge Accessory Board	40
Fuel System	20	Main DC Distribution Panel	41
Ventilation System / Bilge Blowers	23	Main Distribution Panel (With Generator Option) ..	42
Bilge Pumping System	24	Generator Remote Switch Panel (Option)	43
Steering System	26	Mercury® Diesel Engine Monitor (Option)	44
Fire Extinguishing System	27	Battery Cable Routing	45-48
Extinguisher Indicator Panel	27	Wiring Harness Installation	49-52
Air Conditioning / Heating System	28	Wiring Schematics	53-70
Engine Cooling System	29	Safety Label Locations	71-73
Engine Oil Change System	29	International Homologations	74

(This book contains 74 pages.)



Information in this publication is based upon the latest product specifications available at printing. Sea Ray® Boats, Inc. reserves the right to make changes at any time, without notice, in the colors, equipment, specifications, materials and prices of all models, or to discontinue models. Should changes in production models be made, Sea Ray® is not obligated to make similar changes or modifications to models sold prior to the date of such changes.

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280 Sundancer

SUPPLEMENTAL GENERAL INFORMATION

LIFE SAVING EQUIPMENT

(PERSONAL FLOTATION DEVICE (PFD))

STORAGE: The 280 DA offers storage under the forward v-berth seats, v-berth hanging lockers, under the forward dinette seat, below the galley, aft starboard cockpit side panel storage, under cockpit entertainment center and transom storage.

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.

TROUBLESHOOTING

LIST OF REFERENCE MANUALS AND DRAWINGS

PERFORMANCE: Refer to "Power Capacity" in the owner's manual.

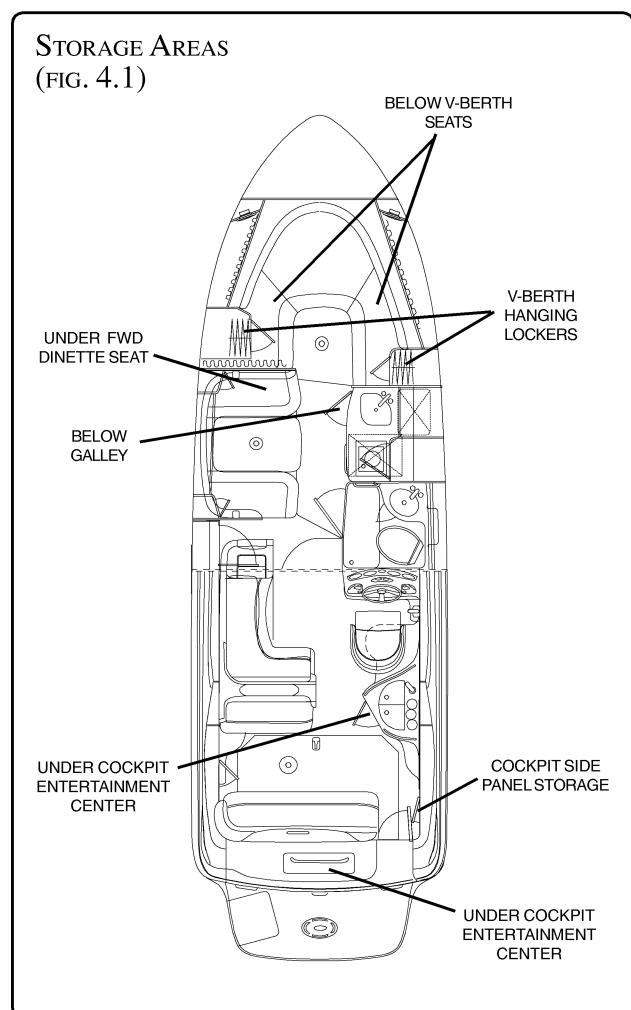
ENGINE: Refer to the owner's manual and/or the engine manual.

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 (OEM's) found in the owner's manual packet.



DOCKING/LIFTING/TRAILERING



CLEATS: Cleats must not be used for lifting the boat, they are intended for mooring use only.

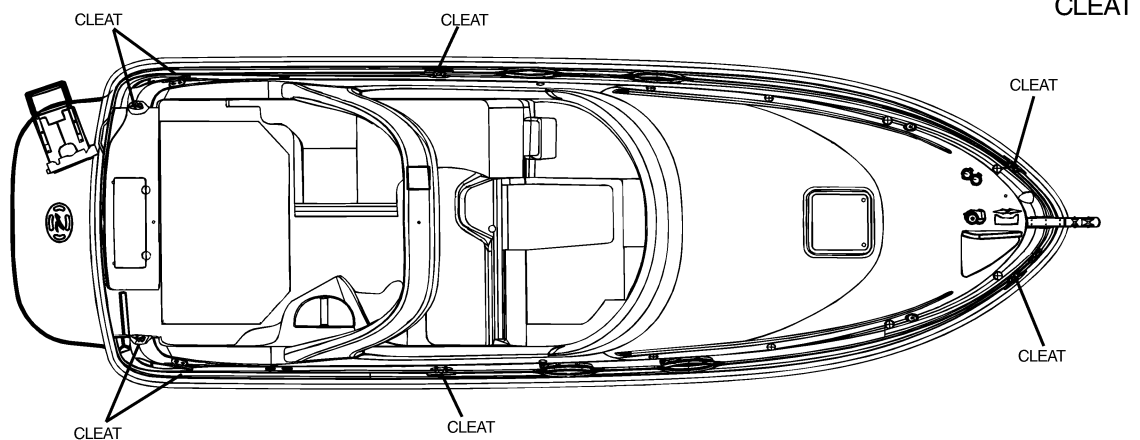


BOW AND STERN EYES: The bow eye should be used to haul the boat onto a trailer. The stern eyes should be used as tie down points for trailering the boat. The bow and stern eyes may be used for short term lifting of the boat such as for service. Long term lifting with

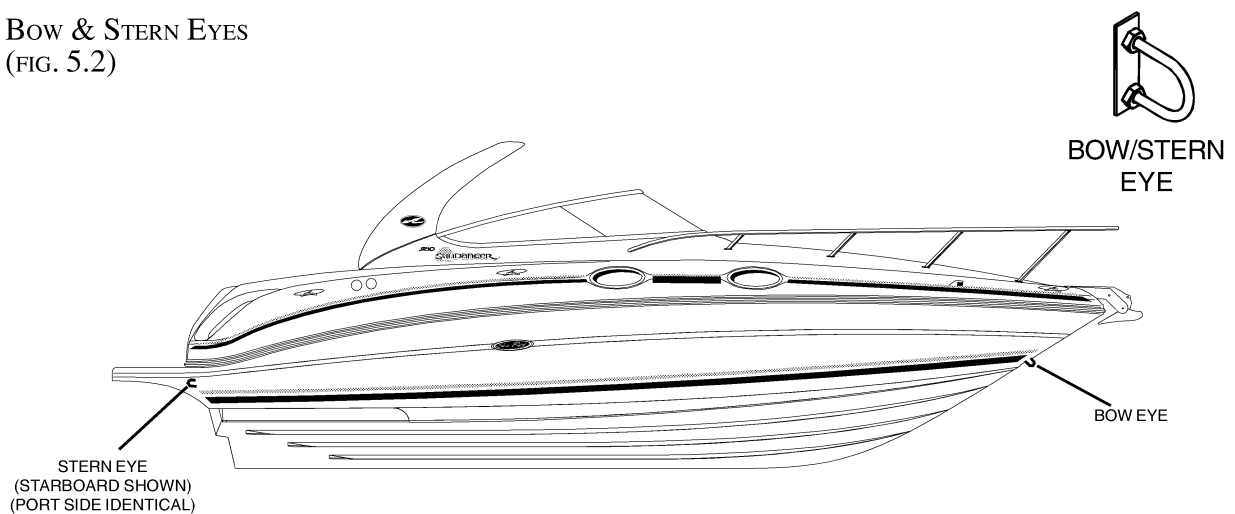
the bow and stern eyes may cause stress on the fiberglass and gel coat.

For long term storage use flat, wide belt-type slings and spreaders long enough to keep pressure from gun-wales. Do not place slings where they may lift on underwater fittings.

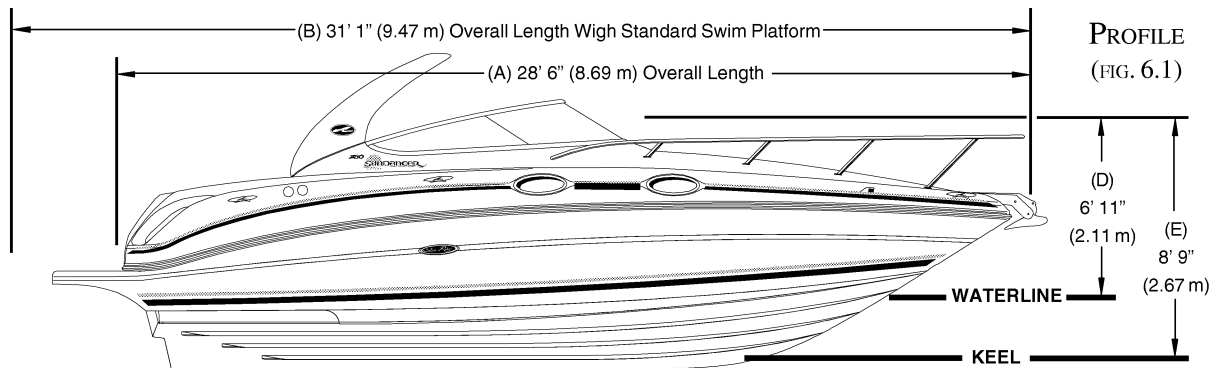
CLEAT LOCATIONS
(FIG. 5.1)



BOW & STERN EYES
(FIG. 5.2)



GENERAL ARRANGEMENTS & DIMENSIONS

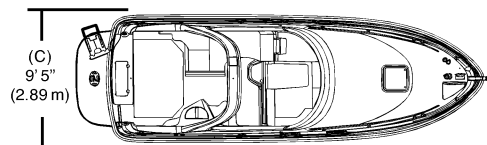


280 BR SPECIFICATIONS

(A) Overall Length	28' 6" (8.69 m)
(B) w/Standard Extended Swim Platform	31' 1" (9.47 m)
(C) Beam	9' 5" (2.89 m)
Draft (Stern Drive Down)	33 5/8" (85.41 cm)
Draft (Stern Drive Up)	23" (58.4 cm)
Draft (Twin Stern Drive Down)	38 5/8" (98.11 cm)
Draft (Twin Stern Drive Up)	23" (58.4 cm)
Dry Weight (lbs.)	8,000 (3.628 kg)
Fuel Capacity (gal.)	100 (378.5 liters)
Usable Fuel (gal.)	95 (359 liters)
Water Capacity (gal.)	28 (106 liters)
Holding Tank (gal.)	28 (106 liters)
Dead Rise	21°

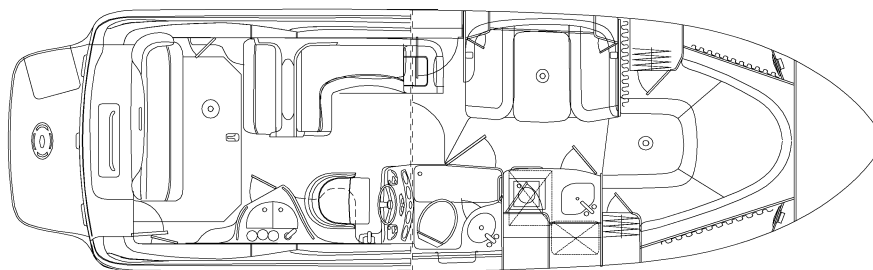
HEIGHT DIMENSIONS

(D) Waterline To Top Of Windshield	6' 11" (2.11 m)
(E) Keel To Top Of Windshield	8' 9" (2.67 m)



(FIG. 6.2)

INTERIOR SEATING PLAN



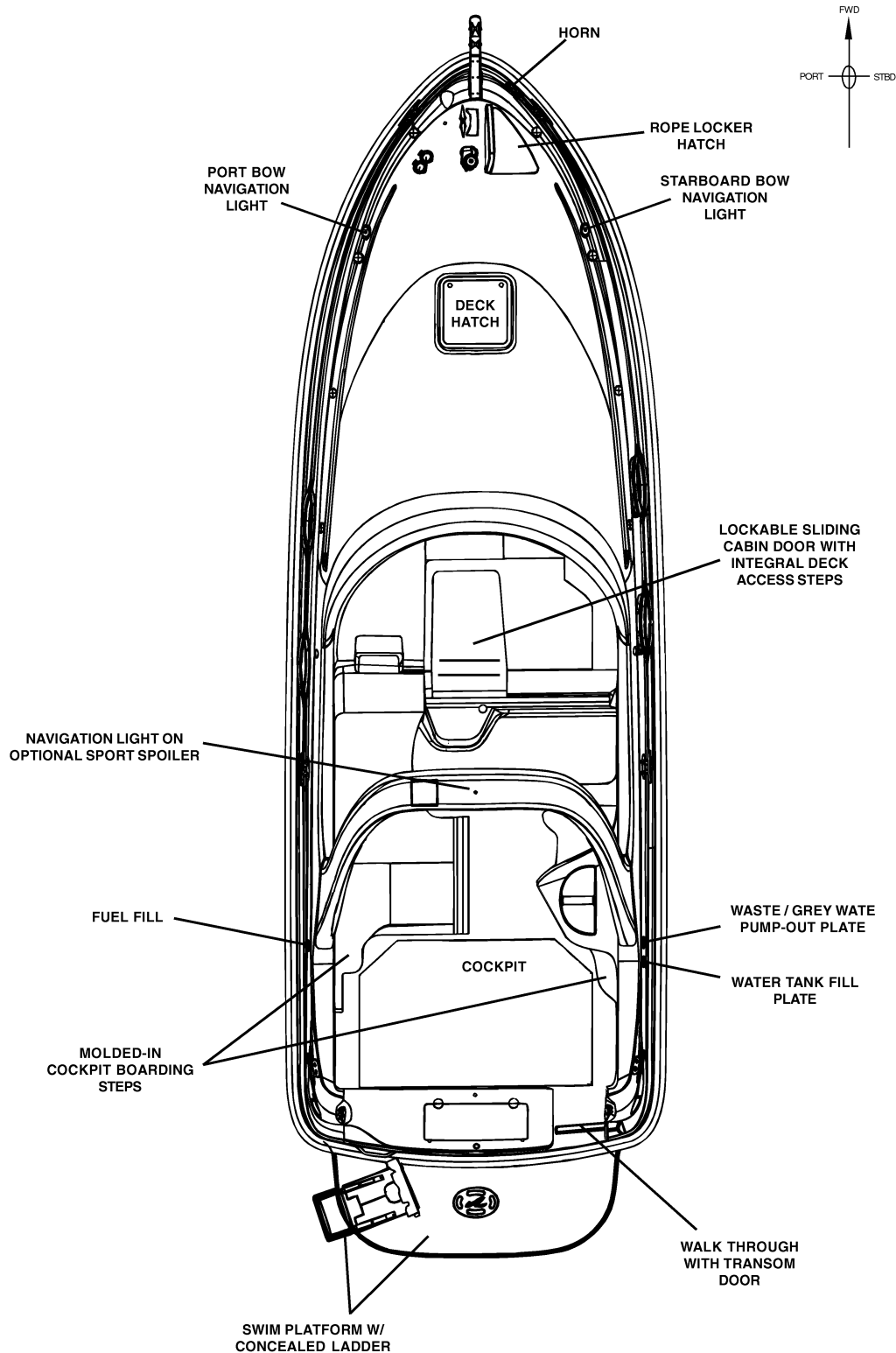
280 DA SEATING PLAN

Swivel Bucket Helm Seat With Slider And Flip-Up Thigh-Rise Bolster, Port Aft-Facing Seat With Fold-Down Sun Pad, Portside Sun Lounger With Forward-Facing Backrest, Removable Cockpit Cooler

(FIG. 6.3)

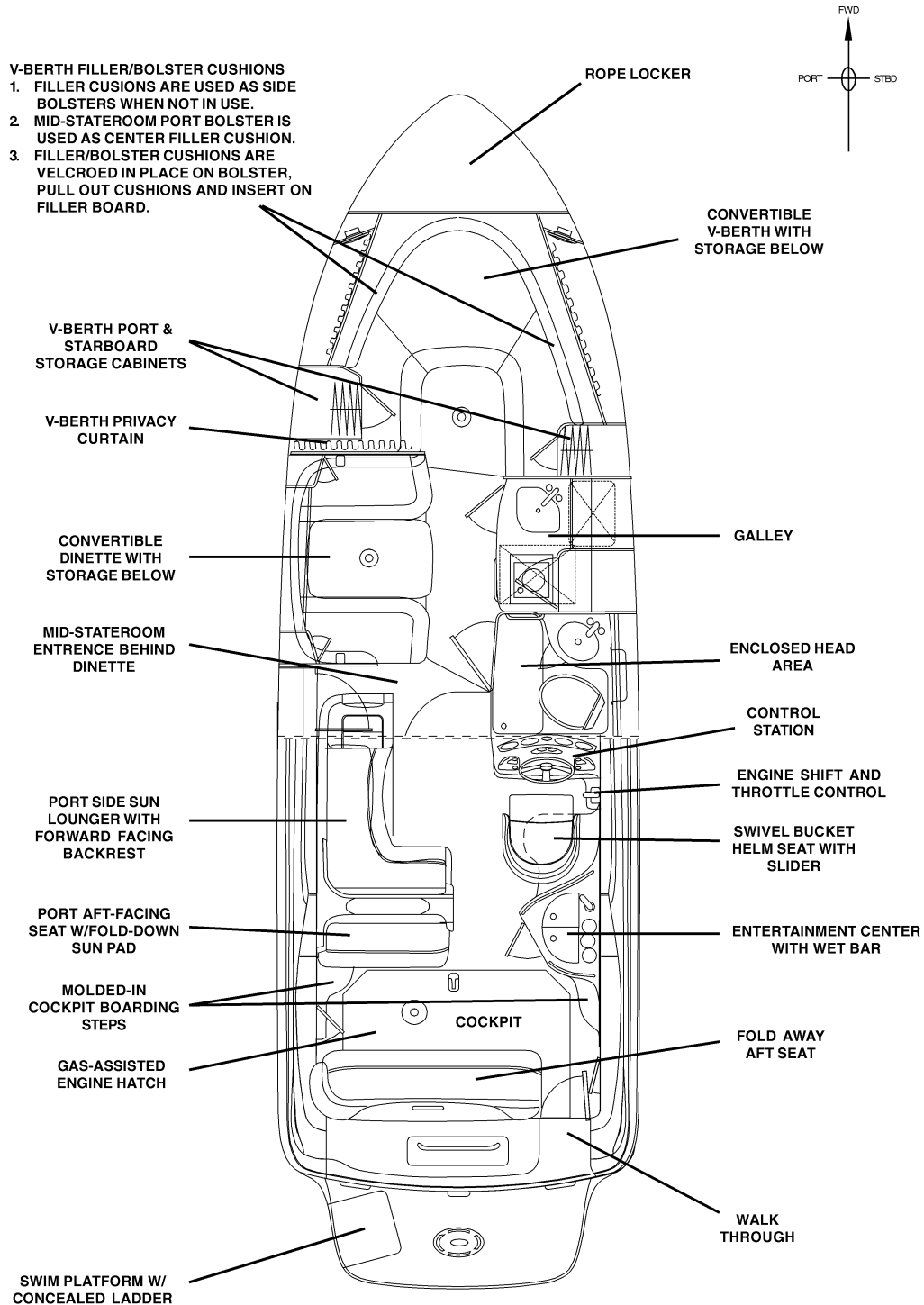
ACCOMMODATION PLAN

MAIN DECK (FLOOR PLAN)
(FIG. 7.1)



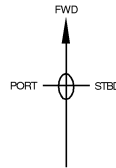
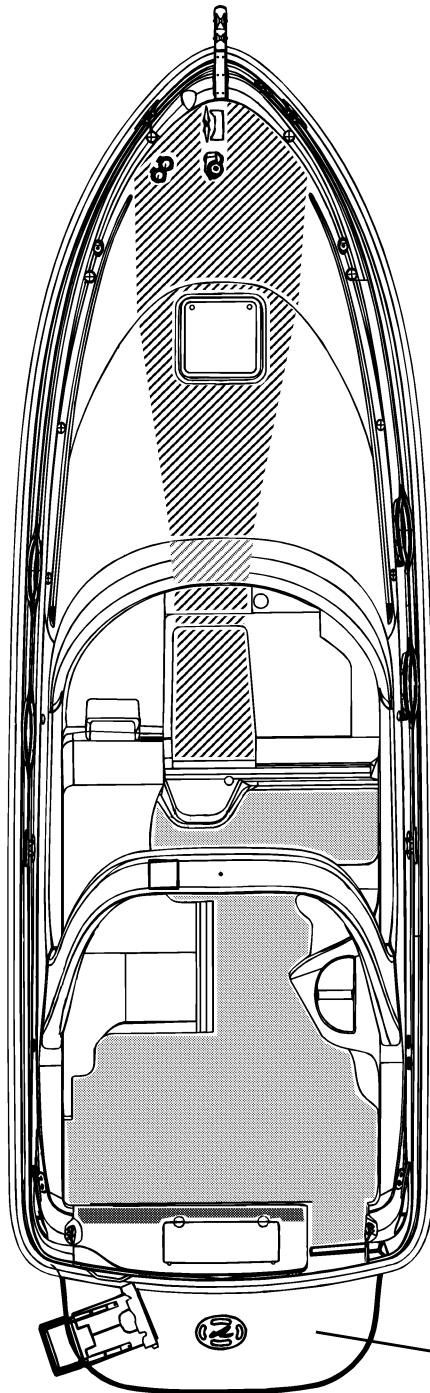
ACCOMMODATION PLAN

MID DECK (FLOOR PLAN)
(FIG. 8.1)



DECK OCCUPANCY PLAN

(FIG. 9.1)



WARNING

SLIPPING HAZARD - Wet decks are slippery. Wear proper footwear and use extreme caution on wet surfaces.



WARNING

PERSONAL INJURY HAZARD
When underway, keep occupants clear of areas not designed for riding. Especially hazardous areas include seat backs, bow, gunwale, transom platform and fore and aft decks.



WORKING DECK
(DECK AREA INTENDED FOR OCCUPATION DURING ANCHORING, MOORING AND EMERGENCY OPERATION ONLY)



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



DO NOT WALK ON THIS AREA

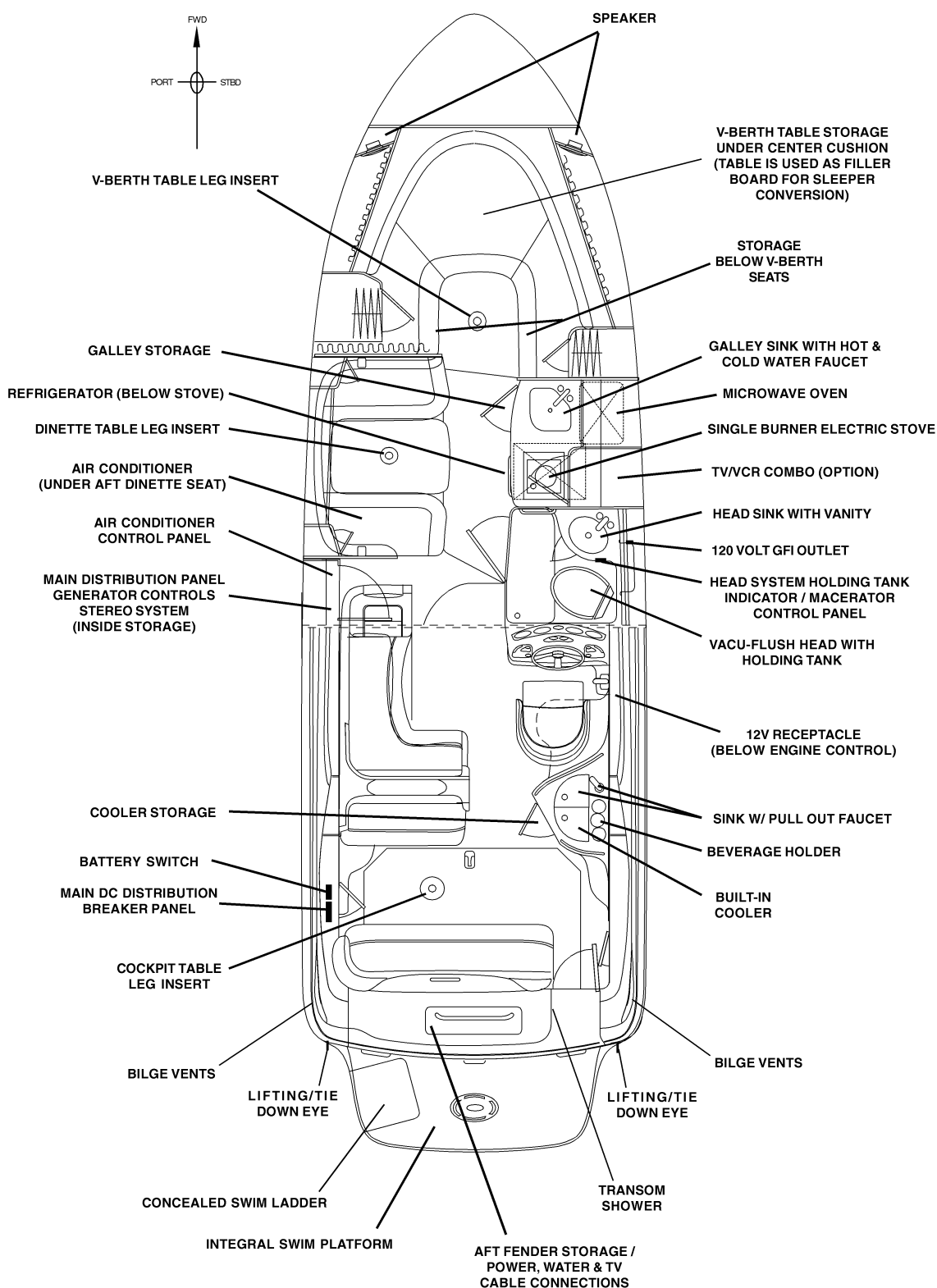


DANGER

TO AVOID RISK OF SERIOUS INJURY OR DEATH SHUT OFF ENGINE WHEN NEAR SWIMMERS OR PRIOR TO USING SWIM PLATFORM AND BOARDING LADDER.

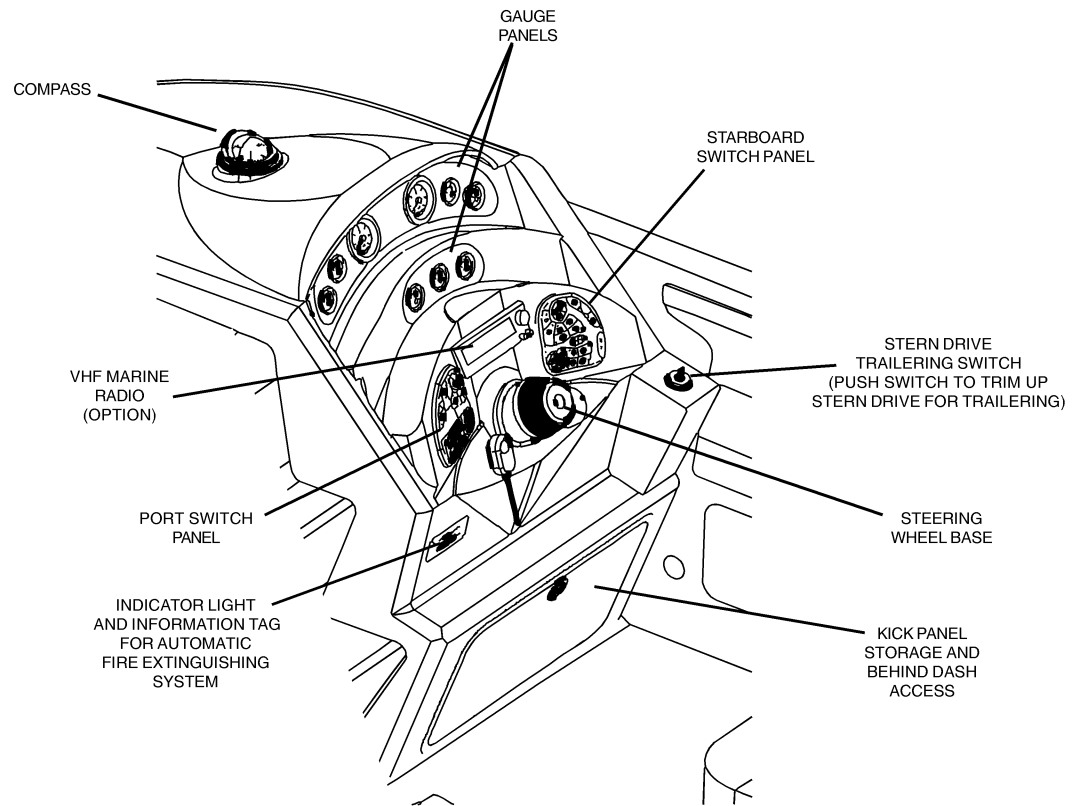
ACCESSORY LOCATIONS

(FIG. 10.1)

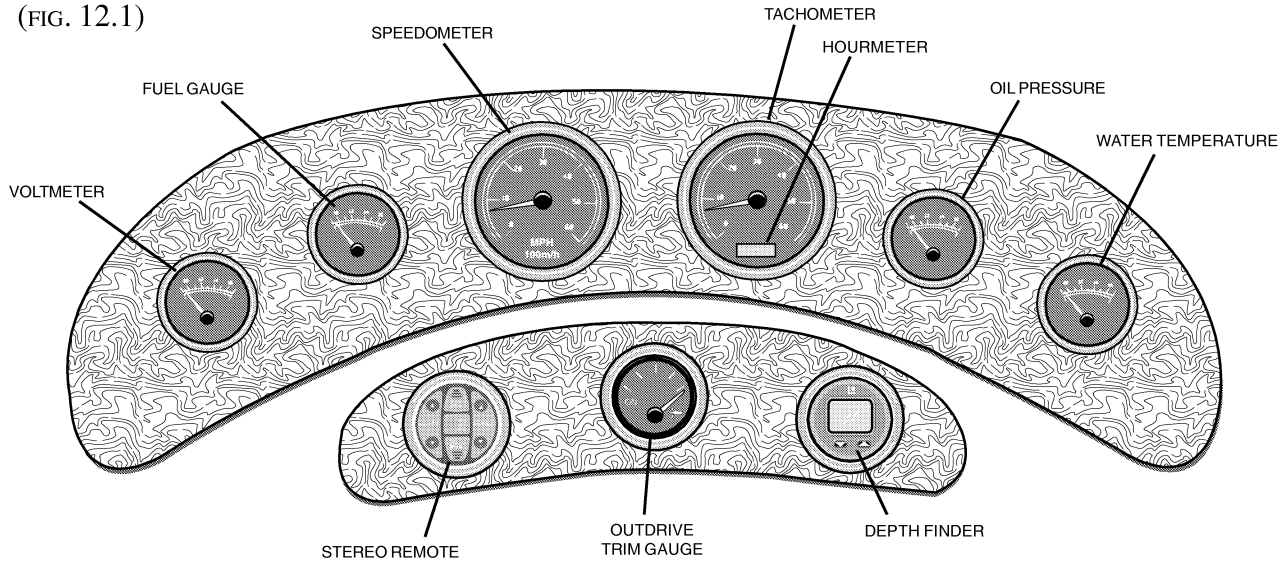


DASH LAYOUT

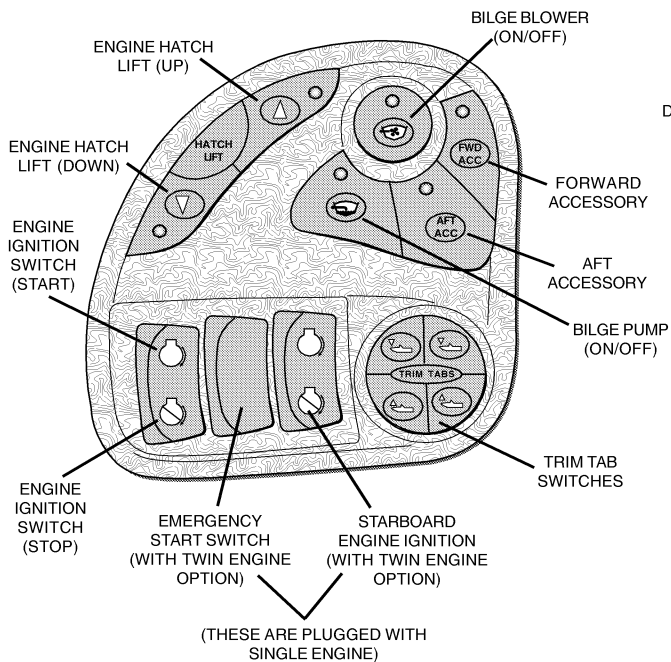
(FIG. 11.1)



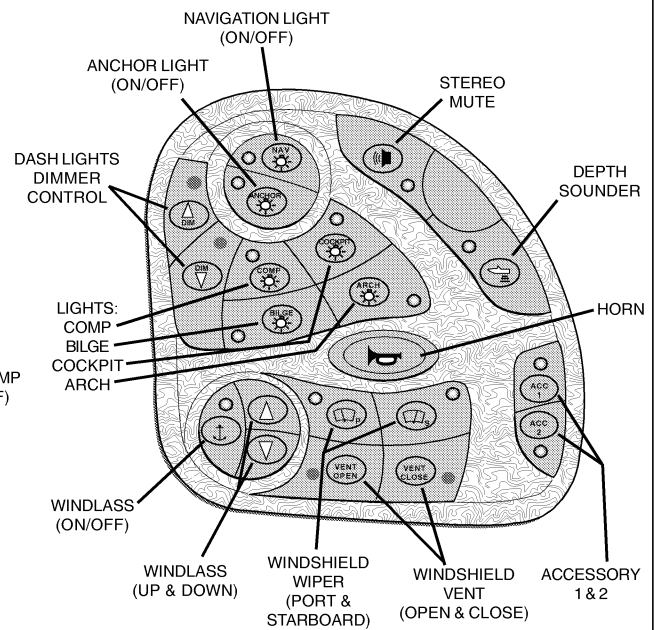
GAUGE PANELS (FIG. 12.1)



PORT SWITCH PANEL (FIG. 12.2)

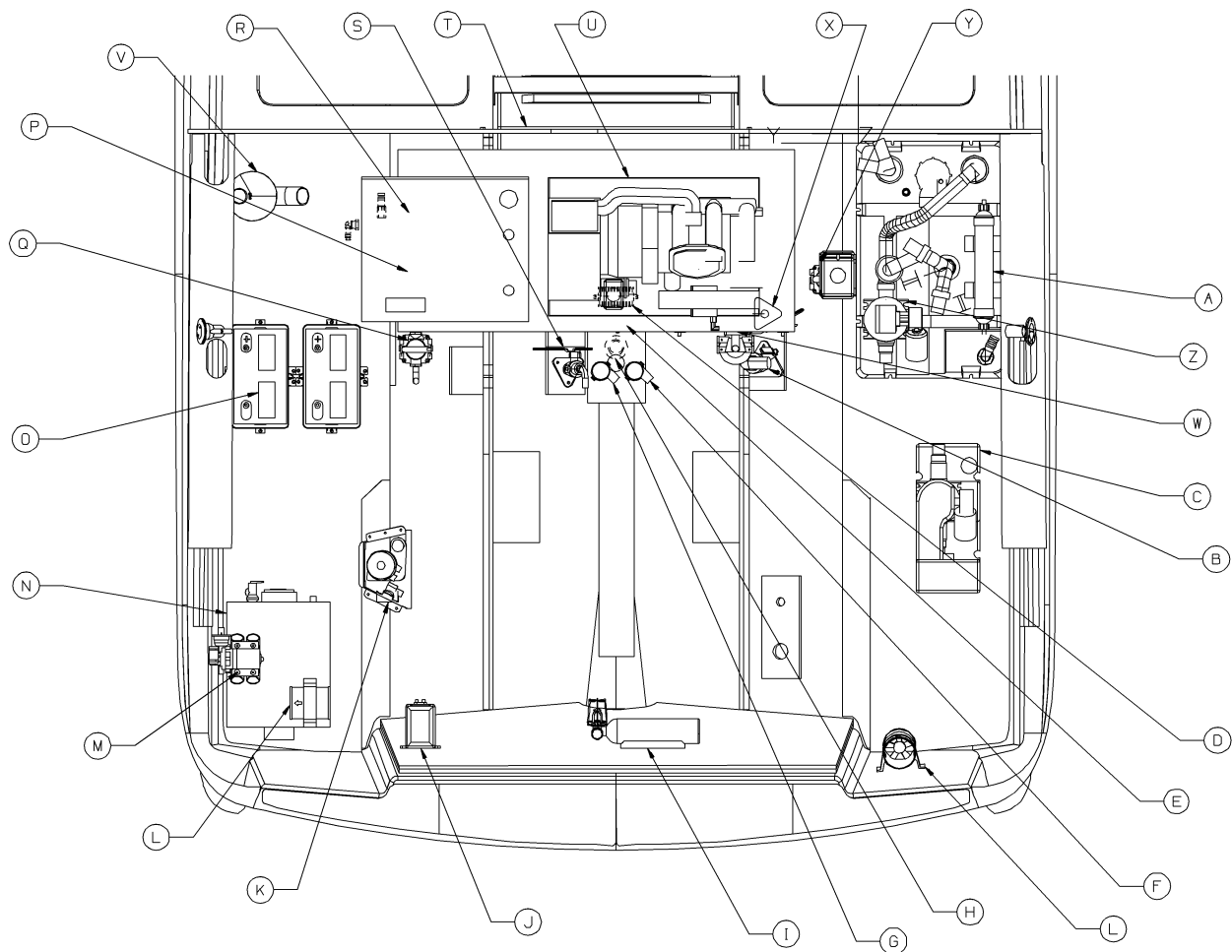


STARBOARD SWITCH PANEL (FIG. 11.3)



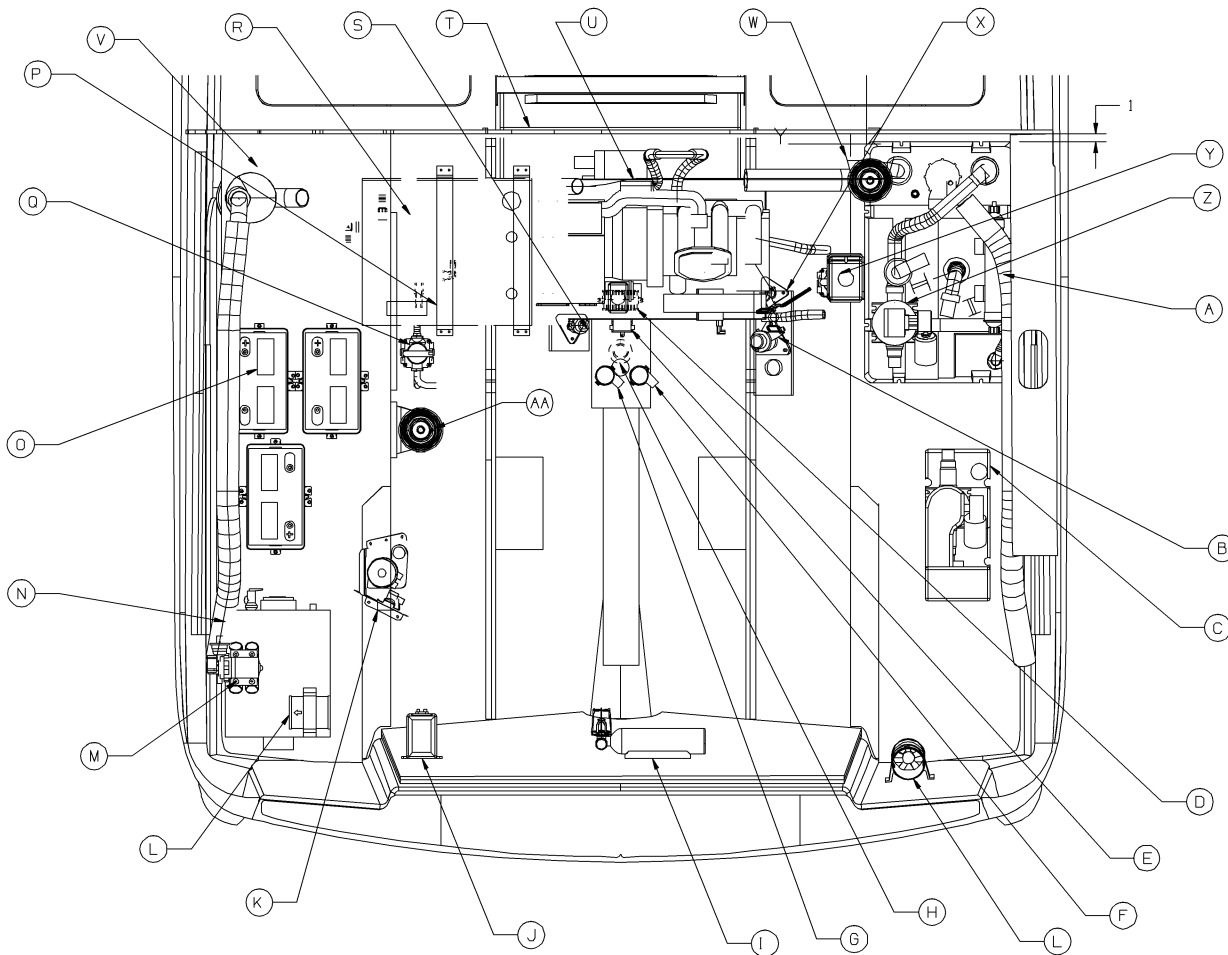
ENGINE COMPARTMENT LAYOUT

GASOLINE SINGLE ENGINE WITH GENERATOR (FIG. 13.1)



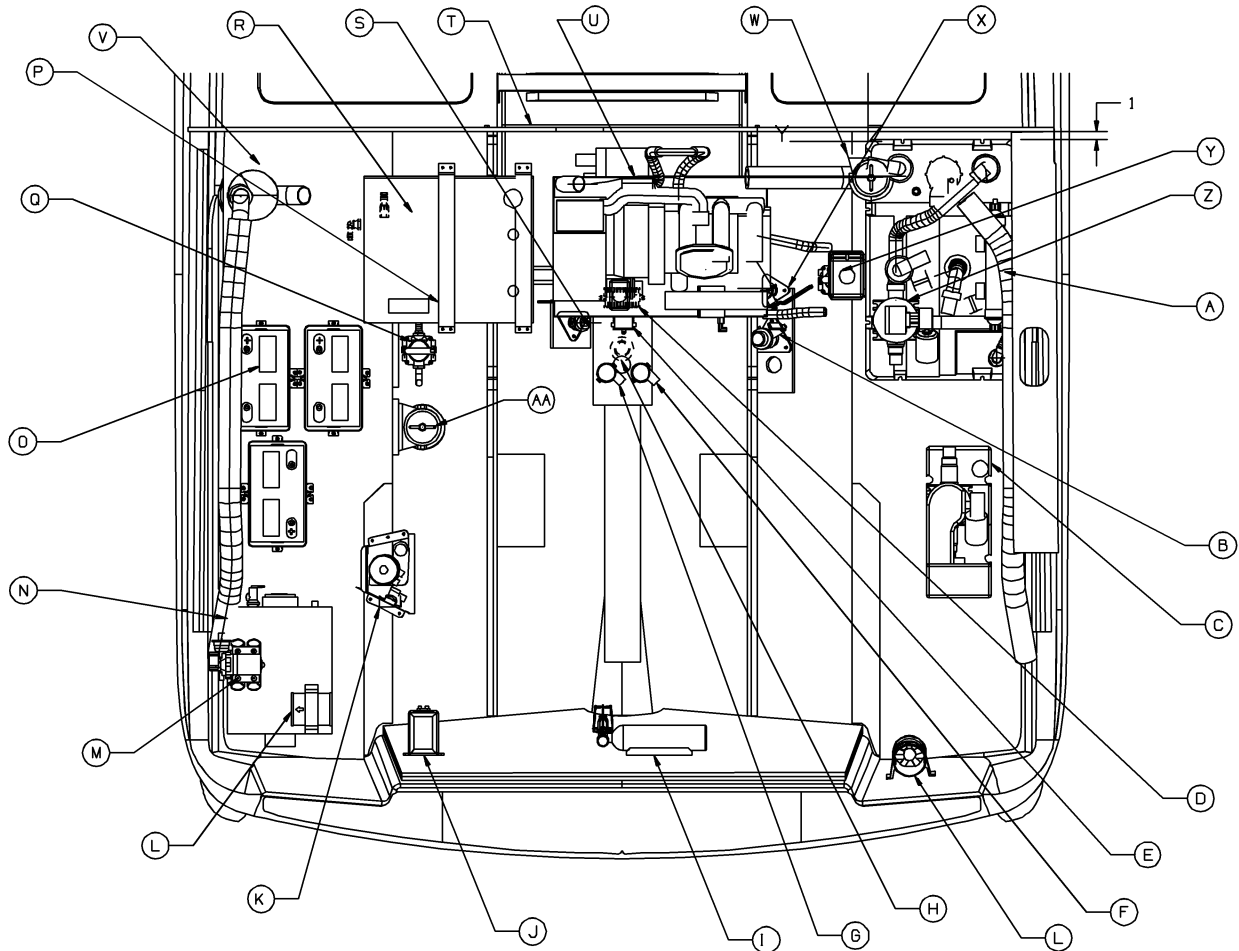
- | | | |
|--|---|---|
| A: HEAD SYSTEM HOLDING TANK | L: BILGE BLOWER | W: GENERATOR FUEL FILTER (W/OPTION) |
| B: HEAD SYSTEM OVERBOARD DISCHARGE SEACOCK | M: WATER PUMP | X: GENERATOR SEACOCK (W/OPTION) |
| C: HEAD SYSTEM VACUUM GENERATOR | N: WATER HEATER | Y: GENERATOR SEAWATER STRAINER (W/OPTION) |
| D: HIGH WATER FLOAT SWITCH | O: BATTERIES | Z: HEAD SYSTEM OVERBOARD DISCHARGE MACERATOR (OPTION) |
| E: BILGE PUMP FLOAT SWITCH | P: WATER TANK | |
| F: HIGH WATER BILGE PUMP | Q: AIR CONDITIONER WATER PUMP STRAINER (OPTION) | |
| G: BILGE PUMP | R: AIR CONDITIONER WATER PUMP | |
| H: TRANSDUCER | S: AIR CONDITIONER SEACOCK | |
| I: AUTOMATIC FIRE EXTINGUISHER | T: FUEL TANK | |
| J: TRIM TAB PUMP | U: GENERATOR (OPTION) | |
| K: STERN DRIVE POWER TRIM PUMP | V: GENERATOR MUFFLER (W/OPTION) | |

GASOLINE TWIN ENGINE WITH GENERATOR (FIG. 14.1)



- | | | |
|--|---|---|
| A: HEAD SYSTEM HOLDING TANK | L: BILGE BLOWER | W: GENERATOR FUEL FILTER (W/OPTION) |
| B: HEAD SYSTEM OVERBOARD DISCHARGE SEACOCK | M: WATER PUMP | X: GENERATOR SEACOCK (W/OPTION) |
| C: HEAD SYSTEM VACUUM GENERATOR | N: WATER HEATER | Y: GENERATOR SEAWATER STRAINER (W/OPTION) |
| D: HIGH WATER FLOAT SWITCH | O: BATTERIES | Z: HEAD SYSTEM OVERBOARD DISCHARGE MACERATOR (OPTION) |
| E: BILGE PUMP FLOAT SWITCH | P: WATER TANK | |
| F: HIGH WATER BILGE PUMP | Q: AIR CONDITIONER WATER PUMP STRAINER (OPTION) | |
| G: BILGE PUMP | R: AIR CONDITIONER WATER PUMP (OPT) | |
| H: TRANSDUCER | S: AIR CONDITIONER SEACOCK (OPTION) | |
| I: AUTOMATIC FIRE EXTINGUISHER | T: FUEL TANK | |
| J: TRIM TAB PUMP | U: GENERATOR (OPTION) | |
| K: STERN DRIVE POWER TRIM PUMP | V: GENERATOR MUFFLER (W/OPTION) | |

DIESEL SINGLE ENGINE WITH GENERATOR (FIG. 15.1)

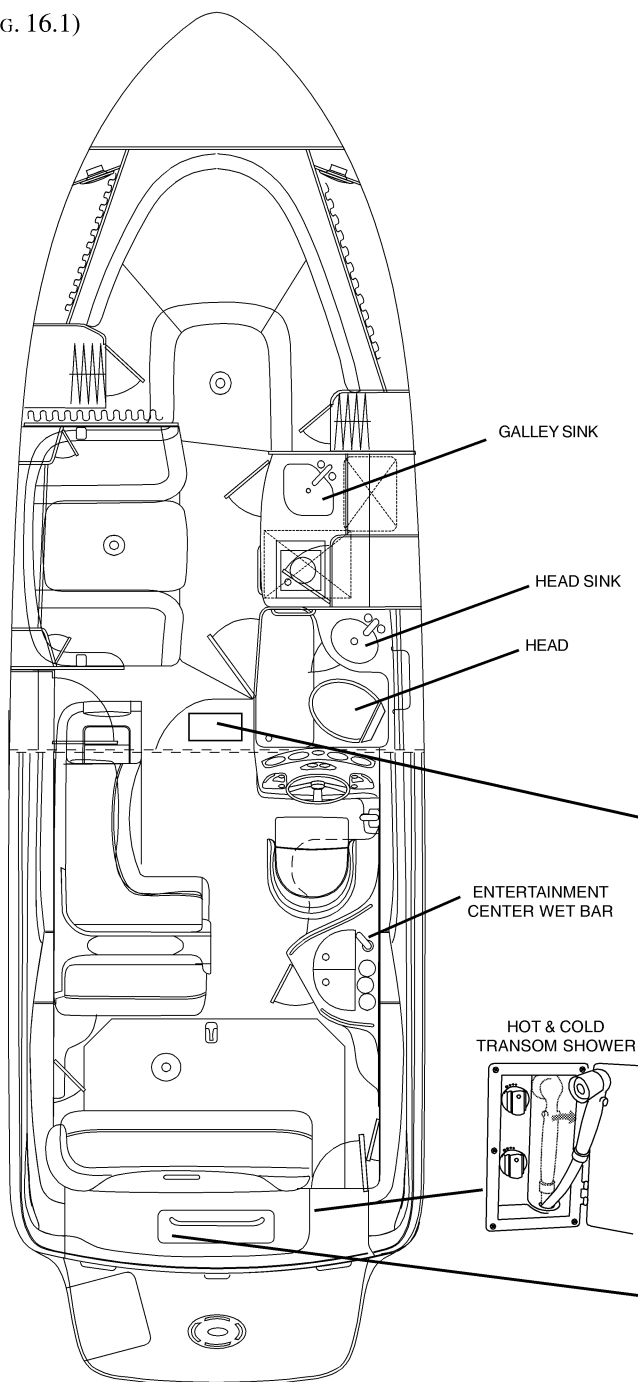


- | | | |
|--|---|---|
| A: HEAD SYSTEM HOLDING TANK | L: BILGE BLOWER | W: GENERATOR FUEL FILTER (W/OPTION) |
| B: HEAD SYSTEM OVERBOARD DISCHARGE SEACOCK | M: WATER PUMP | X: GENERATOR SEACOCK (W/OPTION) |
| C: HEAD SYSTEM VACUUM GENERATOR | N: WATER HEATER | Y: GENERATOR SEAWATER STRAINER (W/OPTION) |
| D: HIGH WATER FLOAT SWITCH | O: BATTERIES | Z: HEAD SYSTEM OVERBOARD DISCHARGE MACERATOR (OPTION) |
| E: BILGE PUMP FLOAT SWITCH | P: WATER TANK | |
| F: HIGH WATER BILGE PUMP | Q: AIR CONDITIONER WATER PUMP STRAINER (OPTION) | |
| G: BILGE PUMP | R: AIR CONDITIONER WATER PUMP (OPT) | AA: FUEL FILTER |
| H: TRANSDUCER | S: AIR CONDITIONER SEACOCK (OPT) | |
| I: AUTOMATIC FIRE EXTINGUISHER | T: FUEL TANK | |
| J: TRIM TAB PUMP | U: GENERATOR (OPTION) | |
| K: STERN DRIVE POWER TRIM PUMP | V: GENERATOR MUFFLER (W/OPTION) | |

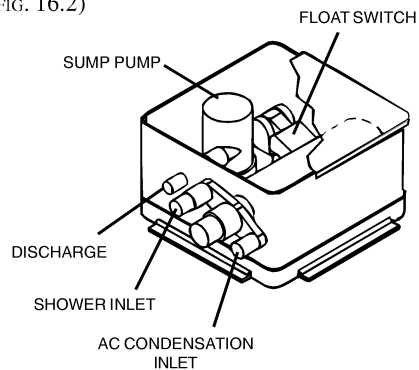
WATER SYSTEM

The water system on your Sea Ray® Sport Cruiser is equipped with a galley sink, shower, cockpit entertainment center wet bar, freshwater washdown, hot and cold transom shower, dockside water inlet and water heater with heat exchanger.

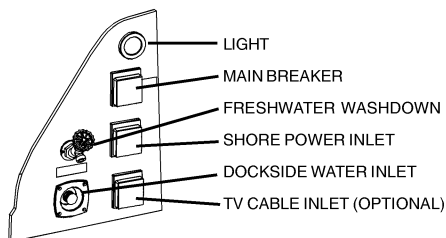
(FIG. 16.1)



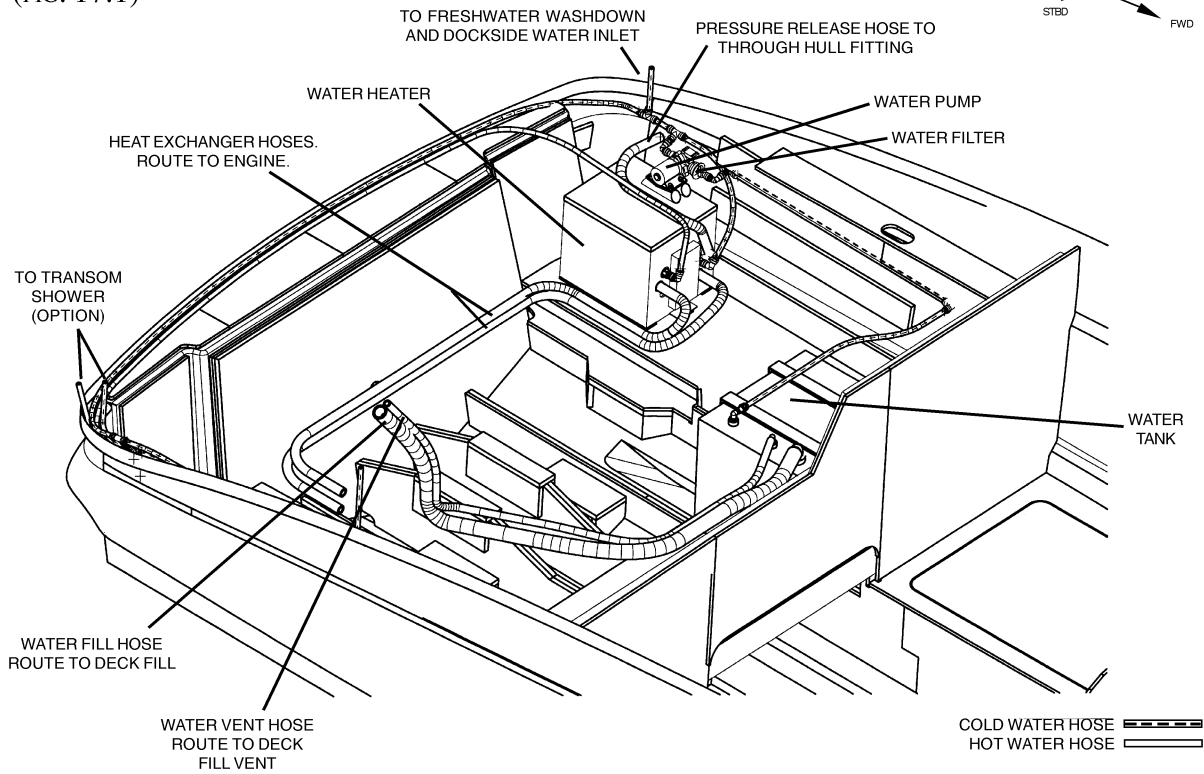
GREY WATER SUMP LOCATED BELOW CABIN ENTRY STEP (LIFT OUT TRASH CAN)
(FIG. 16.2)



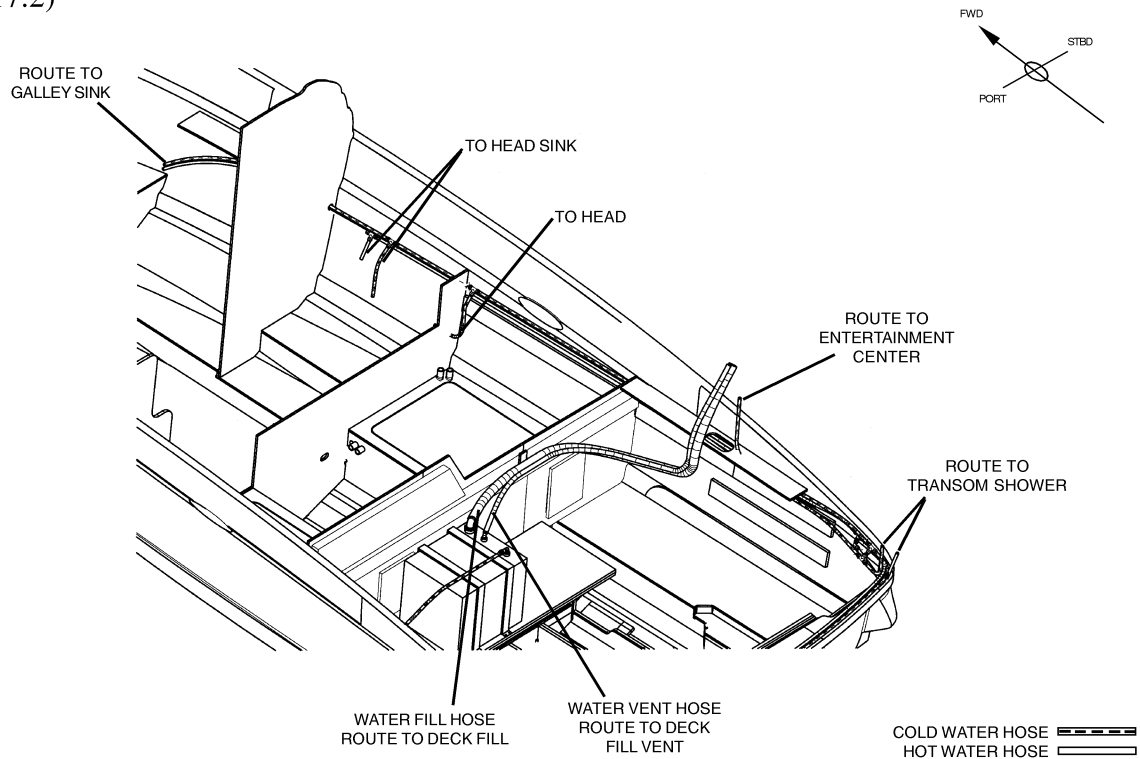
ACCESSORY BOARD INSIDE TRANSOM STORAGE COMPARTMENT (FIG. 16.3)



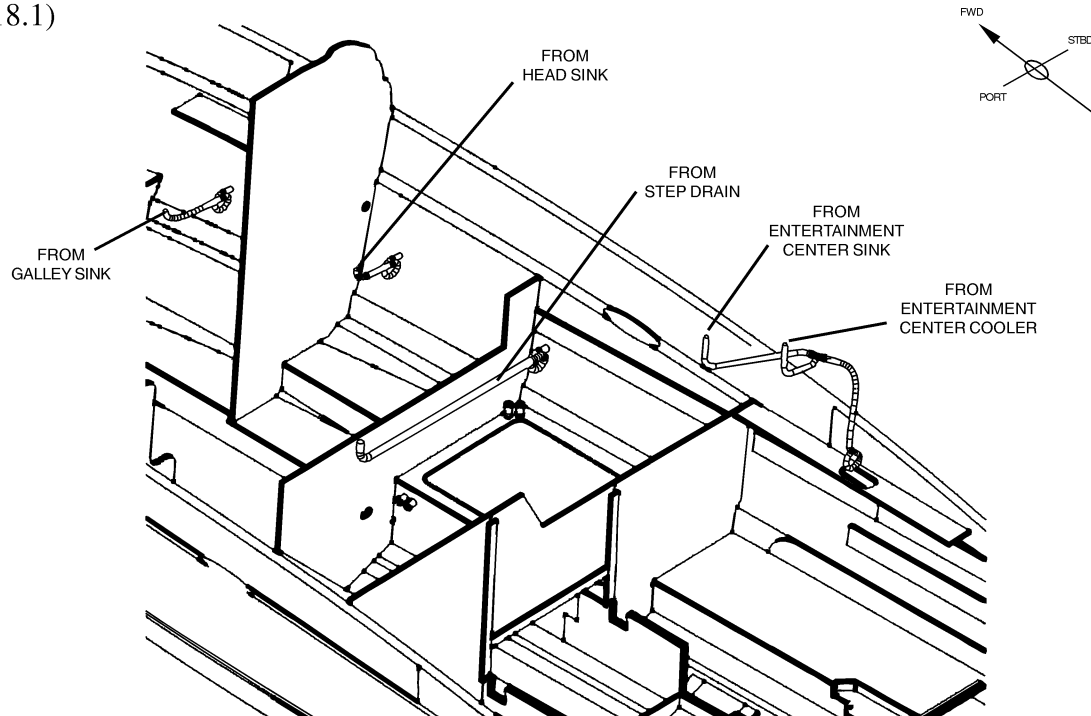
WATER SYSTEM
(FIG. 17.1)



WATER SYSTEM
(FIG. 17.2)



DRAIN LINE ROUTING
(FIG. 18.1)

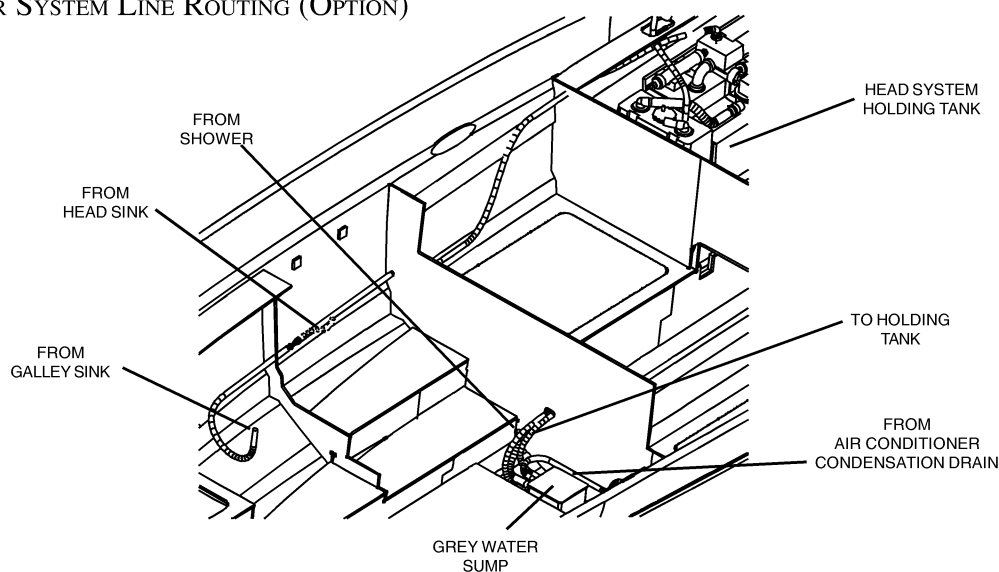


GREY WATER SYSTEM (OPTION)

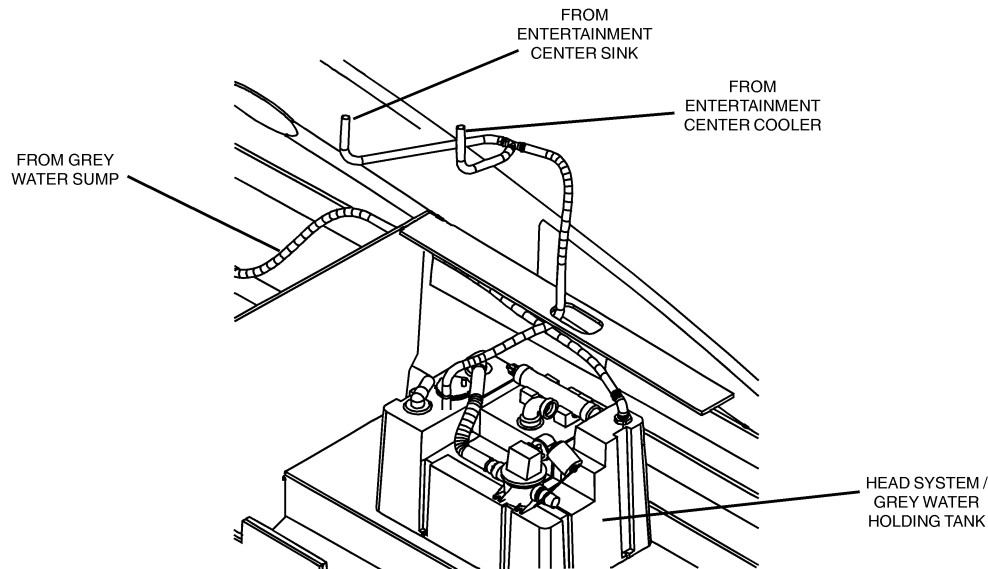
The grey water system option is available for boats operating in areas with overboard discharge restrictions. The grey water system drains all water into the enclosed sump where it is pumped into the head system

holding tank. If you are operating your boat in areas with discharge restrictions the holding tank must be emptied at a pump-out station. Refer to the *Grey Water* section in the owner's manual.

GREY WATER SYSTEM LINE ROUTING (OPTION)
(FIG. 18.2)



GREY WATER SYSTEM LINE ROUTING (OPTION)
(FIG. 19.1)



HEAD SYSTEM

The head system on your Sea Ray® Sport Cruiser is equipped with a Vacu-Flush® head with holding tank. Carefully read the sections in your Owner's Manual that pertain to your head system. The Owner's Packet in your boat also contains information pertaining to your head system that should be carefully read.

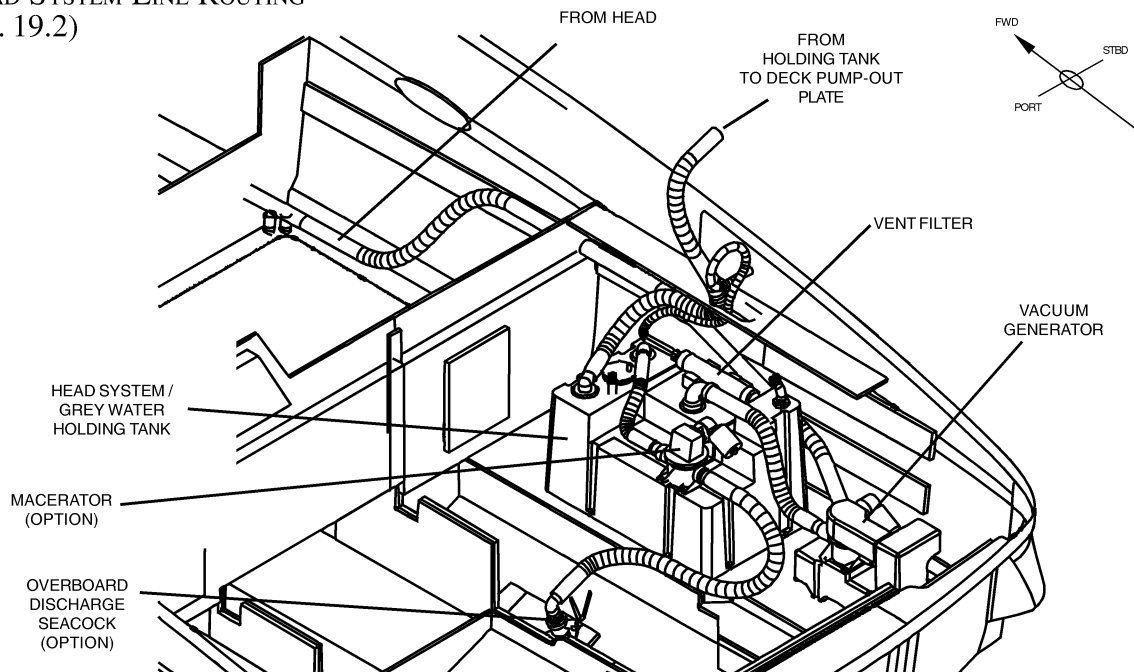
REFER TO OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.



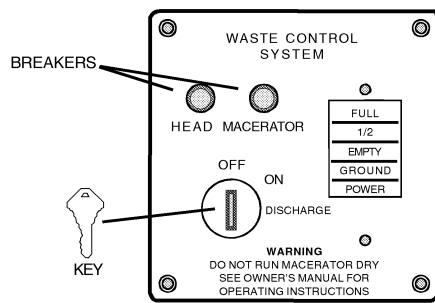
CAUTION

Do not place facial tissue, paper towels or sanitary napkins in head.

HEAD SYSTEM LINE ROUTING
(FIG. 19.2)



WASTE CONTROL SYSTEM PANEL
(FIG. 20.1)



MACERATOR (OPTIONAL)

When the 280 DA is equipped with the optional macerator it is located on the head system holding tank, (See FIG. 19.2). Refer to *Head System* section of the owner's manual for detailed macerator information.

To Operate The Macerator:

1. Open the overboard discharge seacock on the bilge floor, (See FIG. 19.2).
2. Turn discharge key on Waste Control System Panel in the head to DISCHARGE position
3. When tank is empty, release the switch and close the macerator seacock.

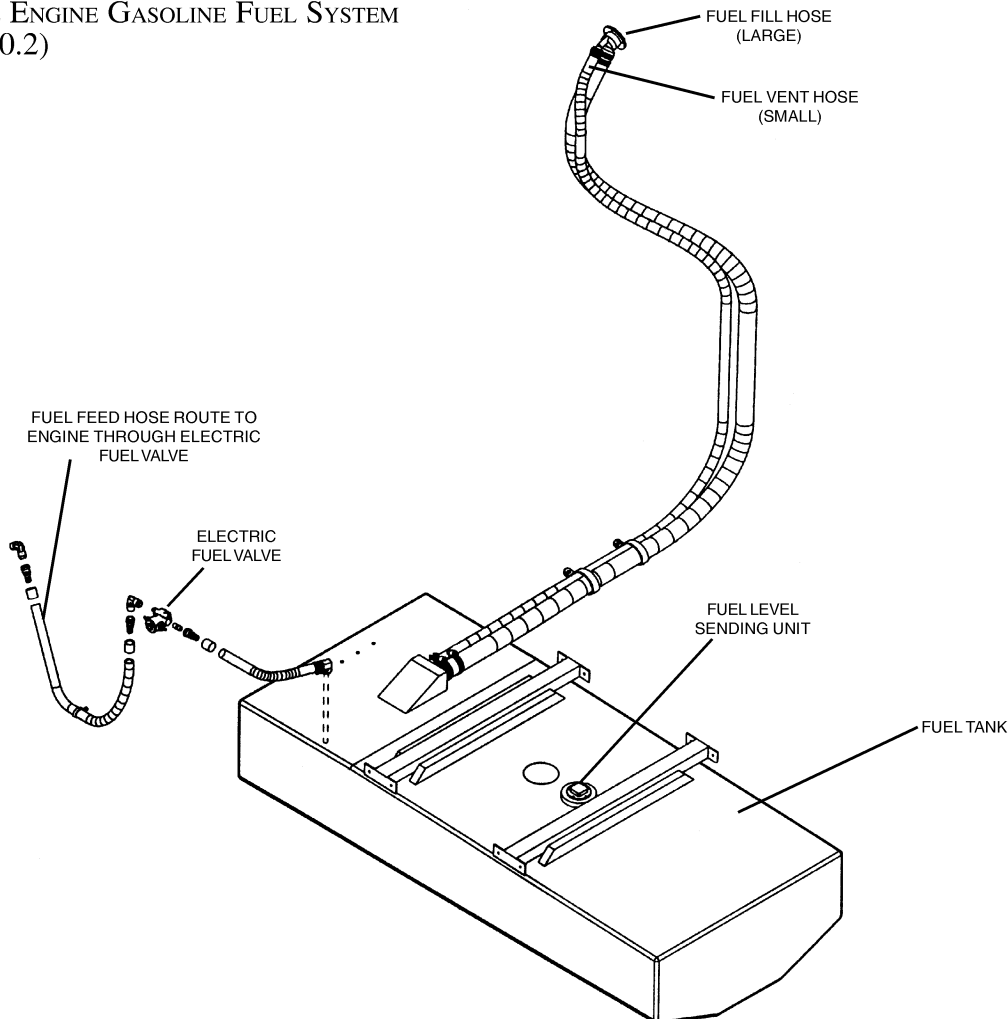
FUEL SYSTEM



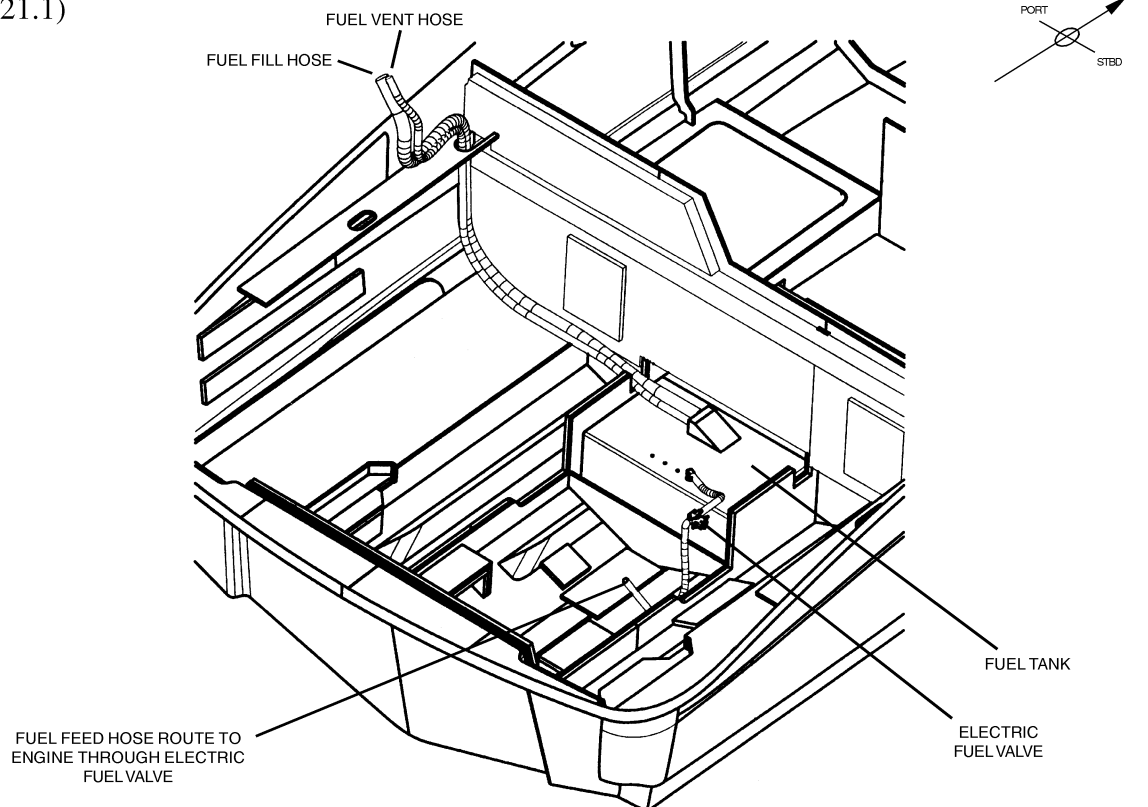
The Owner's Manual contains important fueling information. Take time to read all the fuel related information in the owner's packet.

The 280 DA standard gasoline fuel system consists of a 100 gallon (378.5 liters) fuel tank, fuel tank vent, anti-siphon valve, engine fuel supply line and fuel fill (see figs. 16.1, 17.1, 17.2 or 18.1).

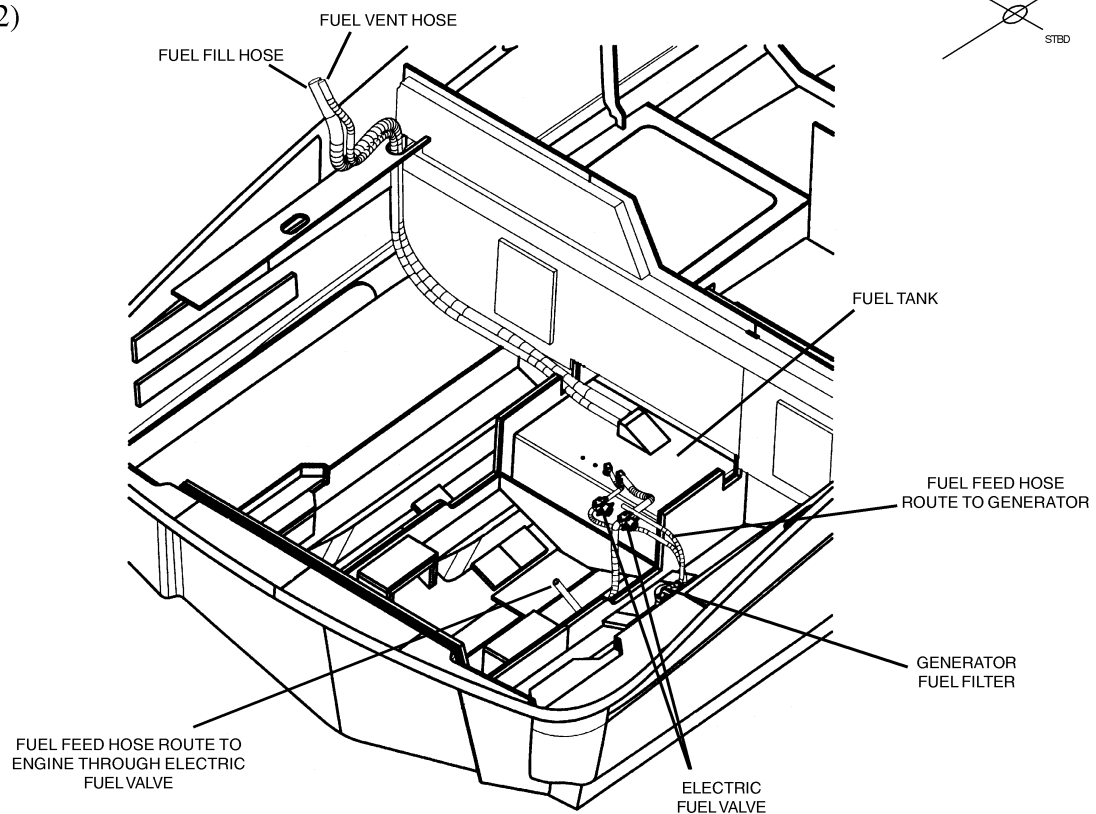
SINGLE ENGINE GASOLINE FUEL SYSTEM
(FIG. 20.2)



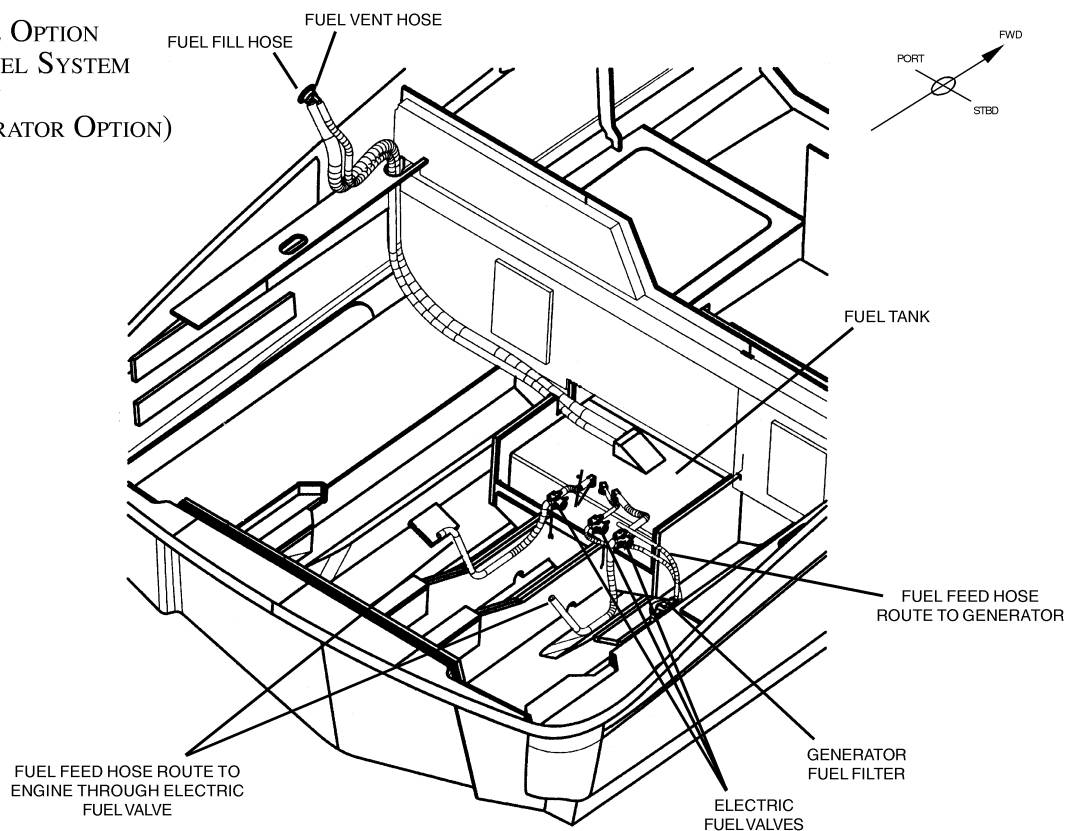
SINGLE ENGINE GASOLINE FUEL SYSTEM INSTALLATION
(FIG. 21.1)



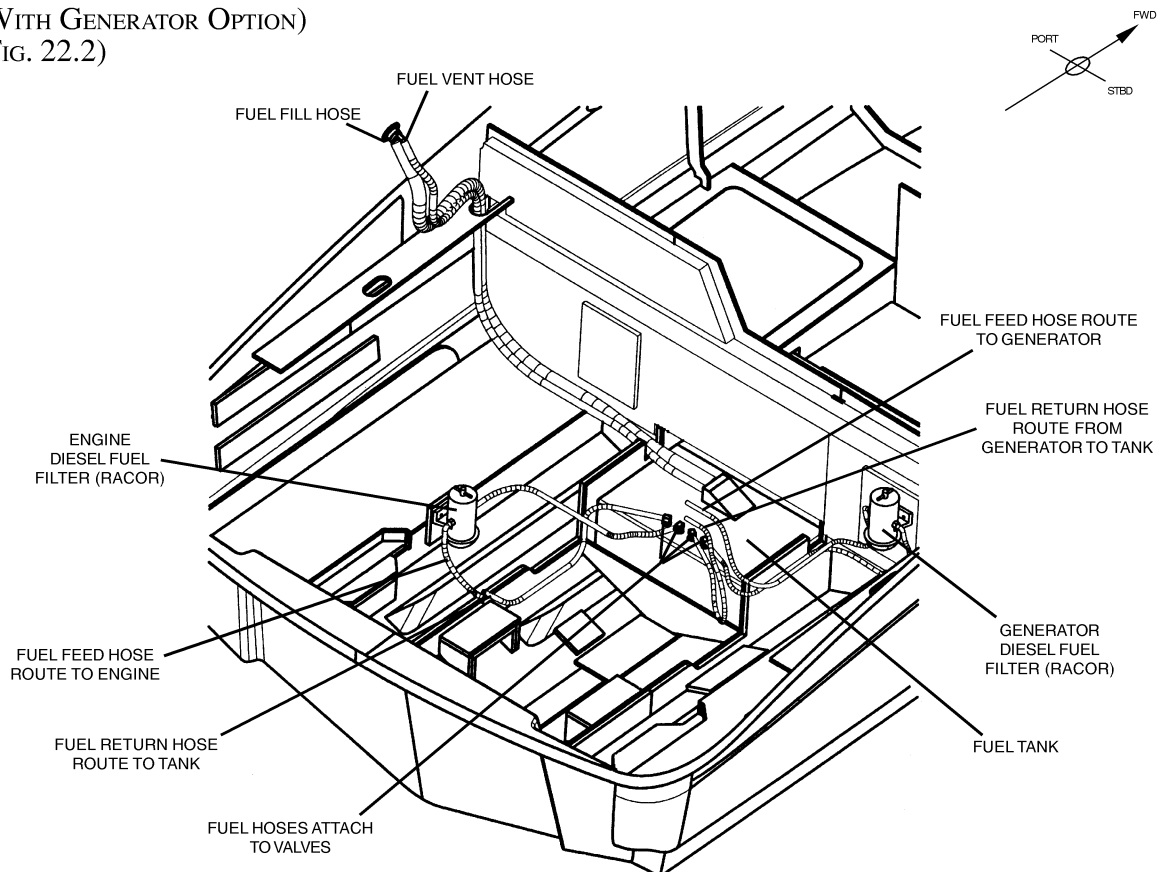
SINGLE ENGINE GASOLINE FUEL SYSTEM INSTALLATION
(WITH GENERATOR OPTION)
(FIG. 21.2)



TWIN ENGINE OPTION
GASOLINE FUEL SYSTEM
INSTALLATION
(WITH GENERATOR OPTION)
(FIG. 22.1)



SINGLE ENGINE DIESEL FUEL SYSTEM INSTALLATION
(WITH GENERATOR OPTION)
(FIG. 22.2)



VENTILATION SYSTEM / BILGE BLOWERS



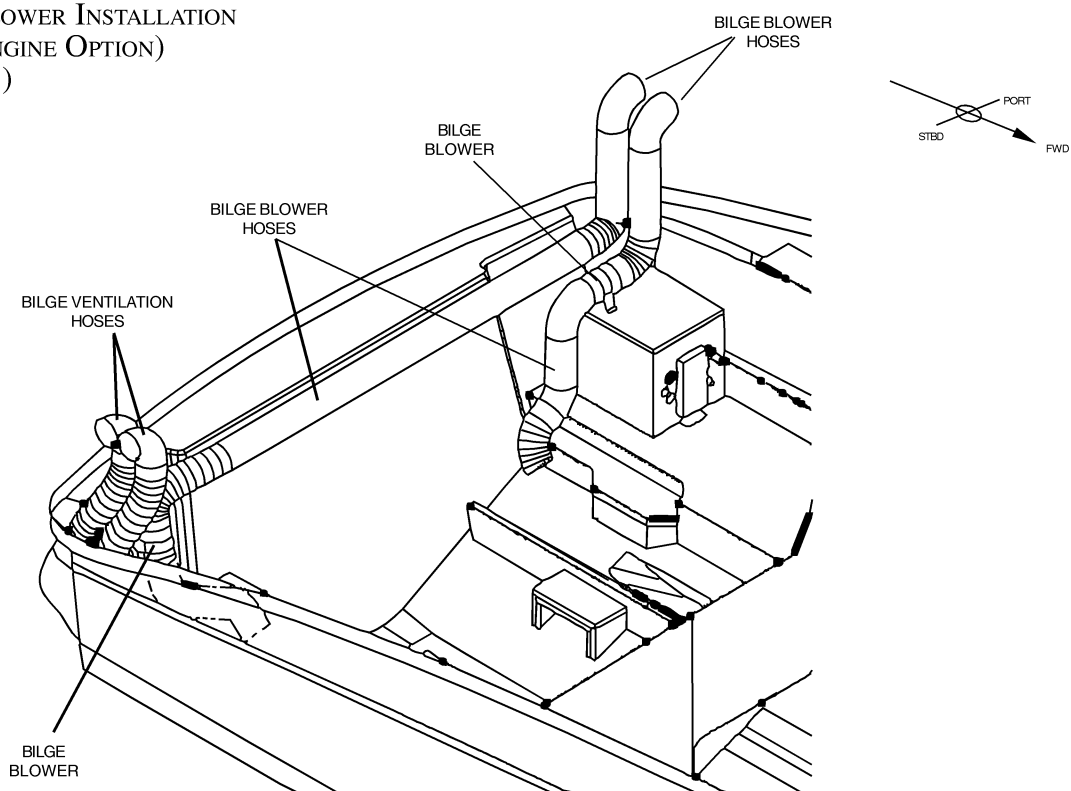
The 280 DA is equipped with electric bilge blowers to remove fumes from the engine compartment and provide ventilation through the deck vents before starting the engine and when operating below cruising speeds. The bilge blowers are located in the engine compartment on the port and starboard sides of the transom.

Bilge blower switches are located on the helm switch panel and, if equipped with the generator option, on the

cabin DC distribution panel. Bilge blower breakers are located on the generator panel in the cabin on the main distribution panel and on the aft EIM on the port side of the engine room.

The 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 cabin DC distribution panel.

**BILGE BLOWER INSTALLATION
(TWIN ENGINE OPTION)
(FIG. 23.1)**



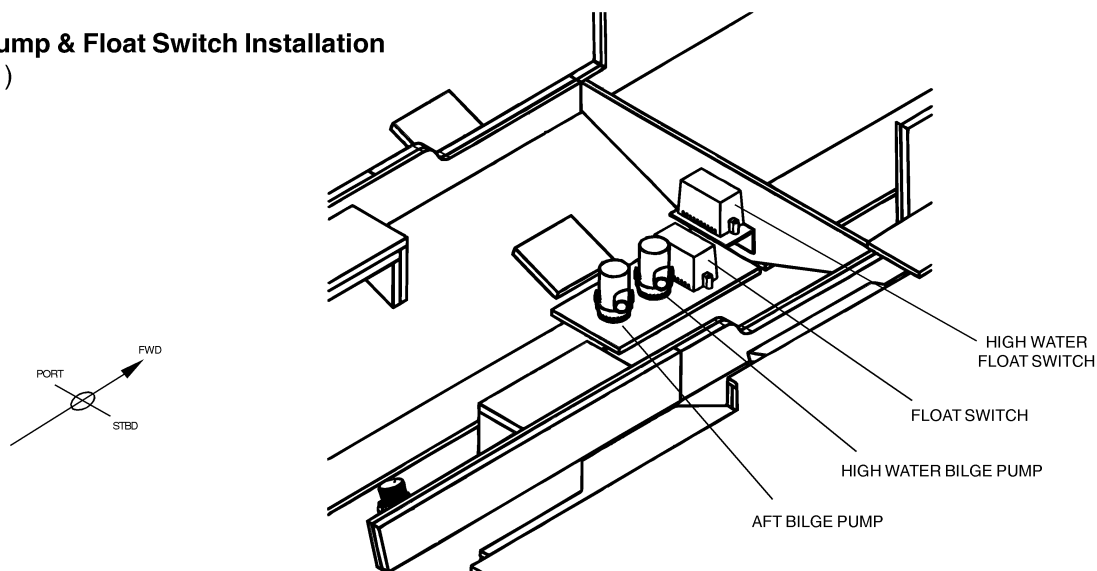
BILGE PUMPING SYSTEM



The 280 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.

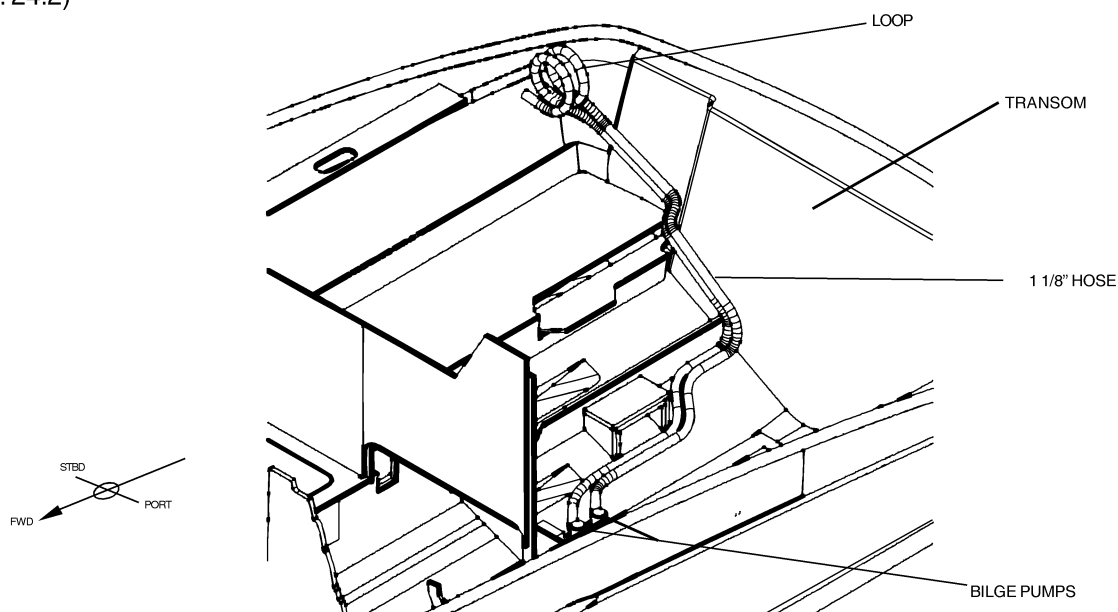
Bilge Pump & Float Switch Installation

(fig. 24.1)

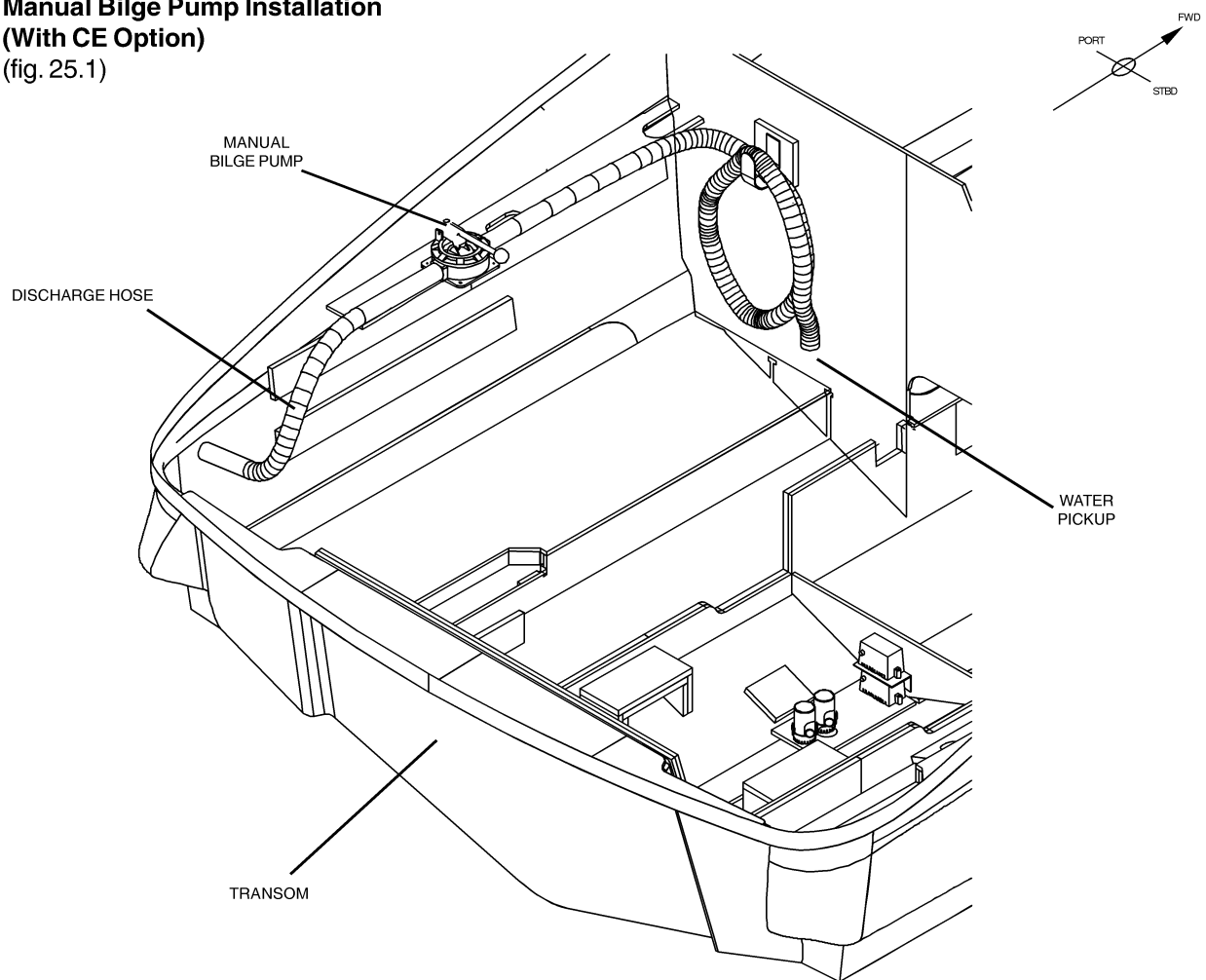


Bilge Pump Hose Routing

(fig. 24.2)



**Manual Bilge Pump Installation
(With CE Option)**
(fig. 25.1)

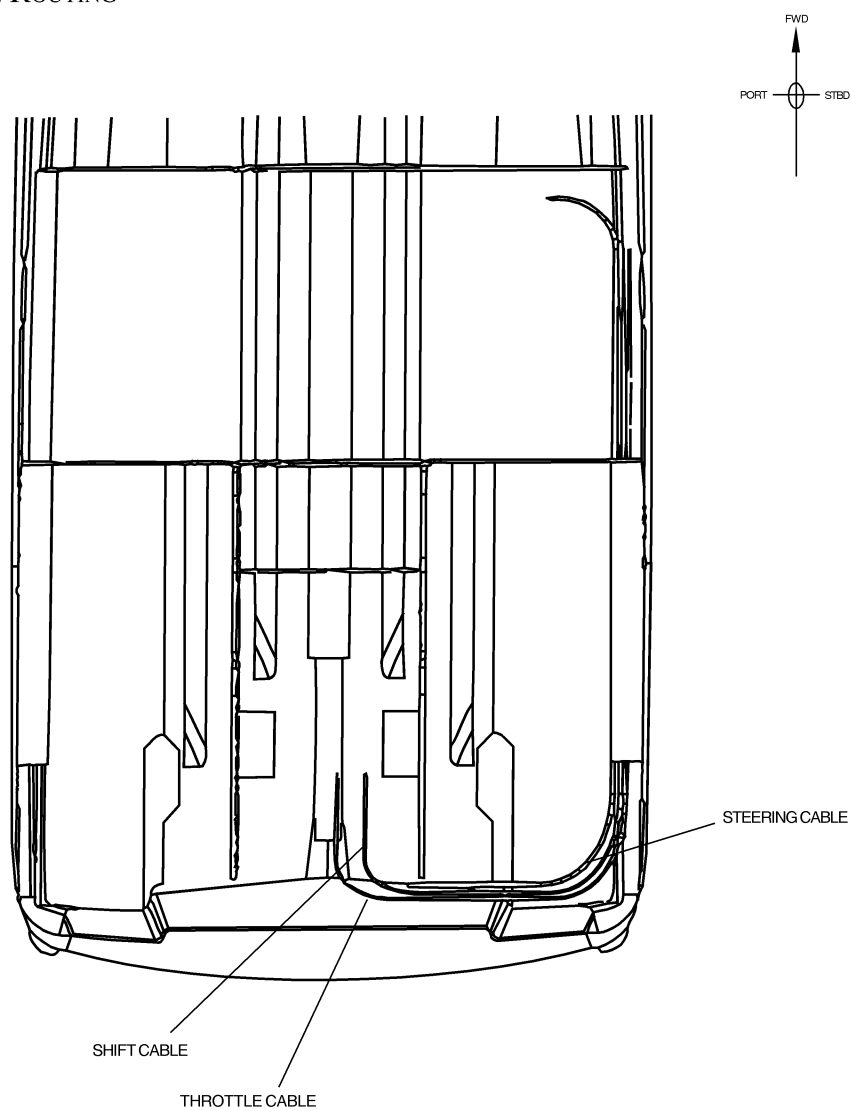


STEERING SYSTEM

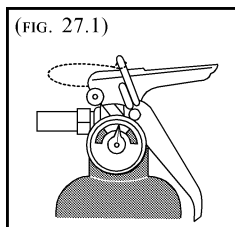
This boat is equipped with power steering.

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

POWER STEERING LINE ROUTING
(FIG. 26.1)



FIRE EXTINGUISHING SYSTEM



The 280 DA is equipped with the automatic fire suppression system. In addition to the automatic system your boat needs to be equipped with approved portable fire extinguishers. It is your responsibility to equip and maintain fire extinguishers.

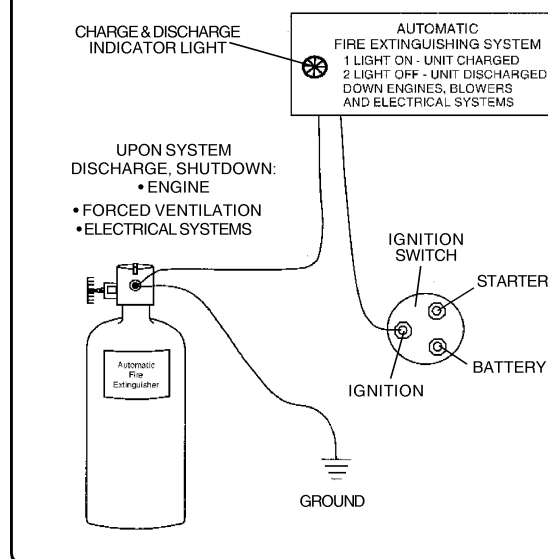
Following are United States Coast Guard (USCG) requirements and American Boat & Yacht Council (ABYC) recommendations for boats equipped with the automatic fire suppression system for open boats over 26 feet (8 meters) but less than 40 feet (12 meters).

Standard	Boat	W/Approved Fixed System Qty.	Type
USCG	280 DA	1	B1
ABYC	280 DA	3	B1

Location: Outside engine compartment, steering position and galley, or passenger cockpit.

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

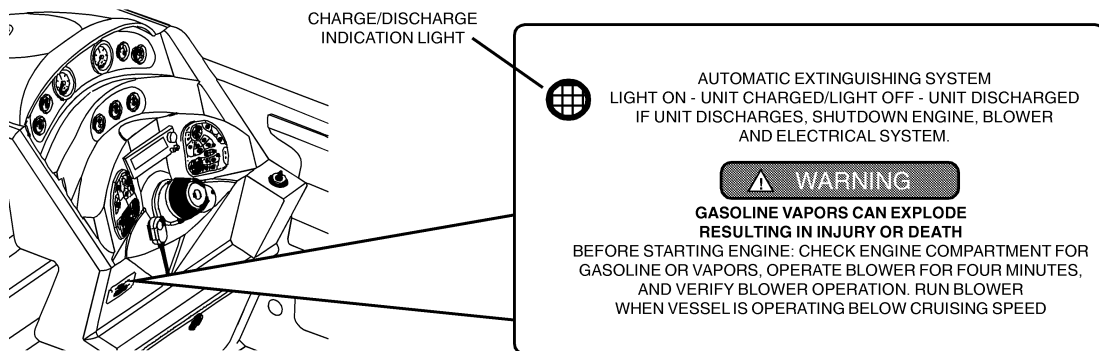
FIRE SUPPRESSION SYSTEM - AUTOMATIC (GAS SYSTEM) (FIG. 27.2)



EXTINGUISHER INDICATOR PANEL

The system indicator light is wired to the ignition and is turned ON when the ignition is turned ON. The system indicator light is located on the helm instrument panel. Under normal circumstances, when the ignition is ON the indicator light is lit. If the unit discharges, the light will go out. Refer to the *Accessories* section in the *Owner's Manual* for detailed information.

EXTINGUISHER INDICATOR PANEL (FOR FIRE SUPPRESSION SYSTEM - AUTOMATIC) (GASOLINE SYSTEM) (FIG. 27.3)

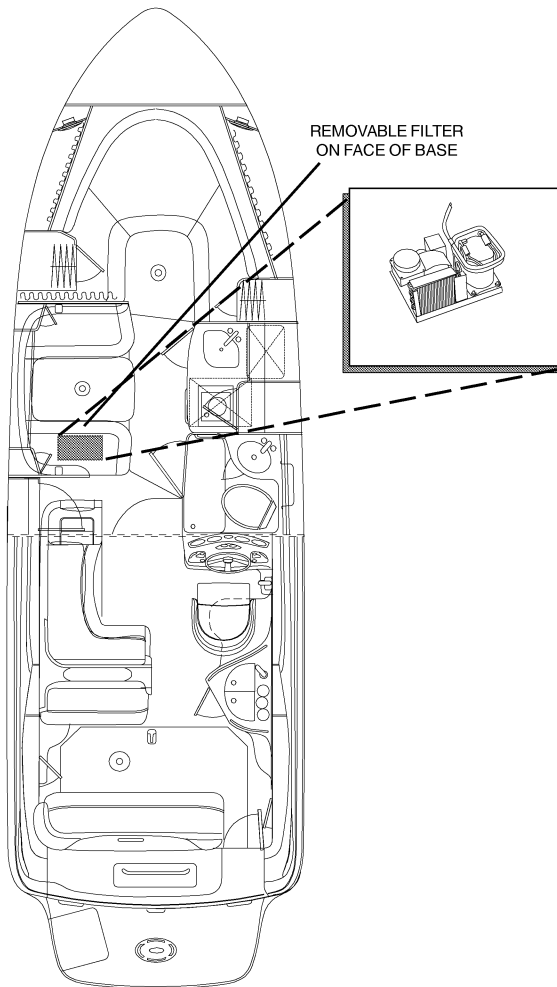


REFER TO THE OWNER'S MANUAL AND OWNER'S
PACKET FOR INSTRUCTIONS AND WARRANTY IN-
FORMATION.

(FIG. 28.1)



AIR CONDITIONER / HEATER LOCATIONS (FIG. 29.1)



ENGINE OIL CHANGE SYSTEM

Your Sport Cruiser is equipped with the oil change system that allows used oil to be drained out the transom through hoses that pull out of the drain plug(s) holes.

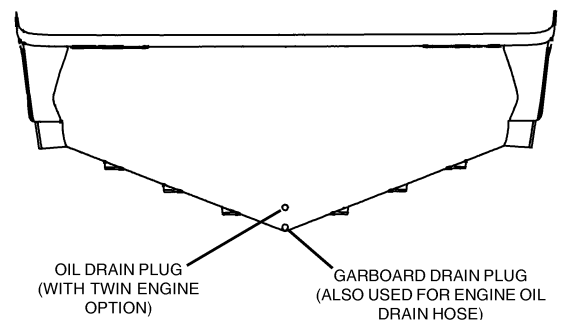
Note: When boat is equipped with one engine there is one plug on the transom. When boat is equipped with twin engine option there are two plugs on the transom.

To Operate:

1. Remove oil fill cap. (To allow ventilation)
2. Remove hull drain plug(s) on transom and pull oil drain hose(s) out of hole.
3. Have enough empty containers at hand to hold all of the used oil. Remove plug in the end of the hose(s). Let oil drain into container(s).
4. When all of the used oil has drained out of the engine(s) reinstall the plug into the hose(s). Push oil drain hose back into hull and reinstall hull drain plug(s).
5. Follow oil change instructions provided by the engine manufacturer.

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

OIL CHANGE PLUGS / GARBOARD DRAIN PLUGS (FIG. 29.2)



ENGINE COOLING SYSTEM

The engine cooling system is an integral part of the propulsion system.

REFER TO THE ENGINE OWNER'S MANUAL FOR INSTRUCTIONS AND WARRANTY 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. See *Anchoring* Section in the *Owner's Manual, General Information* section.

ANCHORING ARRANGEMENT

Standard:

This Sport Cruiser is equipped with an anchor storage compartment and anchor cradle. Store the anchor in the anchor cradle when not in use.

The anchor storage compartment drain should be kept clear of obstructions.

Optional Anchor Chute With Hause Pipe:

With this option the anchor is stored in the anchor chute. Secure the anchor to the cleat immediately behind the anchor and run the anchor rope through the hause pipe into the storage below.

Optional Windlass & Anchor Chute:

With this option the windlass is used to raise and lower the anchor and the anchor is stored in the anchor chute.

Note: Before using the windlass, be sure the anchor safety lanyard is removed from the anchor and the anchor is secured to the windlass chain.

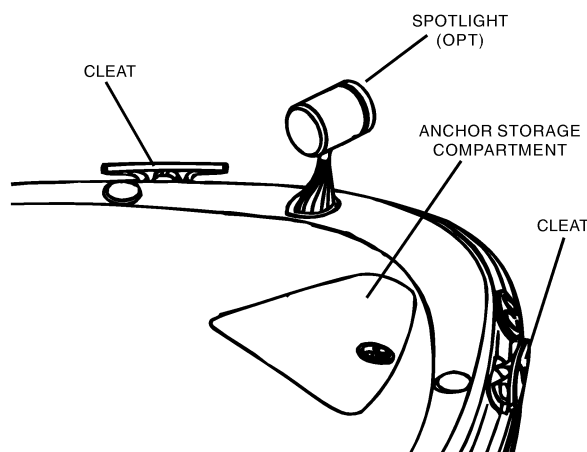
The manual winch handle is stored in the rope/chain storage compartment.

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

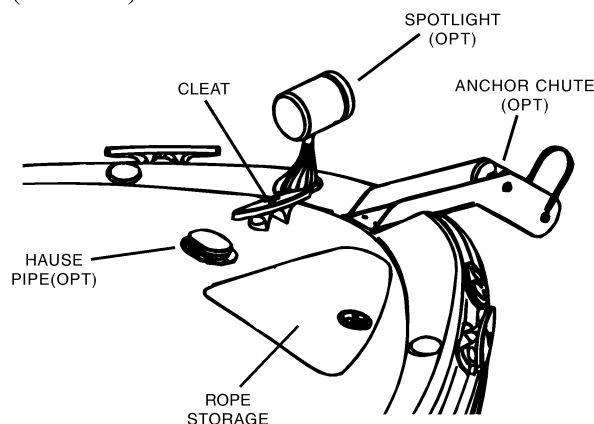
NOTICE

ATTACH THE SAFETY LANYARD TO THE ANCHOR to insure that the anchor is held in place should the windlass fail. DO NOT use the safety lanyard to SUPPORT the anchor in a stored position.

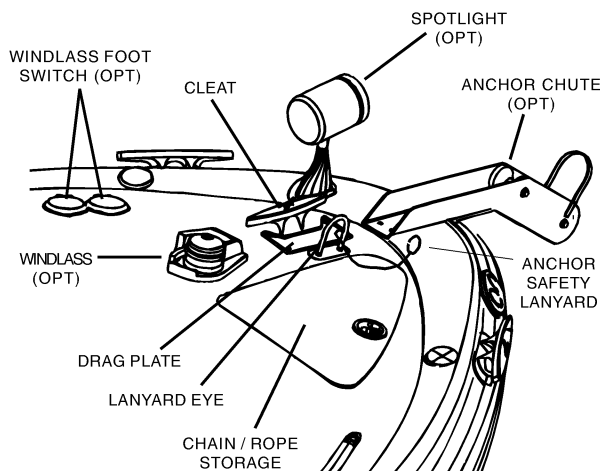
ANCHOR ARRANGEMENT
(STANDARD) (FIG. 30.1)



ANCHOR ARRANGEMENT
(OPTIONAL ANCHOR CHUTE WITH HAUSE PIPE)
(FIG. 30.2)

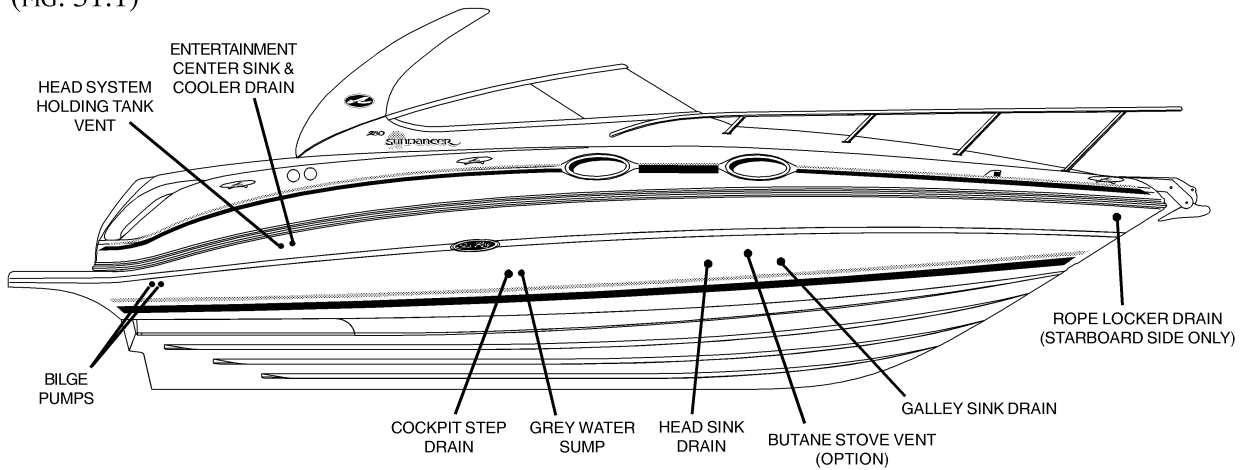


ANCHOR ARRANGEMENT
(OPTIONAL WINDLASS & ANCHOR CHUTE)
(FIG. 30.3)

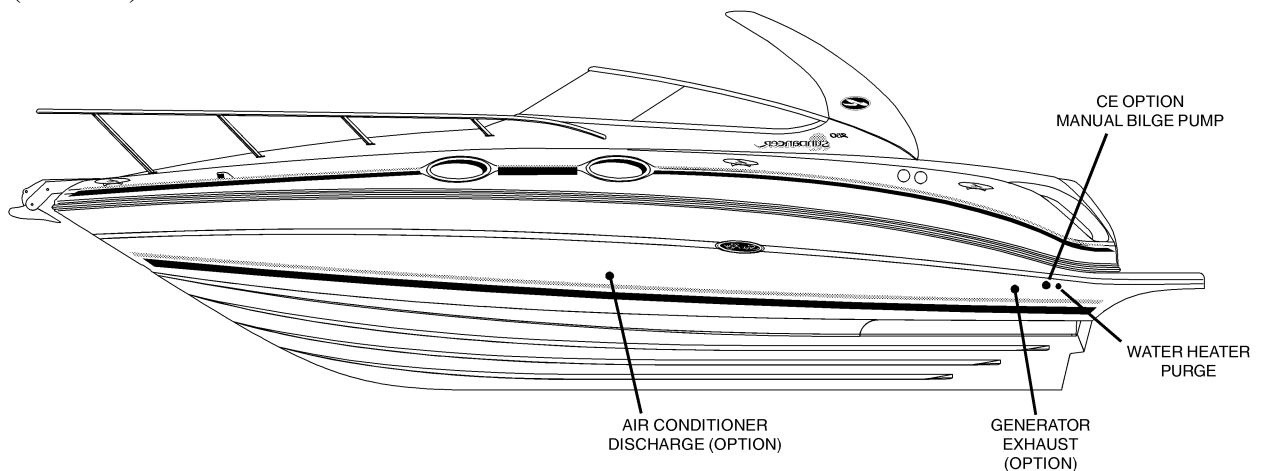


LOCATION OF THROUGH-HULL FITTINGS

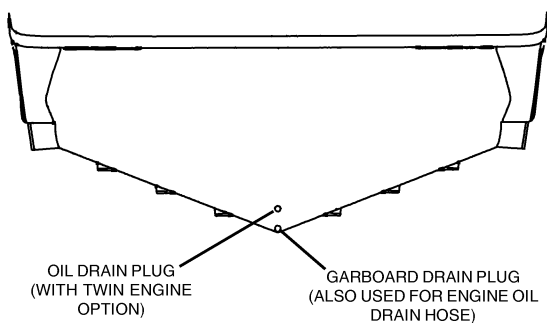
STARBOARD SIDE
(FIG. 31.1)



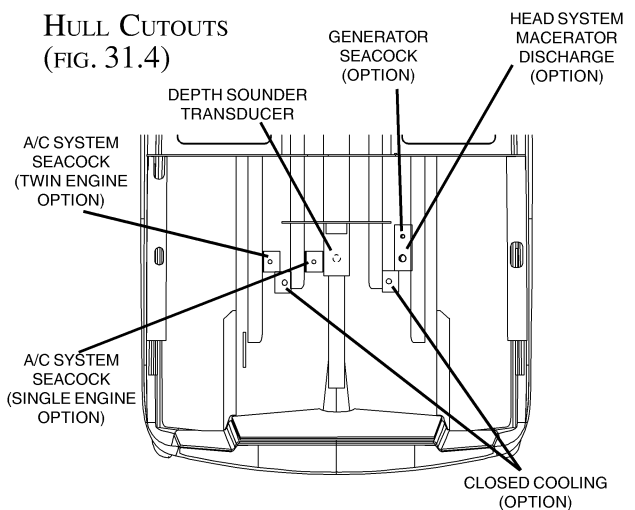
PORT SIDE
(FIG. 31.2)



TRANSOM CUTOUTS
(FIG. 31.3)



HULL CUTOUTS
(FIG. 31.4)



CANVAS INFORMATION

CANVAS

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

Read and understand the effects of carbon monoxide in the Owner's Manual and how to ventilate your Sport Boat to prevent the build-up of this invisible gas.

Attached to the inside of the bimini top is a DANGER tag for Carbon Monoxide Gas (CO) buildup and a WARNING tag for excessive speeds while canvas is installed. The Aft Curtain also has a WARNING tag stating "The Aft Curtain is not designed to be used while engine is running or boat is underway". If your canvas does not have these tags, they become lost or are unable to be read, contact your dealer for replacement labels.

! DANGER
EXHAUST FUMES FROM ENGINES
CONTAIN DEADLY
CARBON MONOXIDE GAS (CO).
BOATS WITH CANVAS OR POOR
VENTILATION ARE MOST LIKELY TO
COLLECT FUMES. CO SICKNESS
SYMPTOMS INCLUDE HEADACHE,
NAUSEA AND DIZZINESS. DO NOT
MISTAKE FOR SEA SICKNESS.
VENTILATE BOAT. SEE BOAT OWNER'S
MANUAL FOR MORE DETAILS.

! WARNING
SUNSHADE SHOULD
NOT BE USED WHEN
VESSEL SPEED EXCEEDS
45 MPH

! WARNING
THE AFT CURTAIN IS NOT
DESIGNED TO BE USED
WHILE ENGINE IS RUNNING
OR BOAT IS UNDERWAY

Your Sea Ray® Sport Boat standard canvas set consists of the following pieces:

- Sunbrella® Bimini Top, With Boot

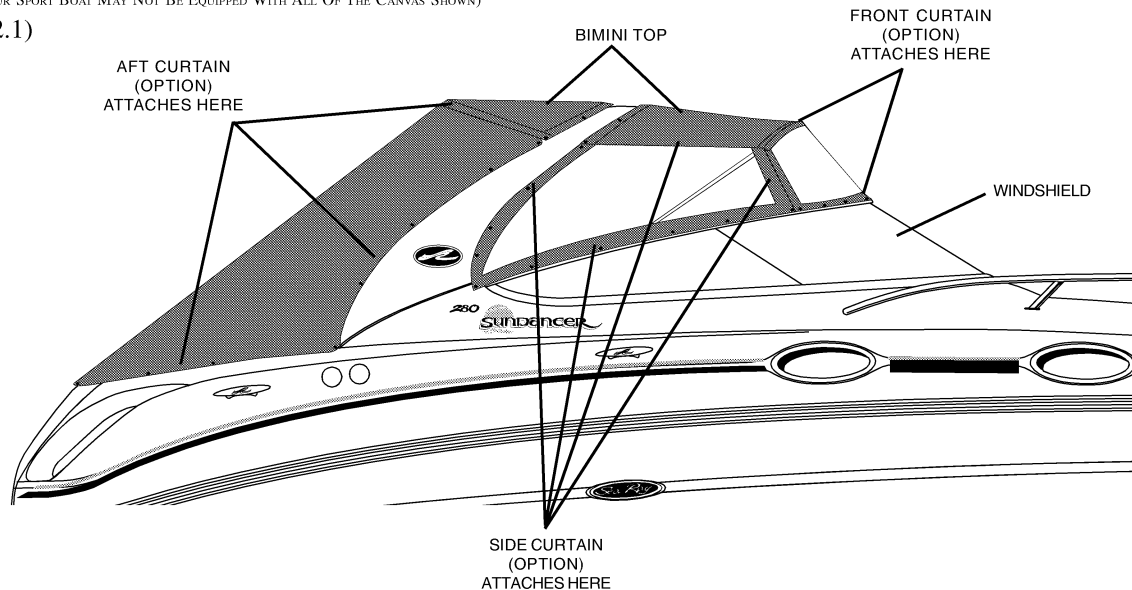
Canvas options available consist of the following pieces:

- Canvas Package:
 - Aft Cover
 - Bimini Front Curtain
 - Canvas Storage Bag
 - Side Curtains
- Camper Canvas Package:
 - Bimini Front Curtain
 - Camper Aft Cover
 - Camper Top Boot
 - Canvas Storage Bag
 - Side Curtains

CANVAS ARRANGEMENT (SHOWN WITH OPTIONAL ARCH):

(NOTE: YOUR SPORT BOAT MAY NOT BE EQUIPPED WITH ALL OF THE CANVAS SHOWN)

(FIG. 32.1)

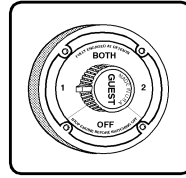


ELECTRICAL INFORMATION

ELECTRICAL INSTALLATION

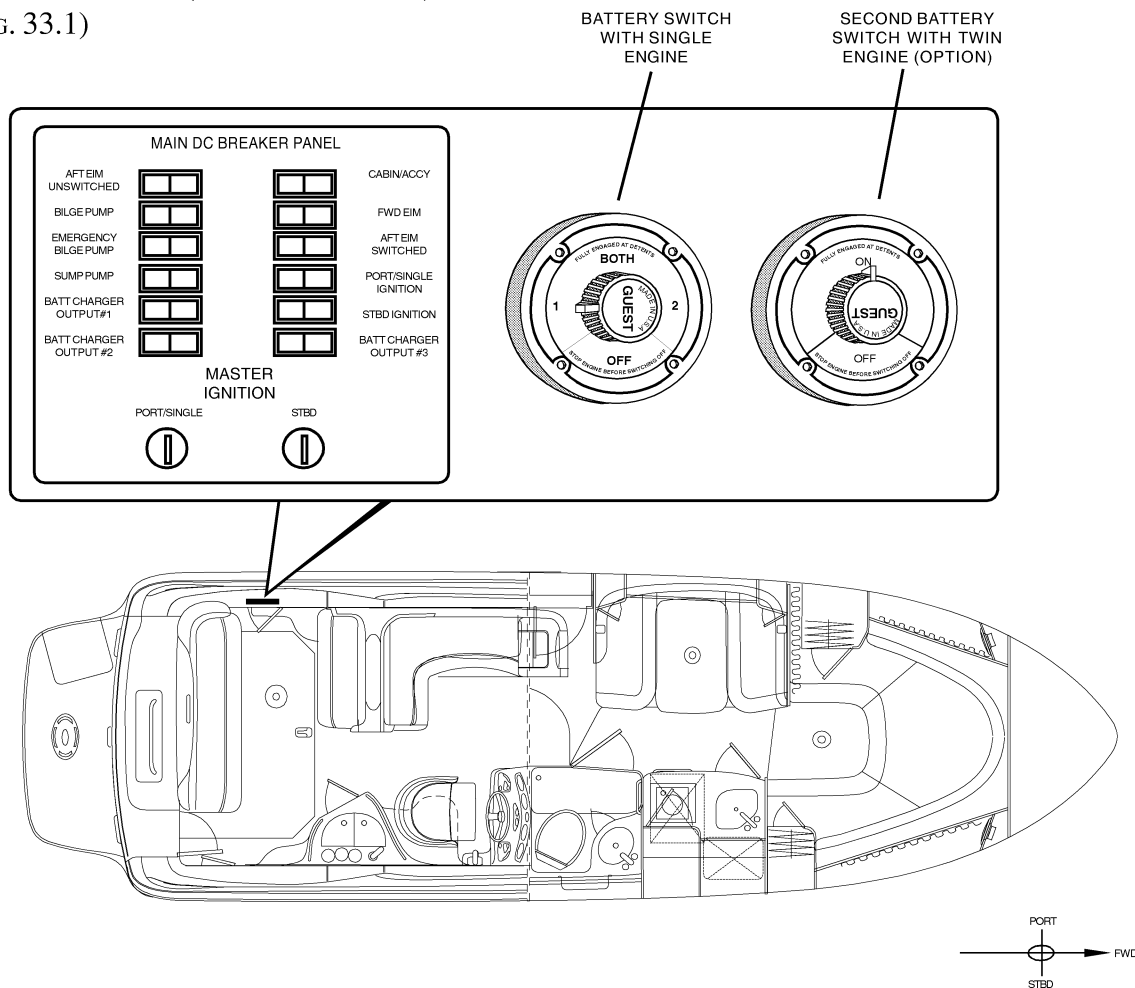
This owner's manual supplement contains electrical schematics for your boat. These electrical schematics were generated by technicians at the engineering division for technical reference and service technicians. Sea Ray® does not recommend that you attempt to work on the boat's electrical system yourself; 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.

BATTERY SWITCH (OPTION)



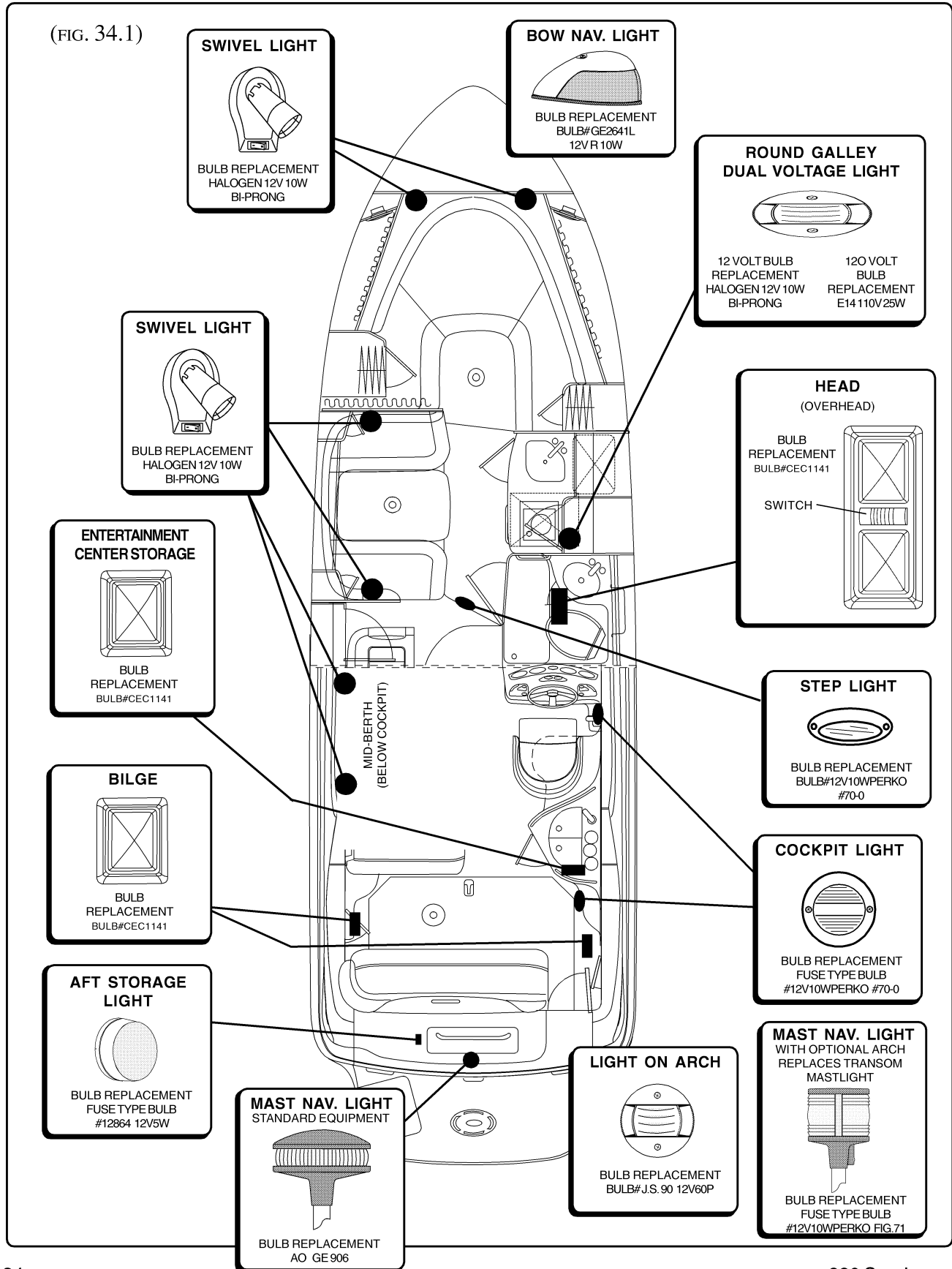
Your boat is equipped with a dual battery on/off switch. It is located . (See figure 15.2 for exact location). The battery switch controls the delivery of DC loads to start the engine(s) and operate accessories.

**BATTERY SWITCH & MAIN DC BREAKER
PANEL LOCATIONS (AFT PORT COCKPIT)**
(FIG. 33.1)



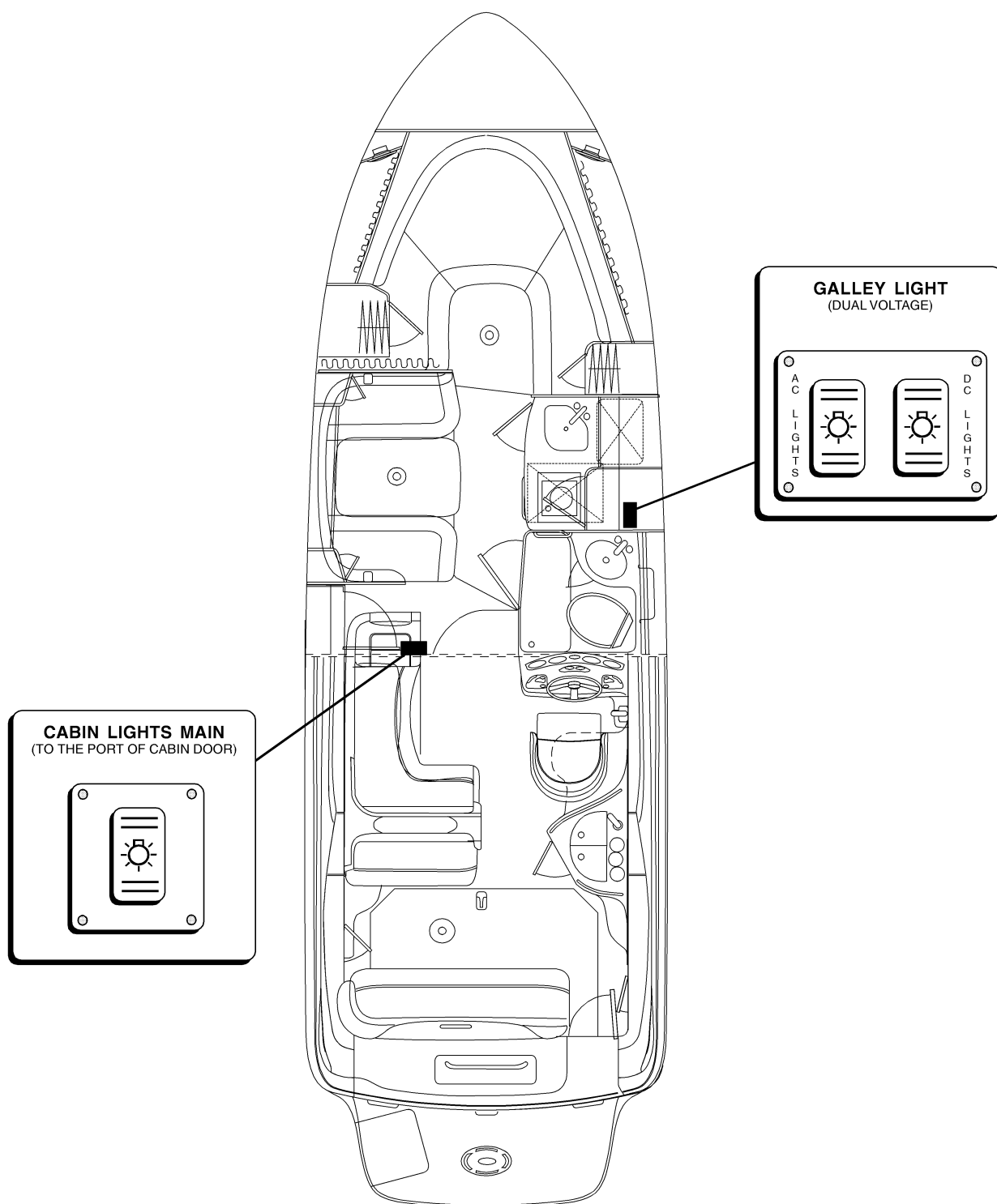
LIGHTING LOCATIONS

(FIG. 34.1)



CABIN & COCKPIT SWITCH LOCATION & FUNCTION

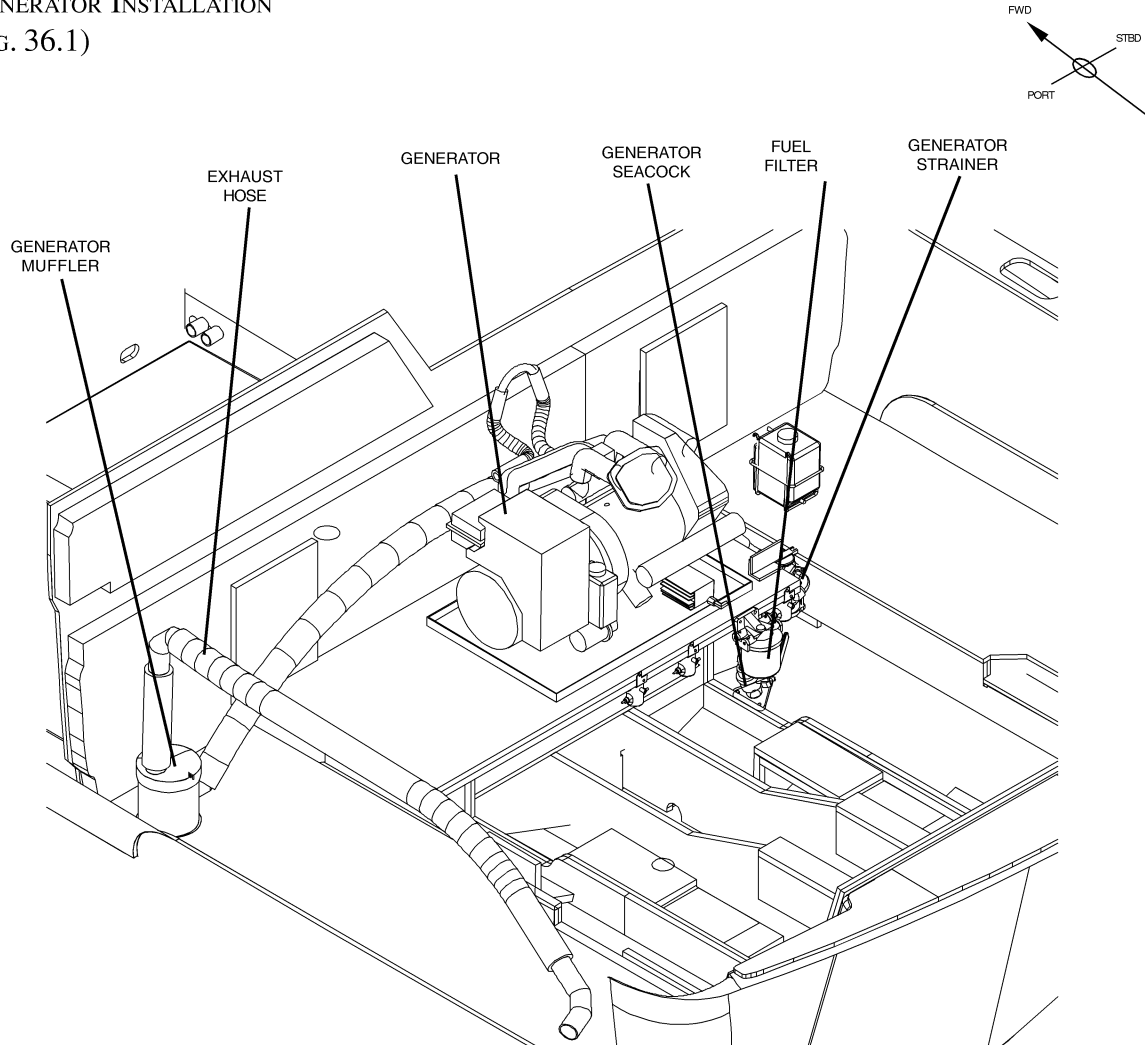
(FIG. 35.1)



GENERATOR INSTALLATION (OPTION)

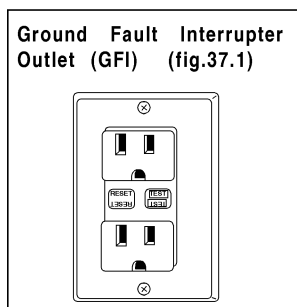
The generator is optional equipment on the 280 DA. Below is an illustration showing the location of the generator and related equipment. For detailed operating instructions refer to the Owner's Manual *Section 7, Generator*, and to the information provided by the generator manufacturer in the Owner's Packet.

GENERATOR INSTALLATION
(FIG. 36.1)



GROUND FAULT INTERRUPTER (GFI) OUTLET LOCATIONS & ASSOCIATED LOADS

(FIG. 37.2)



Refer to the electrical system section of the owner's manual for operation and function information of the GFI's.

If any of the accessories on your boat fail to turn on, check the associated GFI outlet breaker first.

GFI Location

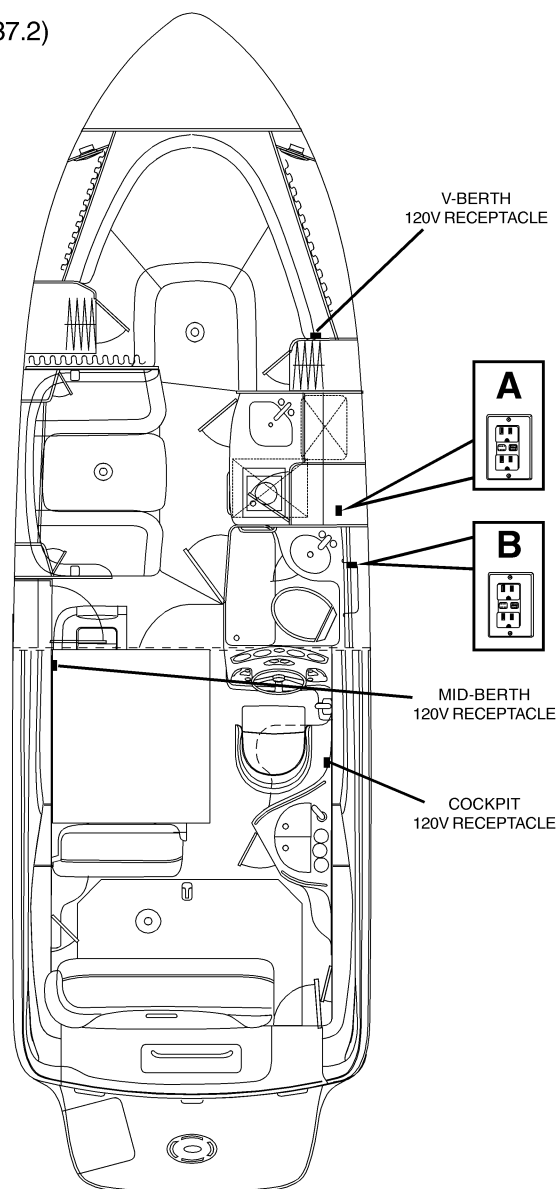
A: Galley- Inside back galley storage cubby.

B: Head- Inside head upper storage compartment.

Associated Loads

- Galley Receptacle
- Microwave
- V-Berth Receptacle

- Head Receptacle
- Mid-Berth Receptacle
- Cockpit Receptacle



ELECTRONIC SWITCH PADS & ELECTRONIC INTERFACE MODULES (EIM)

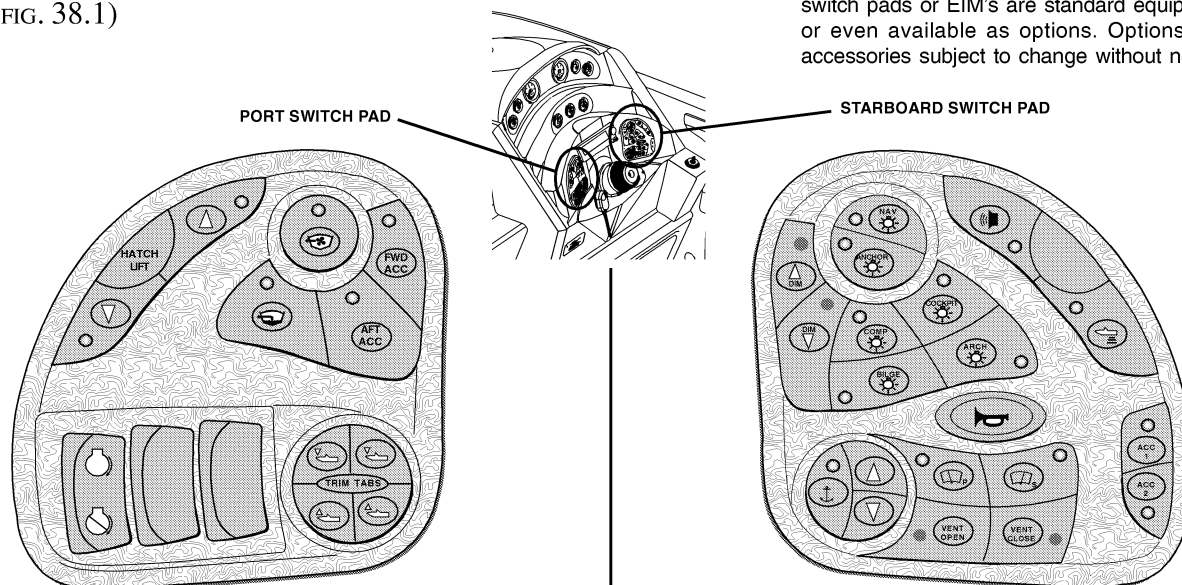
Your Sea Ray® Sport Cruiser is equipped with illuminated waterproof electronic switch pads. The individual switch functions are indicated by ISO symbols. (See FIG. 12.2 and 12.3)

Electrical equipment illustrated on the switch pads are connected to the Electronic Interface Modules (EIM's).

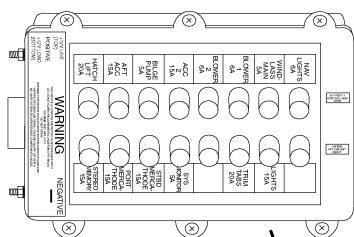
The port switch pad is connected to the EIM located in the engine compartment. The starboard switch pad is connected to the EIM located below the helm. (See FIG. 38.1) Each EIM is fitted with breakers for each piece of equipment connected to it. If a piece of electrical equipment will not function check its corresponding breaker on the EIM.

ELECTRONIC SWITCH PADS & ELECTRONIC INTERFACE MODULES (EIM) LOCATIONS (FIG. 38.1)

NOTE: Switch pads and EIM's are generic in nature and may be used on more than one Sea Ray® model. Not all accessories shown on switch pads or EIM's are standard equipment or even available as options. Options and accessories subject to change without notice.

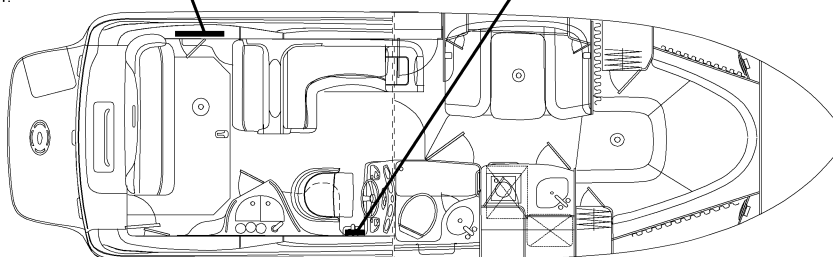
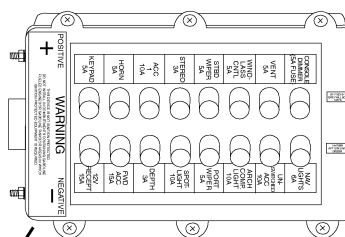


AFT ELECTRONIC INTERFACE MODULE (EIM)
(CONTROLLED BY PORT SWITCH PAD)
(LOCATED ON THE ACCESSORY BOARD ON THE PORT SIDE OF THE ENGINE COMPARTMENT)



NOTE: THIS BOX IS IGNITION PROTECTED. DO NOT OPEN. READ WARNING ON BOX IN ENGINE COMPARTMENT.

FORWARD ELECTRONIC INTERFACE MODULE (EIM)
(CONTROLLED BY STARBOARD SWITCH PAD)
(LOCATED AT THE HELM IN THE COMPARTMENT BELOW THE ENGINE SHIFT AND THROTTLE)



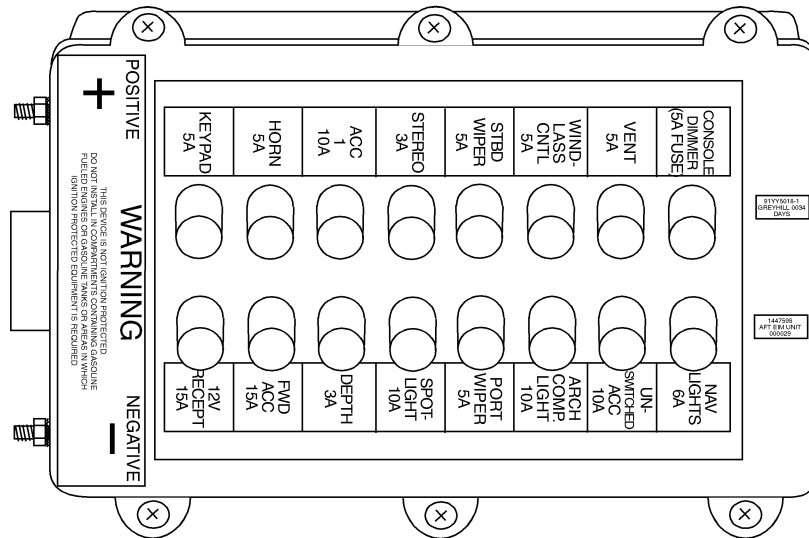
(FIG. 39.1)

FORWARD ELECTRONIC INTERFACE MODULE (EIM)

(CONTROLLED BY STARBOARD SWITCH PAD)

(LOCATED AT THE HELM IN THE COMPARTMENT

BELOW THE ENGINE SHIFT AND THROTTLE)



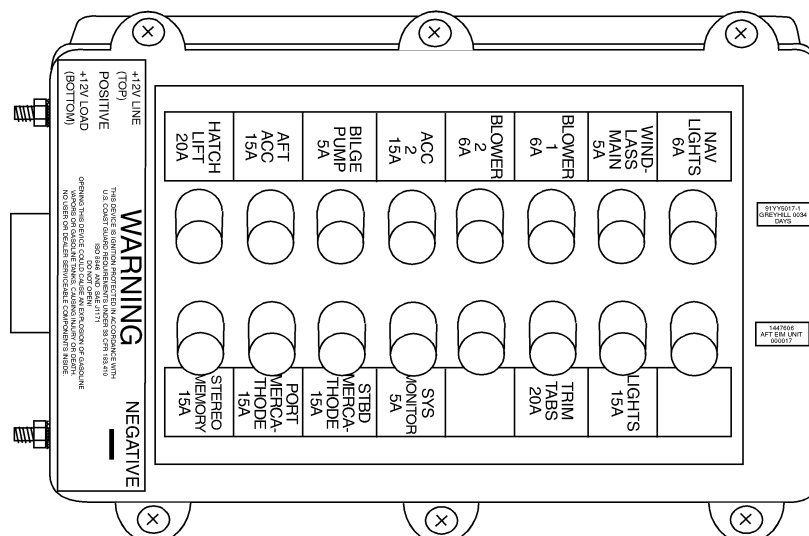
(FIG. 39.2)

AFT ELECTRONIC INTERFACE MODULE (EIM)

(CONTROLLED BY PORT SWITCH PAD)

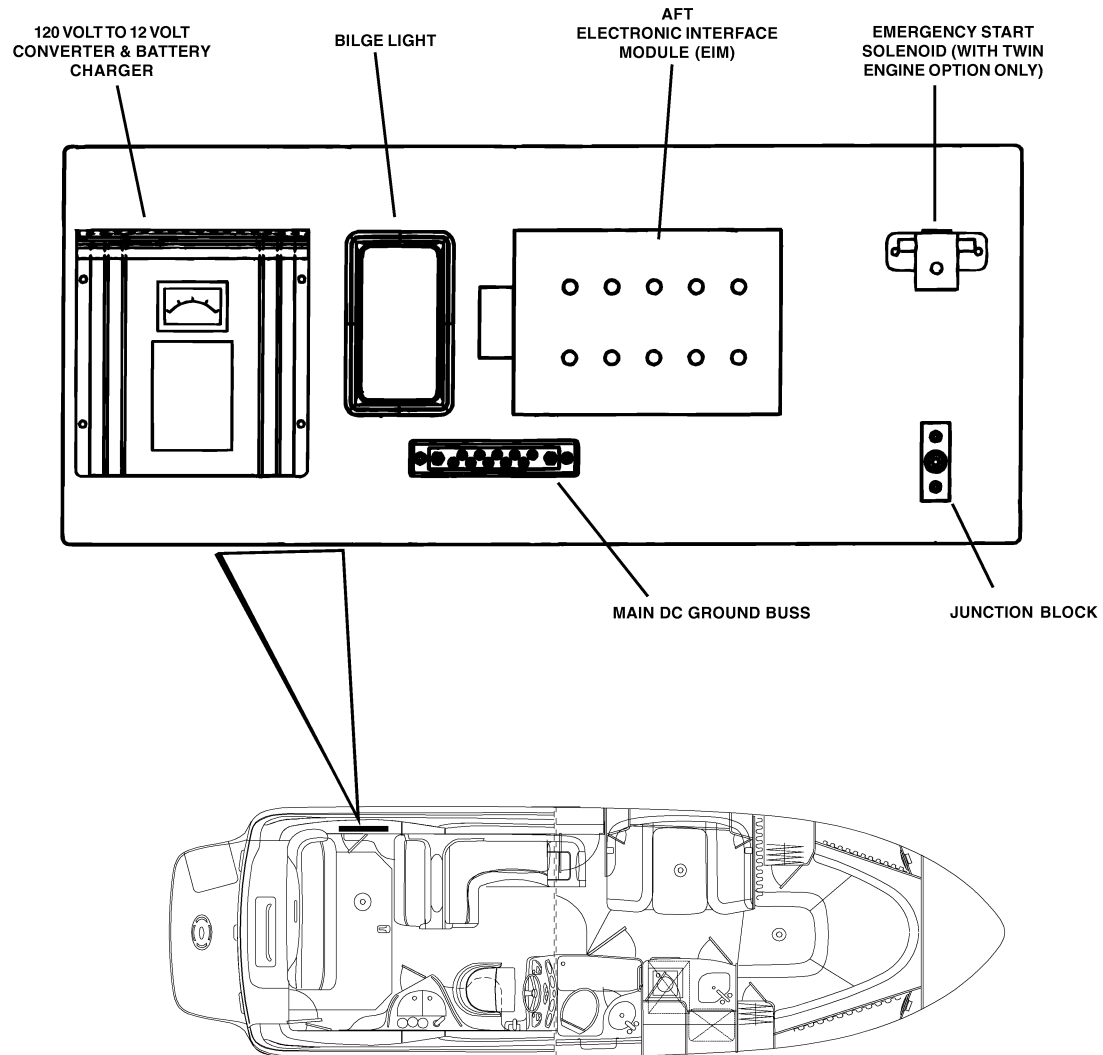
(LOCATED ON THE ACCESSORY BOARD ON THE
PORT SIDE OF THE ENGINE COMPARTMENT)

NOTE: THIS BOX IS IGNITION PROTECTED. DO NOT OPEN! READ WARNING ON BOX IN ENGINE COMPARTMENT.



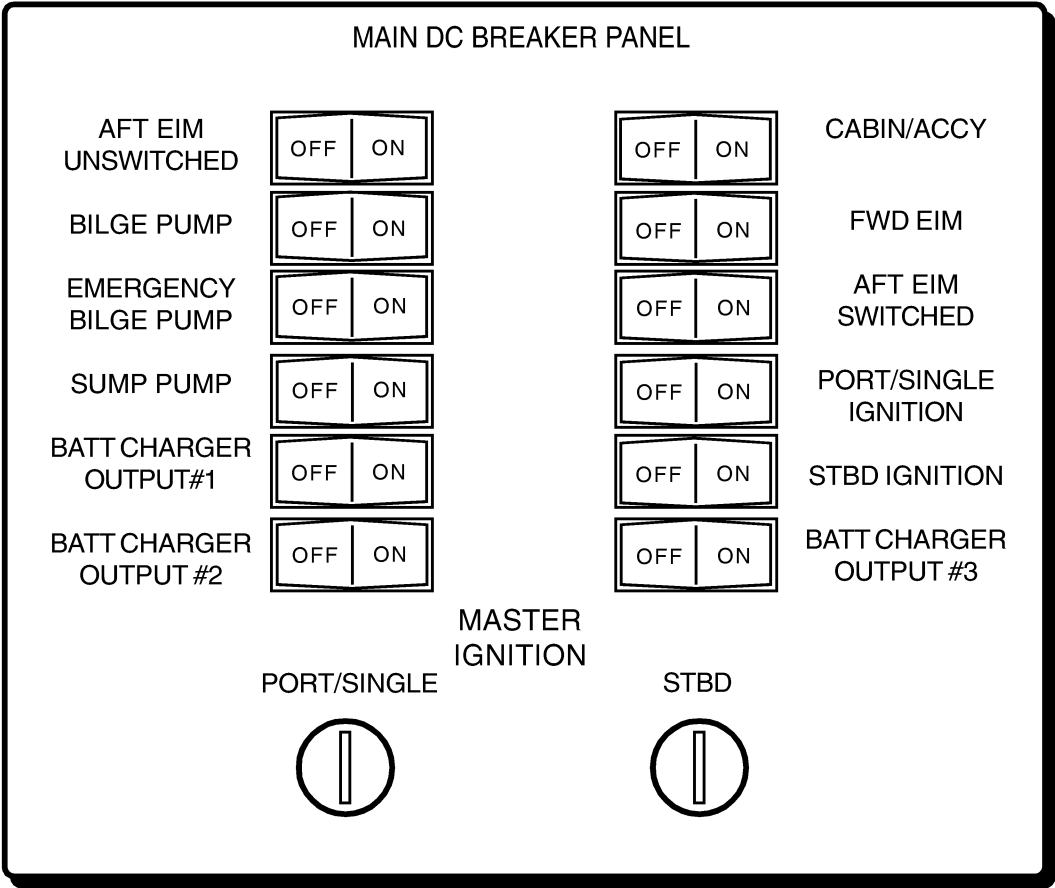
BILGE ACCESSORY BOARD

BILGE ACCESSORY BOARD (LOCATED ON THE PORT SIDE OF THE ENGINE ROOM)
(FIG. 40.1)



MAIN DC BREAKER PANEL

MAIN DC BREAKER PANEL (LOCATED IN THE AFT PORT COCKPIT COMPARTMENT)
(FIG. 41.1)



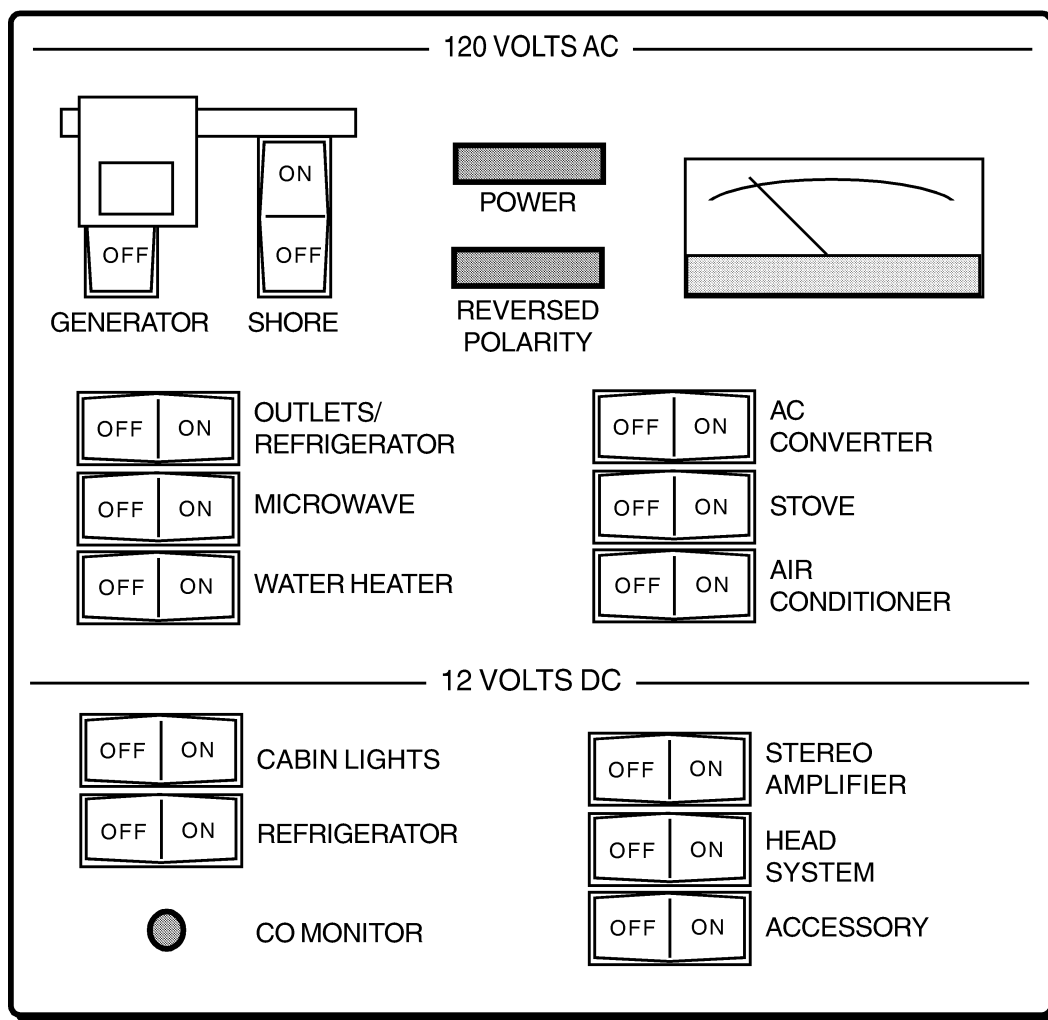
12 Volt DC Breakers	Amperage	12 Volt DC Breakers	Amperage
Aft EIM Unswitched	30	Cabin/Accessory	50
Bilge Pump	6	Forward EIM	50
Emergency Bilge Pump	6	Aft EIM Switched	50
Sump Pump	5	Port/Single Ignition	10
Battery Charger Output #1	50	Starboard Ignition	10
Battery Charger Output #2	50	Battery Chrager Output #3	50

MAIN DISTRIBUTION PANEL (WITH GENERATOR OPTION)

MAIN DISTRIBUTION PANEL (WITH GENERATOR OPTION)

(LOCATED ON THE PORT SIDE OF THE CABIN)

(FIG. 42.1)



120 Volt AC Breakers	Amperage	220 Volt AC Breaker (International)	Amperage	12 Volt DC Breakers	Amperage
Shore	30	Shore	20	Cabin Lights	15
Generator	35	Generator	20	Refrigerator	15
Outlets/Refrigerator	20	Outlets/Refrigerator	10	Stereo Amplifier	25
Microwave	15	Microwave	10	Head System	20
Water Heater	15	Water Heater	10	Accessory (Dealer Installed)	Plug
AC Converter (Option)	10	AC Converter (Option)	5	CO Monitor	1
Stove (Option)	10	Stove (Option)	5		
Air Conditioner (Option)	20	Air Conditioner (Option)	10		

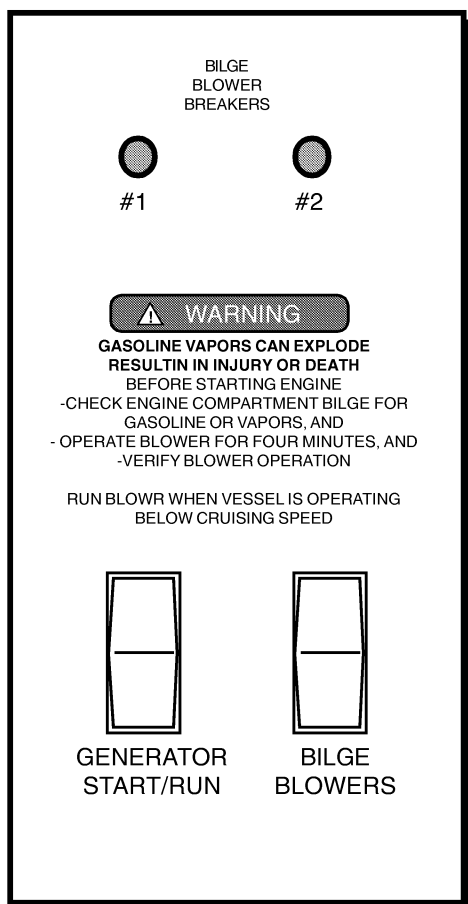
GENERATOR REMOTE SWITCH PANEL (OPTION)

If our Sport Cruiser is equipped with the optional generator, refer to the generator information in the *Electrical System* section of the owner's manual and the information provided by the generator manufacture in the owner's packet. Below are illustrations of the gasoline and diesel generator control panels. The panels are lo-

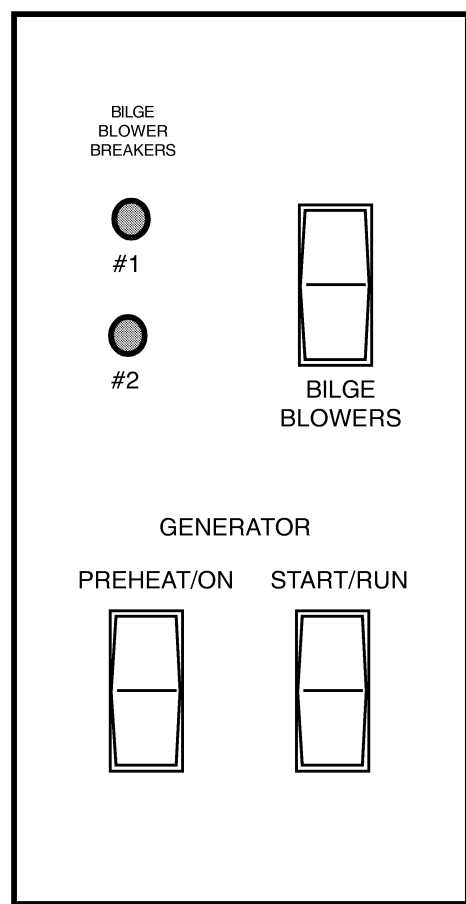
cated adjacent to the Main Distribution Panel on the port side of the cabin.

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

GAS GENERATOR REMOTE SWITCH PANEL
(FIG. 43.1)



DIESEL GENERATOR REMOTE SWITCH PANEL
(FIG. 43.2)



12 Volt DC Breakers

Amperage

Blower #1
Blower #2

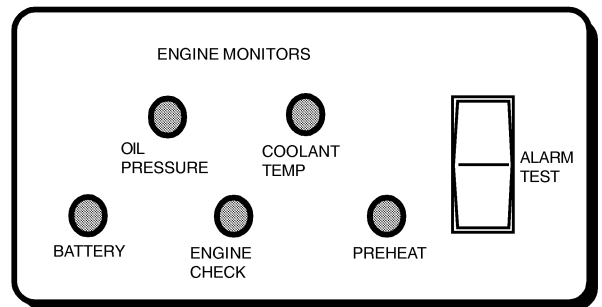
6
6

MERCURY[®] DIESEL ENGINE MONITOR (OPTION)

If our Sport Cruiser is equipped with the optional diesel engine monitor, refer to the information provided by the engine manufacture in the owner's packet.

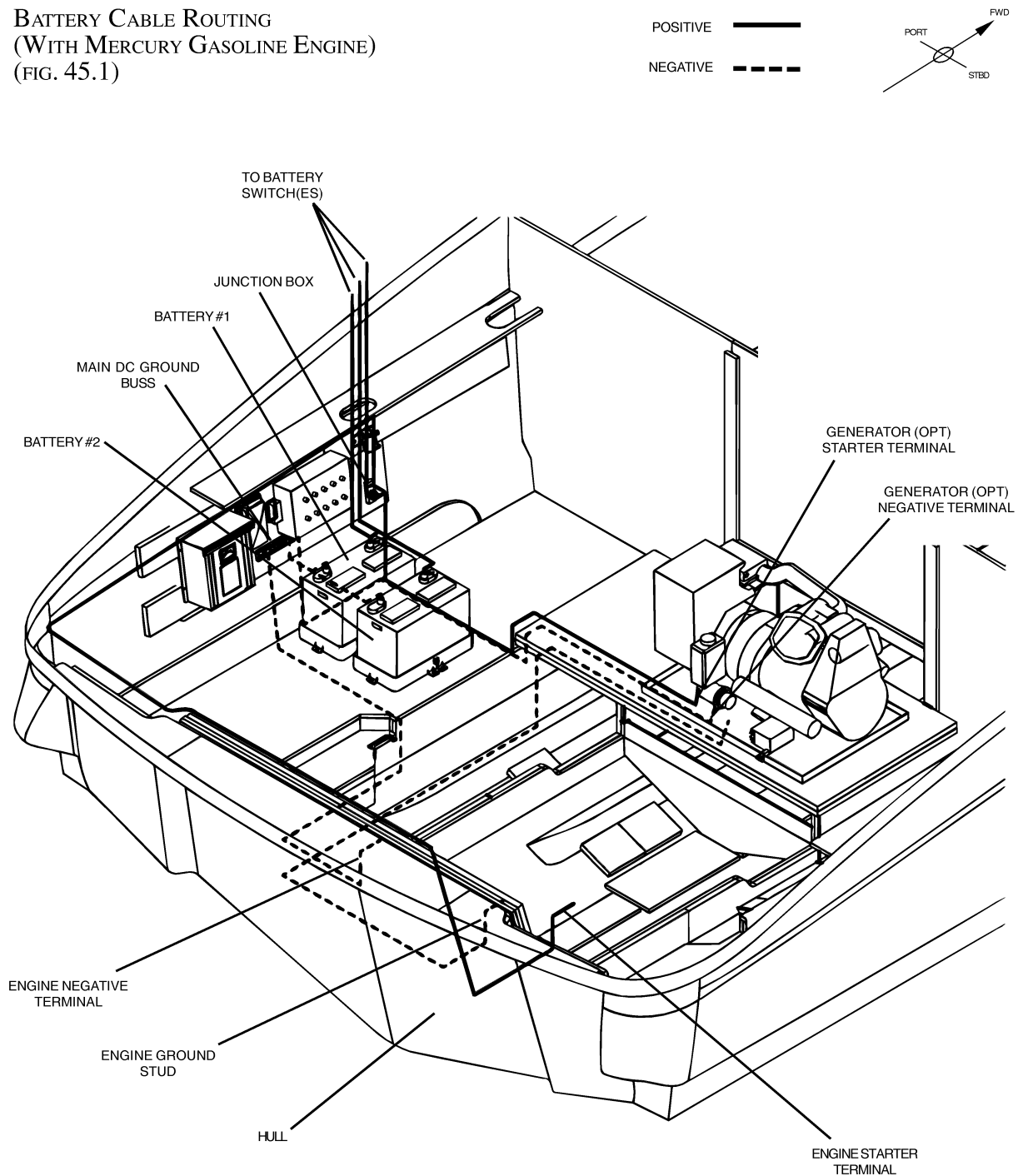
REFER TO OWNER'S MANUAL PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

MERCURY DIESEL ENGINE MONITOR (OPTION)
(FIG. 44.1)



BATTERY CABLE ROUTING

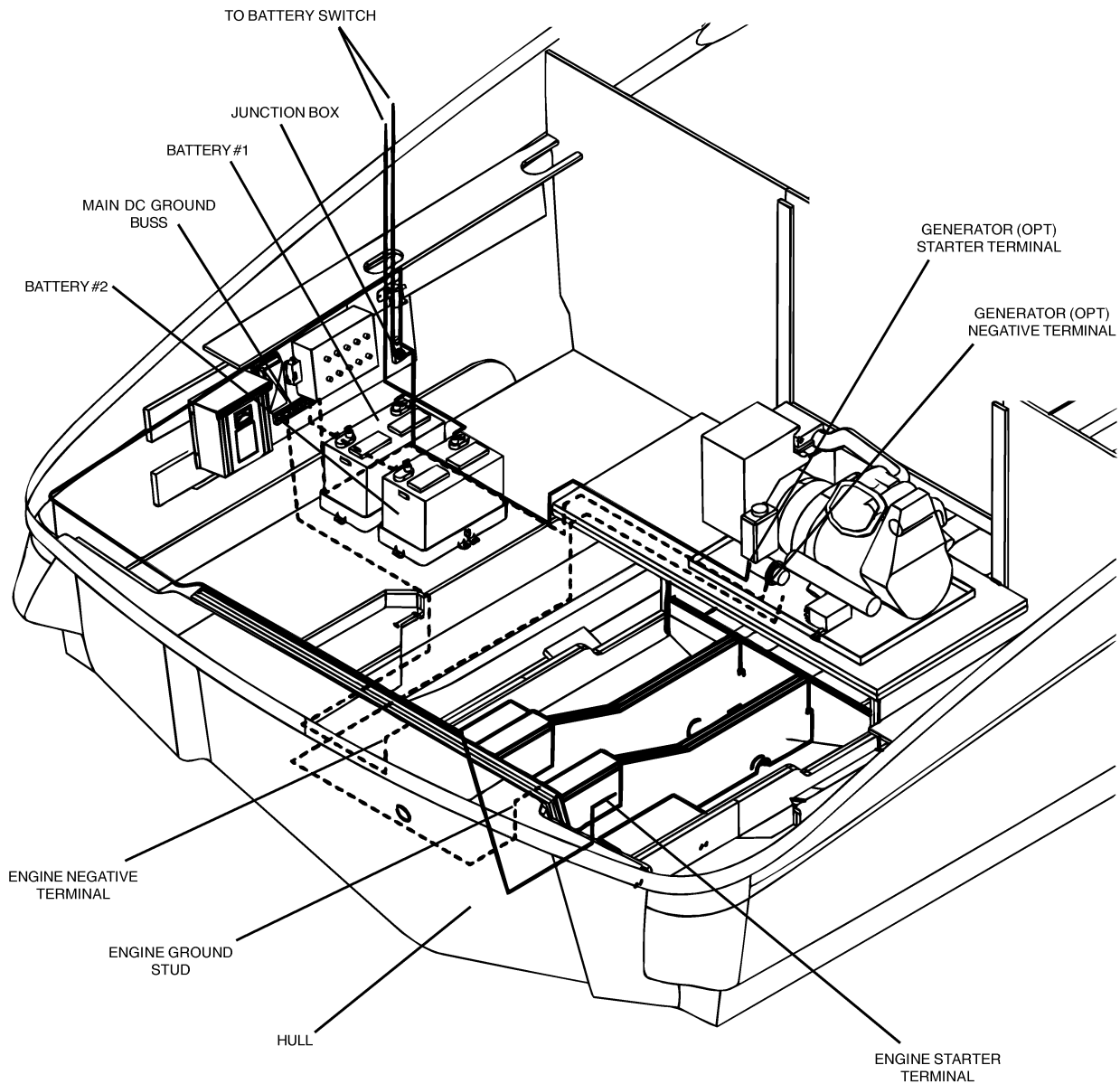
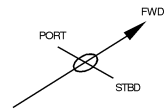
BATTERY CABLE ROUTING
(WITH MERCURY GASOLINE ENGINE)
(FIG. 45.1)



BATTERY CABLE ROUTING (CONTINUED)

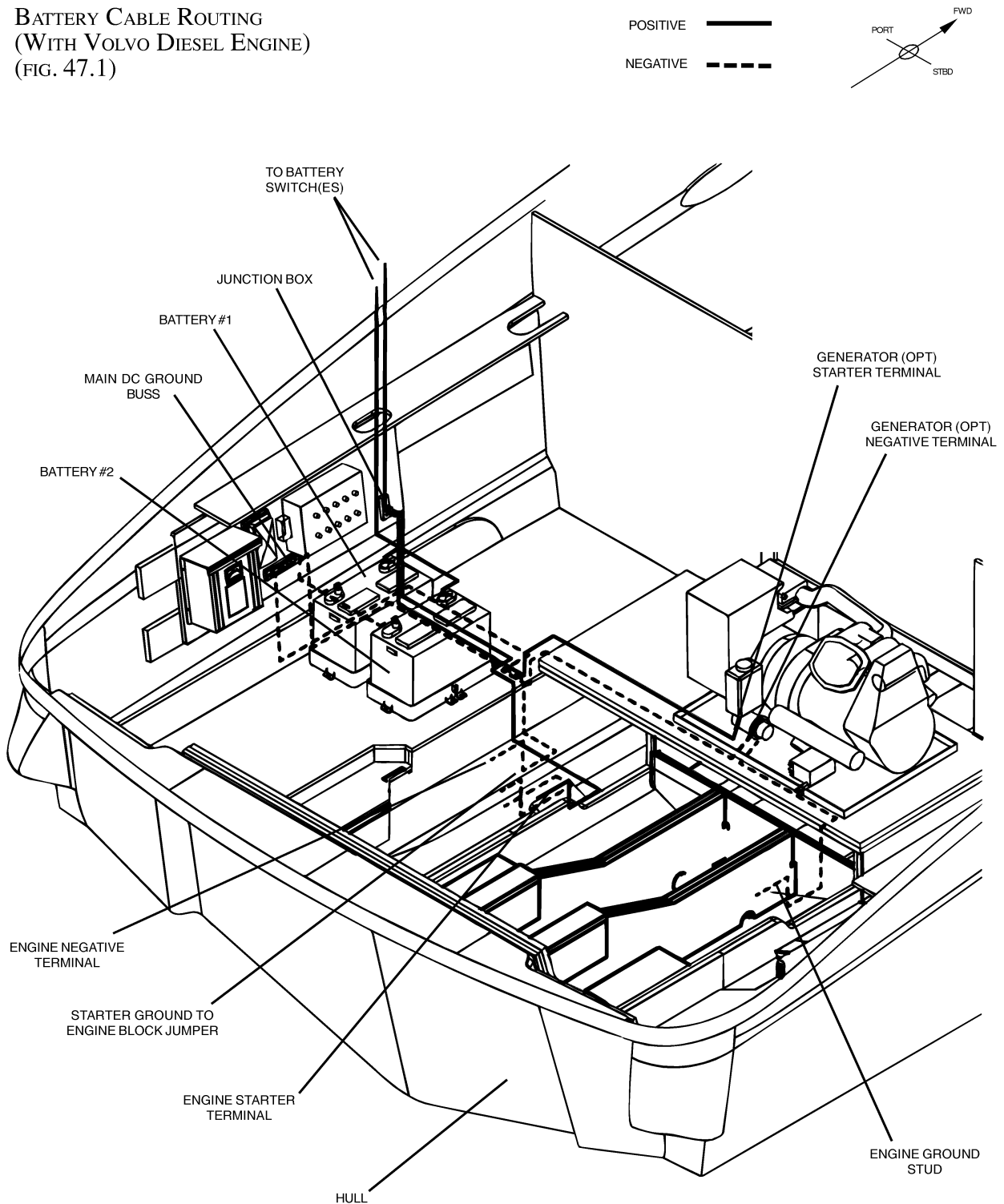
BATTERY CABLE ROUTING
(WITH MERCURY DIESEL ENGINE)
(FIG. 46.1)

POSITIVE ———
NEGATIVE - - - -



BATTERY CABLE ROUTING (CONTINUED)

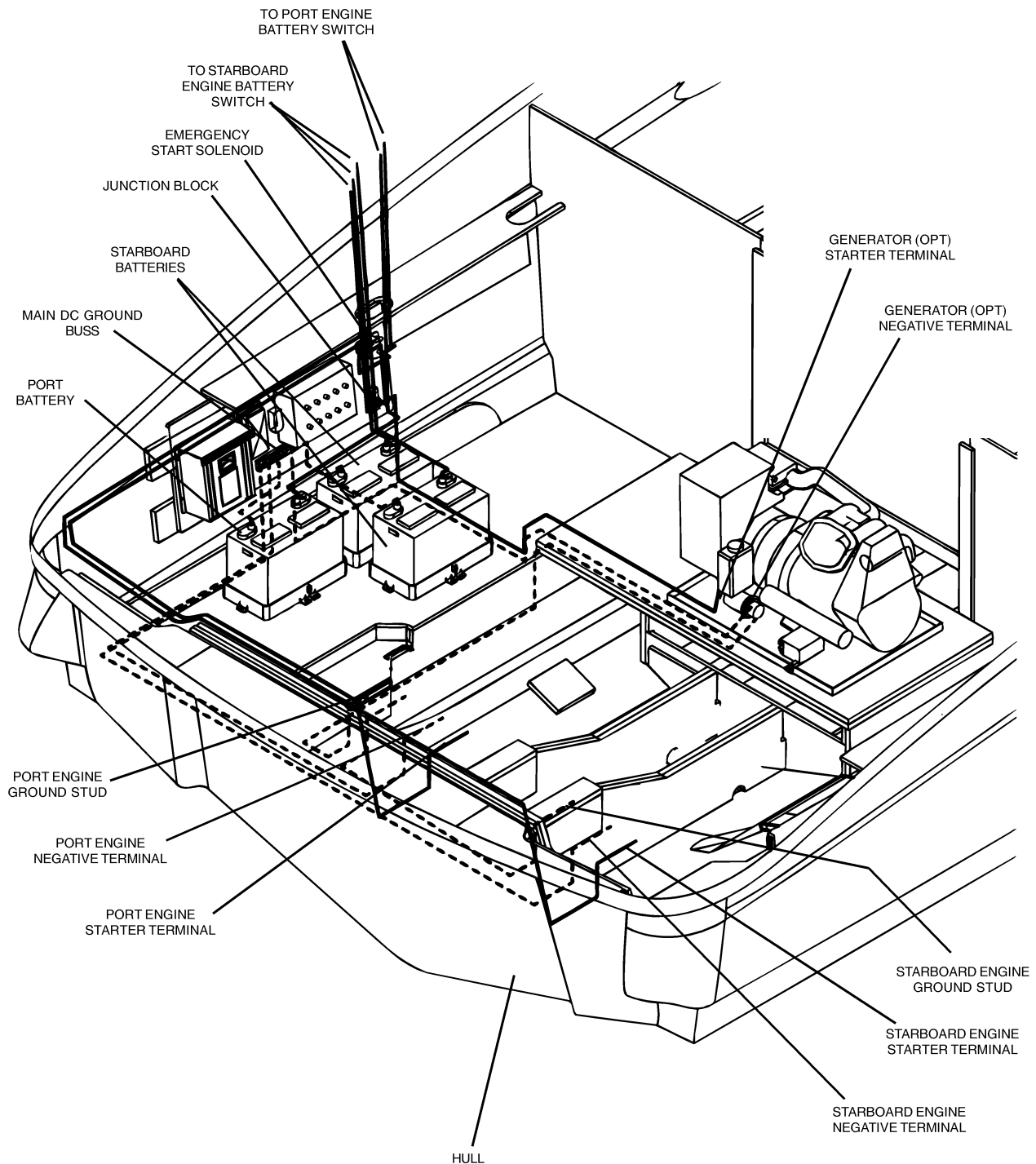
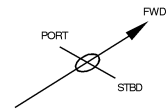
BATTERY CABLE ROUTING
(WITH VOLVO DIESEL ENGINE)
(FIG. 47.1)



BATTERY CABLE ROUTING (CONTINUED)

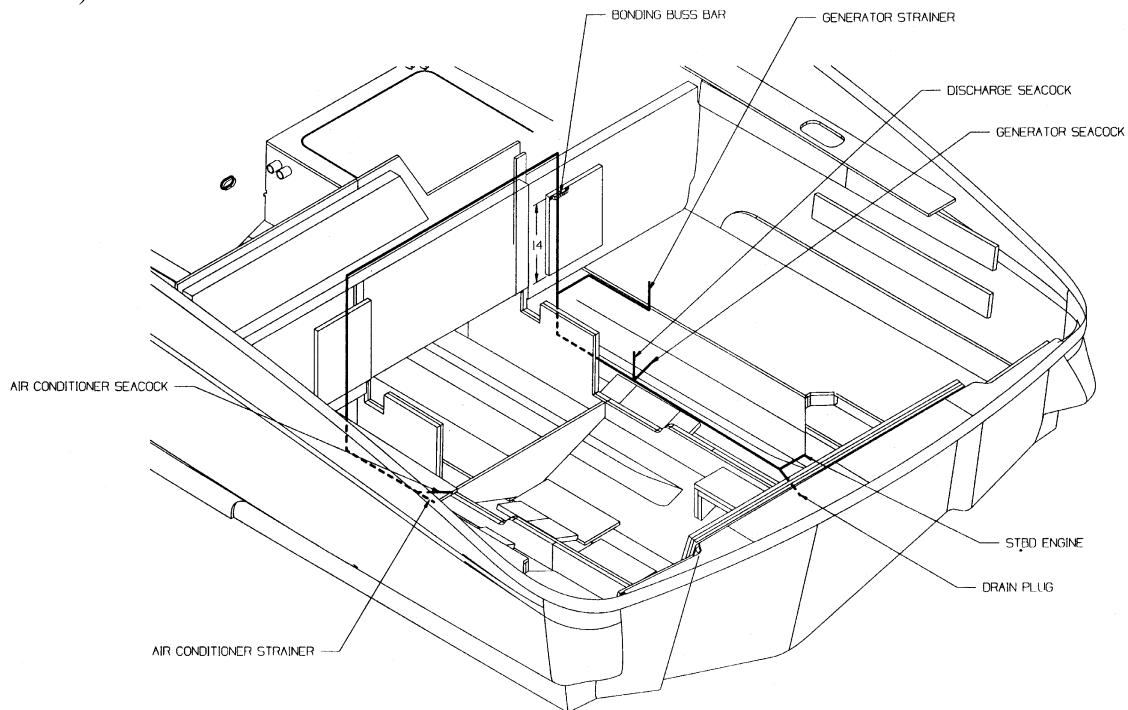
BATTERY CABLE ROUTING
(WITH TWIN MERCURY GASOLINE ENGINES)
(FIG. 48.1)

POSITIVE ———
NEGATIVE - - - -

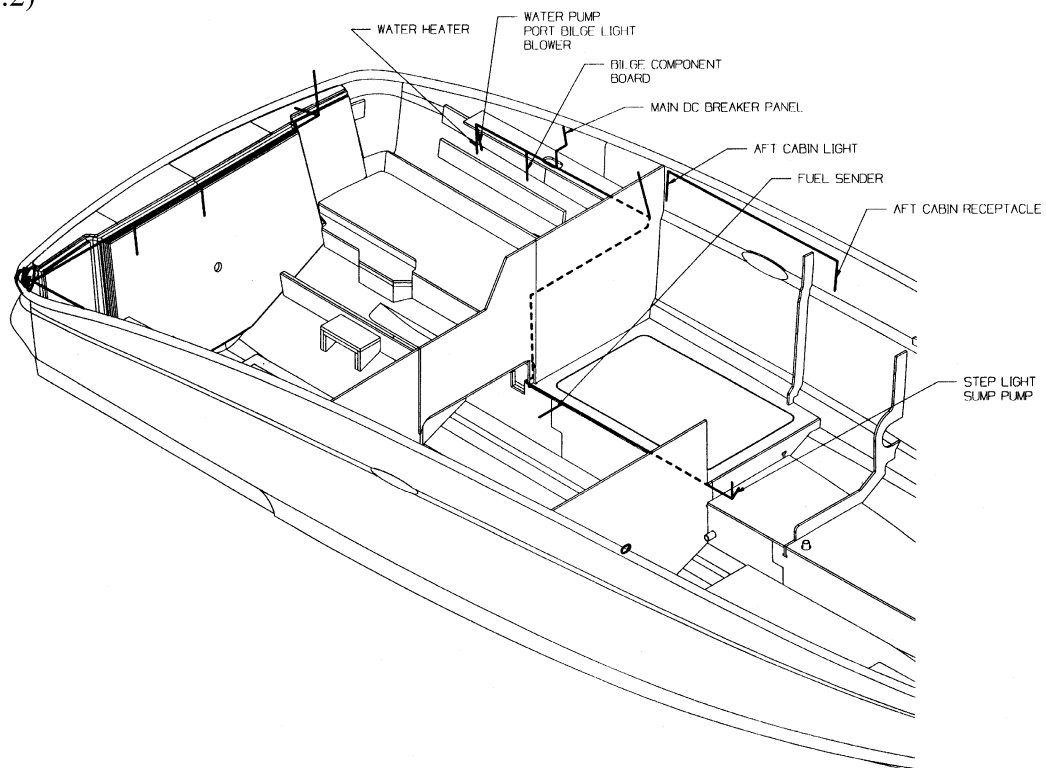


WIRE HARNESS INSTALLATION

BONDING SYSTEM HARNESS INSTALLATION (PRINT #09-201, 1 OF 1, REVISION #0)
(FIG. 49.1)

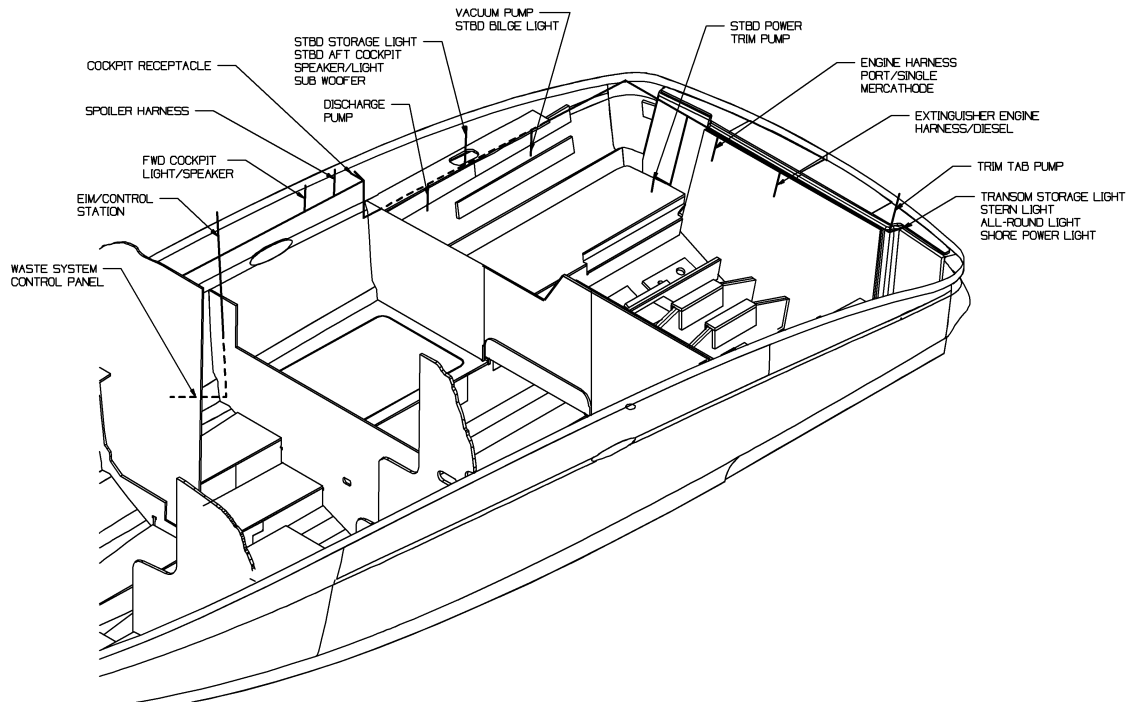


BILGE HARNESS INSTALLATION (PRINT #09-871, 1 OF 3, REVISION #0)
(FIG. 49.2)

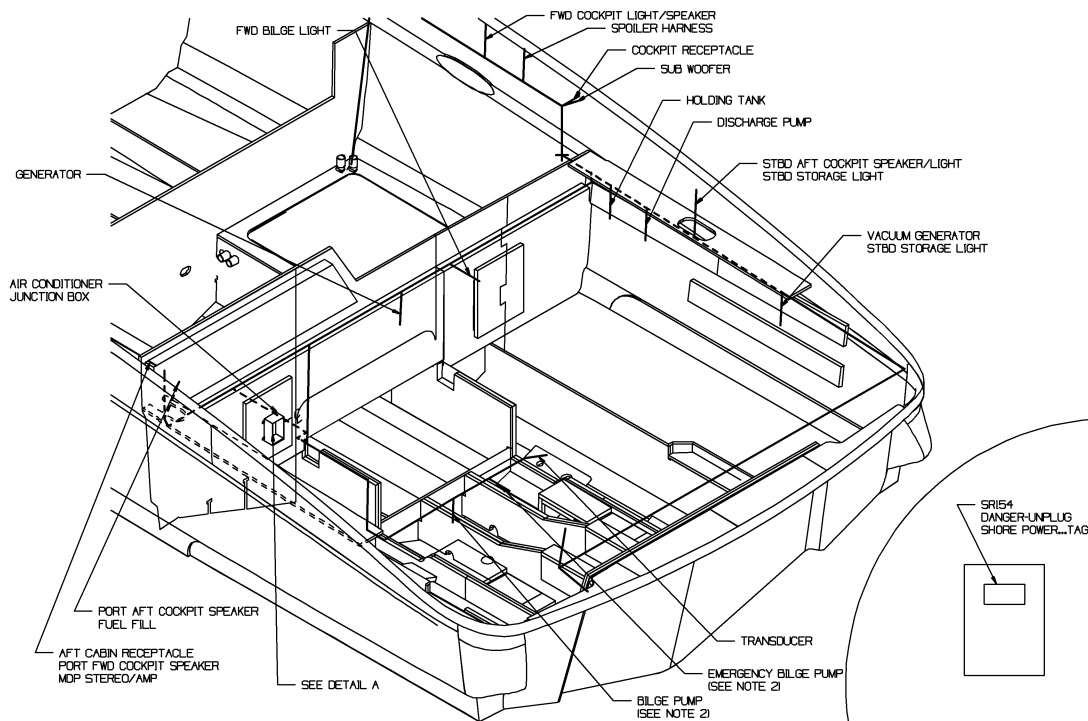


WIRE HARNESS INSTALLATION (CONTINUED)

BILGE HARNESS INSTALLATION (PRINT #09-871, 2 OF 3, REVISION #1)
(FIG. 50.1)

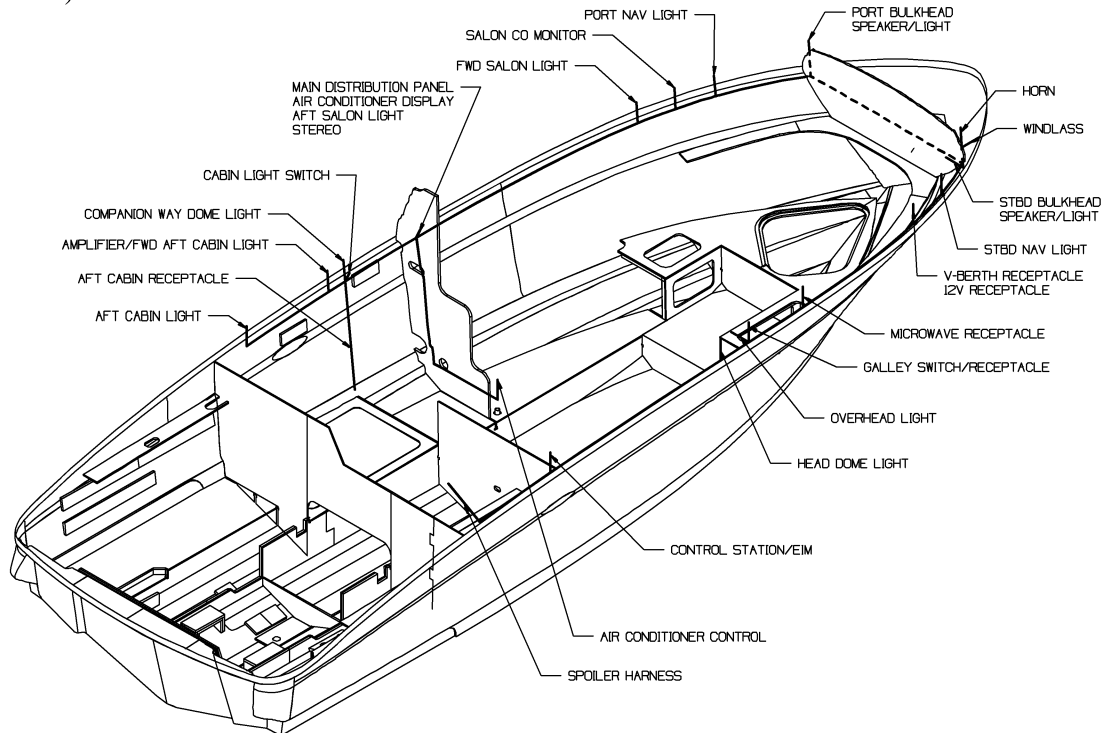


BILGE HARNESS INSTALLATION (PRINT #09-871, 3 OF 3, REVISION #1)
(FIG. 50.2)

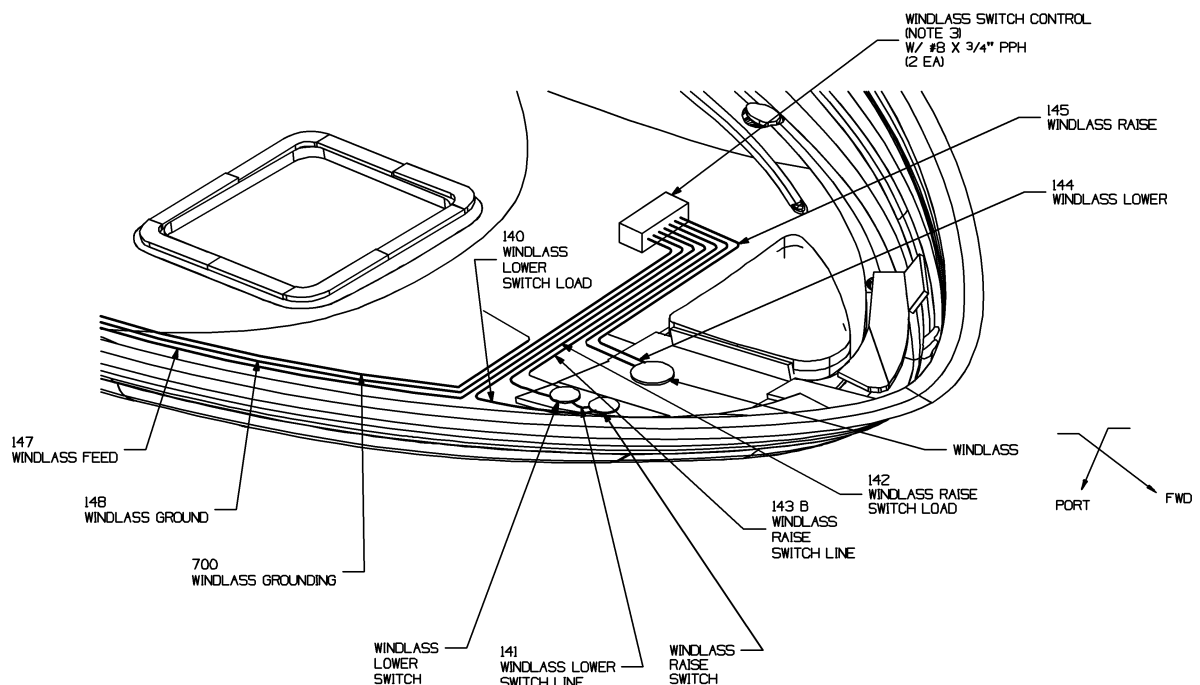


WIRE HARNESS INSTALLATION (CONTINUED)

CABIN HARNESS INSTALLATION (PRINT #09-875, REVISION #1)
(FIG. 51.1)

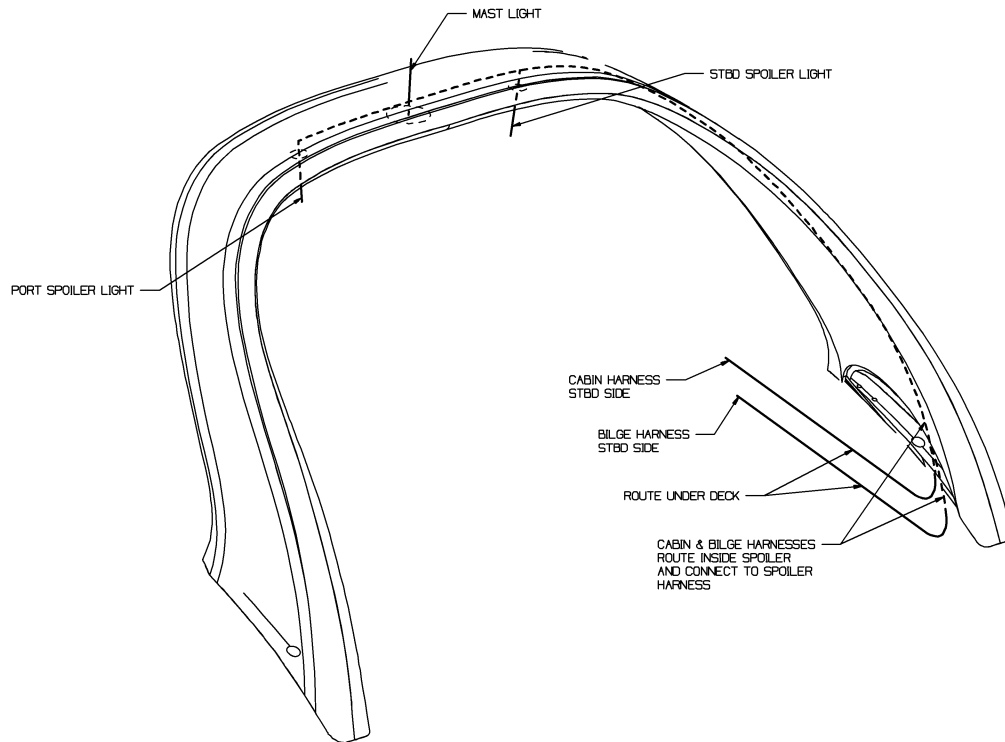


WINDLASS CABLE INSTALLATION (PRINT #09-881, REVISION #1)
(FIG. 51.2)

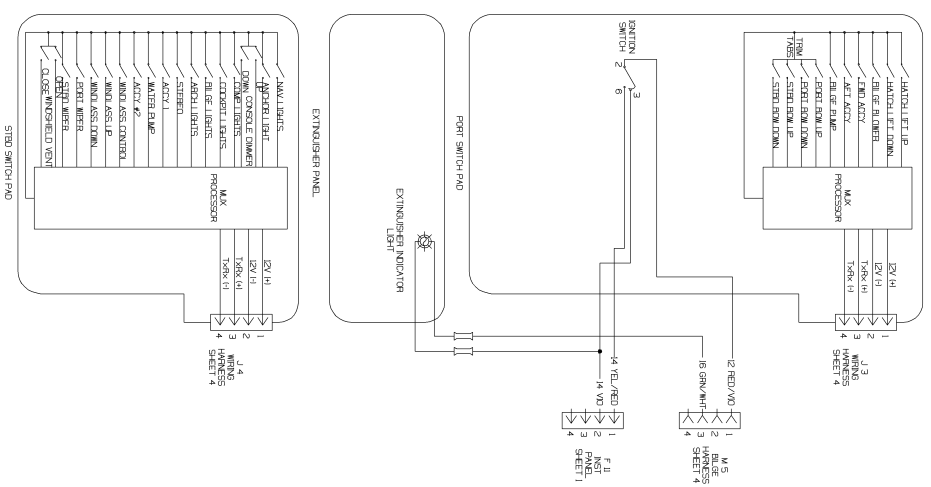


WIRE HARNESS INSTALLATION (CONTINUED)

SPOILER HARNESS INSTALLATION (PRINT #09-887, REVISION #2)
(FIG. 52.1)

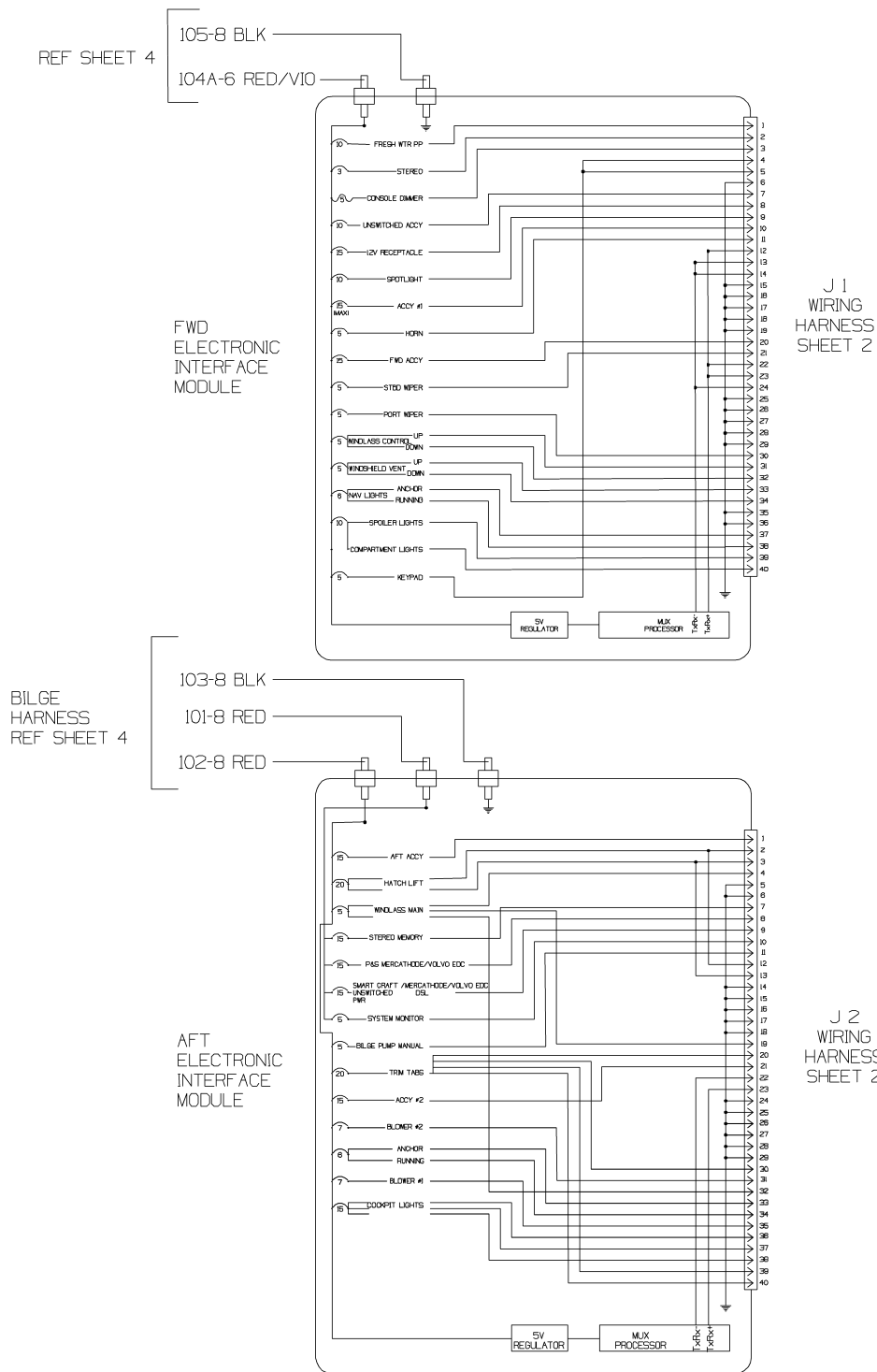


280 DA•DC WIRING SCHEMATIC



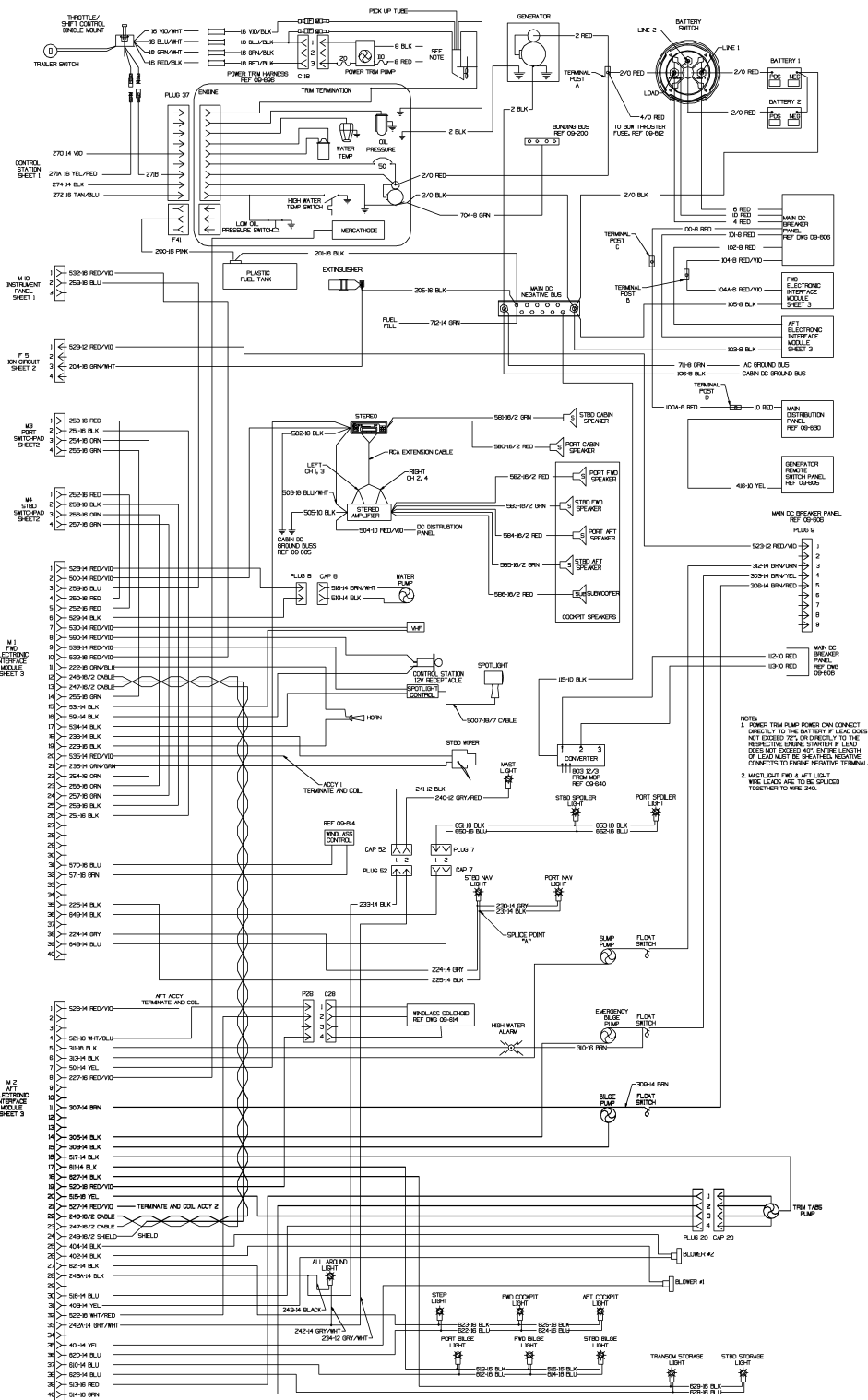
Print# 09-601, 2 of 5, Revision# 2

Print# 09-601, 3 of 5, Revision# 1

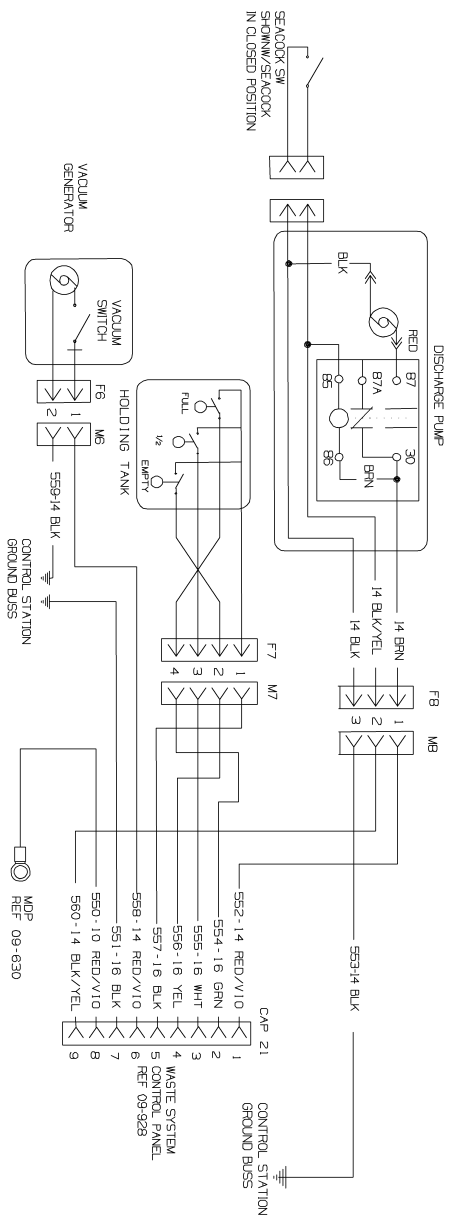


280 DA • DC WIRING SCHEMATIC

280DA • DC WIRING SCHEMATIC

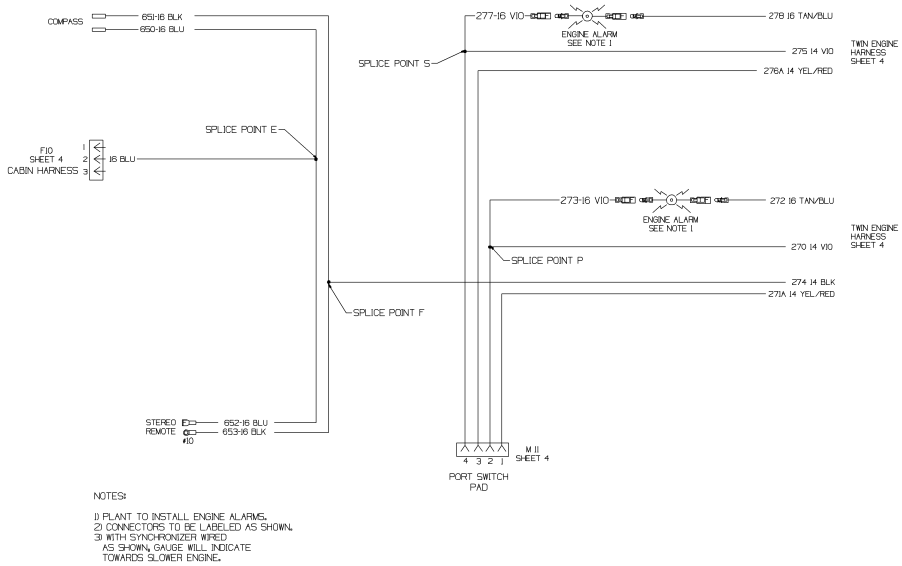


280DA•DC WIRING SCHEMATIC



Print# 09-601, 5 of 5, Revision# 4

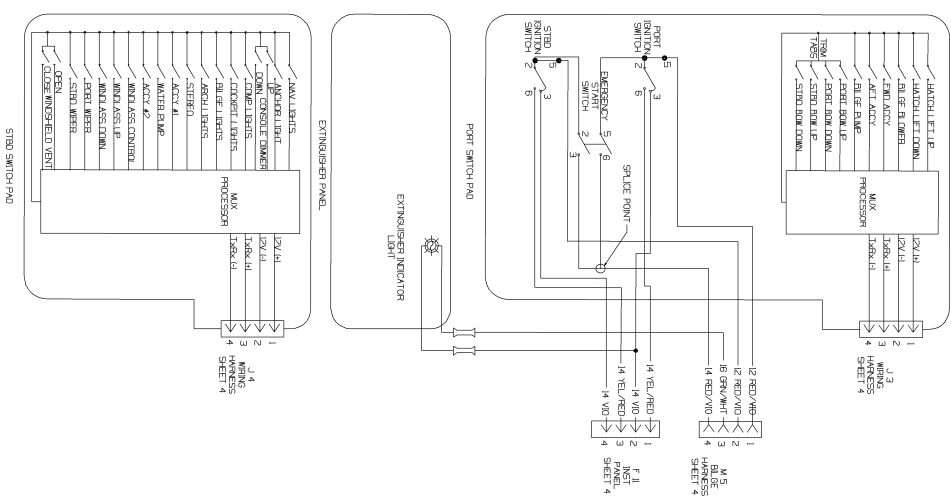
280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION)



Print# 09-602, 1 of 5, Revision# 1

280 Sundancer

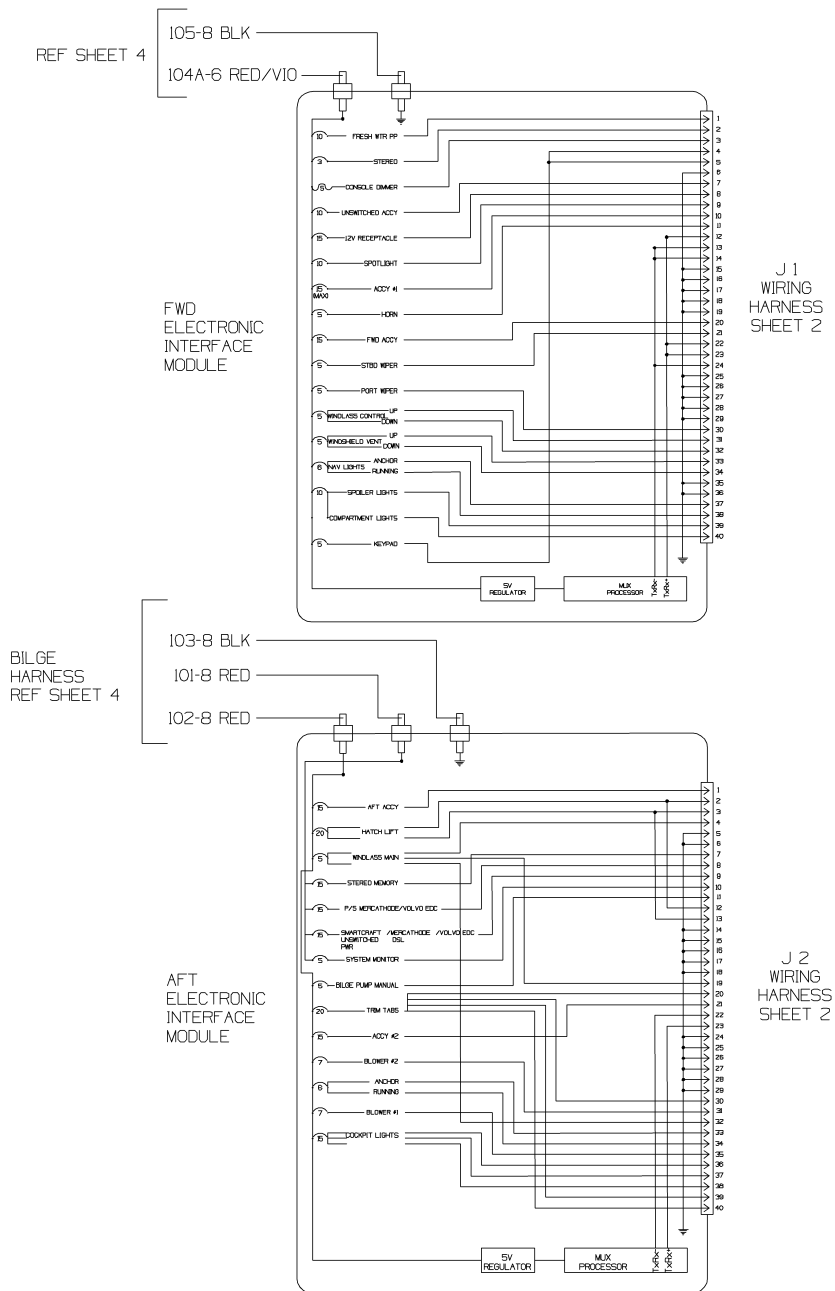
280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION)



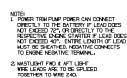
Print# 09-602, 2 of 5, Revision# 2

57

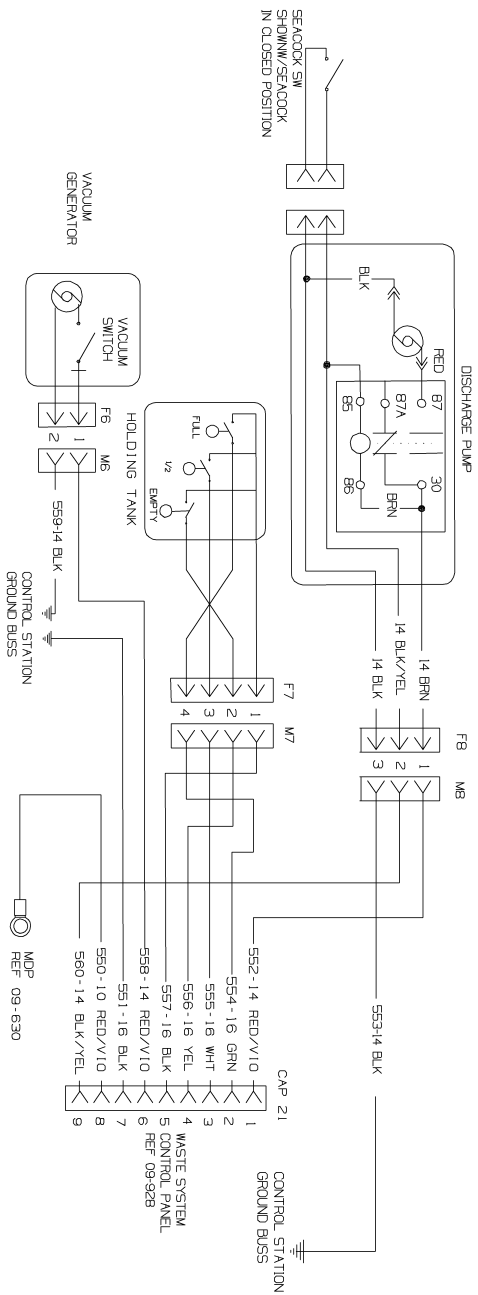
280DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION)



SCH

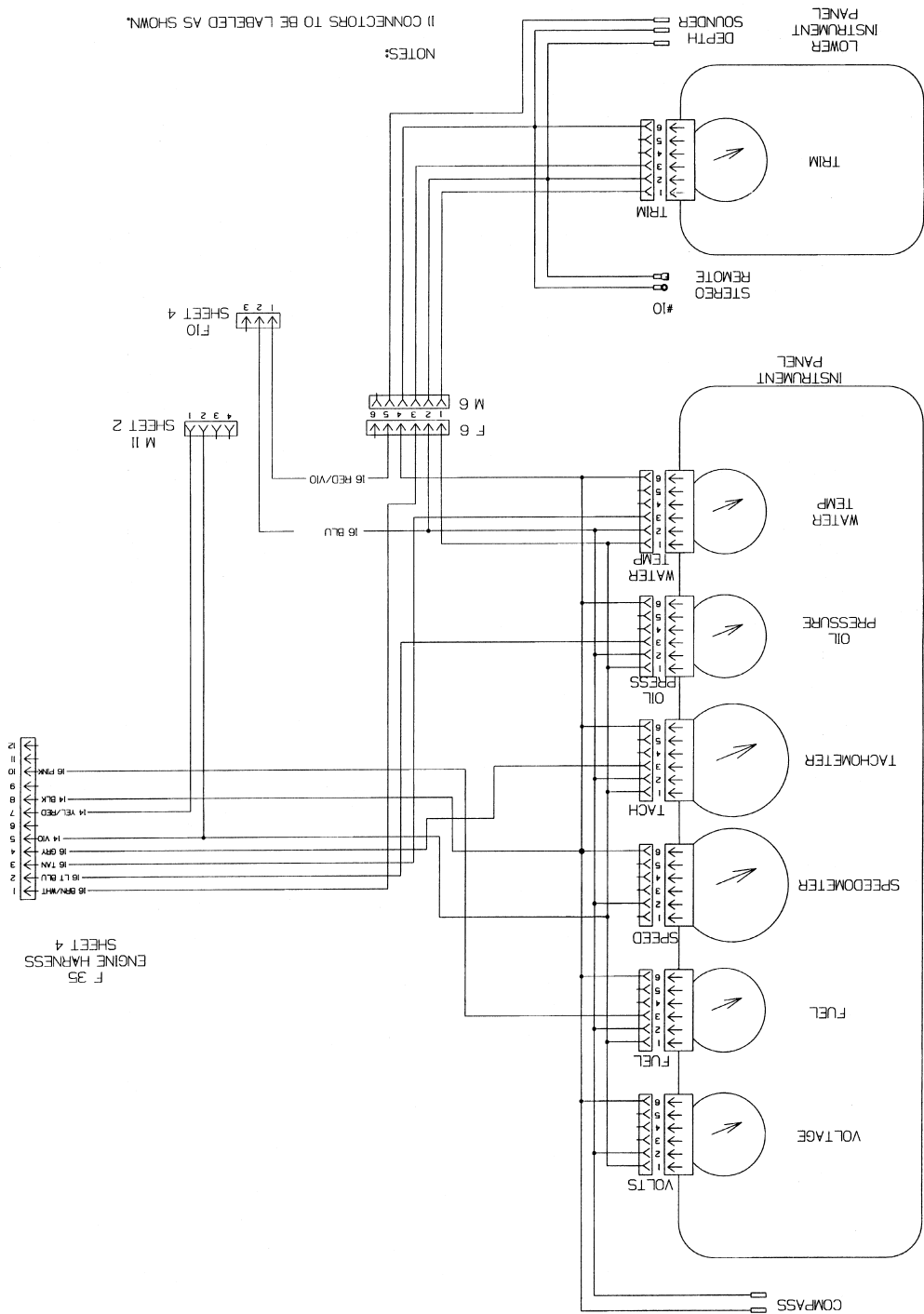


280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION)



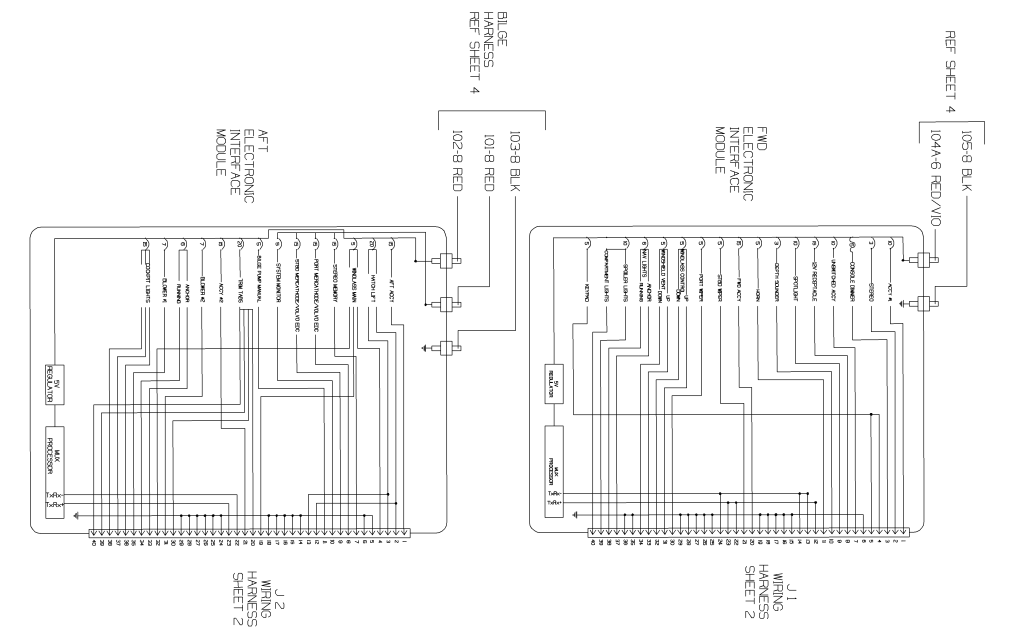
Print# 09-602, 5 of 5, Revision# 3

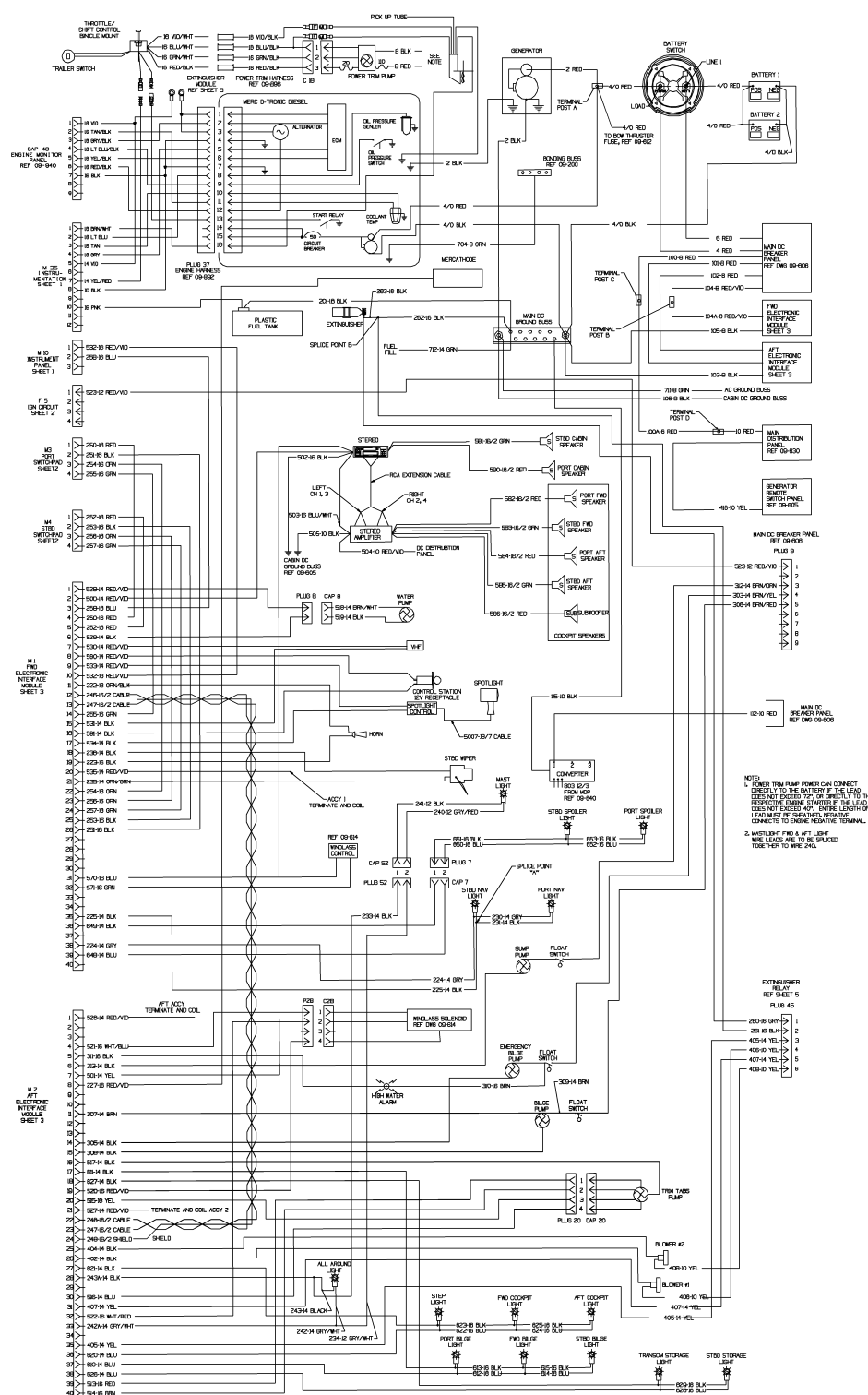
280DA • DC WIRING SCHEMATIC (WITH D-7.3L D-TRONIC DIESEL)



Print# 09-603, 1 of 5

280DA • DC WIRING SCHEMATIC (WITH D-7.3L D-TRONIC DIESEL)

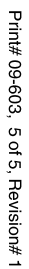




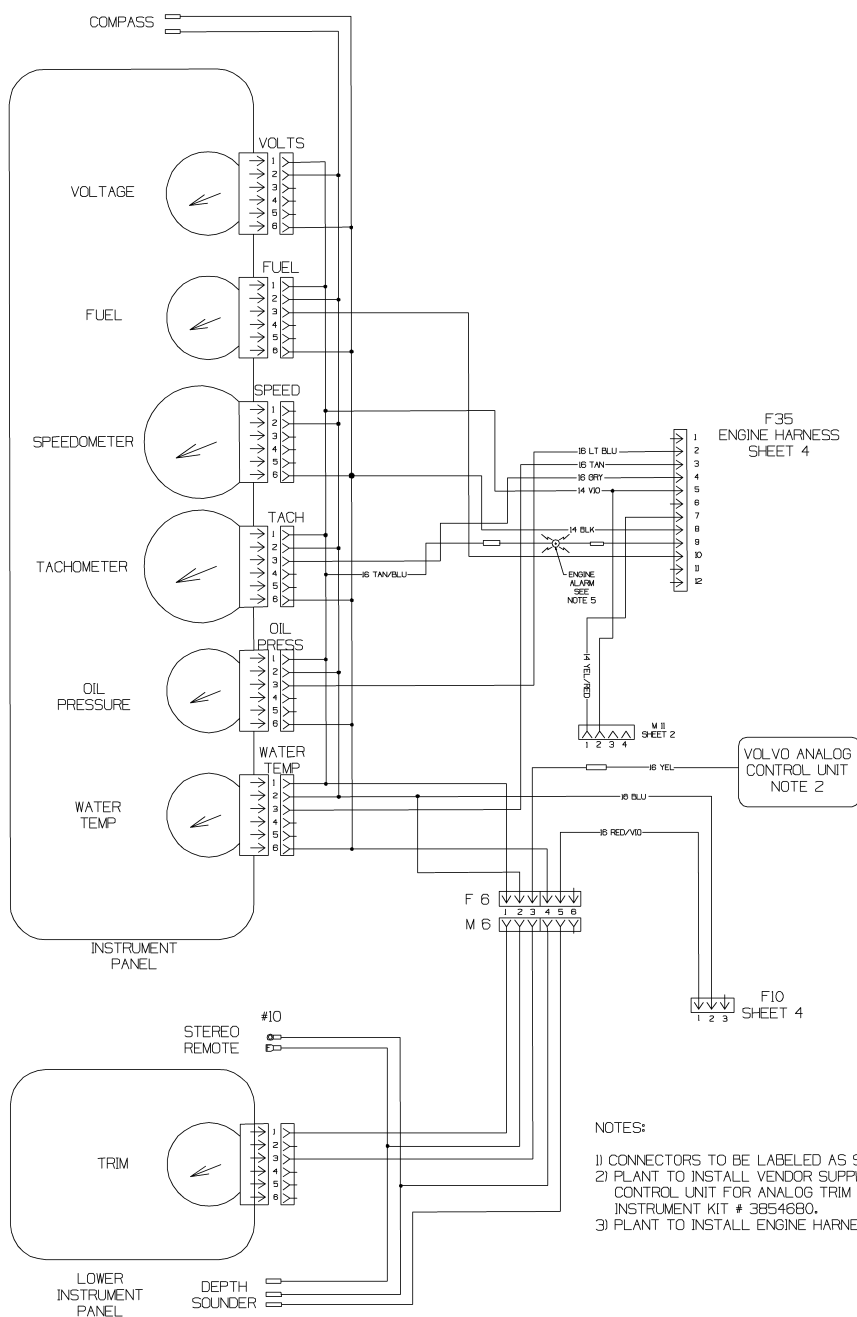
280DA • DC WIRING SCHEMATIC (WITH D-7.3LD-TRONIC DIESEL)

The diagram illustrates the electrical control system for a waste system. Key components and their connections are as follows:

- DISCHARGE PUMP:** Controlled by a VACUUM SWITCH and a HOLDING TANK. It features a 14 BLK/VEL line and a 14 BLK line.
- HOLDING TANK:** Includes a 1/2 AMP fuse and a 14 BLK/VEL line.
- CONTROL STATION:** Contains a VACUUM SWITCH, a 14 BLK/VEL line, and a 14 BLK line.
- VACUUM GENERATOR:** Labeled with a 09-630 rating.
- WASTE SYSTEM:** Includes a 14 BLK/VEL line and a 14 BLK line.
- GROUND BUSES:** Labeled with 552-14 RED/VIO, 554-16 GRN, 555-16 WHT, 555-16 YEL, 559-16 BLK, 559-16 RED/VIO, 550-10 RED/VIO, 550-14 BLK/VEL, and 550-14 BLK/VEL.
- CONTROL PANEL:** Labeled with 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.
- WASTE SYSTEM:** Labeled with 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.
- GROUND BUSES:** Labeled with 552-14 RED/VIO, 554-16 GRN, 555-16 WHT, 555-16 YEL, 559-16 BLK, 559-16 RED/VIO, 550-10 RED/VIO, 550-14 BLK/VEL, and 550-14 BLK/VEL.
- CONTROL PANEL:** Labeled with 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.
- WASTE SYSTEM:** Labeled with 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.
- GROUND BUSES:** Labeled with 552-14 RED/VIO, 554-16 GRN, 555-16 WHT, 555-16 YEL, 559-16 BLK, 559-16 RED/VIO, 550-10 RED/VIO, 550-14 BLK/VEL, and 550-14 BLK/VEL.

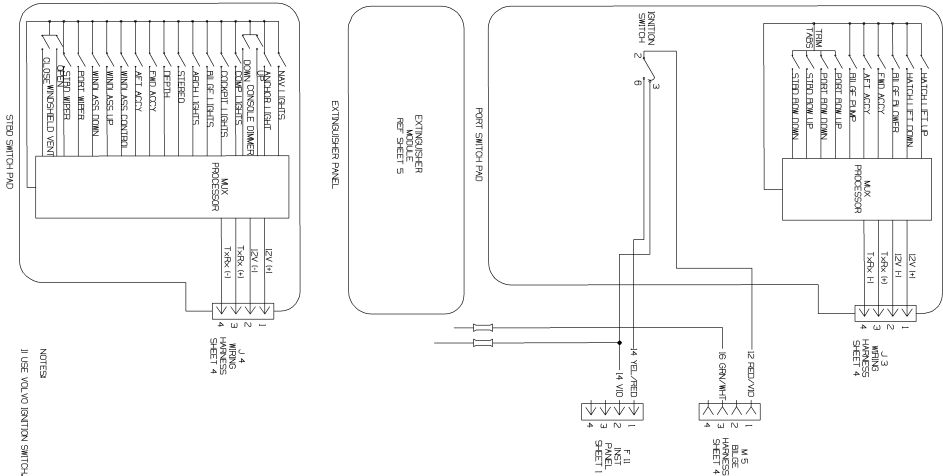


280DA • DC WIRING SCHEMATIC (Volvo KAD 44P DIESEL) (OPTION)



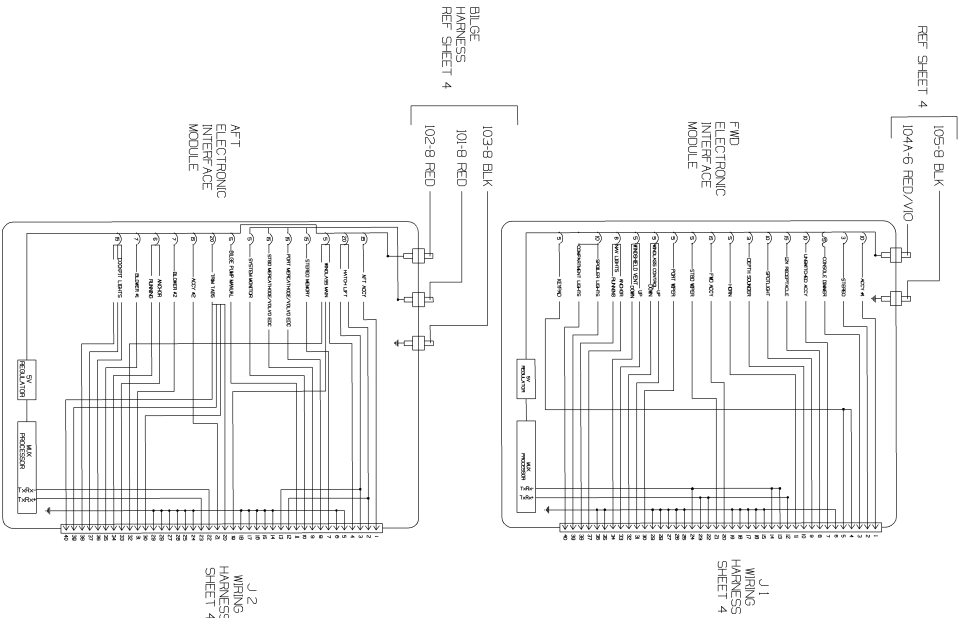
- NOTES:
- 1) CONNECTORS TO BE LABELED AS SHOWN.
 - 2) PLANT TO INSTALL VENDOR SUPPLIED CONTROL UNIT FOR ANALOG TRIM INSTRUMENT KIT # 3854680.
 - 3) PLANT TO INSTALL ENGINE HARNESS.

280DA • DC WIRING SCHEMATIC (Volvo KAD 44P DIESEL) (OPTION)



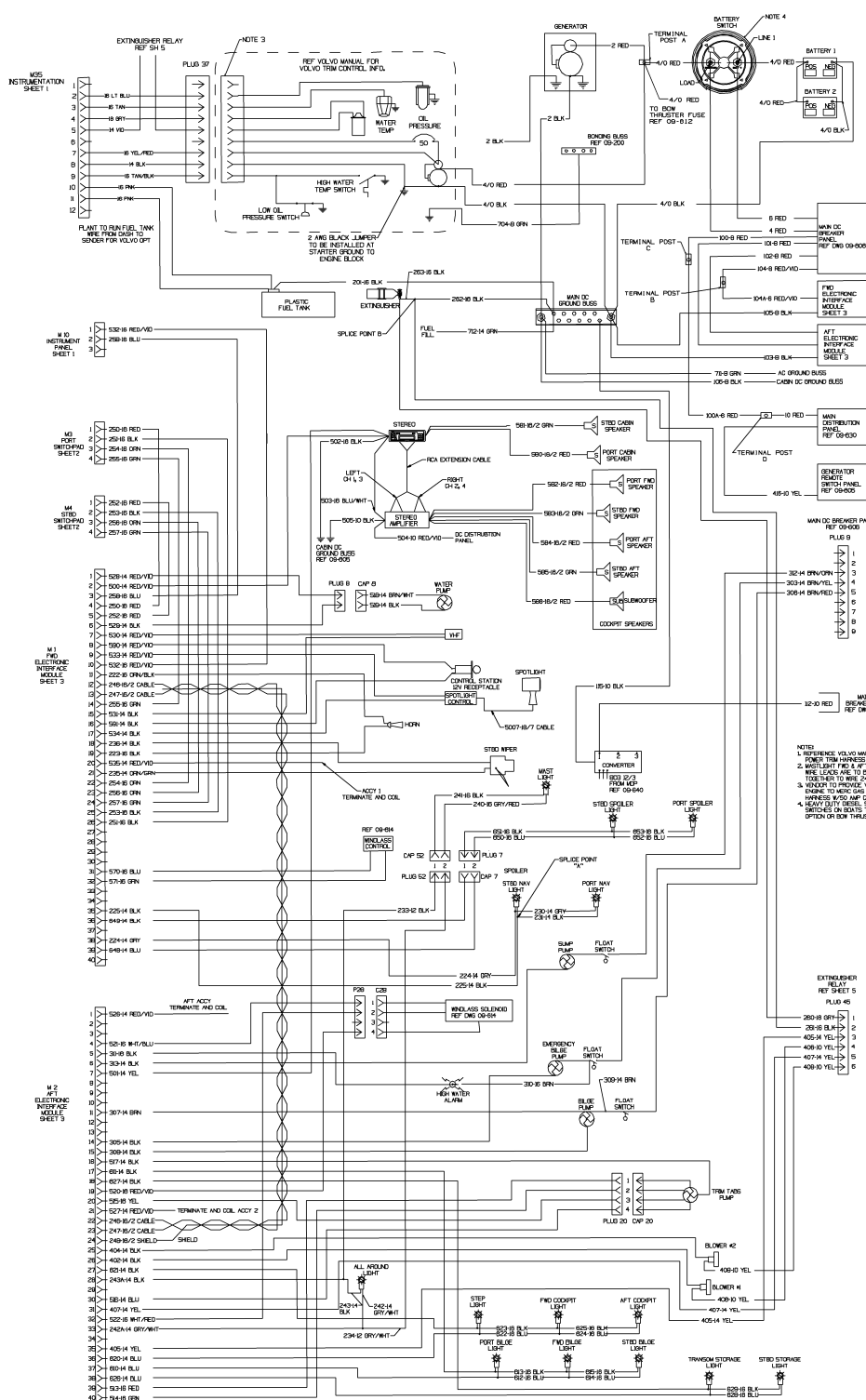
Print# 09-604, 2 of 5

280DA • DC WIRING SCHEMATIC (Volvo KAD 44P DIESEL) (OPTION)

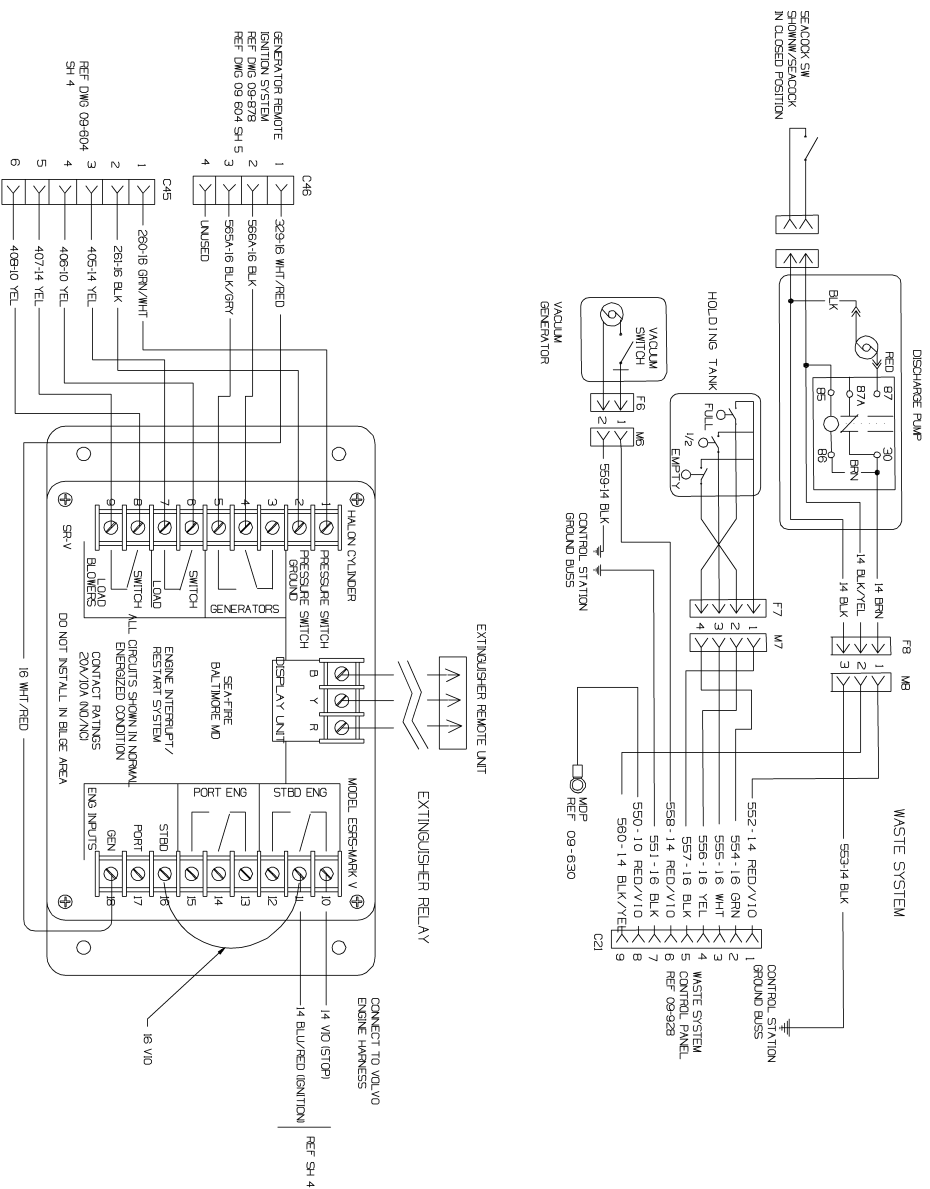


Print# 09-604, 3 of 5, Revision# 1

280DA•DC WIRING SCHEMATIC

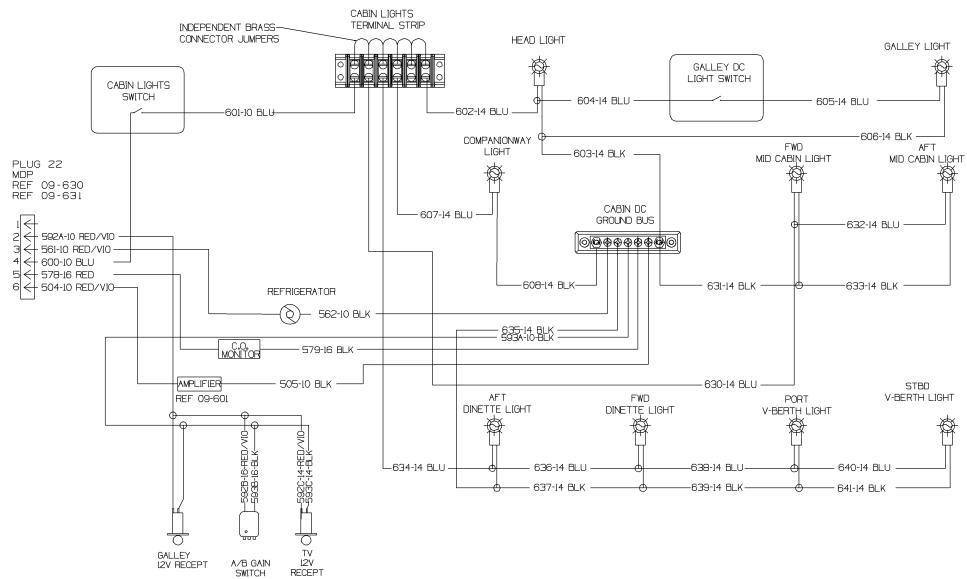


280DA • DC WIRING SCHEMATIC (Volvo KAD 44P DIESEL) (OPTION)



Print# 09-604, 5 of 5, Revision 2

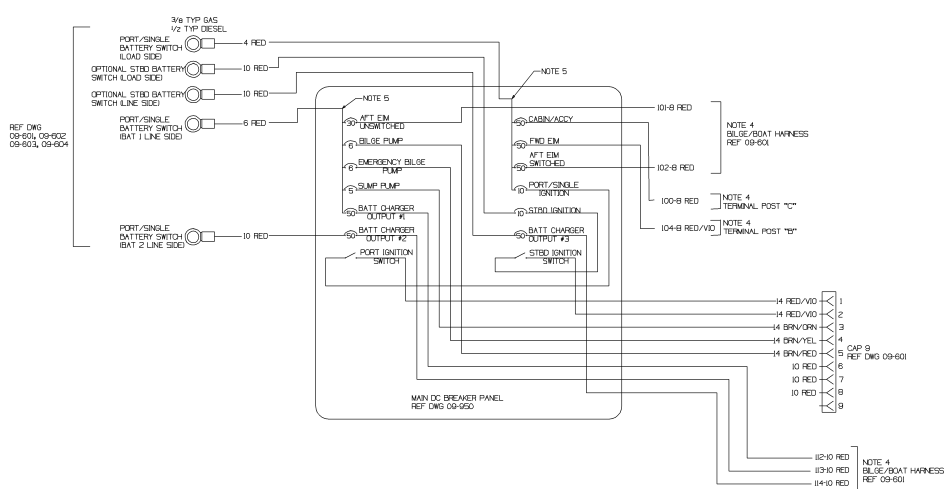
280 DA • CABIN DC WIRING DIAGRAM



Print# 09-605, 1 of 2, Revision# 1

280 Sundancer

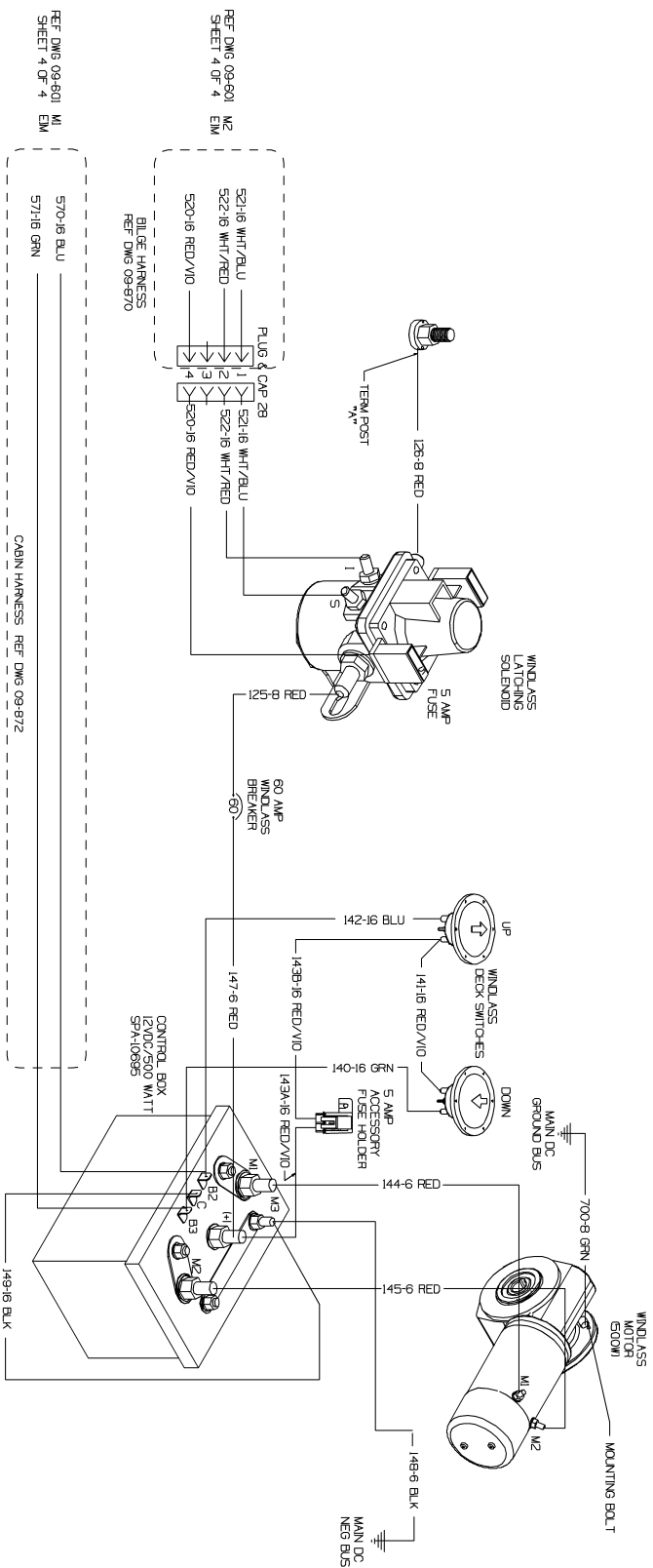
280 DA • MAIN DC BREAKER PANEL WIRING DIAGRAM



Print# 09-606, Revision# 6

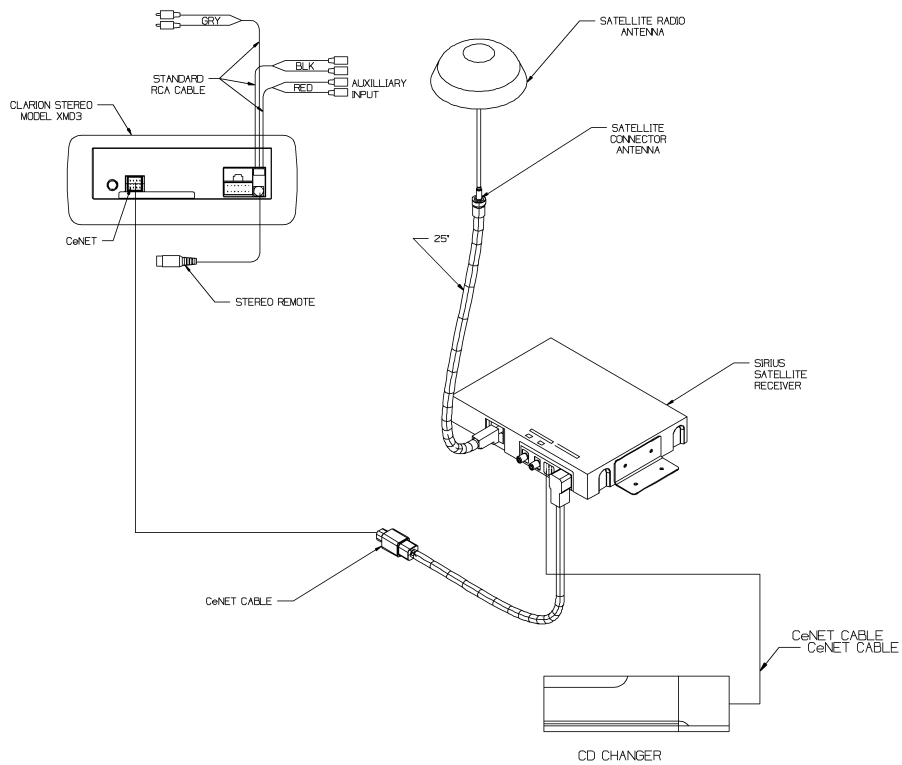
69

280DA • WINDLASS WIRING DIAGRAM



Print# 09-614, Revision# 2

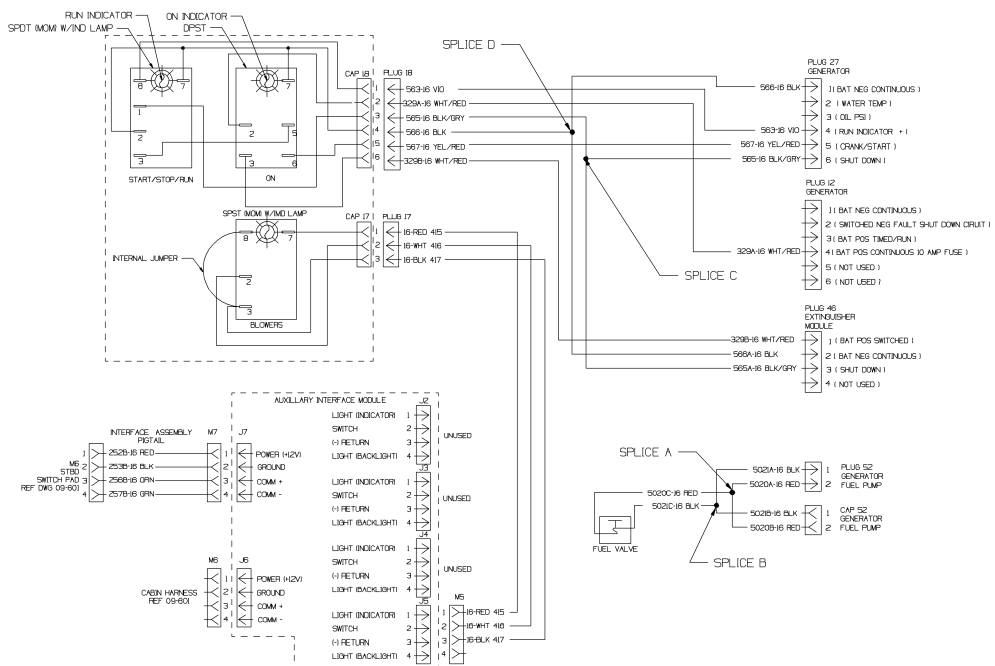
280 DA • SATELLITE STEREO SYSTEM (OPTION)



Print# 09-615

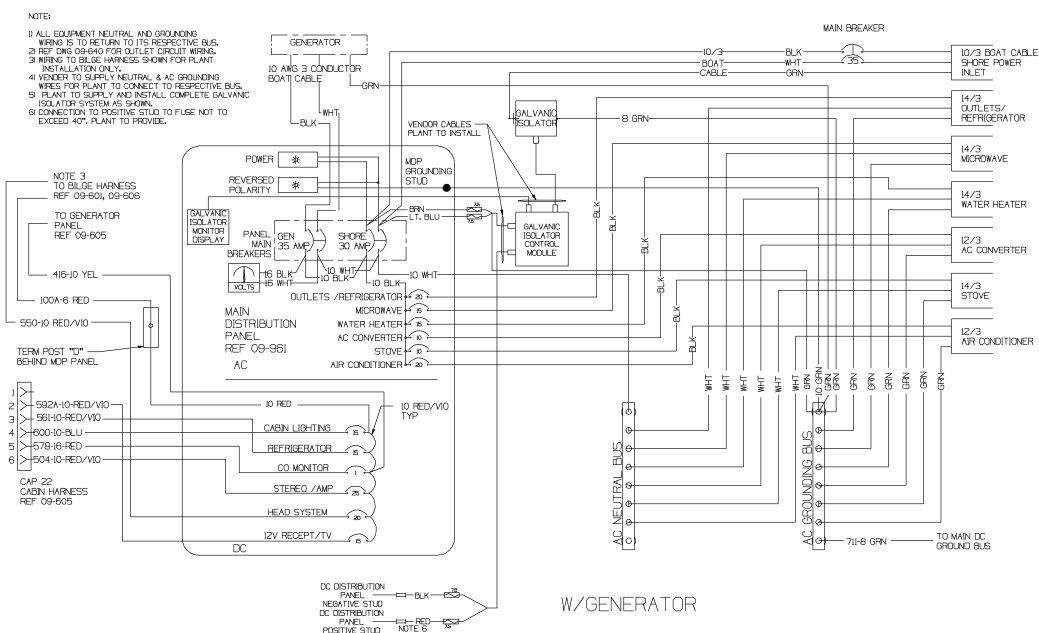
280 Sundancer

280 DA • GENERATOR WIRING DIAGRAM (OPTION)

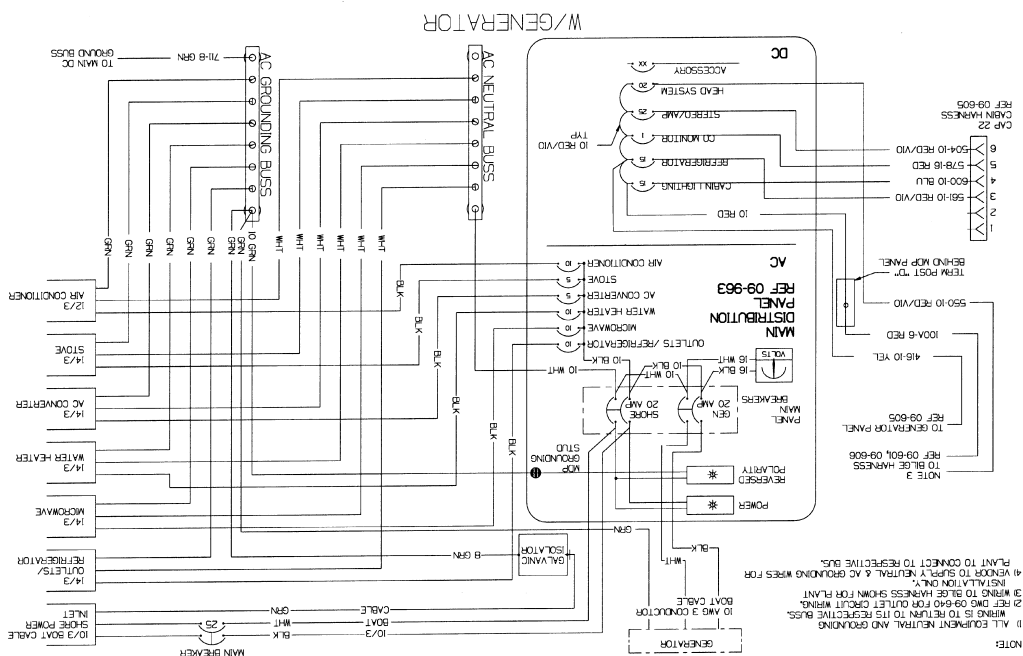


Print# 09-624

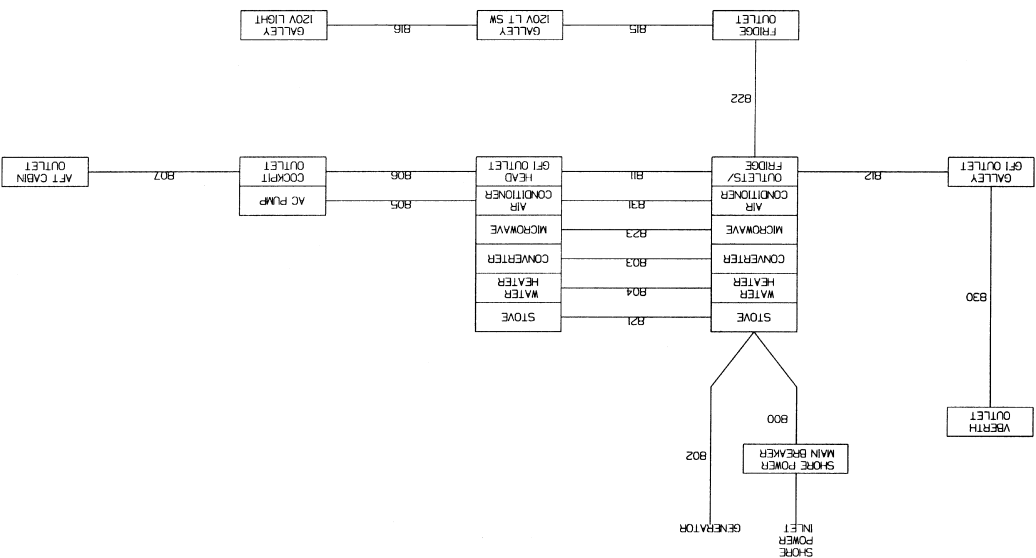
71



280 DA • MDP WIRING DIAGRAM (220VAC/50HZ)

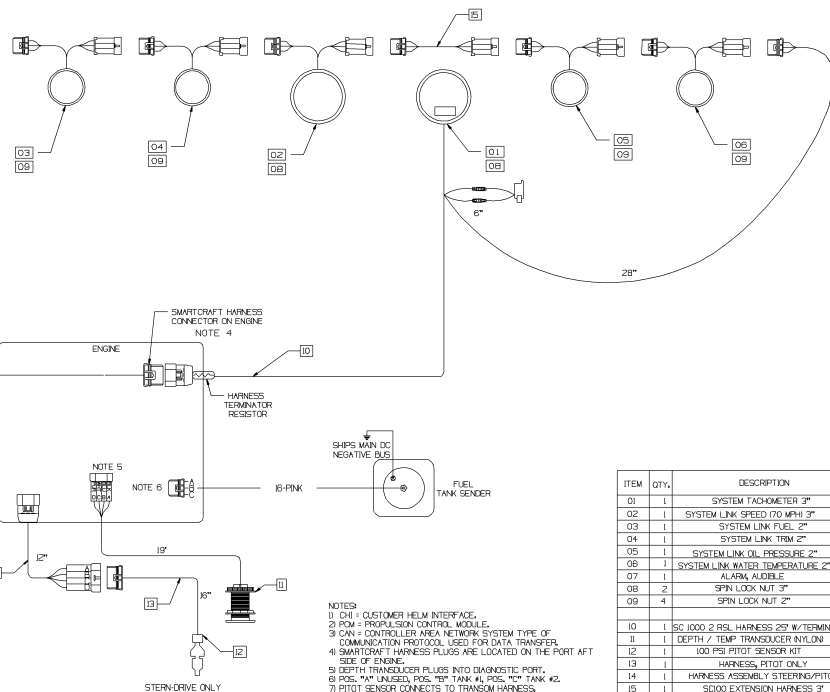


280 DA • AC SYSTEM WIRING DIAGRAM



Print# 09-640

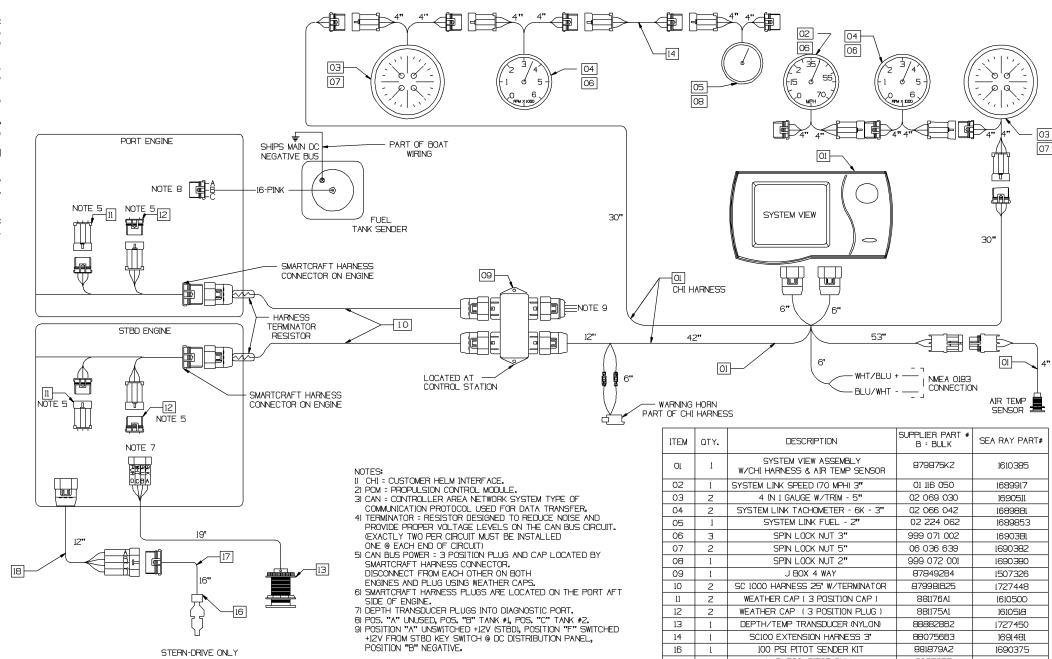
280 DA • SMARTCRAFT™ SYSTEMS DIAGRAM



ITEM	QTY.	DESCRIPTION	SUPP. PART # B = BULK	SEA RAY PART#
01	1	SYSTEM TACHOMETER 3"	02 065 452	1690357
02	1	SYSTEM LINK SPEED 170 MPH 3"	01 16 050	1690617
03	1	SYSTEM LINK FUEL 2"	02 224 062	1690653
04	1	SYSTEM LINK TRIM 2"	V0212045	1690031
05	1	SYSTEM LINK OIL PRESSURE 2"	02 140 160	1690652
06	1	SYSTEM LINK WATER TEMPERATURE 2"	02 38 050	1690655
07	1	ALARM, ALDIBLE	B6492A9	1720995
08	2	SPIN LOCK NUT 3"	999 071 002	1690381
09	4	SPIN LOCK NUT 2"	999 072 001	1690380
10	1	SC 1000 2 RSL HARNESS 25' W/TERMINATORS	679982B25	1727449
11	1	DEPTH / TEMP TRANSDUCER NYLON	888620B2	1727450
12	1	100 PSI PITOT SENDER KIT	88879A2	1690375
13	1	HARNESS, PITOT ONLY	8637371	1691477
14	1	HARNESS ASSEMBLY STEERING/PITOT	86393A1	1691719
15	1	SC1000 EXTENSION HARNESS 3'	880756B3	1691481
16	-	-	-	-

SINGLE ENGINE W/SYSTEM TACH

Print# 09-710, 2 of 3, Revision# 1

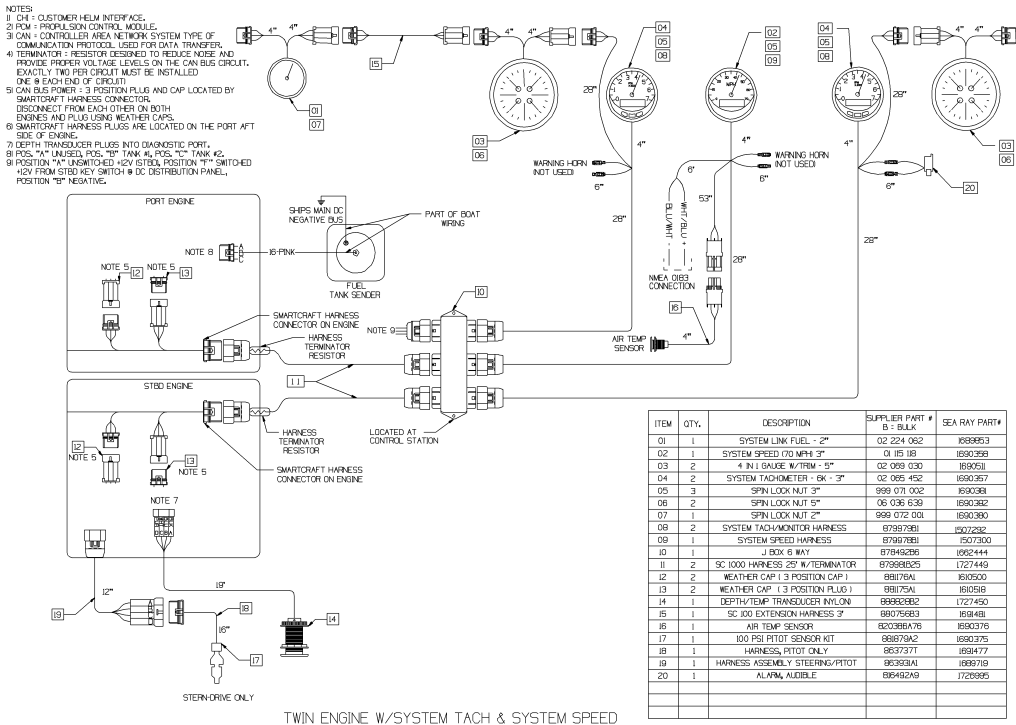


ITEM	QTY.	DESCRIPTION	SUPPLIER PART # B = BULK	SEA RAY PART#
01	1	SYSTEM VIEW ASSEMBLY W/CH HARNESS & AIR TEMP SENSOR	679975K2	1610385
02	1	SYSTEM LINK SPEED 170 MPH 3"	01 16 050	1690617
03	2	4 IN 1 GAUGE W/TRIM - 5"	02 059 030	1690511
04	2	SYSTEM LINK TACHOMETER - 6" 3"	02 065 042	1690653
05	1	SYSTEM LINK FUEL - 2"	02 224 062	1690653
06	3	SPIN LOCK NUT 3"	999 071 002	1690381
07	2	SPIN LOCK NUT 5"	06 036 639	1690382
08	1	SPIN LOCK NUT 2"	999 072 001	1690380
09	1	J BOX 4-WAY	679403H4	1507326
10	2	SC 1000 HARNESS 25' W/TERMINATOR	679982B25	1727448
11	2	WEATHER CAP (3 POSITION PLUG)	88170A1	1610500
12	2	WEATHER CAP (3 POSITION PLUG)	88170A1	1610508
13	1	DEPTH/TEMP TRANSDUCER NYLON	888620B2	1727450
14	1	SC1000 EXTENSION HARNESS 3'	880756B3	1691481
15	1	100 PSI PITOT SENDER KIT	88879A2	1690375
17	1	HARNESS, PITOT ONLY	8637371	1691477
18	1	HARNESS ASSEMBLY STEERING/PITOT	86393A1	1691719

TWIN ENGINE W/OPT SYSTEM VIEW

280 DA • SMARTCRAFT™ SYSTEMS DIAGRAM

280 DA • SMARTCRAFT™ SYSTEMS DIAGRAM



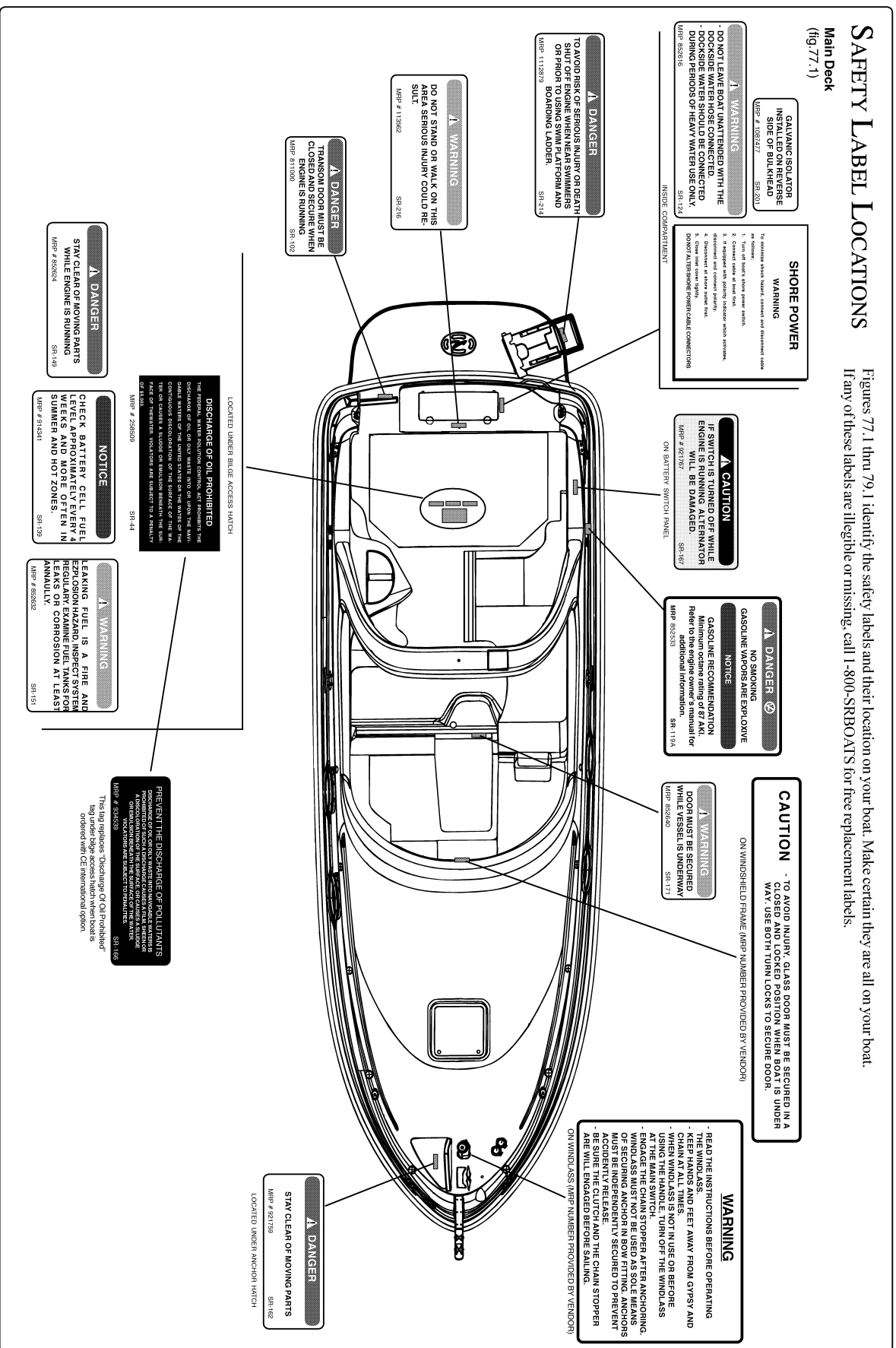
Print# 09-710, 3 of 3, Revision# 1

SAFETY LABEL LOCATIONS

Figures 77.1 thru 79.1 identify the safety labels and their location on your boat. Make certain they are all on your boat. If any of these labels are illegible or missing, call 1-800-SRBOATS for free replacement labels.

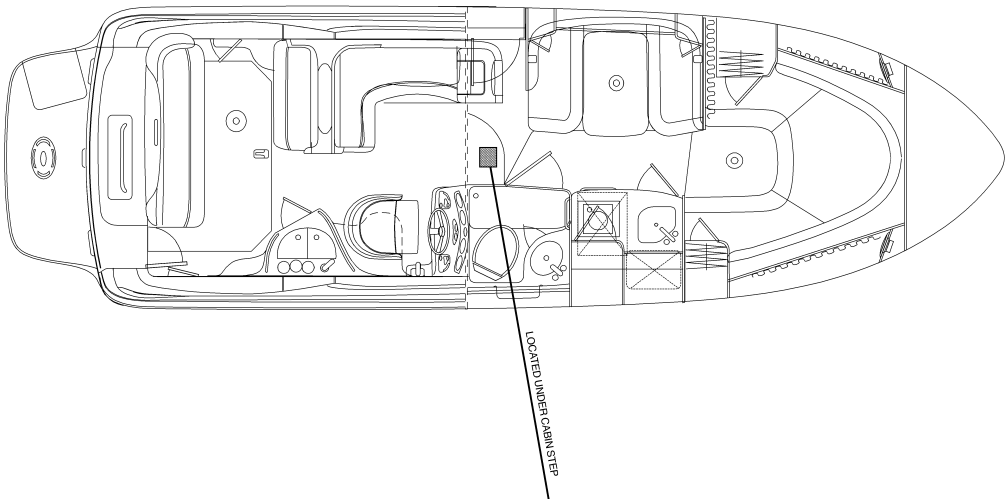
Main Deck

(fig. 77.1)



SAFETY LABEL LOCATIONS (CONTINUED)

(fig.79.1)



Save Our Seas

It is *illegal* to dump plastic trash anywhere into the ocean or navigable waters of the United States. Violation of these requirements may result in civil penalty up to \$25,000, a fine of \$50,000 and imprisonment for up to five years.

PLASTIC - Includes but is not

limited to: plastic bags, styrofoam cups and lids, sixpack holders, stirrers, straws, milk jugs, egg cartons, synthetic fishing nets, ropes, lines, and bio or photo degradable plastics.

GARBAGE - Means paper, rags, glass, metal, crockery (generated in living spaces aboard the vessel-what we normally call trash), and all kinds of food, maintenance and cargo-associated waste.

"Garbage" does not include fresh fish or fish parts, dishwater, and gray water.

INSIDE 3 MILES

(and in U.S. Lakes, Rivers, Bays and Sounds)
PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT
ANY GARBAGE EXCEPT DISHWATER/GRAYWATER/FRESH FISH PARTS

3 TO 12 MILES

PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT
ANY GARBAGE NOT GROUND TO LESS THAN ONE SQUARE INCH

12 TO 25 MILES

PLASTICS

DUNNAGE, LINING AND PACKING MATERIALS THAT FLOAT

12 TO 25 MILES

PLASTICS

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

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

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

M/RP # 532820

SR-61

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.

