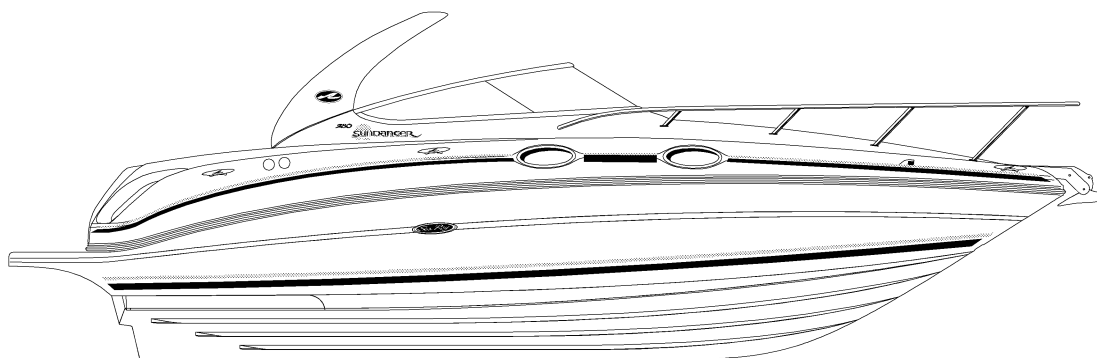


Owner's Manual Supplement

280 Sundancer



Sea Ray

1-800-SRBOATS
www.searay.com

Sea Ray® • Owner's Manual Supplement • 280 Sundancer • MRP #1469402

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Sea Ray Boats, Inc. 2600 Sea Ray Blvd., Knoxville, TN 37914.
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.

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(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.

The following are registered trademarks of the Brunswick Corporation: Sea Ray®, The SR Wave Logo.

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.

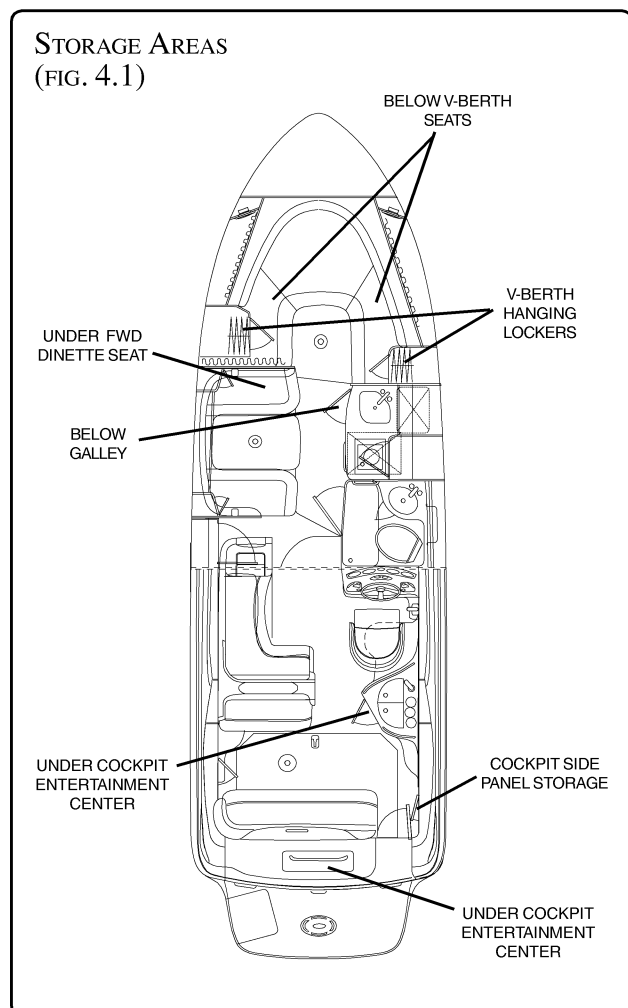
ENGINE: Refer to the owner's manual and/or the engine manual.

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.

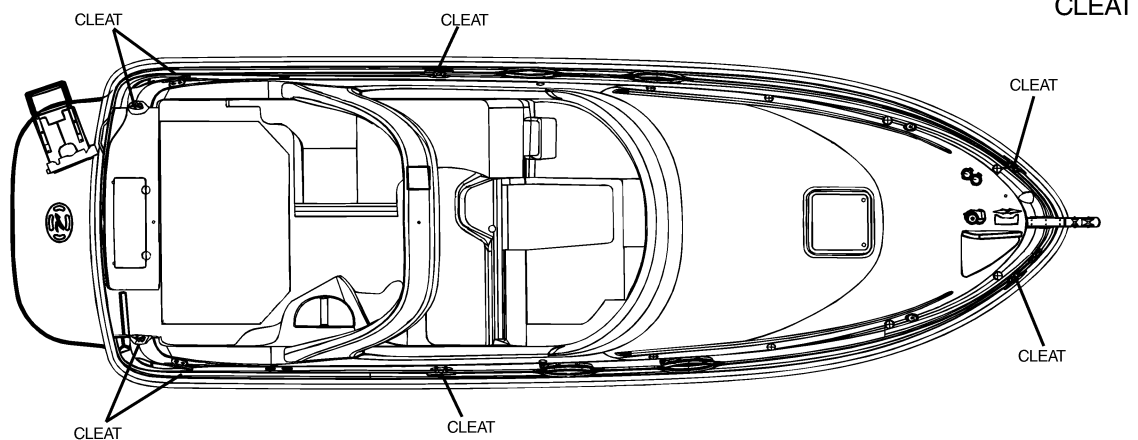


BOW AND STERN EYES: The bow eye should be used to haul the boat onto a trailer. The stern eyes should be used as tie down points for trailering the boat. The bow and stern eyes may be used for short term lifting of the boat such as for service. Long term lifting with

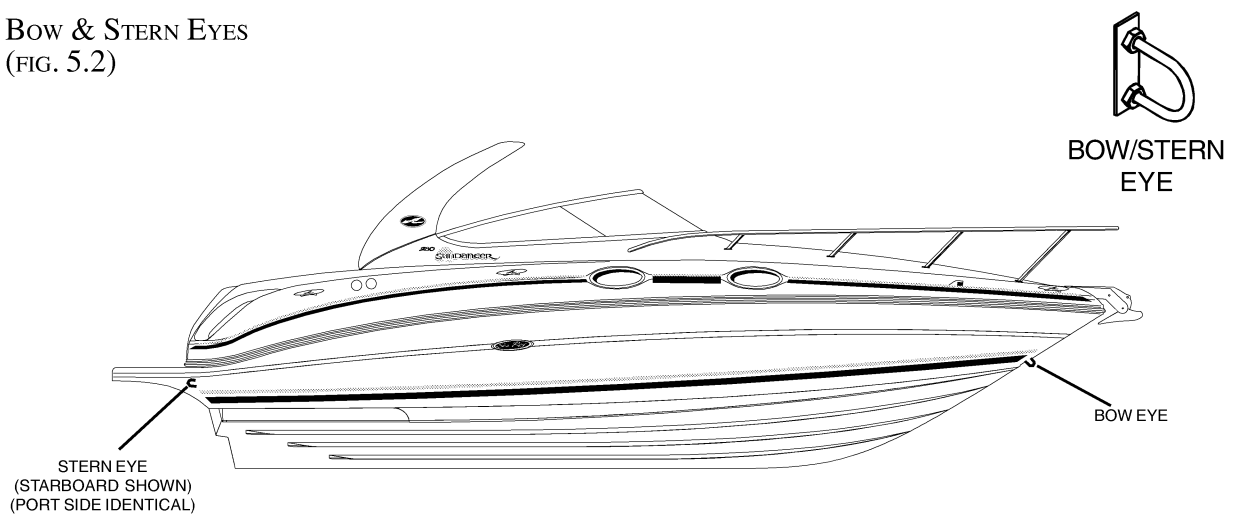
the bow and stern eyes may cause stress on the fiberglass and gel coat.

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

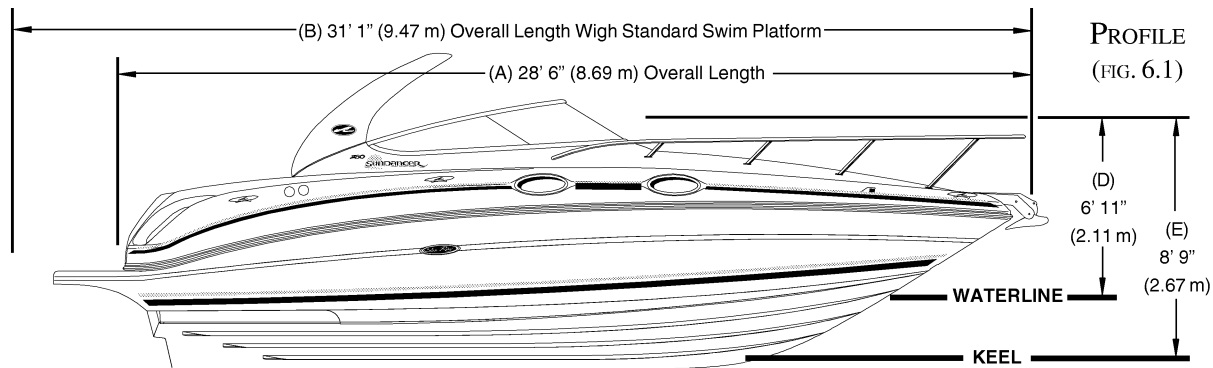
CLEAT LOCATIONS
(FIG. 5.1)



BOW & STERN EYES
(FIG. 5.2)



GENERAL ARRANGEMENTS & DIMENSIONS

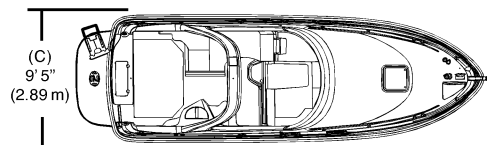


280 BR SPECIFICATIONS

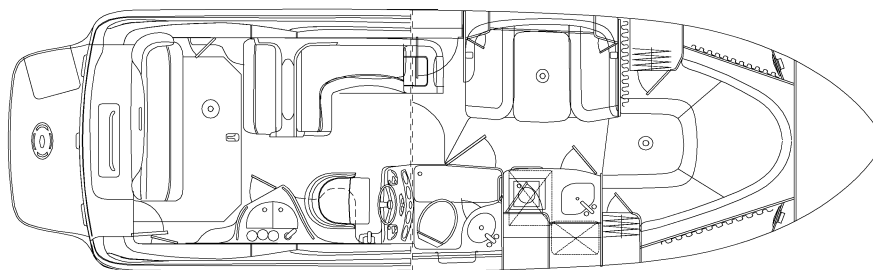
(A) Overall Length	28' 6" (8.69 m)
(B) w/Standard Extended Swim Platform	31' 1" (9.47 m)
(C) Beam	9' 5" (2.89 m)
Draft (Stern Drive Down)	33 5/8" (85.41 cm)
Draft (Stern Drive Up)	23" (58.4 cm)
Draft (Twin Stern Drive Down)	38 5/8" (98.11 cm)
Draft (Twin Stern Drive Up)	23" (58.4 cm)
Dry Weight (lbs.)	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)



INTERIOR SEATING PLAN



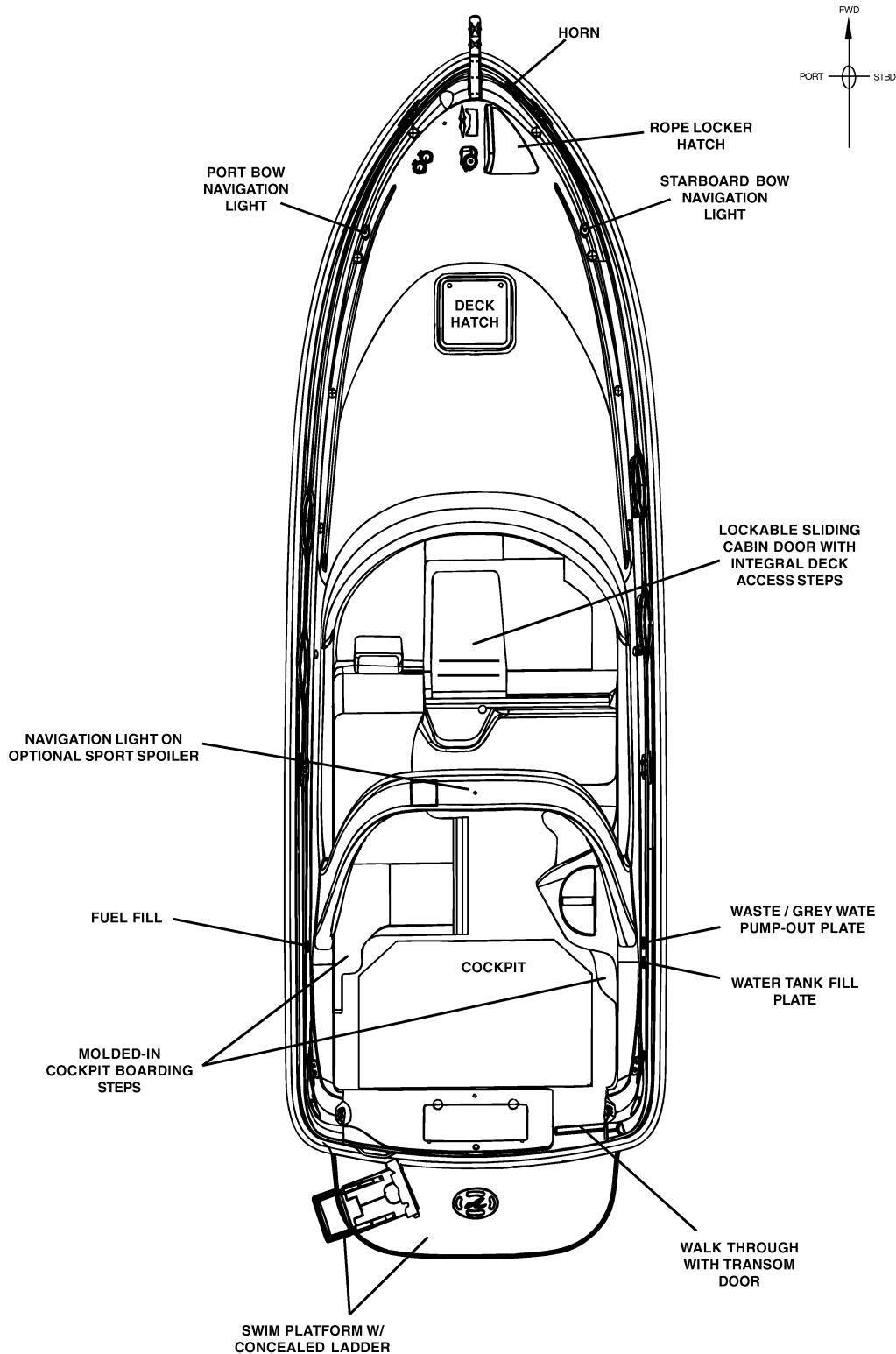
280 DA SEATING PLAN

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)

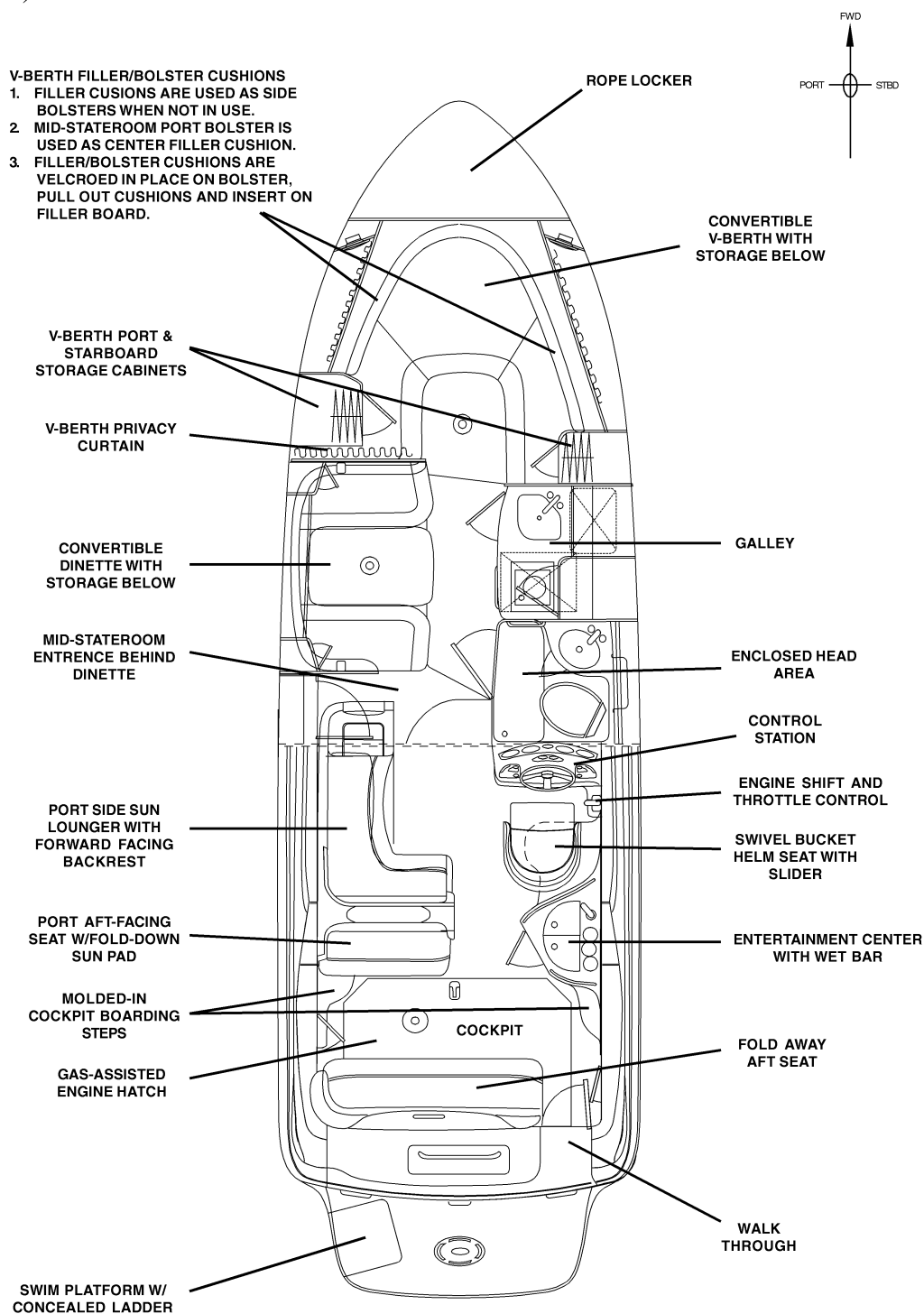
ACCOMMODATION PLAN

MAIN DECK (FLOOR PLAN)
(FIG. 7.1)



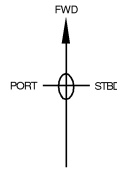
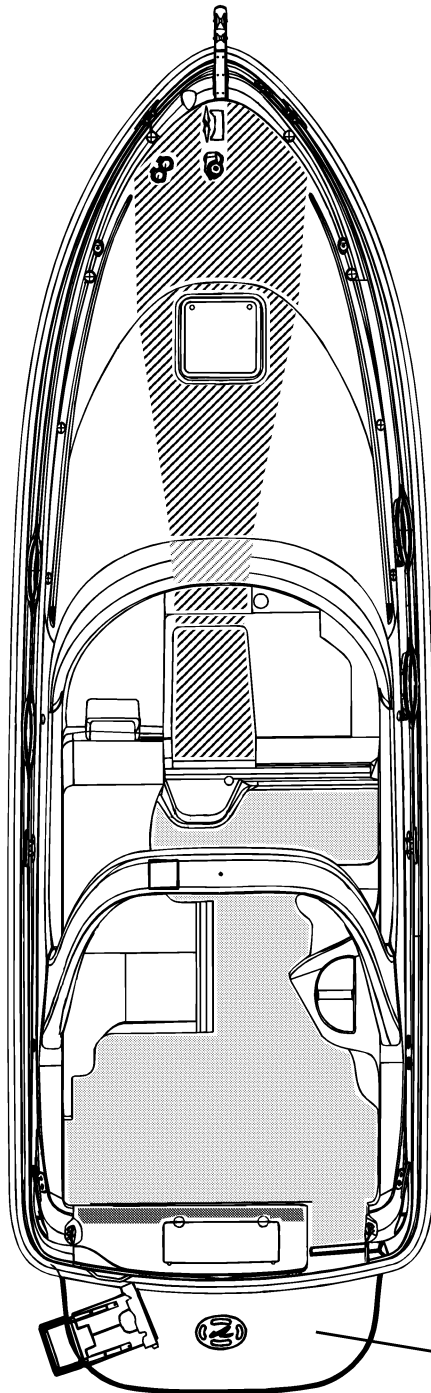
ACCOMMODATION PLAN

MID DECK (FLOOR PLAN)
(FIG. 8.1)



DECK OCCUPANCY PLAN

(FIG. 9.1)



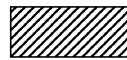
WARNING

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

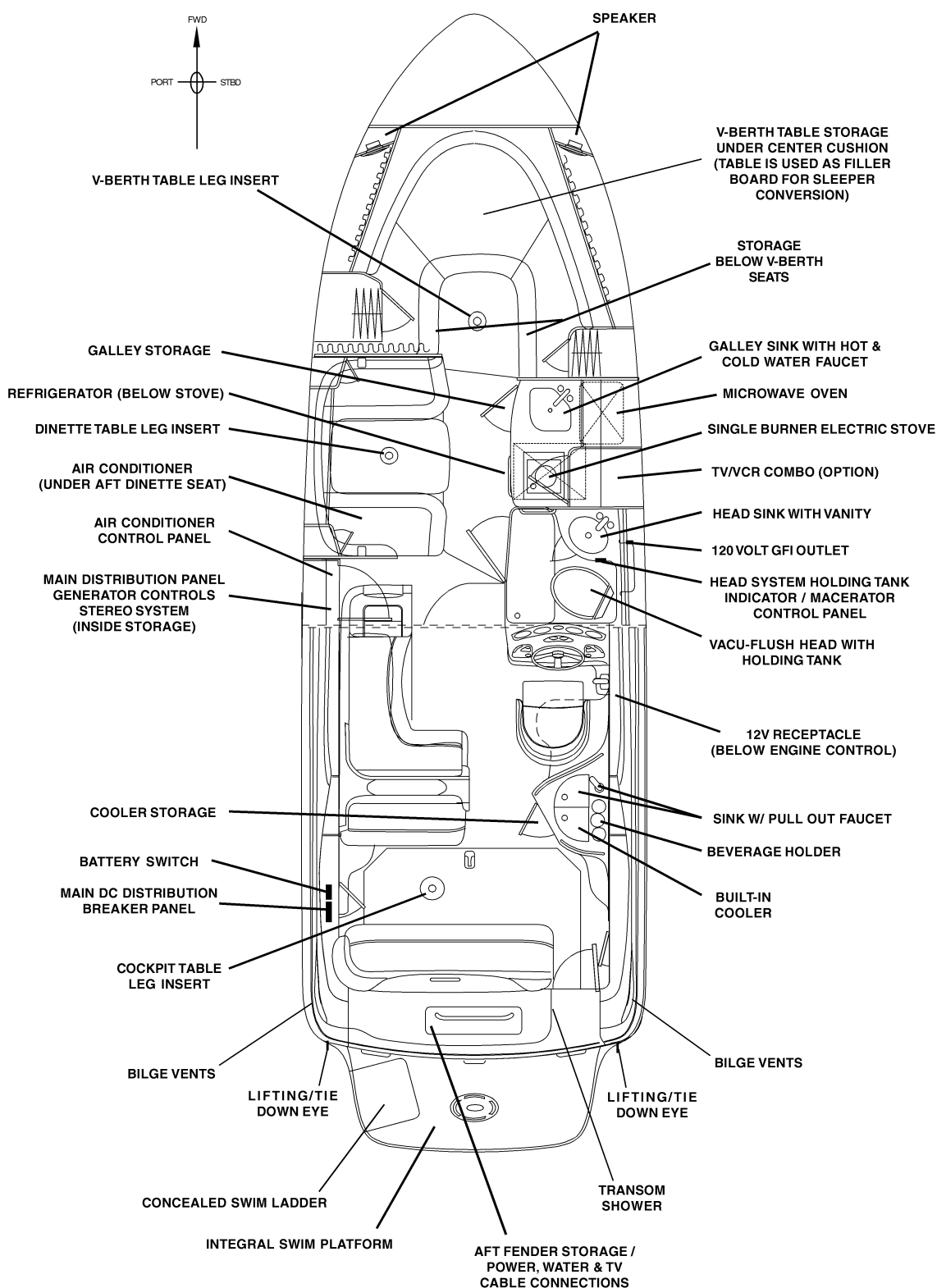


DANGER

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

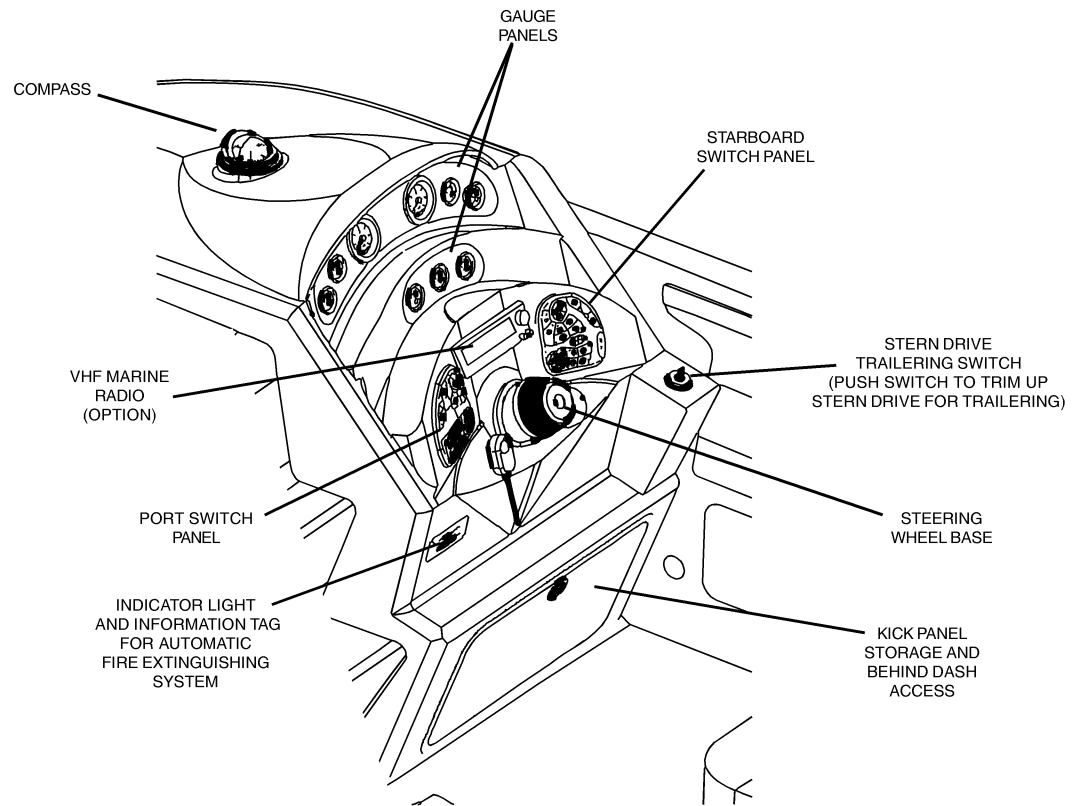
ACCESSORY LOCATIONS

(FIG. 10.1)

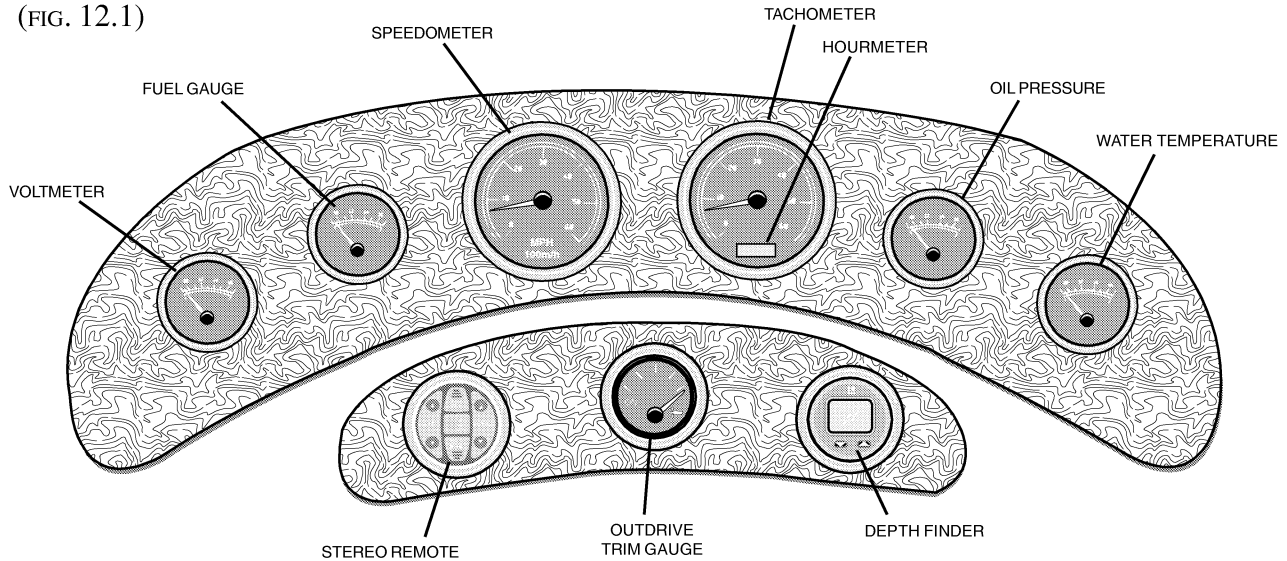


DASH LAYOUT

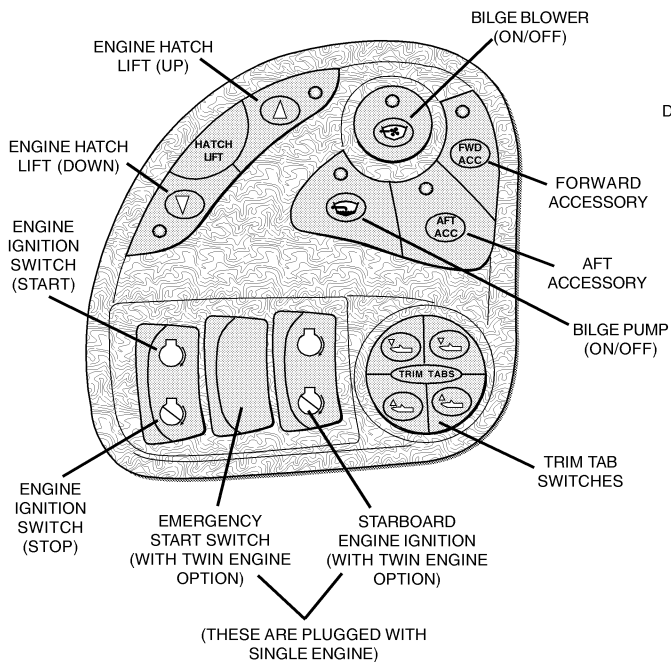
(FIG. 11.1)



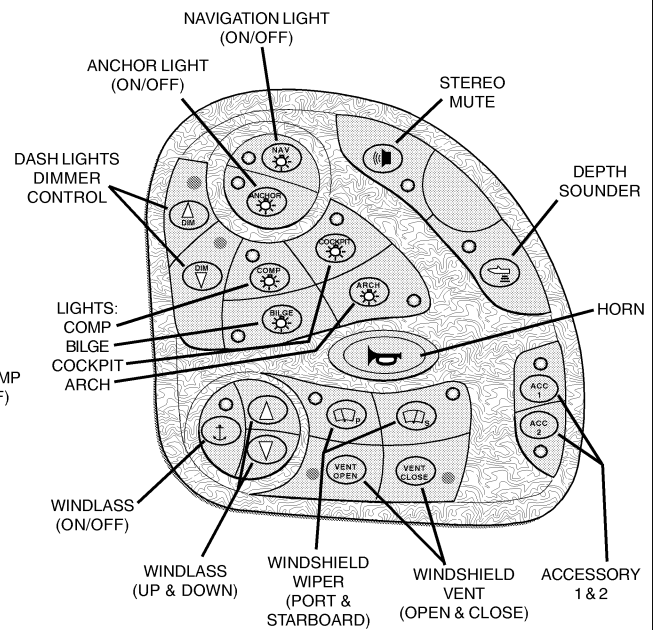
GAUGE PANELS (FIG. 12.1)



PORT SWITCH PANEL (FIG. 12.2)

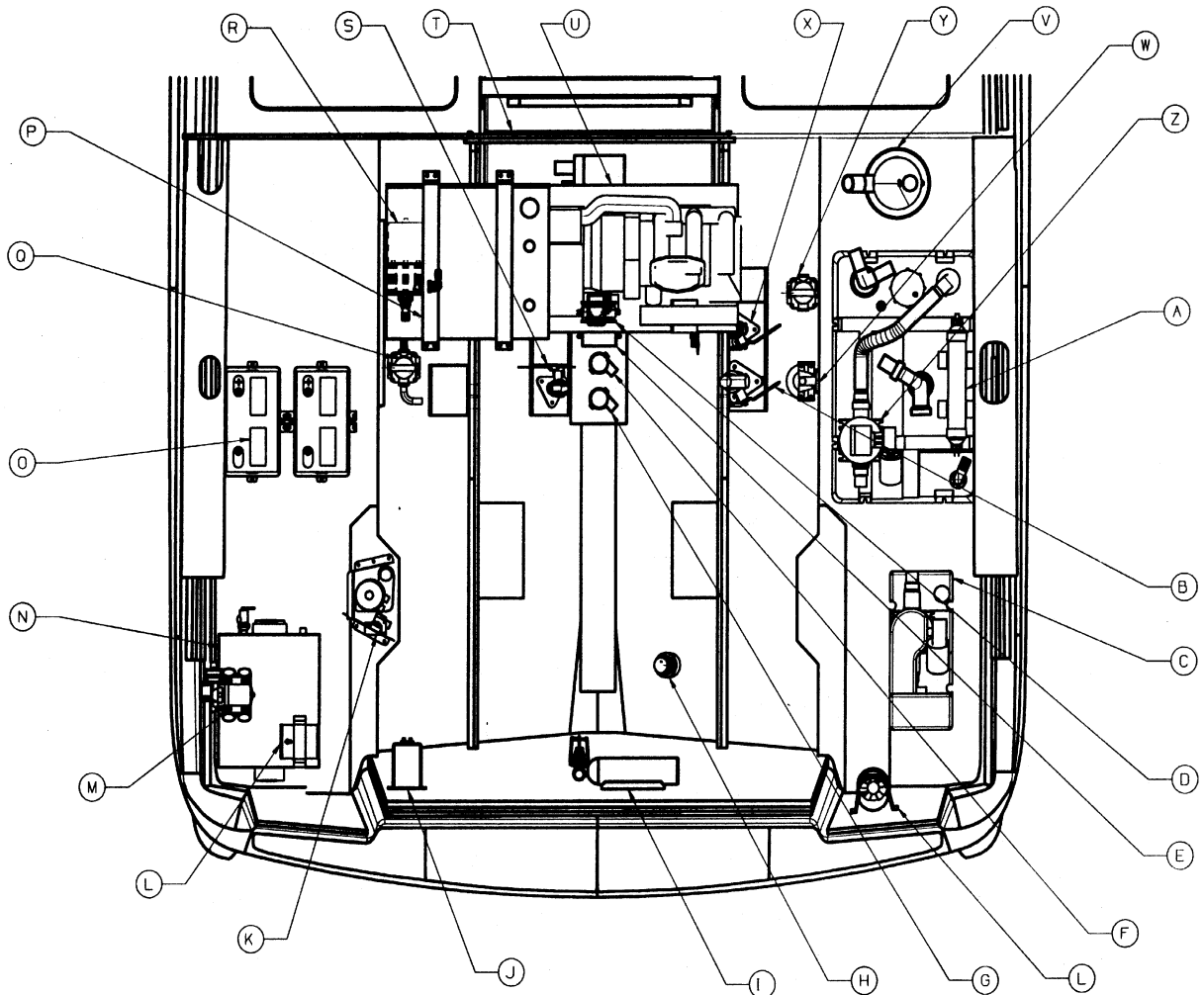


STARBOARD SWITCH PANEL (FIG. 11.3)



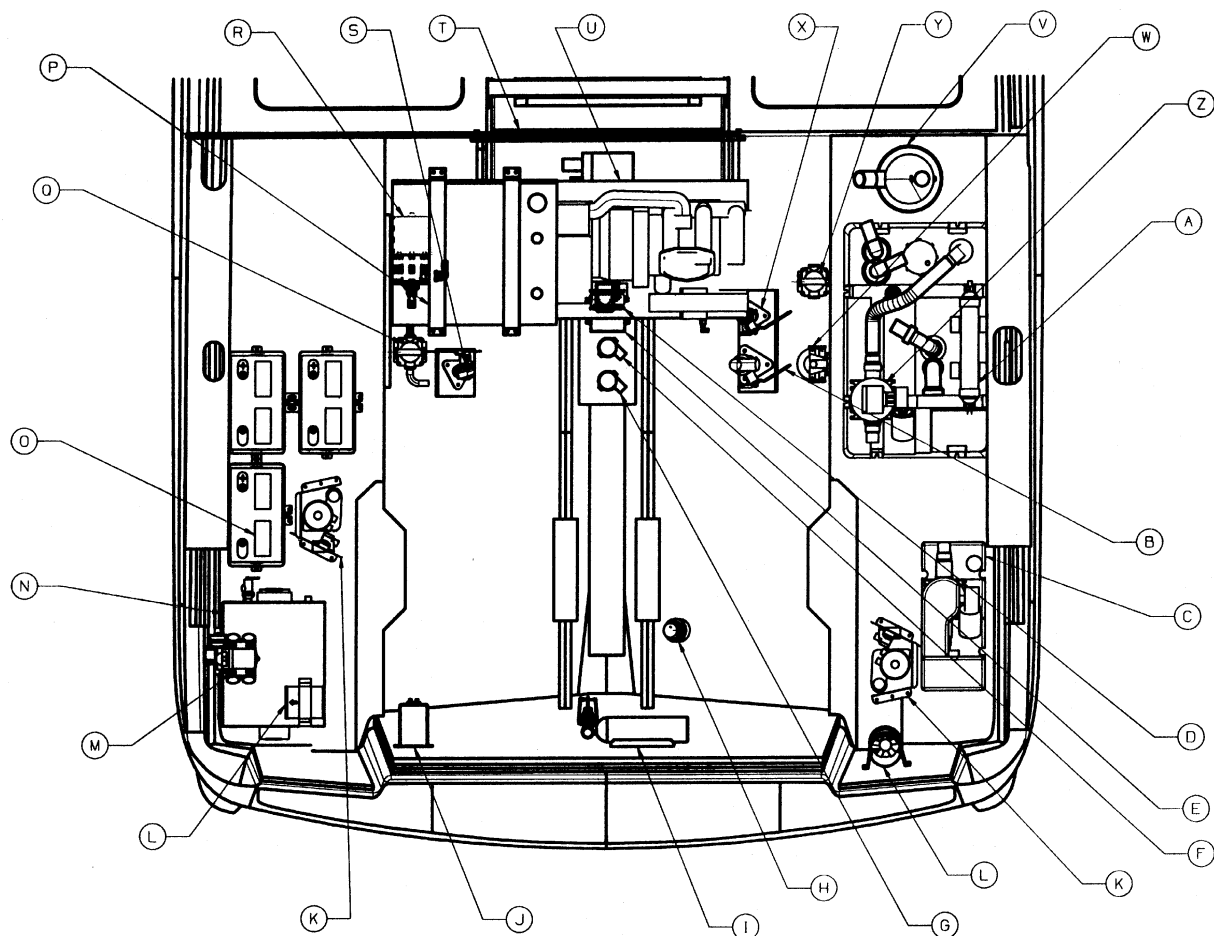
ENGINE COMPARTMENT LAYOUT

GASOLINE SINGLE ENGINE WITH GENERATOR (FIG. 13.1)



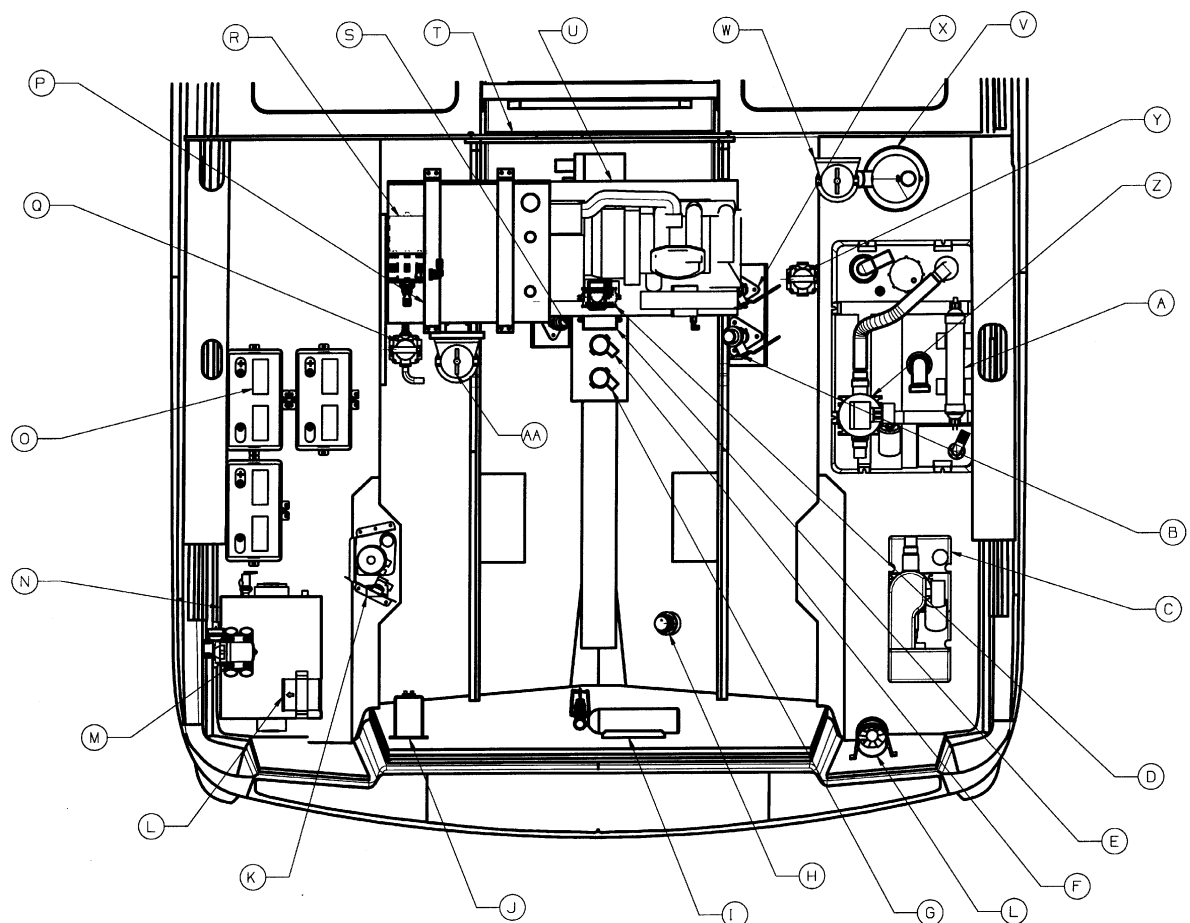
- | | | |
|--|---|---|
| A: HEAD SYSTEM HOLDING TANK | L: BILGE BLOWER | W: GENERATOR FUEL FILTER (W/OPTION) |
| B: HEAD SYSTEM OVERBOARD DISCHARGE SEACOCK | M: WATER PUMP | X: GENERATOR SEACOCK (W/OPTION) |
| C: HEAD SYSTEM VACUUM GENERATOR | N: WATER HEATER | Y: GENERATOR SEAWATER STRAINER (W/OPTION) |
| 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)

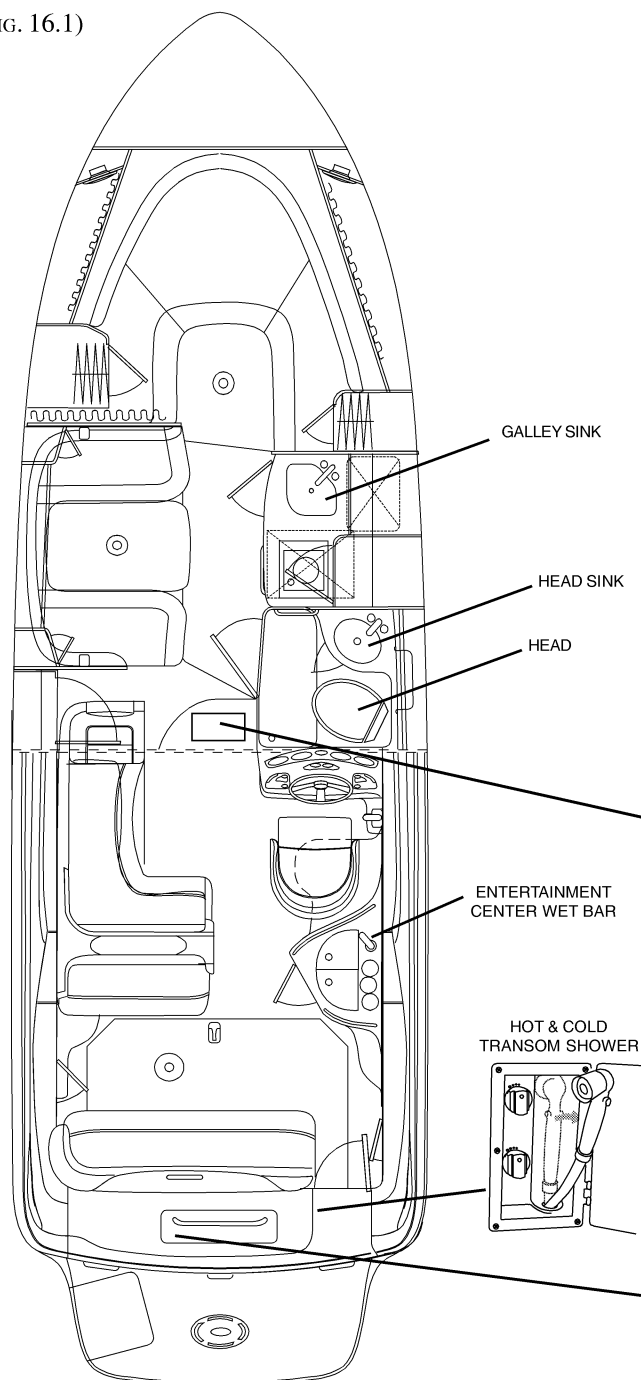


- | | | |
|--|---|---|
| A: HEAD SYSTEM HOLDING TANK | L: BILGE BLOWER | W: GENERATOR FUEL FILTER (W/OPTION) |
| B: HEAD SYSTEM OVERBOARD DISCHARGE SEACOCK | M: WATER PUMP | X: GENERATOR SEACOCK (W/OPTION) |
| C: HEAD SYSTEM VACUUM GENERATOR | N: WATER HEATER | Y: GENERATOR SEAWATER STRAINER (W/OPTION) |
| D: HIGH WATER FLOAT SWITCH | O: BATTERIES | Z: HEAD SYSTEM OVERBOARD DISCHARGE MACERATOR (OPTION) |
| E: BILGE PUMP FLOAT SWITCH | P: WATER TANK | AA: FUEL FILTER |
| 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 (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) | |

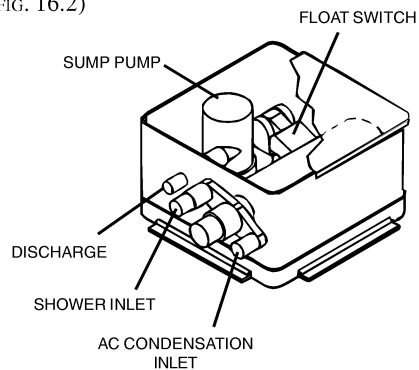
WATER SYSTEM

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.

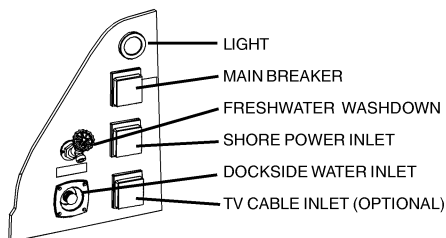
(FIG. 16.1)



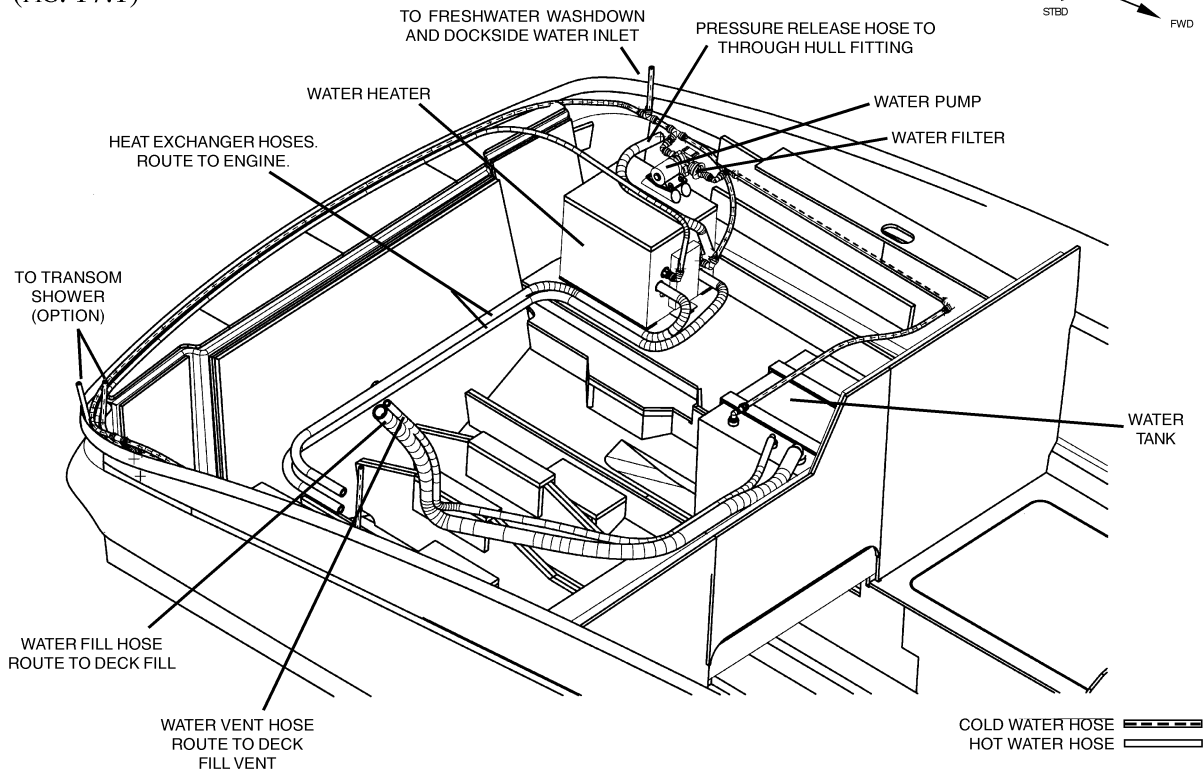
GREY WATER SUMP LOCATED BELOW CABIN ENTRY STEP (LIFT OUT TRASH CAN)
(FIG. 16.2)



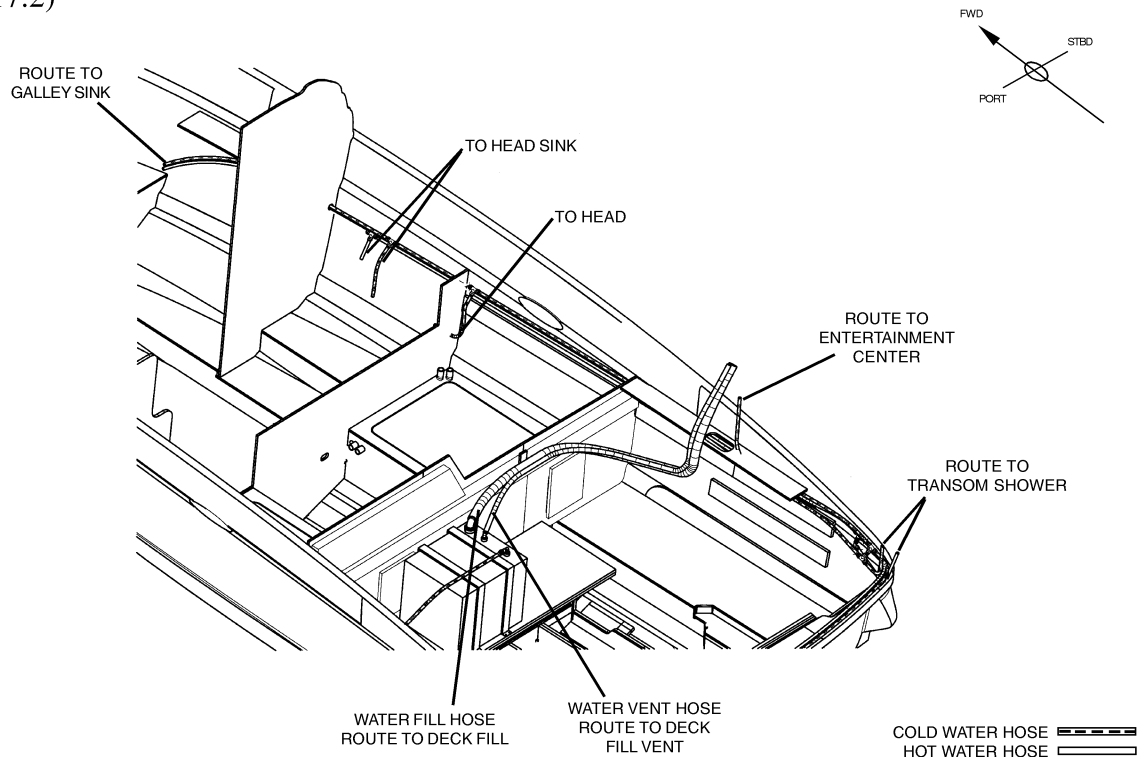
ACCESSORY BOARD INSIDE TRANSOM STORAGE COMPARTMENT
(FIG. 16.3)



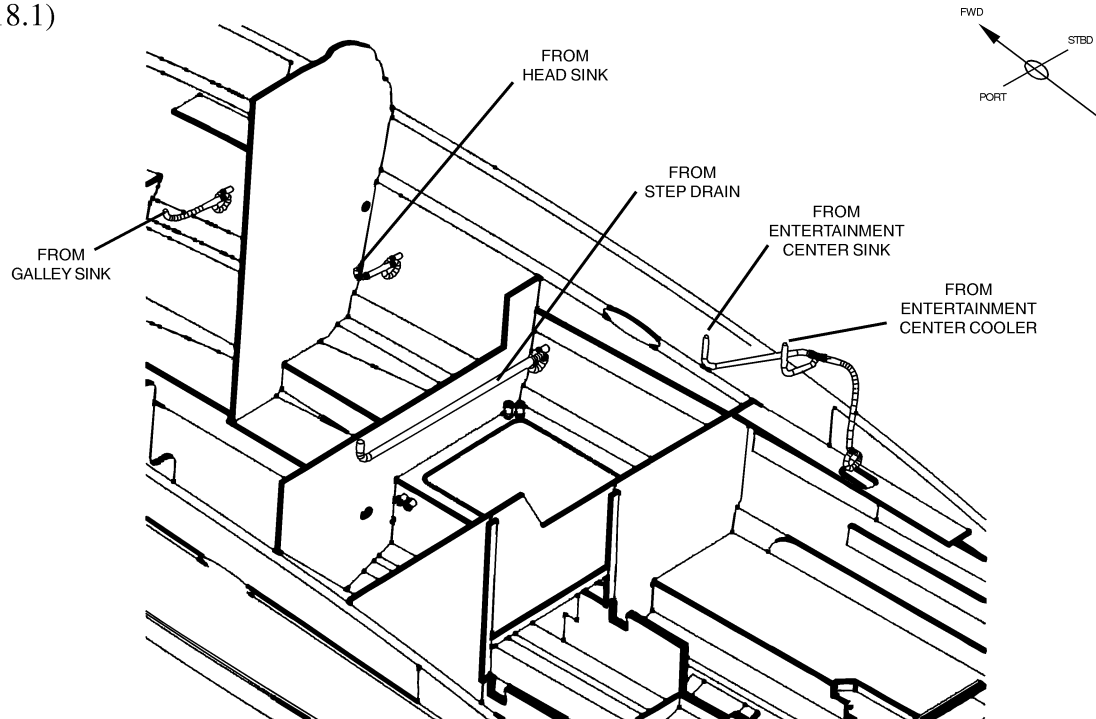
WATER SYSTEM
(FIG. 17.1)



WATER SYSTEM
(FIG. 17.2)



DRAIN LINE ROUTING
(FIG. 18.1)

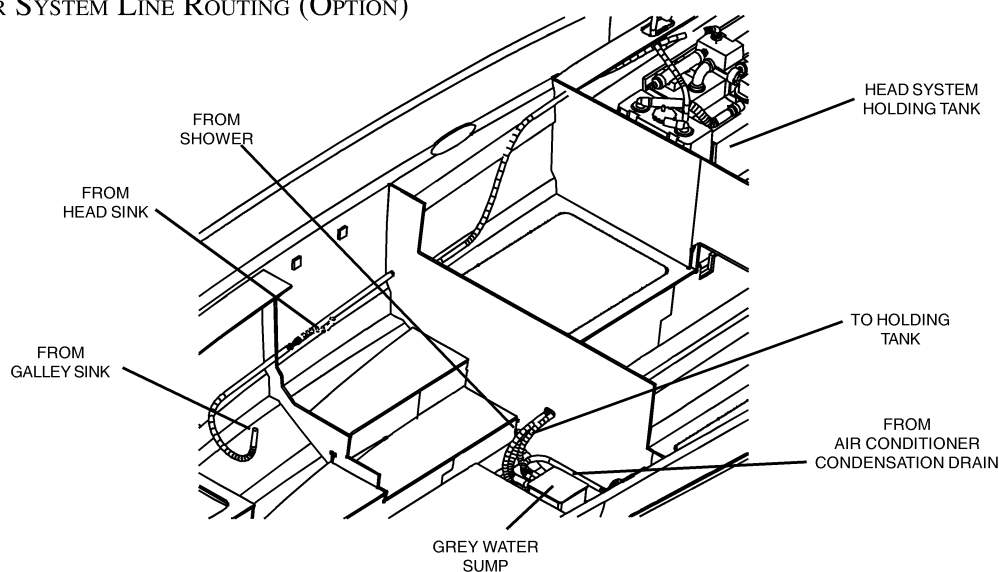


GREY WATER SYSTEM (OPTION)

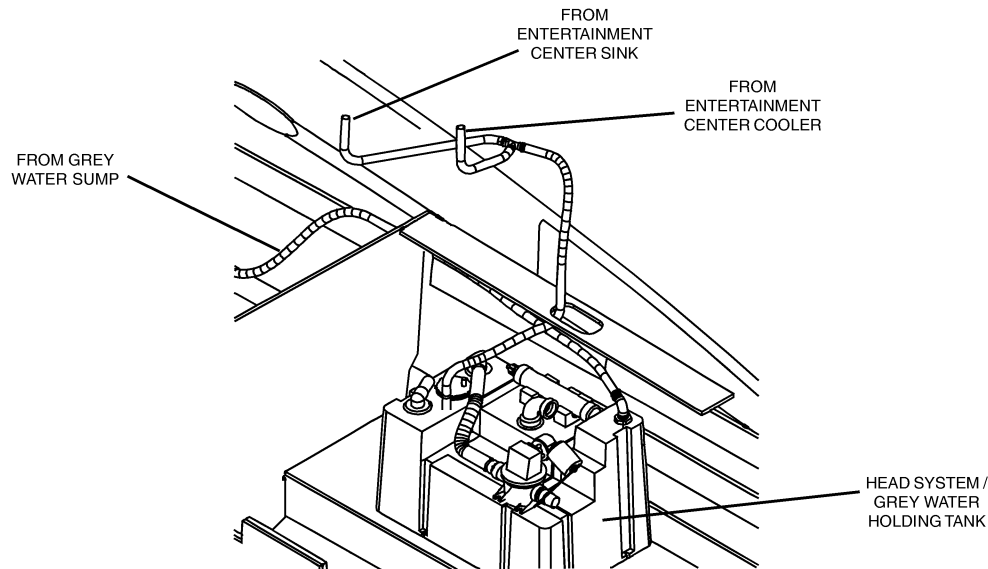
The grey water system option is available for boats operating in areas with overboard discharge restrictions. The grey water system drains all water into the enclosed sump where it is pumped into the head system

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.

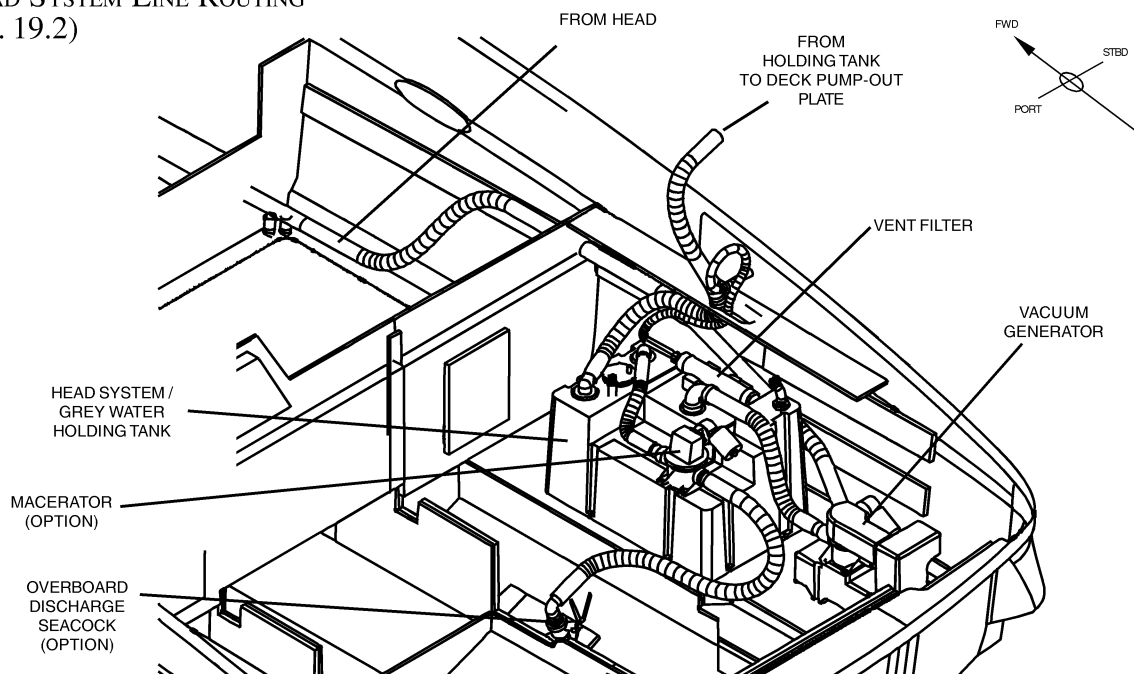
REFER TO OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.



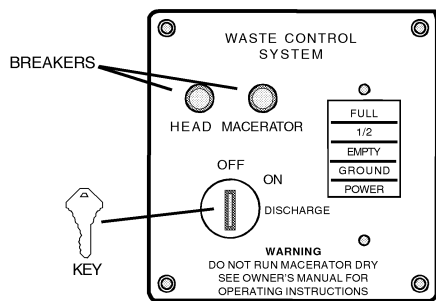
CAUTION

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.

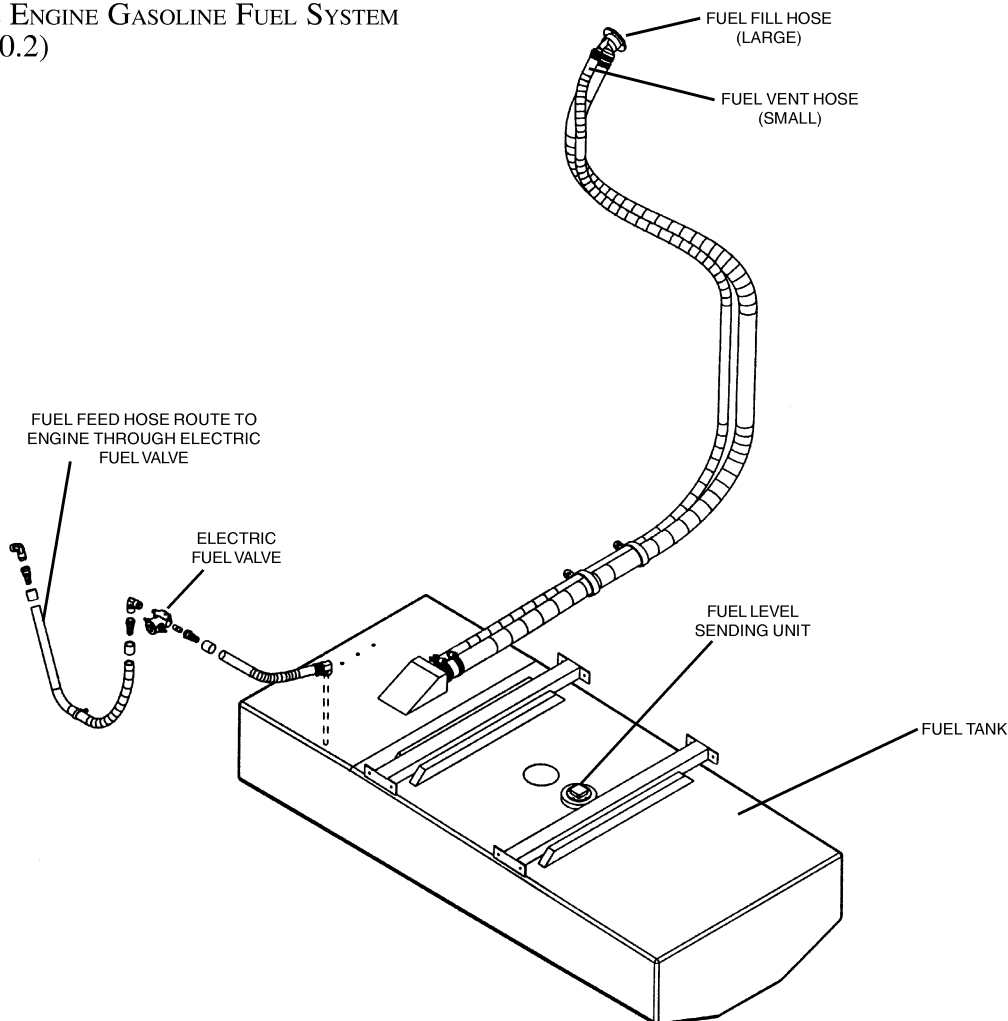
FUEL SYSTEM



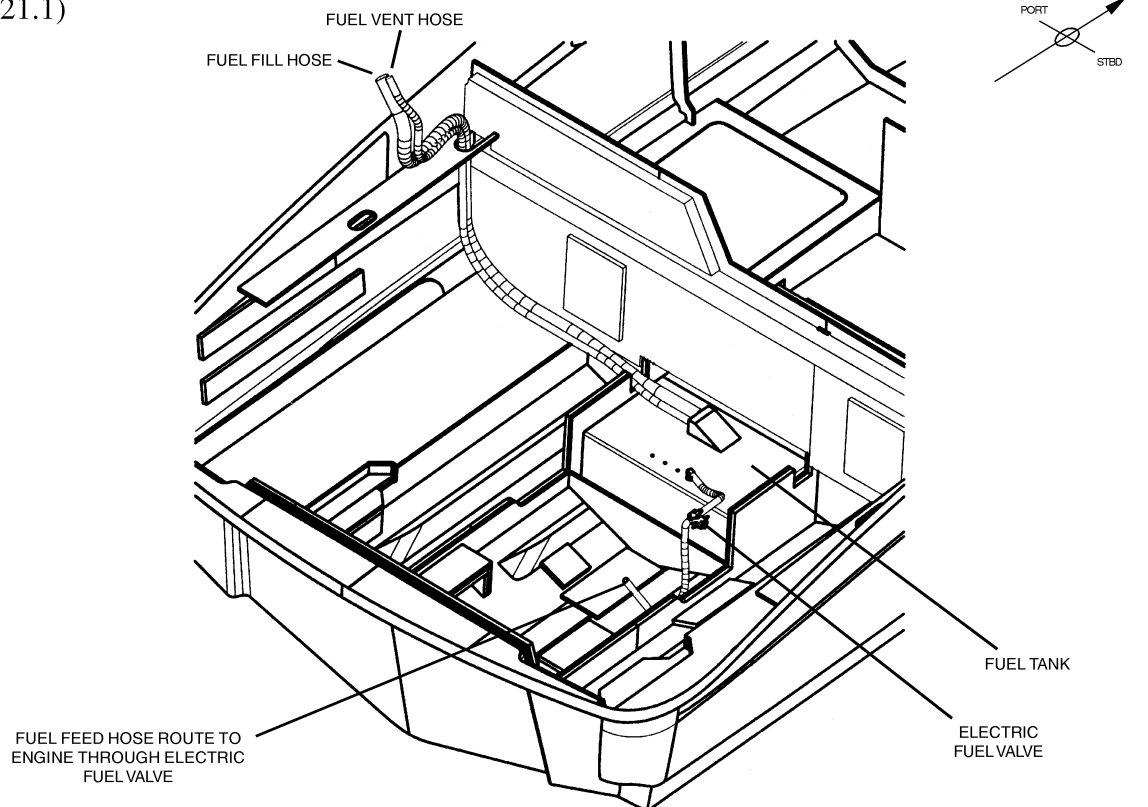
The Owner's Manual contains important fueling information. Take time to read all the fuel related information in the owner's packet.

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).

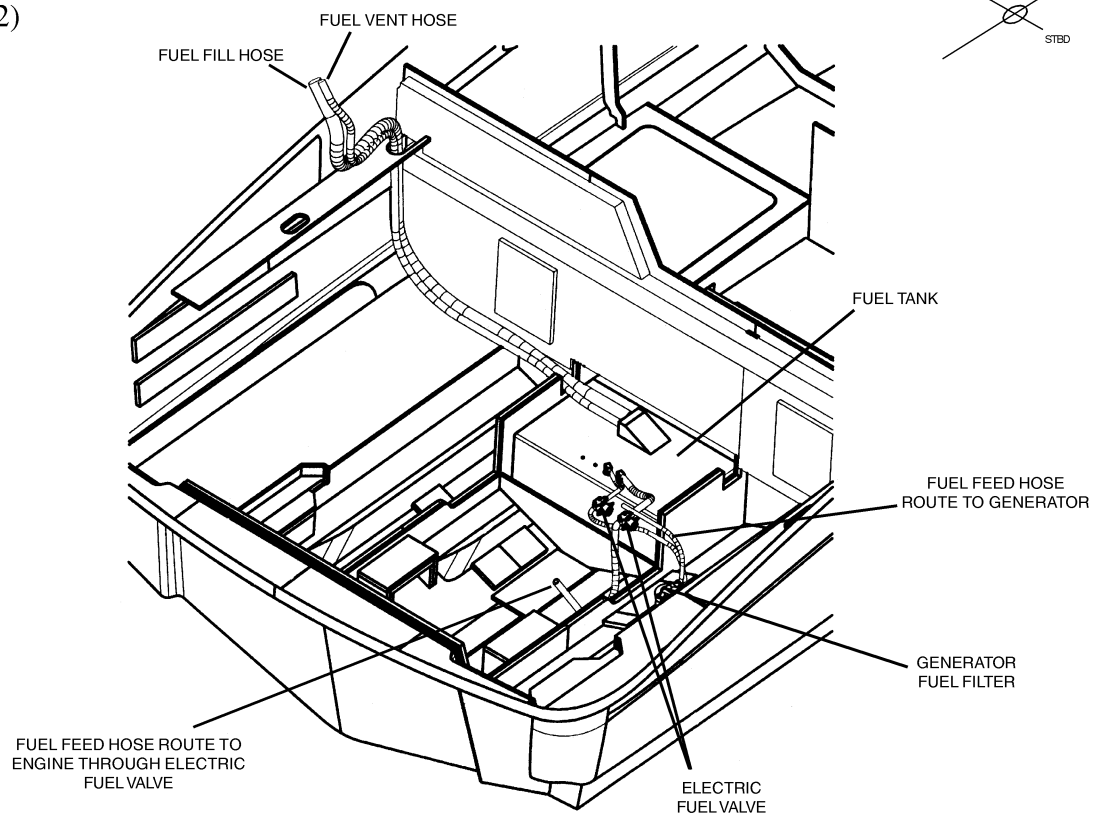
SINGLE ENGINE GASOLINE FUEL SYSTEM
(FIG. 20.2)



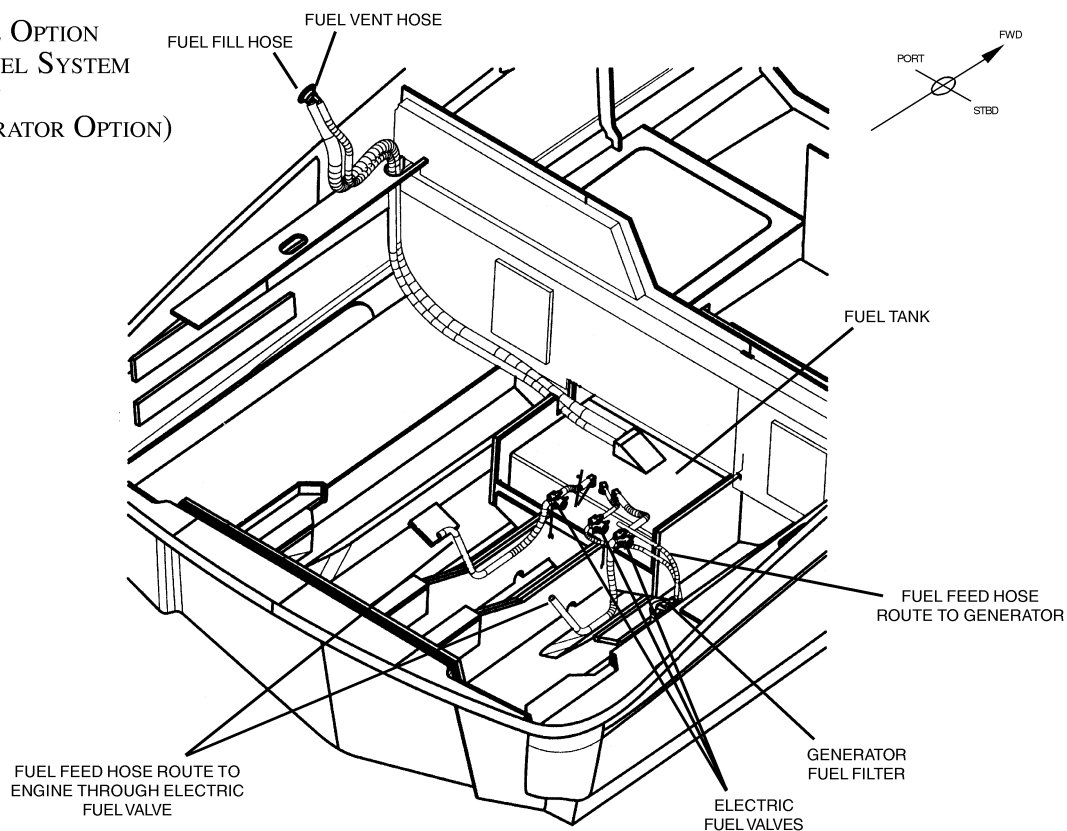
SINGLE ENGINE GASOLINE FUEL SYSTEM INSTALLATION
(FIG. 21.1)



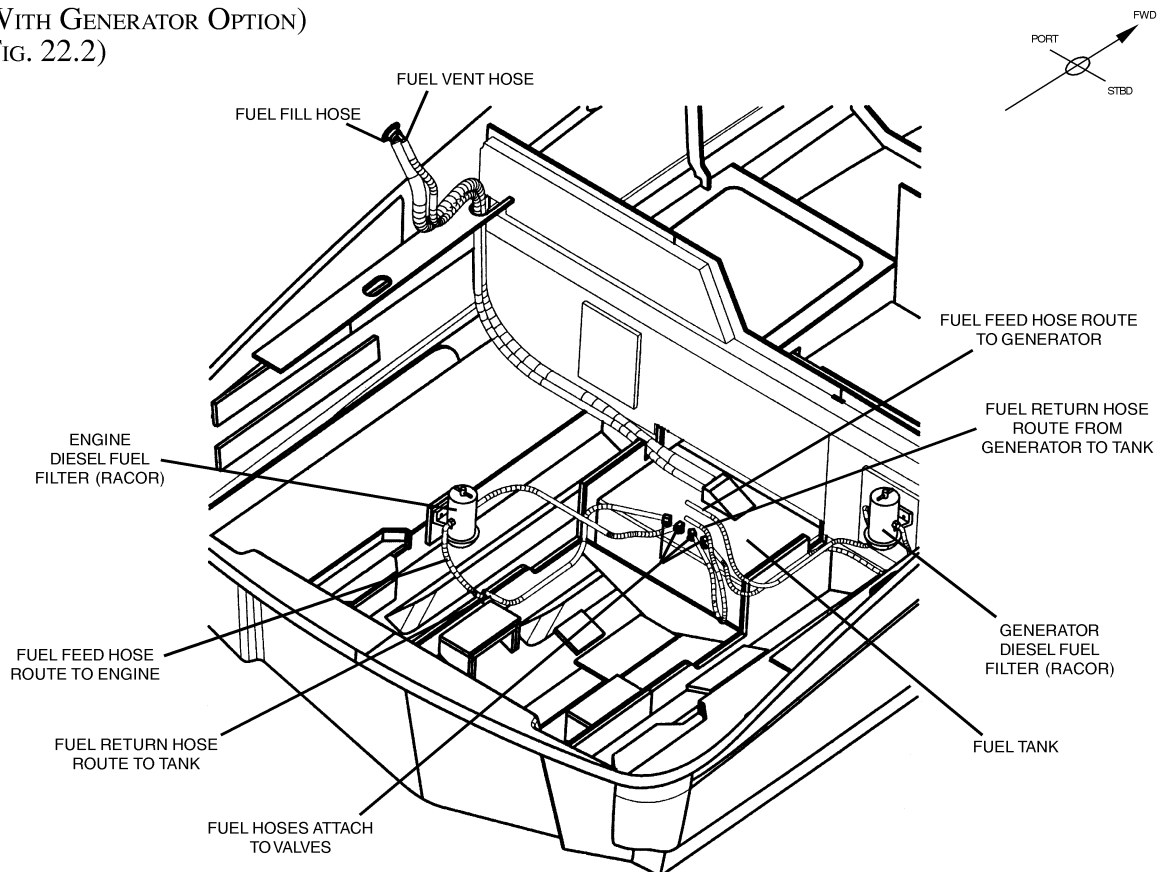
SINGLE ENGINE GASOLINE FUEL SYSTEM INSTALLATION
(WITH GENERATOR OPTION)
(FIG. 21.2)



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



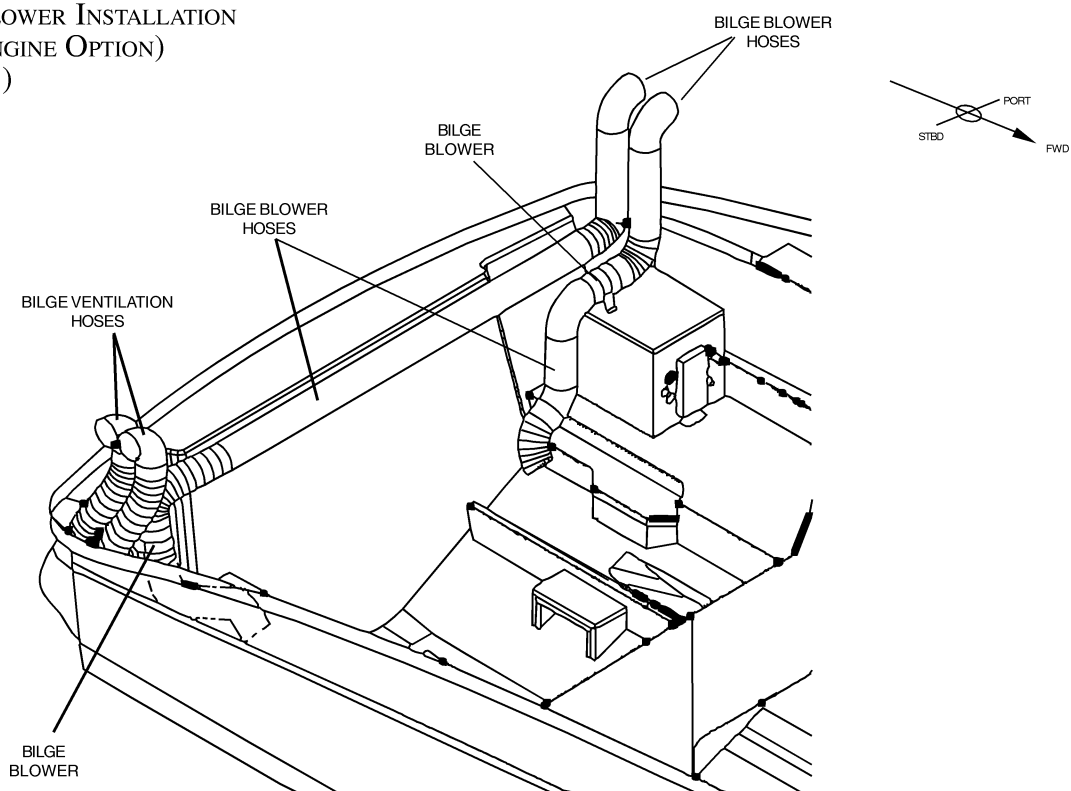
The 280 DA is equipped with electric bilge blowers to remove fumes from the engine compartment and provide ventilation through the deck vents before starting the engine and when operating below cruising speeds. The bilge blowers are located in the engine compartment on the port and starboard sides of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

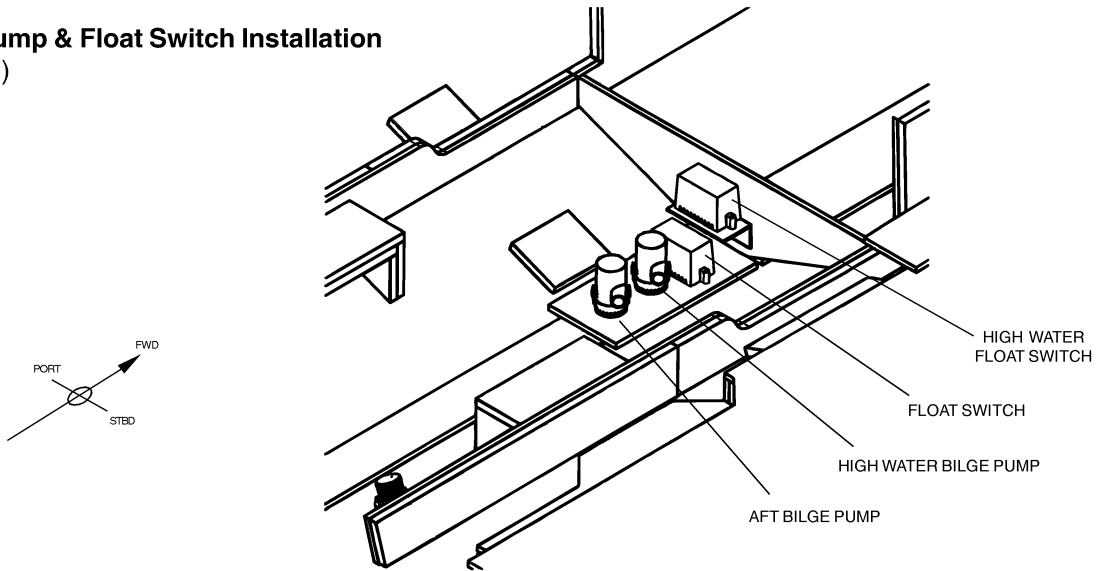


BILGE PUMPING SYSTEM

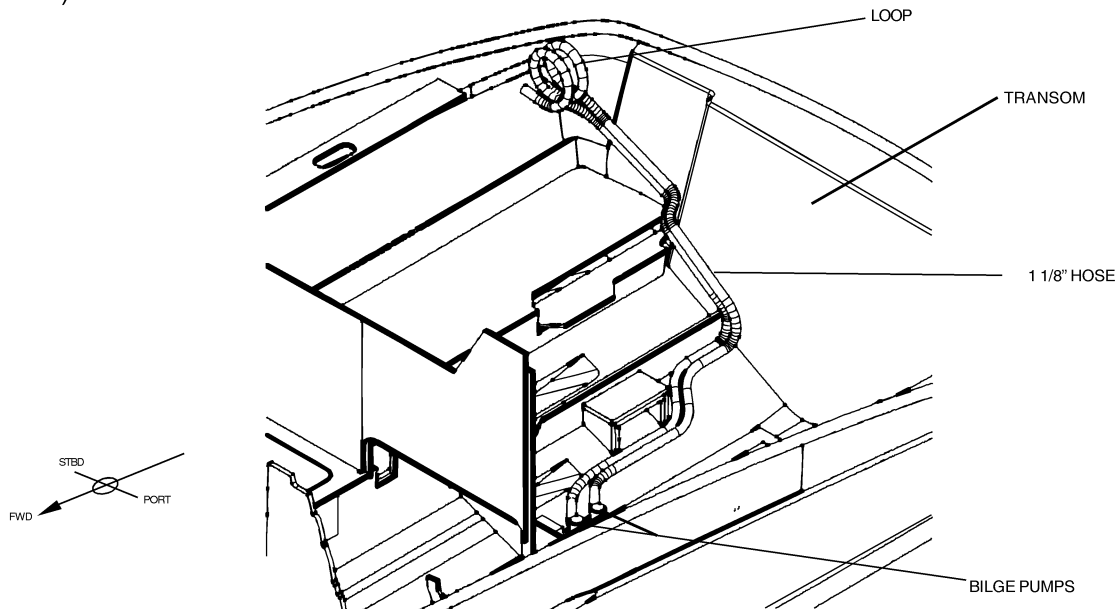


The 280 DA is equipped with an automatic bilge pump system. A manual bilge pump system is available as an international option to comply with CE standards.

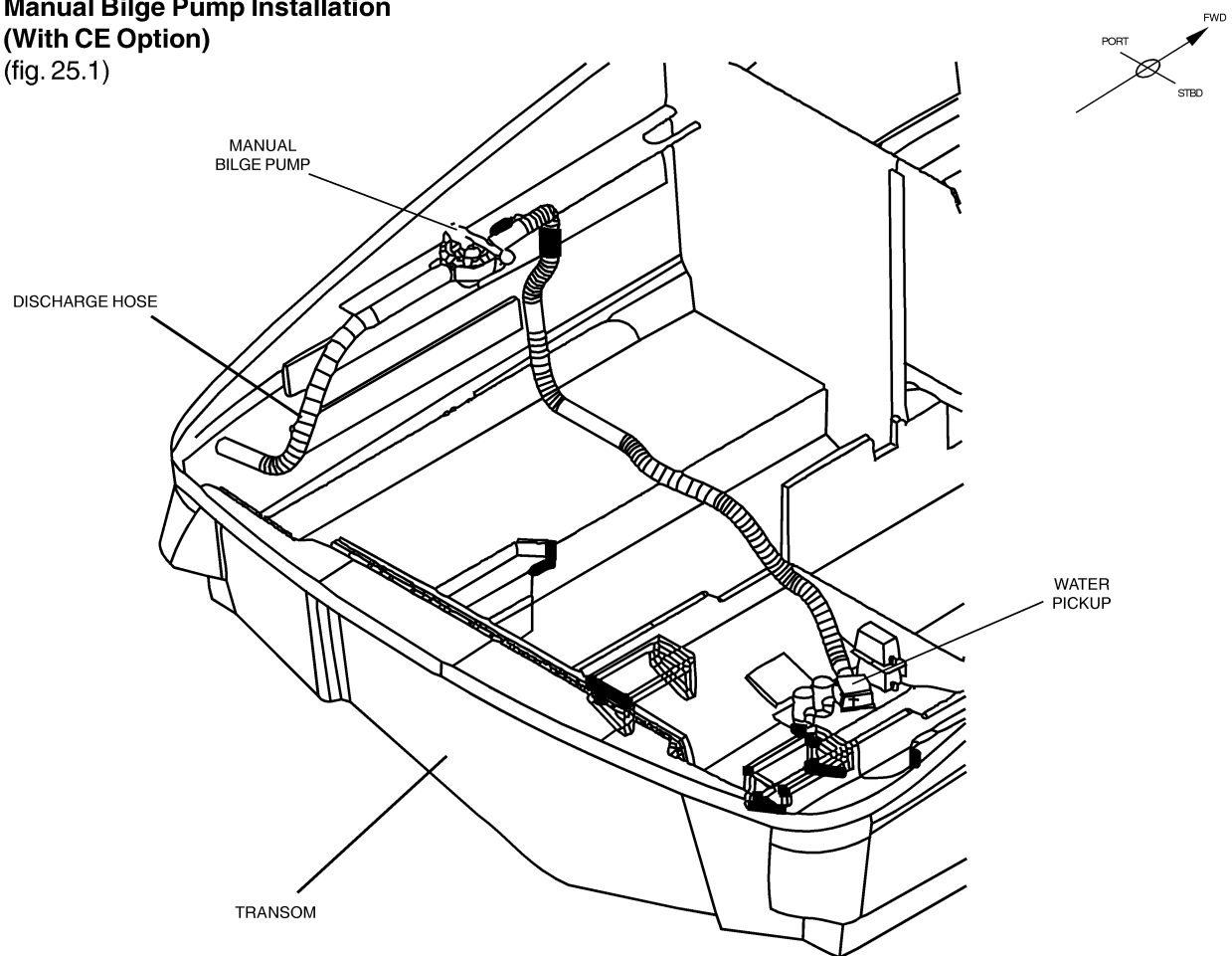
Bilge Pump & Float Switch Installation (fig. 24.1)



Bilge Pump Hose Routing (fig. 24.2)



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

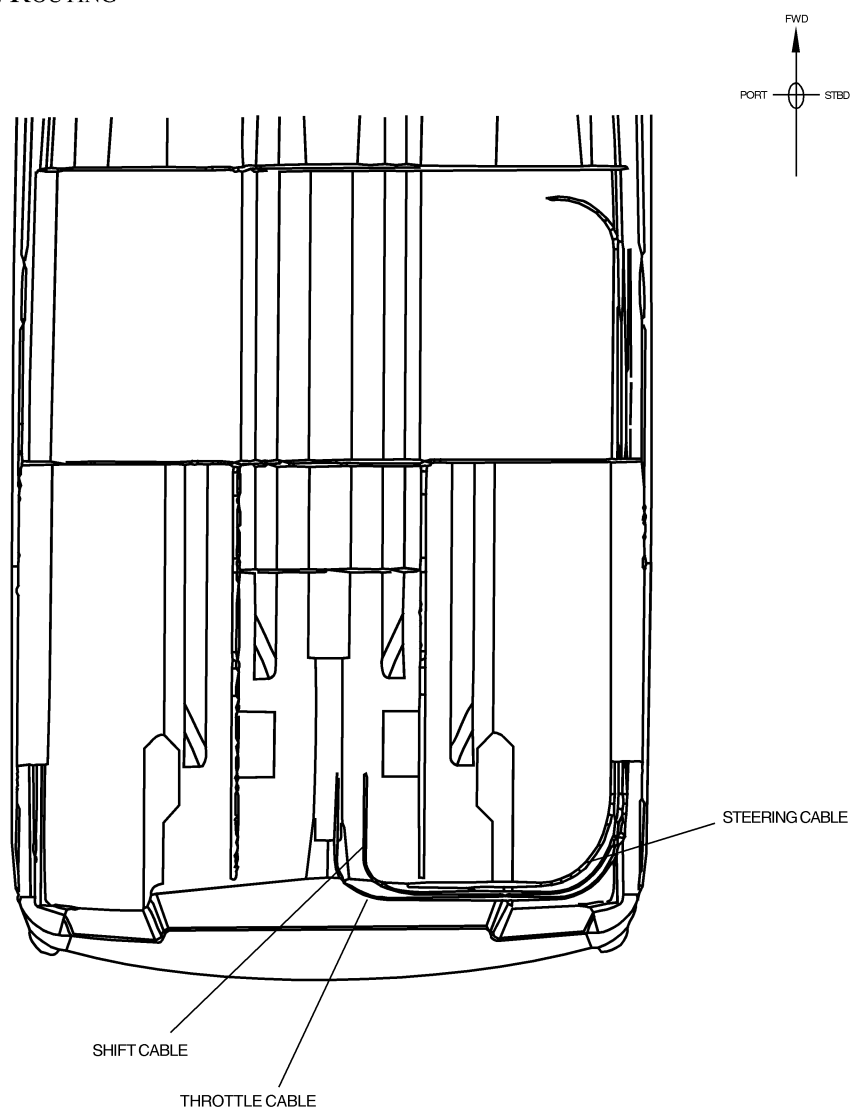


STEERING SYSTEM

This boat is equipped with power steering.

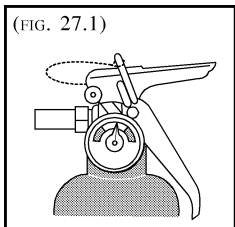
REFER TO THE ENGINE OWNER'S MANUAL IN THE OWNER'S PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

POWER STEERING LINE ROUTING
(FIG. 26.1)



FIRE EXTINGUISHING SYSTEM

(FIG. 27.1)



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.

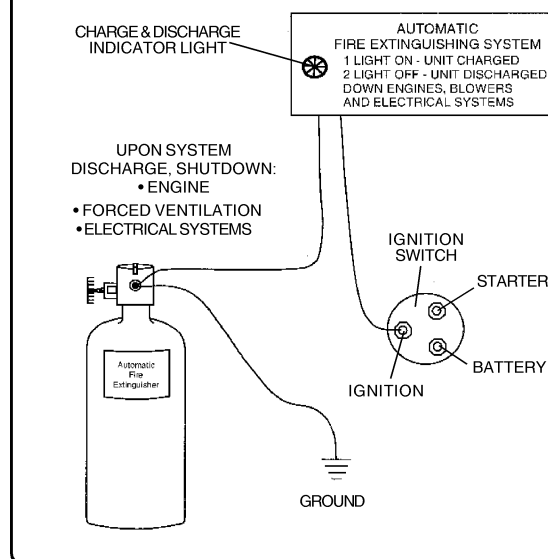
Following are United States Coast Guard (USCG) requirements and American Boat & Yacht Council (ABYC) recommendations for boats equipped with the automatic fire suppression system for open boats over 26 feet (8 meters) but less than 40 feet (12 meters).

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.

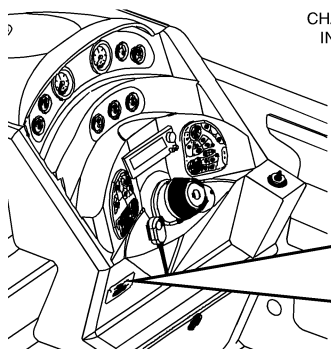
FIRE SUPPRESSION SYSTEM - AUTOMATIC (GAS SYSTEM) (FIG. 27.2)



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)



CHARGE/DISCHARGE INDICATION LIGHT

AUTOMATIC EXTINGUISHING SYSTEM
 LIGHT ON - UNIT CHARGED/LIGHT OFF - UNIT DISCHARGED
 IF UNIT DISCHARGES, SHUTDOWN ENGINE, BLOWER AND ELECTRICAL SYSTEM.

⚠ WARNING
GASOLINE VAPORS CAN EXPLODE
RESULTING IN INJURY OR DEATH
 BEFORE STARTING ENGINE: CHECK ENGINE COMPARTMENT FOR GASOLINE OR VAPORS, OPERATE BLOWER FOR FOUR MINUTES, AND VERIFY BLOWER OPERATION. RUN BLOWER WHEN VESSEL IS OPERATING BELOW CRUISING SPEED

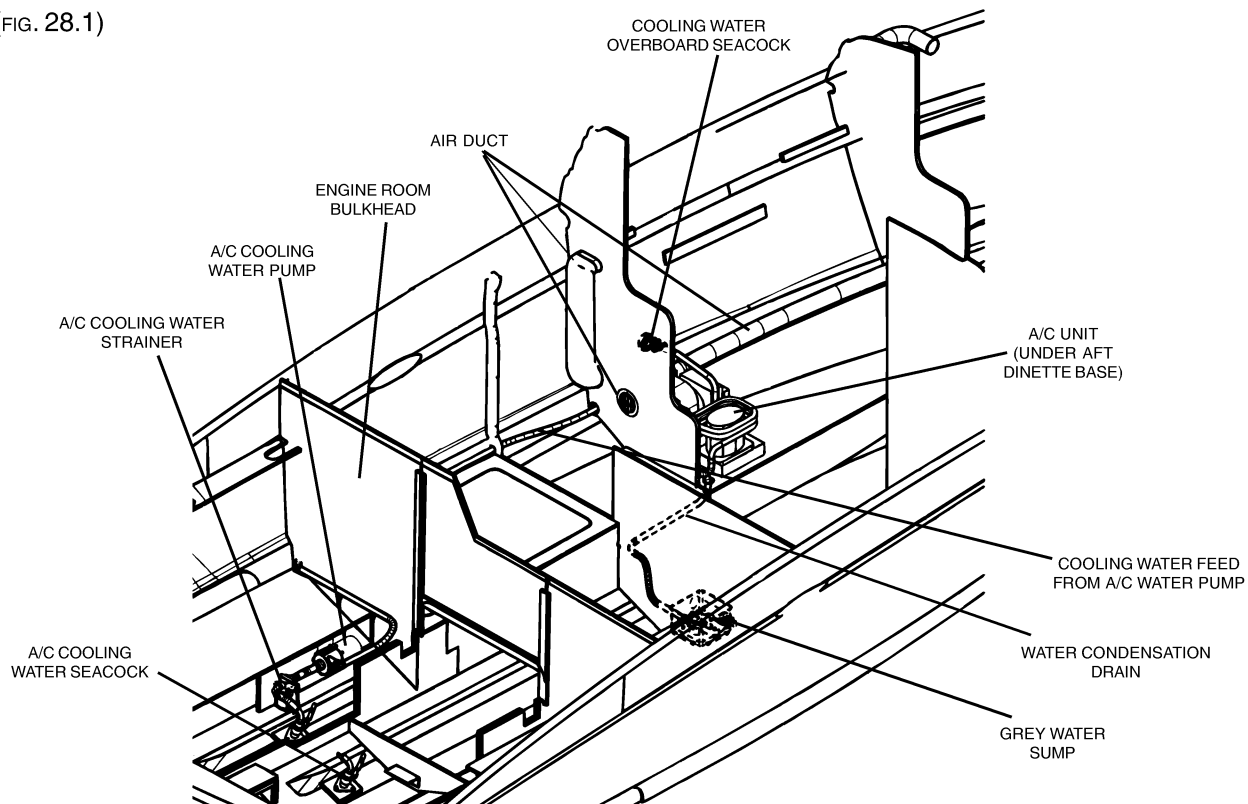
AIR CONDITIONING / HEATING SYSTEM



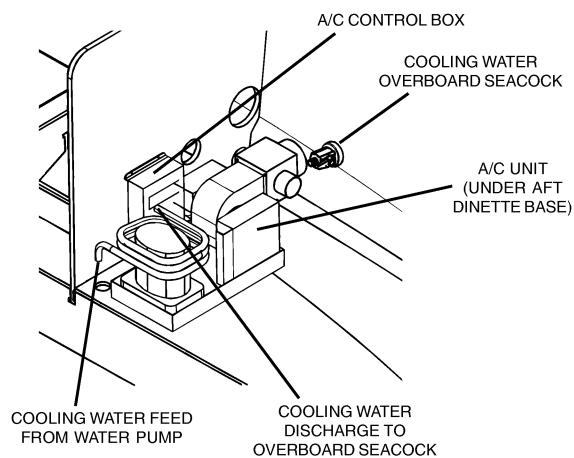
AirConditioning and Heating System information can be found in *Section 8 • Accessories* of the owner's manual.

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

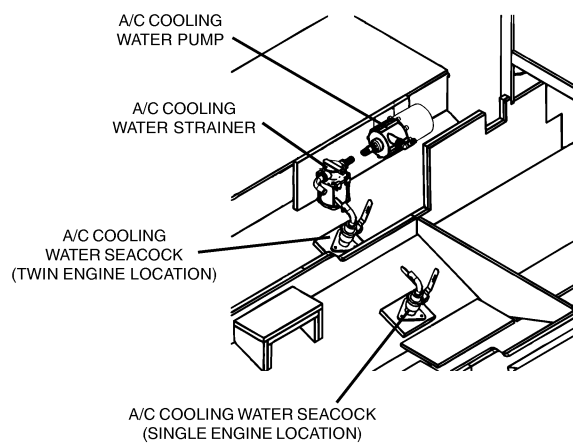
AIR CONDITIONING HOSE ROUTING
(FIG. 28.1)



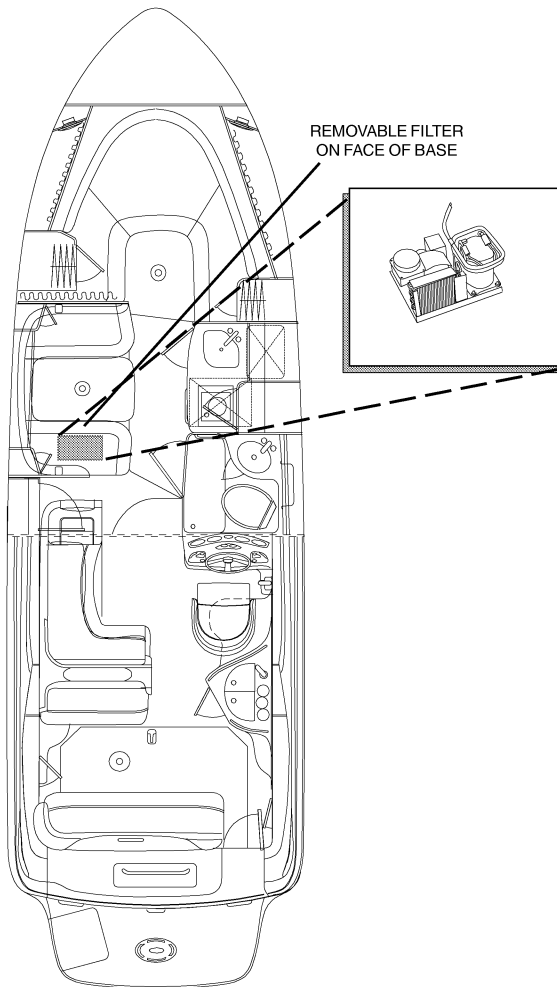
**AIR CONDITIONER LOCATION UNDER AFT
DINETTE SEAT (FIG. 28.2)**



**AIR CONDITIONING WATER COOLING
PUMP STRAINER & SEACOCK (FIG. 28.3)**



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.

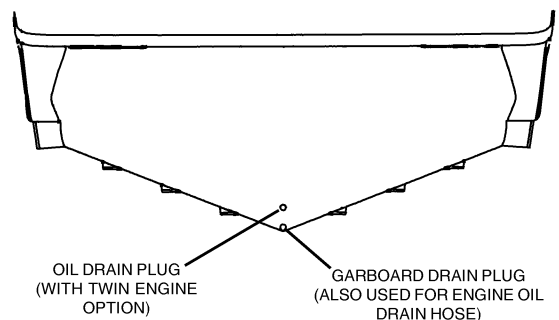
REFER TO THE ENGINE OWNER'S MANUAL FOR INSTRUCTIONS AND WARRANTY INFORMATION.

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.

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



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 storge 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.

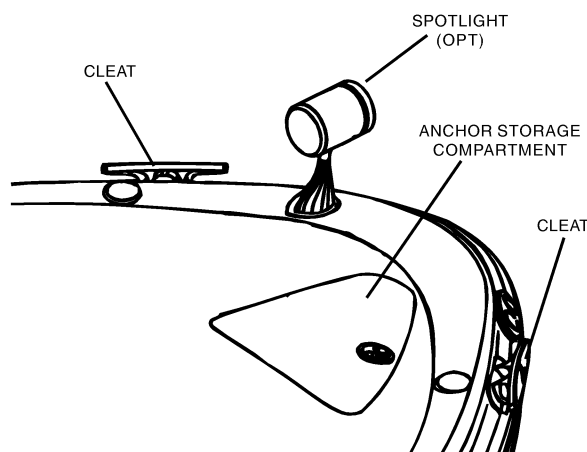
The manual winch handle is stored in the rope/chain storage compartment.

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

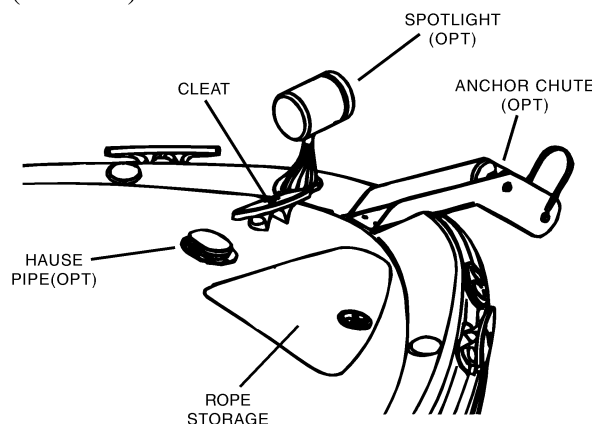
NOTICE

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.

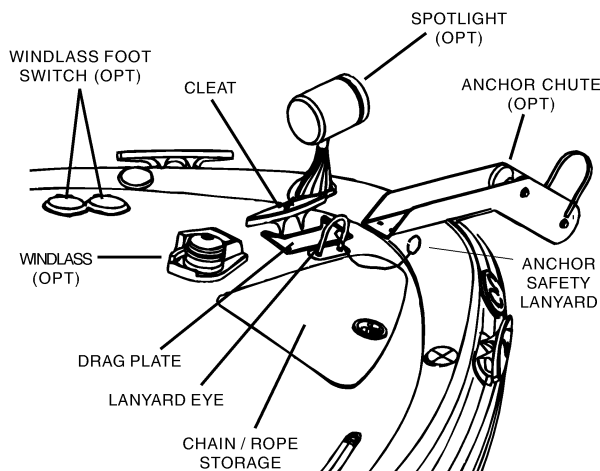
ANCHOR ARRANGEMENT
(STANDARD) (FIG. 30.1)



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

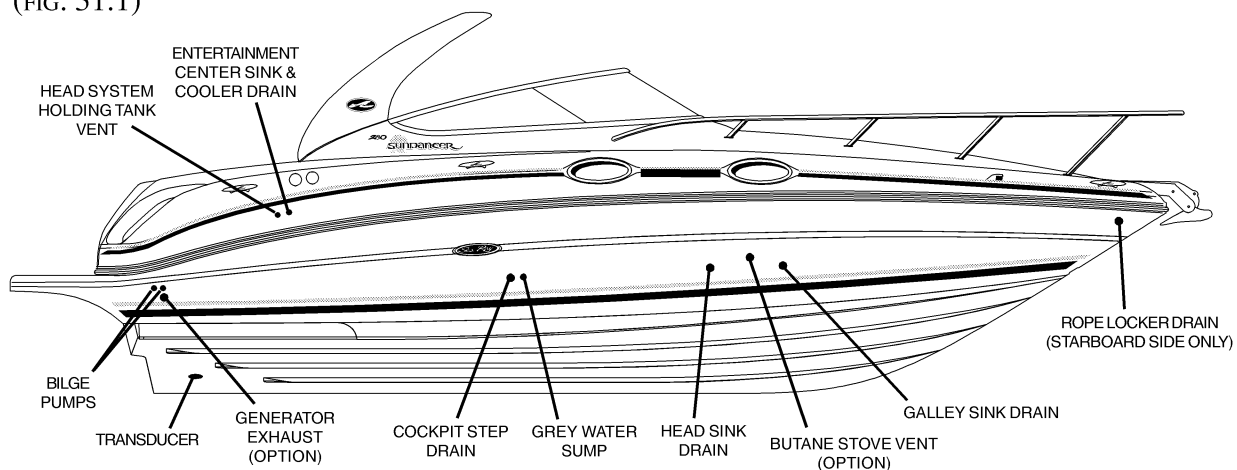


ANCHOR ARRANGEMENT
(OPTIONAL WINDLASS & ANCHOR CHUTE)
(FIG. 30.3)

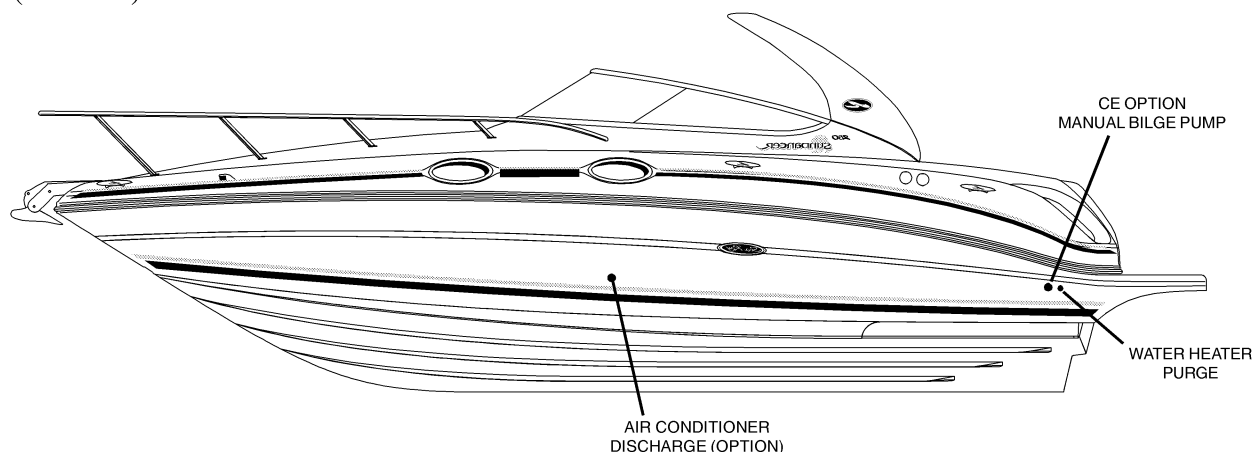


LOCATION OF THROUGH-HULL FITTINGS

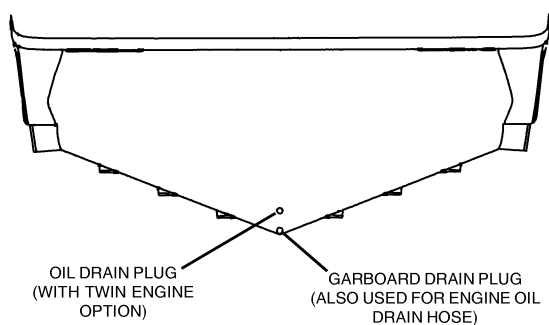
STARBOARD SIDE
(FIG. 31.1)



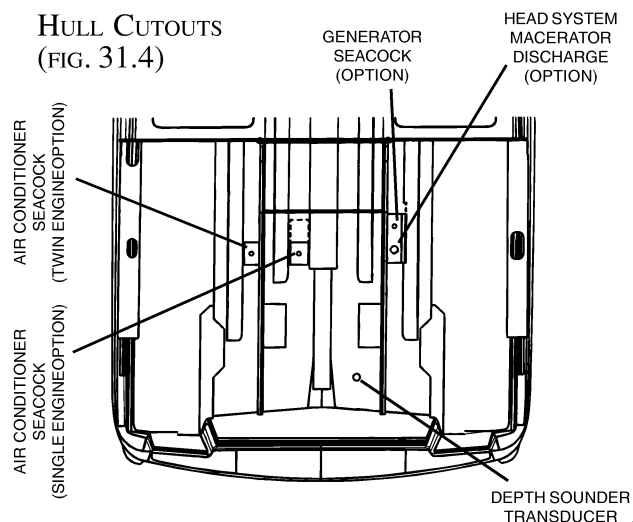
PORT SIDE
(FIG. 31.2)



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

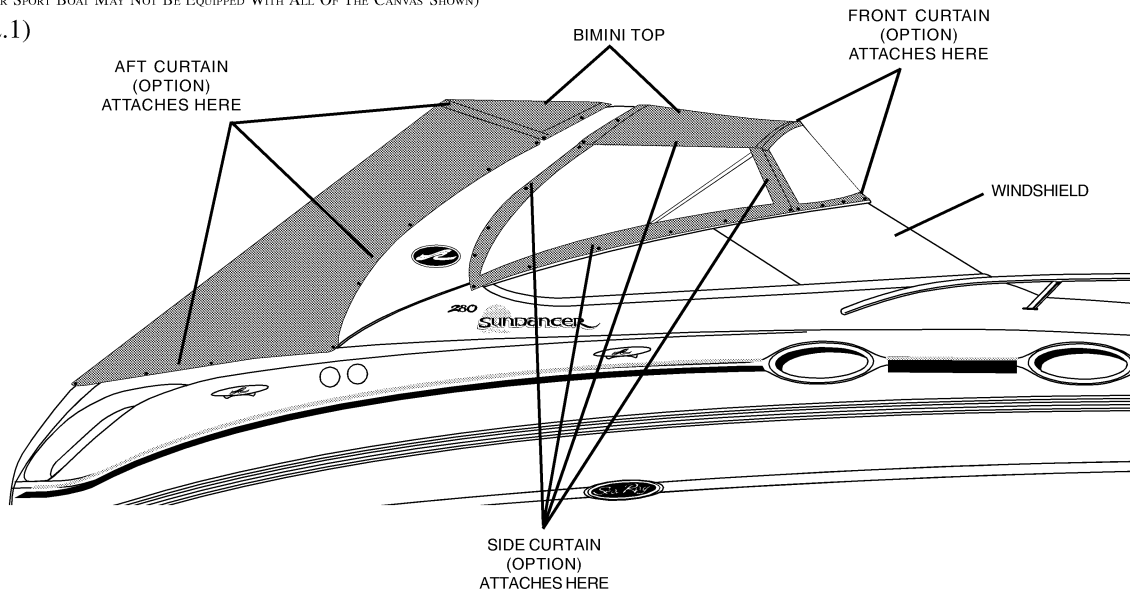
Canvas options available consist of the following pieces:

- 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)

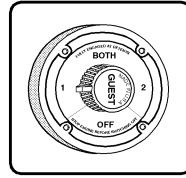


ELECTRICAL INFORMATION

ELECTRICAL INSTALLATION

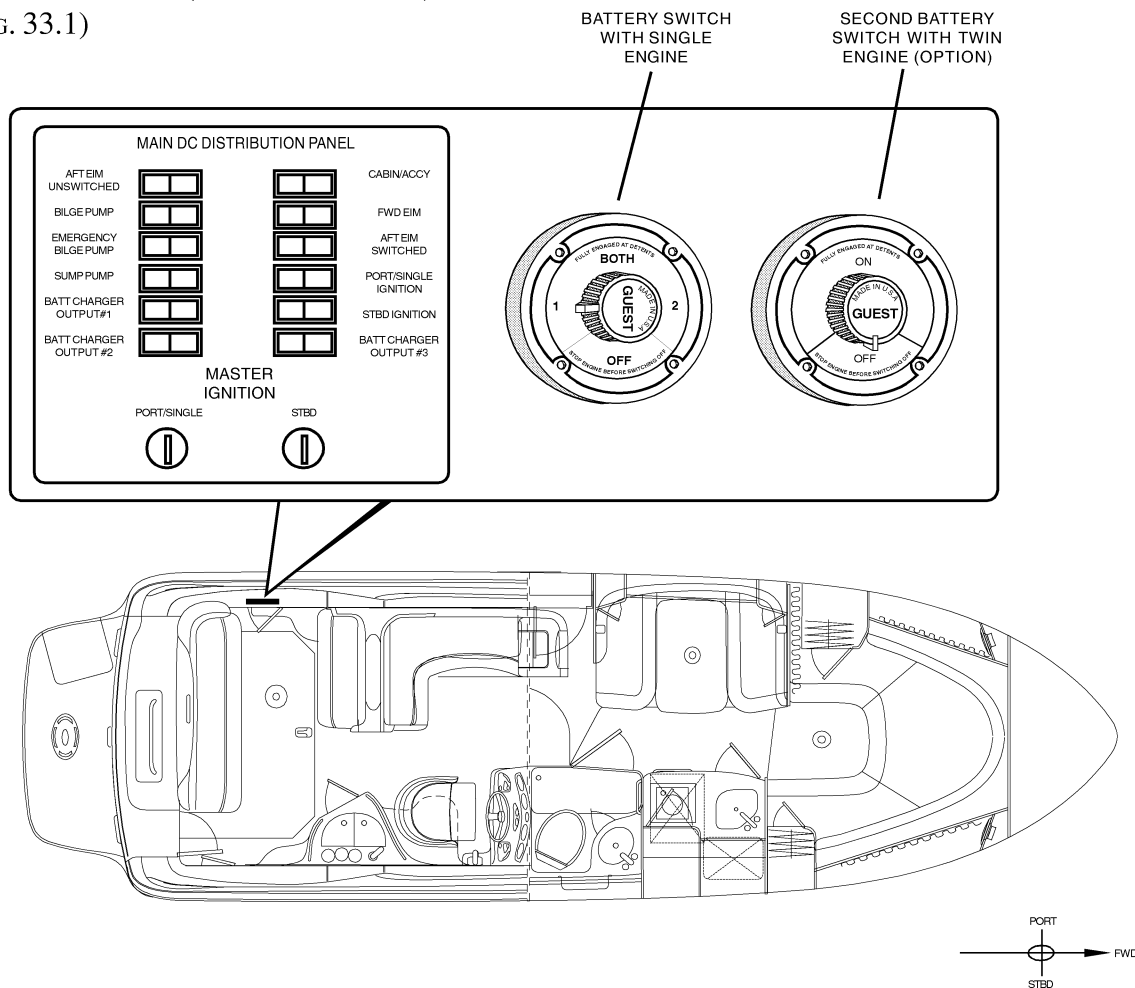
This owner's manual supplement contains electrical schematics for your boat. These electrical schematics were generated by technicians at the engineering division for technical reference and service technicians. Sea Ray® does not recommend that you attempt to work on the boat's electrical system yourself;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



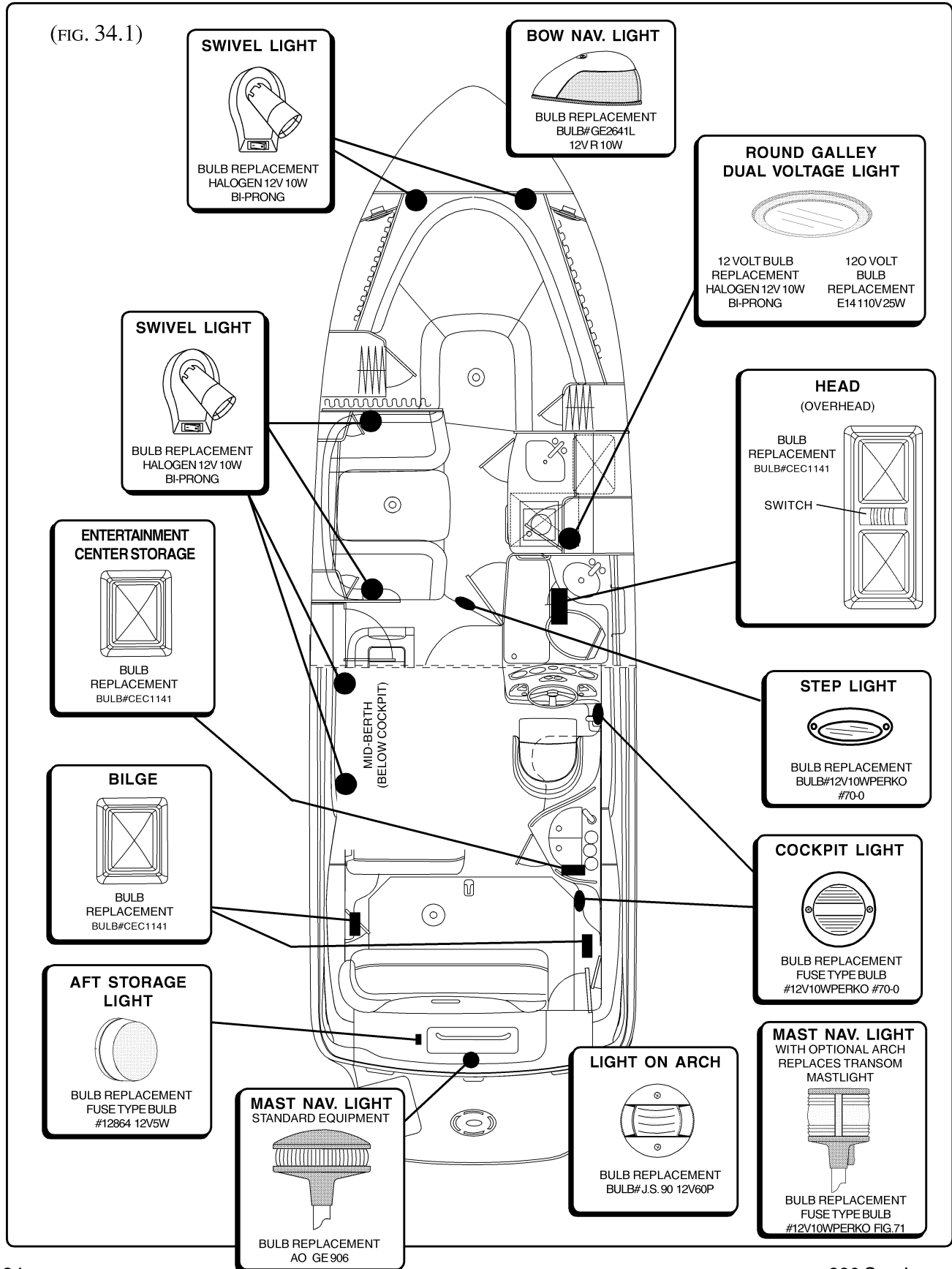
Your boat is equipped with a dual battery on/off switch. It is located . (See figure 15.2 for exact location). The battery switch controls the delivery of DC loads to start the engine(s) and operate accessories.

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



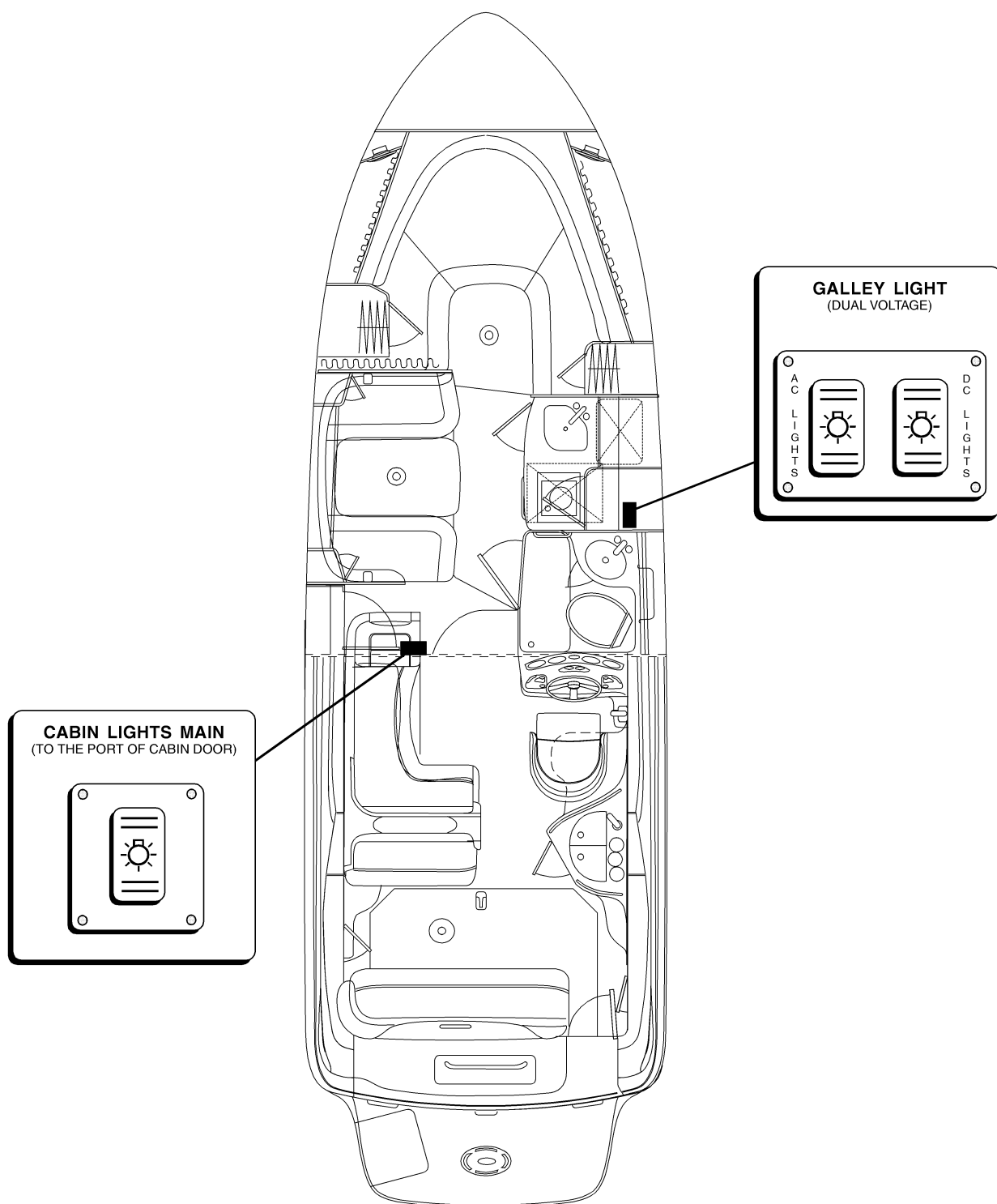
LIGHTING LOCATIONS

(FIG. 34.1)



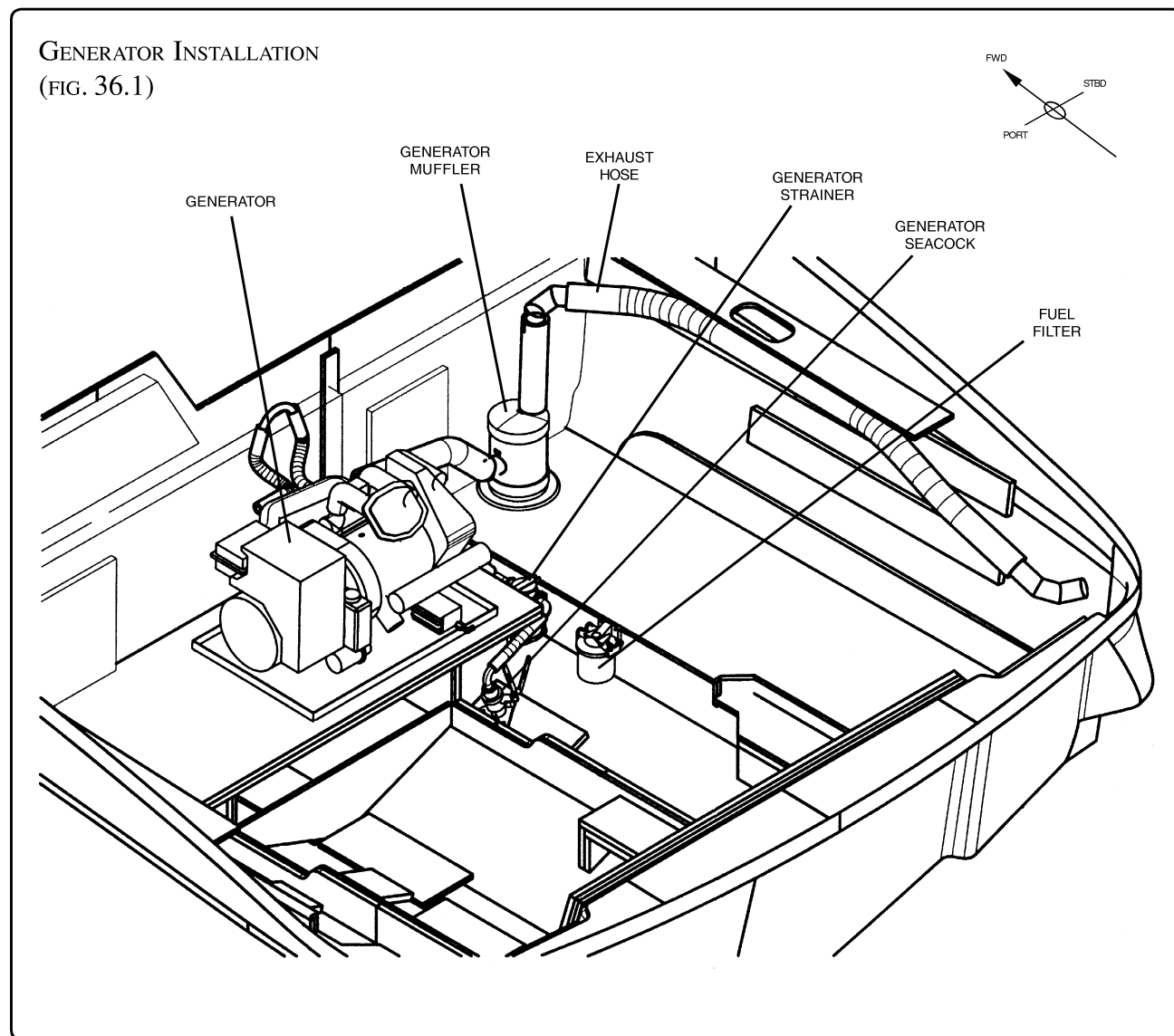
CABIN & COCKPIT SWITCH LOCATION & FUNCTION

(FIG. 35.1)



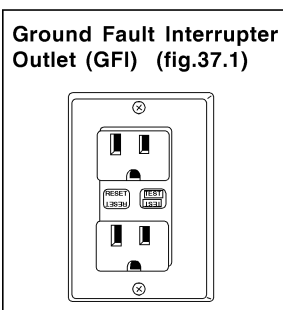
GENERATOR INSTALLATION (OPTION)

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.



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.

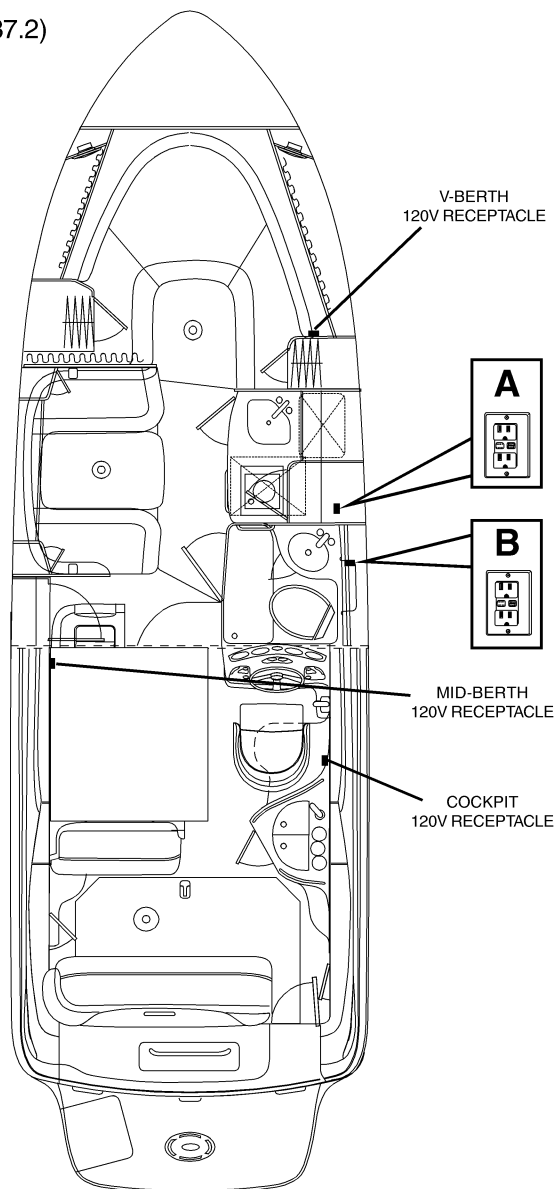
GFI Location

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)

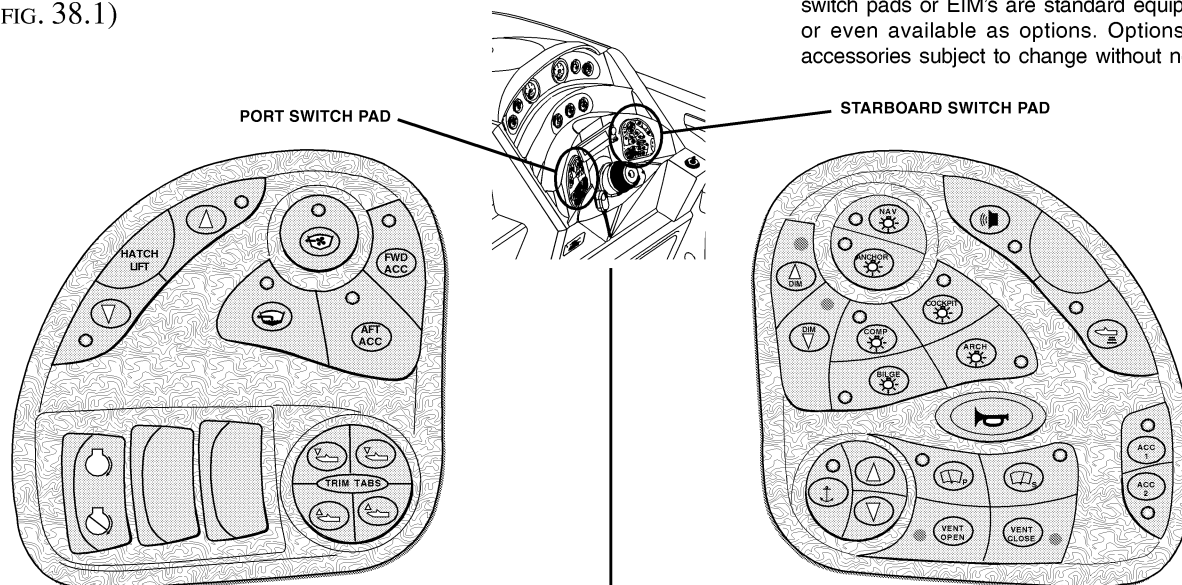
Your Sea Ray® Sport Cruiser is equipped with illuminated waterproof electronic switch pads. The individual switch functions are indicated by ISO symbols. (See FIG. 12.2 and 12.3)

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

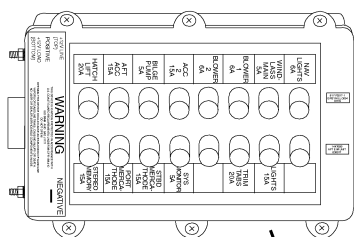
The port switch pad is connected to the EIM located in the engine compartment. The starboard switch pad is connected to the EIM located below the helm. (See FIG. 38.1) Each EIM is fitted with breakers for each piece of equipment connected to it. If a piece of electrical equipment will not function check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

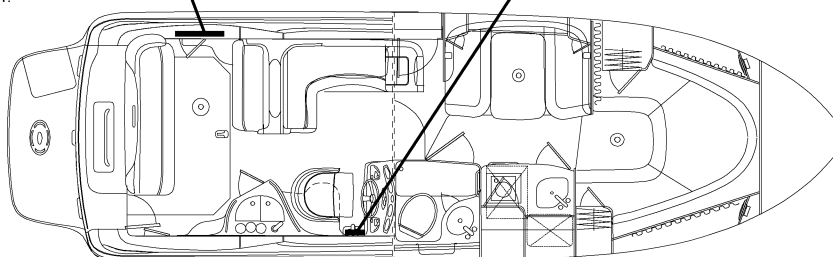
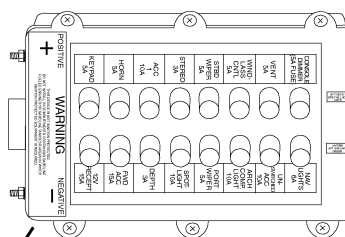


AFT ELECTRONIC INTERFACE MODULE (EIM)
(CONTROLLED BY PORT SWITCH PAD)
(LOCATED ON THE ACCESSORY BOARD ON THE PORT SIDE OF THE ENGINE COMPARTMENT)



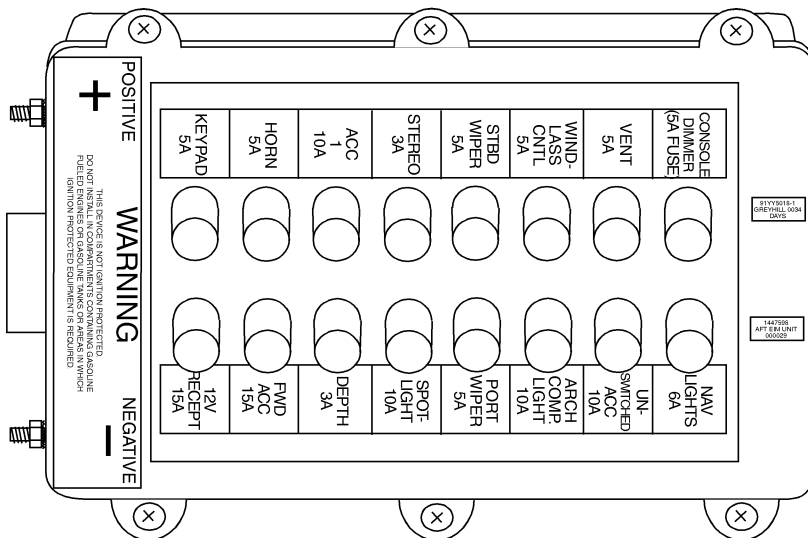
NOTE: THIS BOX IS IGNITION PROTECTED. DO NOT OPEN. READ WARNING ON BOX IN ENGINE COMPARTMENT.

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



ELECTRONIC INTERFACE MODULES (EIM) (FIG. 39.1)

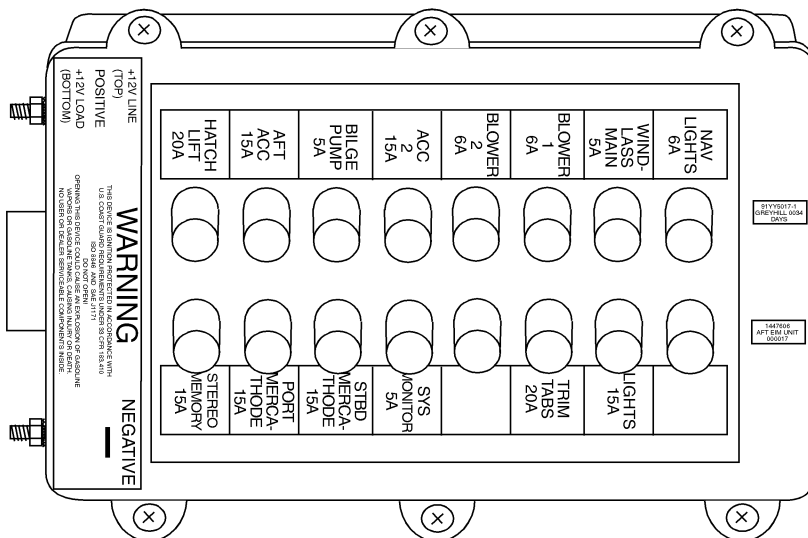
FORWARD ELECTRONIC INTERFACE MODULE (EIM)
(CONTROLLED BY STARBOARD SWITCH PAD)
(LOCATED AT THE HELM IN THE COMPARTMENT
BELOW THE ENGINE SHIFT AND THROTTLE)



(FIG. 39.2)

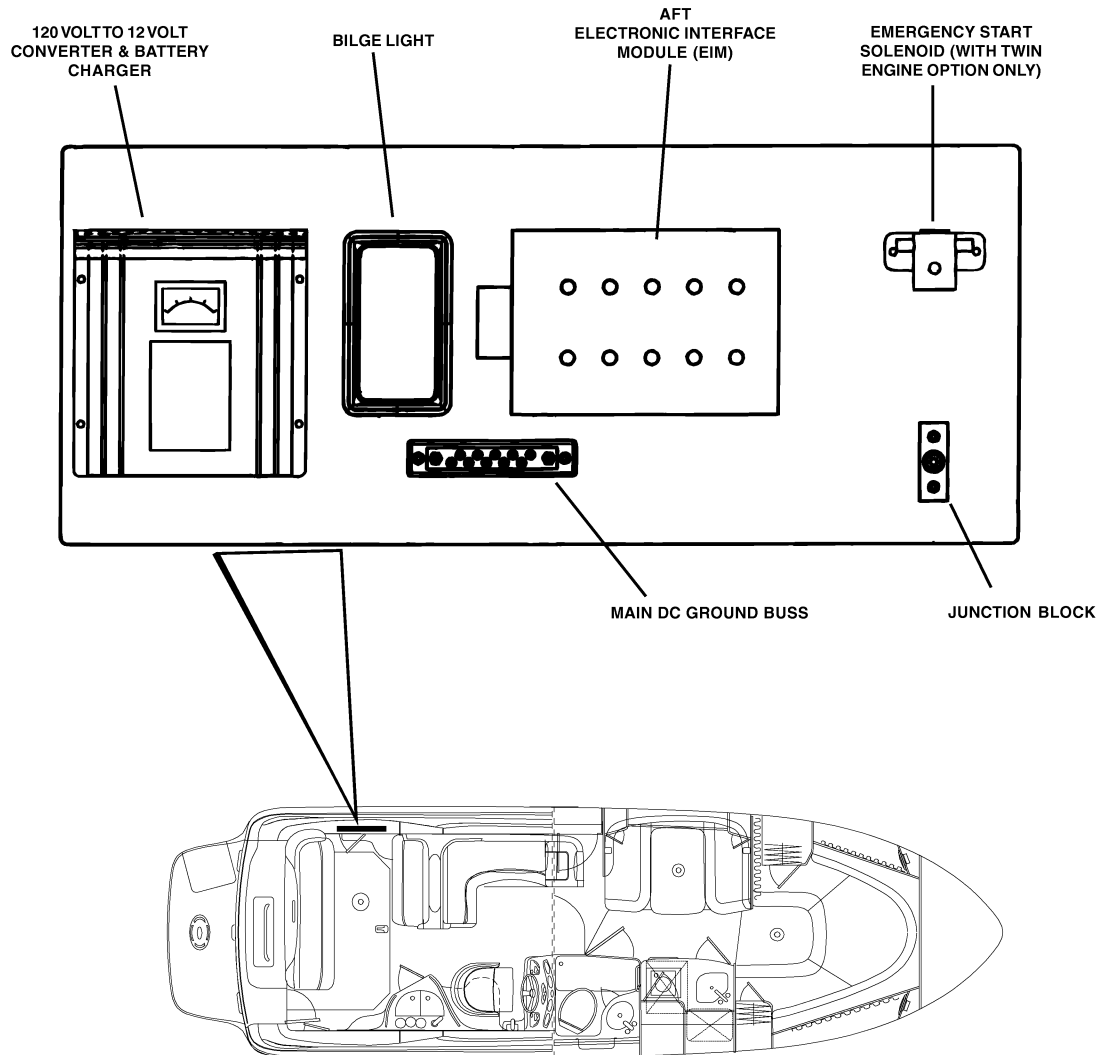
AFT ELECTRONIC INTERFACE MODULE (EIM)
(CONTROLLED BY PORT SWITCH PAD)
(LOCATED ON THE ACCESSORY BOARD ON THE
PORT SIDE OF THE ENGINE COMPARTMENT)

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



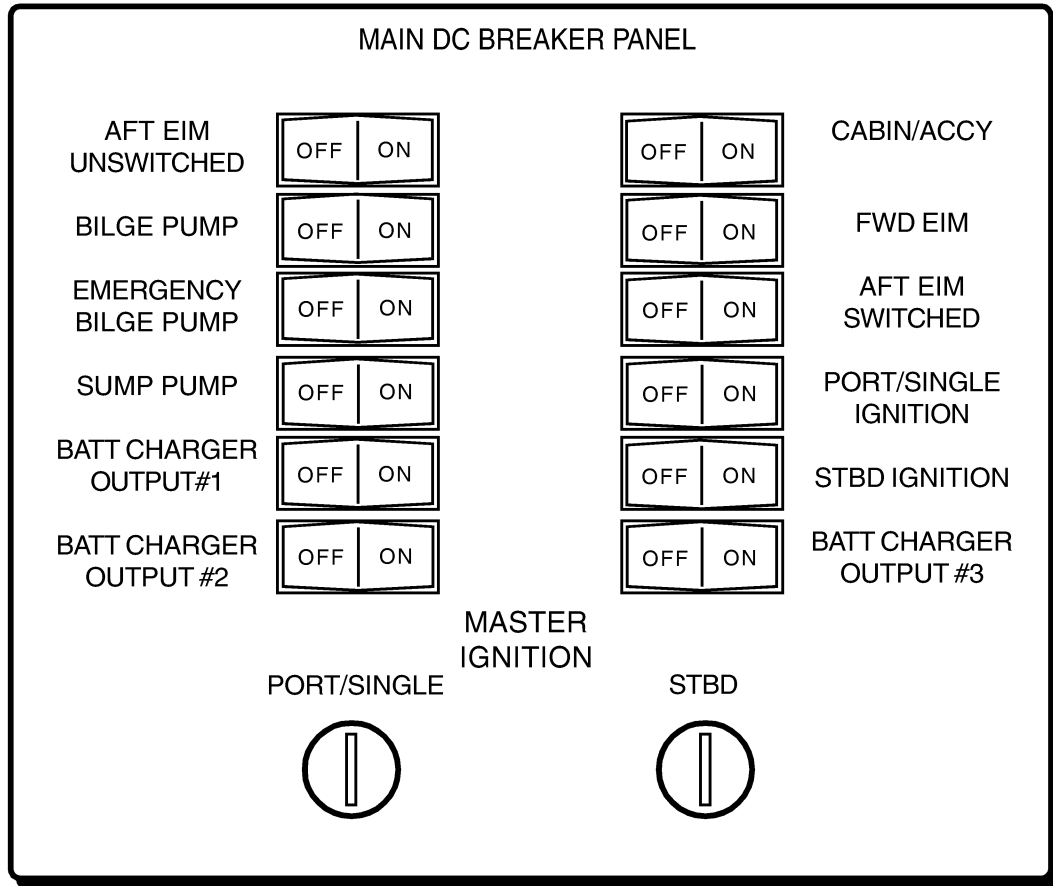
BILGE ACCESSORY BOARD

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

Aft EIM Unswitched	30
Bilge Pump	6
Emergency Bilge Pump	6
Sump Pump	5
Battery Charger Output #1	20
Battery Charger Output #2	20

12 Volt DC Breakers

Amperage

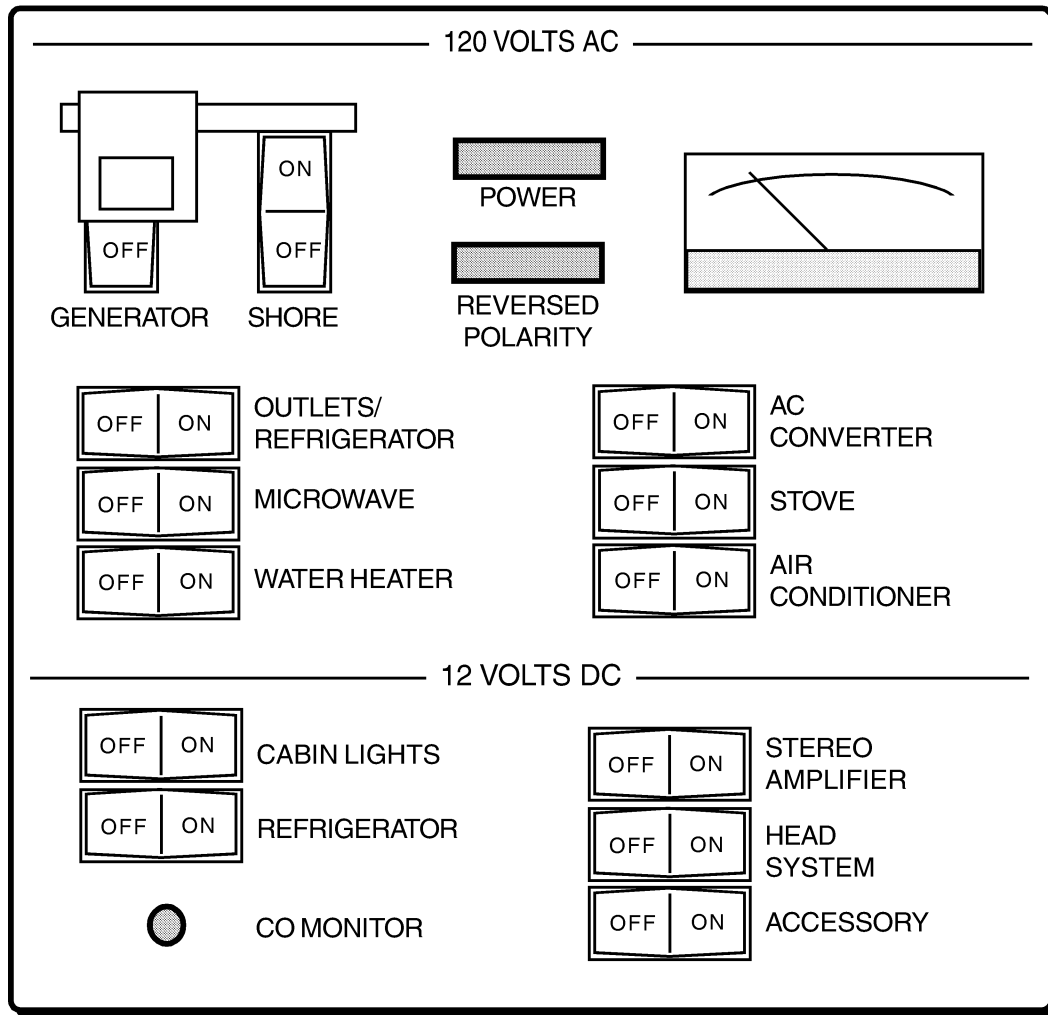
Cabin/Accessory	50
Forward EIM	50
Aft EIM Switched	50
Port/Single Ignition	10
Starboard Ignition	10
Battery Chrager Output #3	20

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		

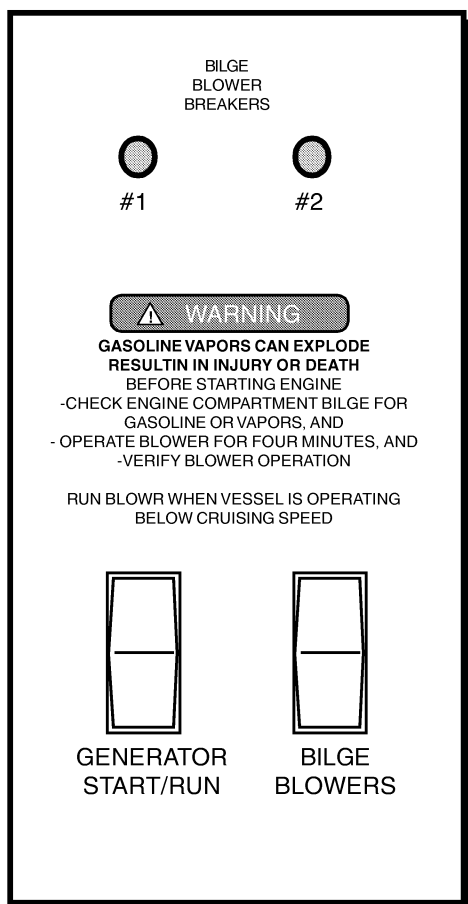
GENERATOR REMOTE SWITCH PANEL (OPTION)

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-

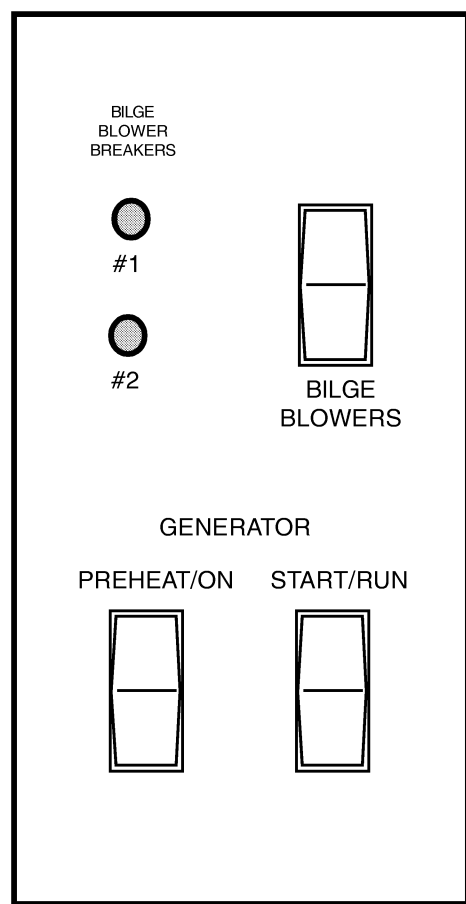
cated adjacent to the Main Distribution Panel on the port side of the cabin.

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

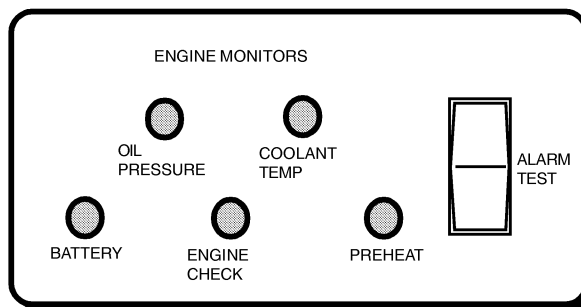
6
6

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.

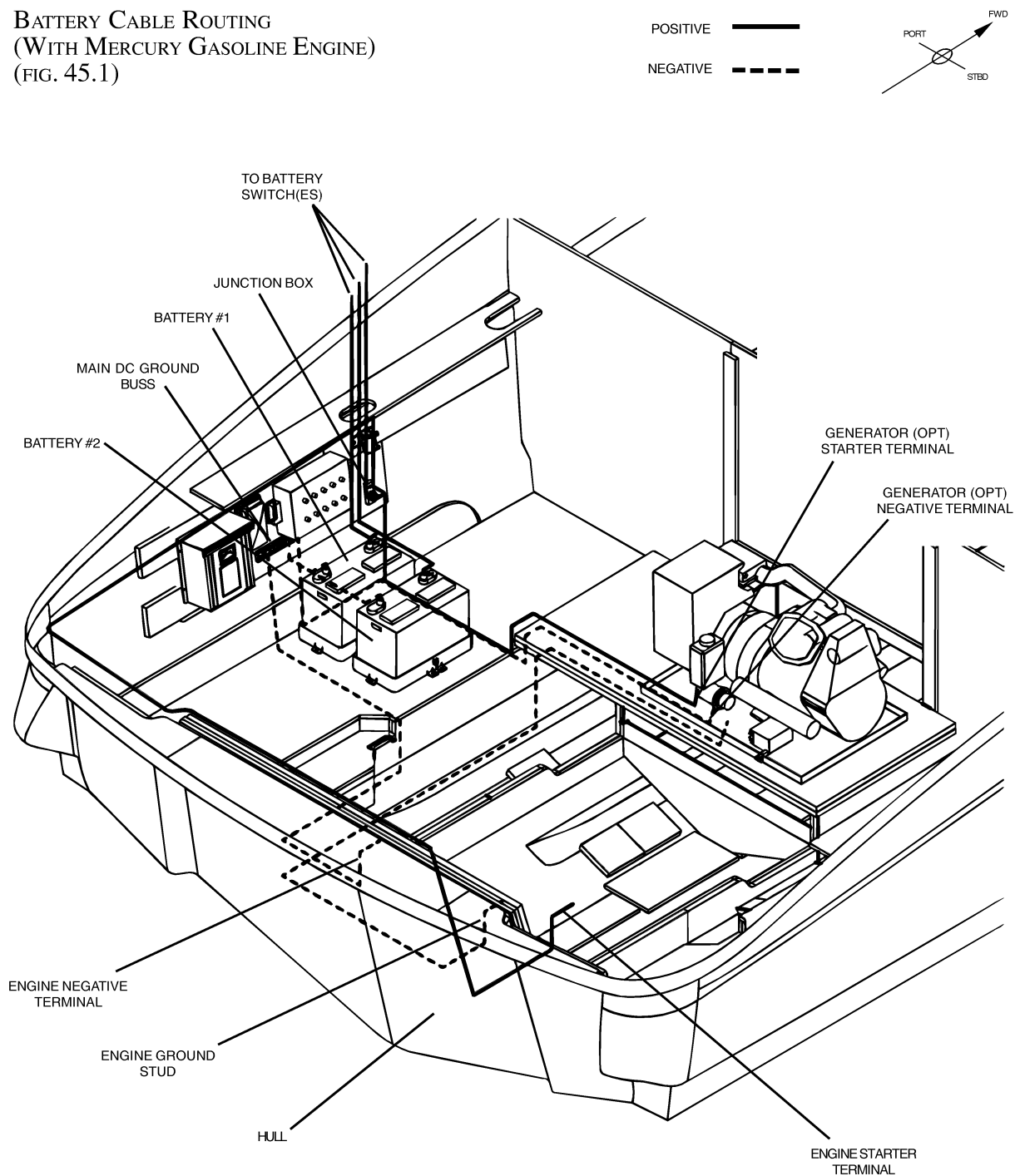
REFER TO OWNER'S MANUAL PACKET FOR INSTRUCTIONS AND WARRANTY INFORMATION.

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



BATTERY CABLE ROUTING

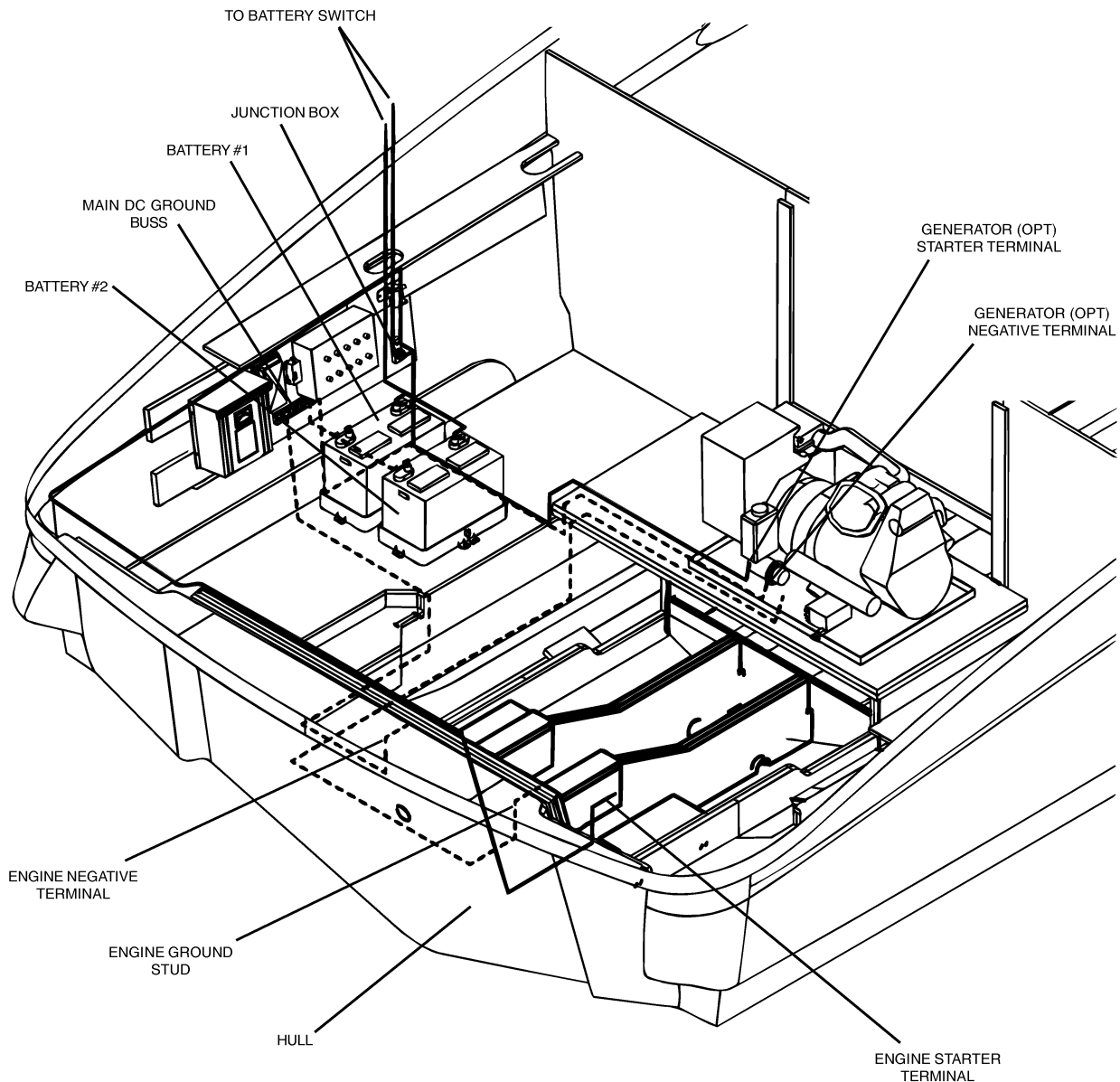
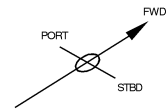
BATTERY CABLE ROUTING
(WITH MERCURY GASOLINE ENGINE)
(FIG. 45.1)



BATTERY CABLE ROUTING (CONTINUED)

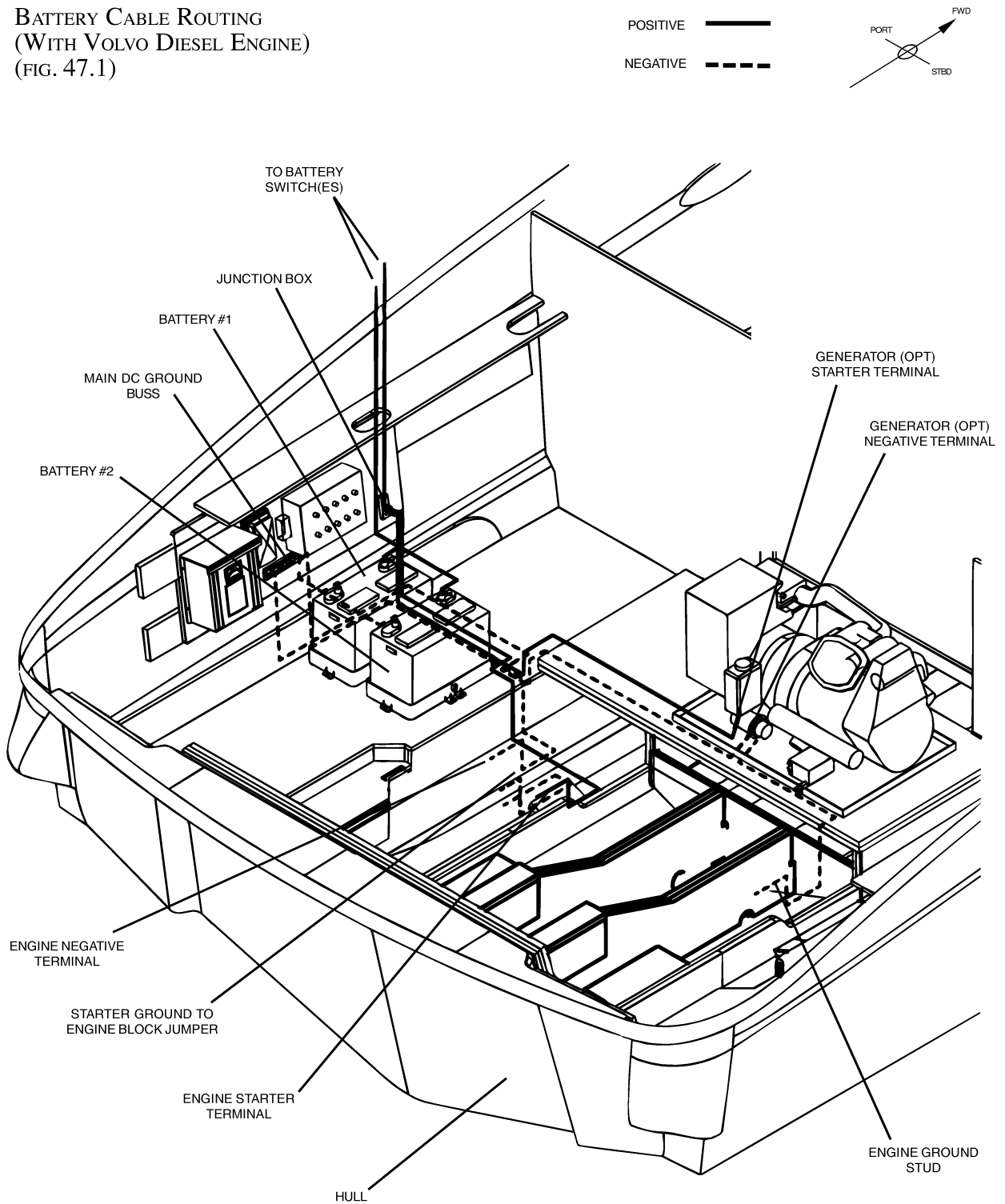
BATTERY CABLE ROUTING
(WITH MERCURY DIESEL ENGINE)
(FIG. 46.1)

POSITIVE ———
NEGATIVE - - - -



BATTERY CABLE ROUTING (CONTINUED)

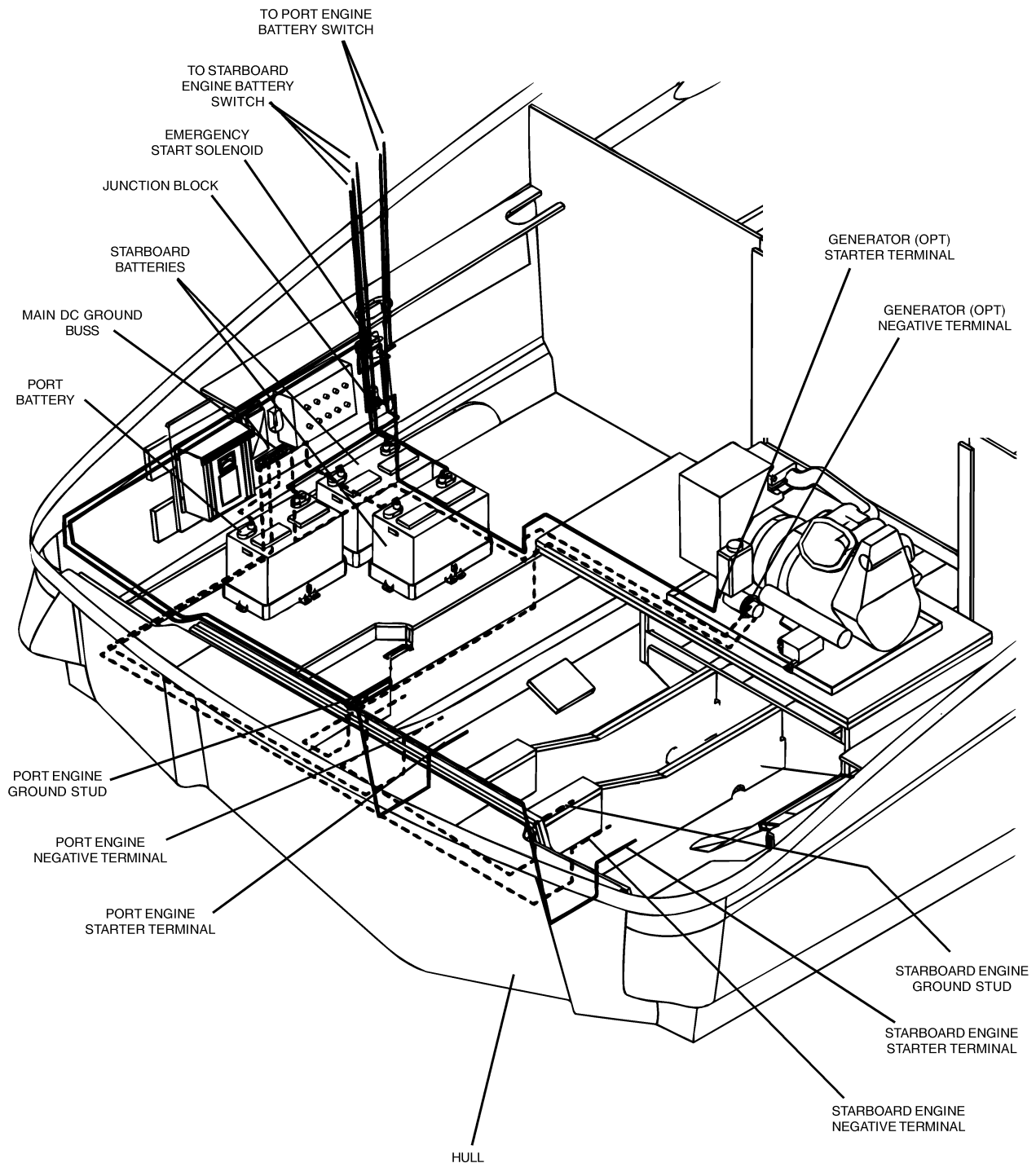
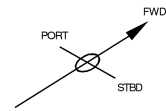
BATTERY CABLE ROUTING
(WITH VOLVO DIESEL ENGINE)
(FIG. 47.1)



BATTERY CABLE ROUTING (CONTINUED)

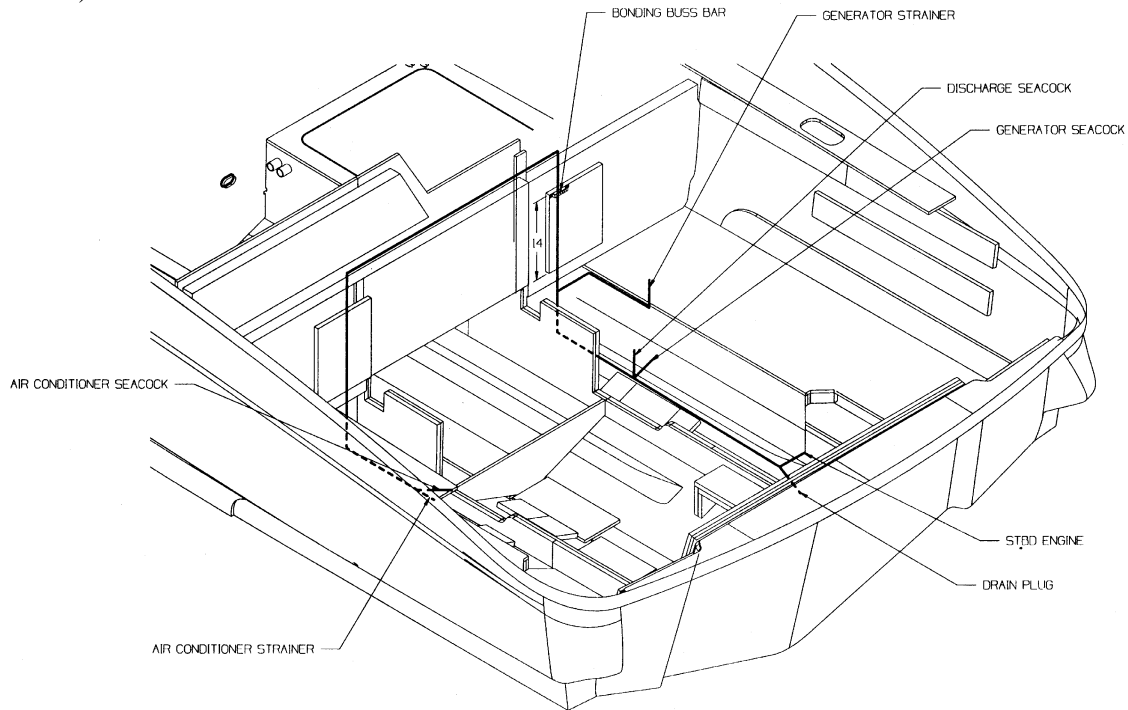
BATTERY CABLE ROUTING
(WITH TWIN MERCURY GASOLINE ENGINES)
(FIG. 48.1)

POSITIVE ———
NEGATIVE - - - -

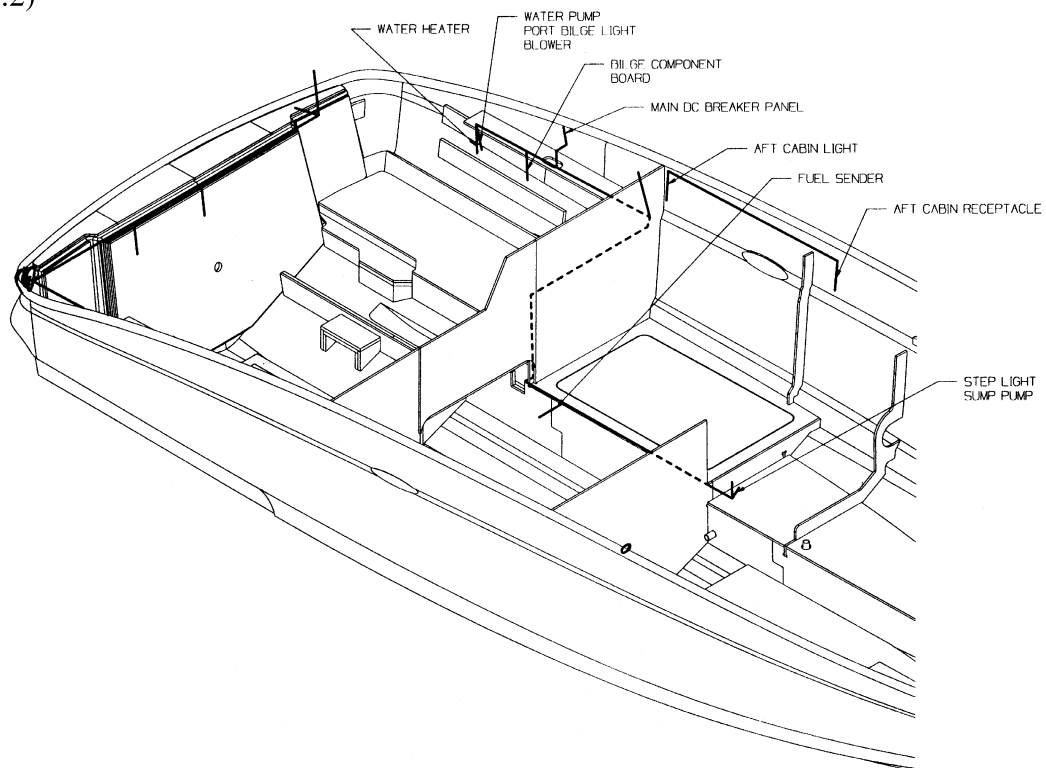


WIRE HARNESS INSTALLATION

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

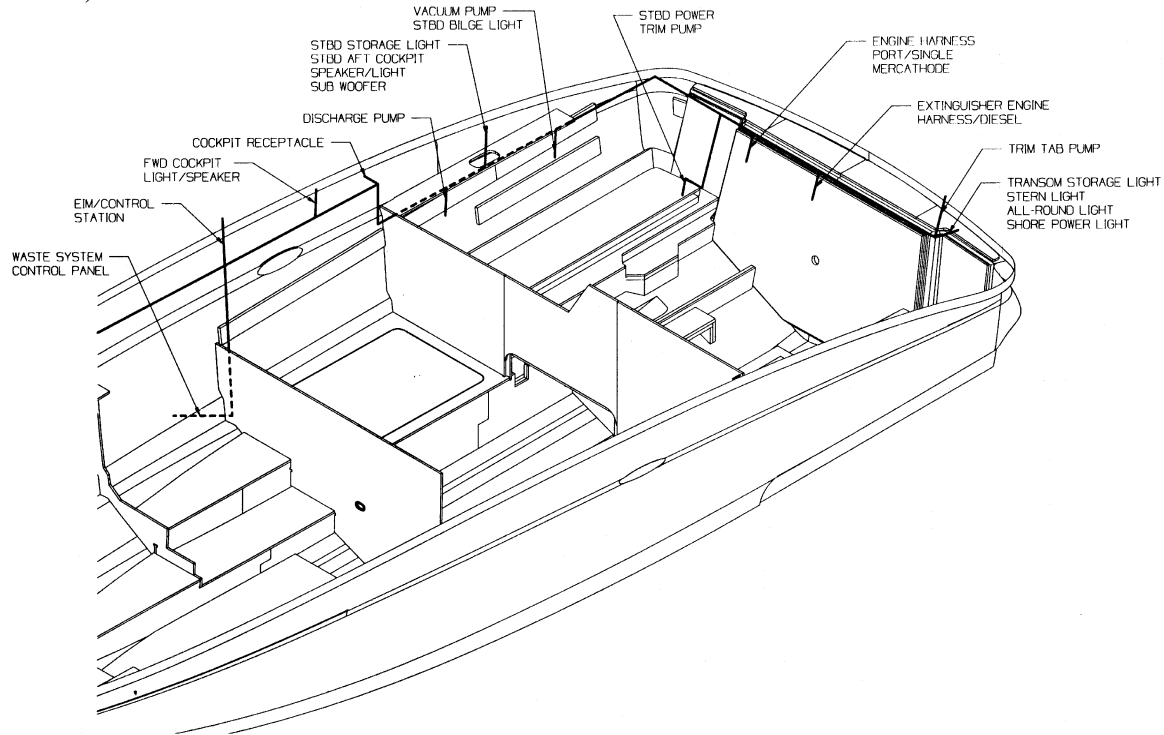


BILGE HARNESS INSTALLATION (PRINT #09-871, 1 OF 3, REVISION #0)
(FIG. 49.2)

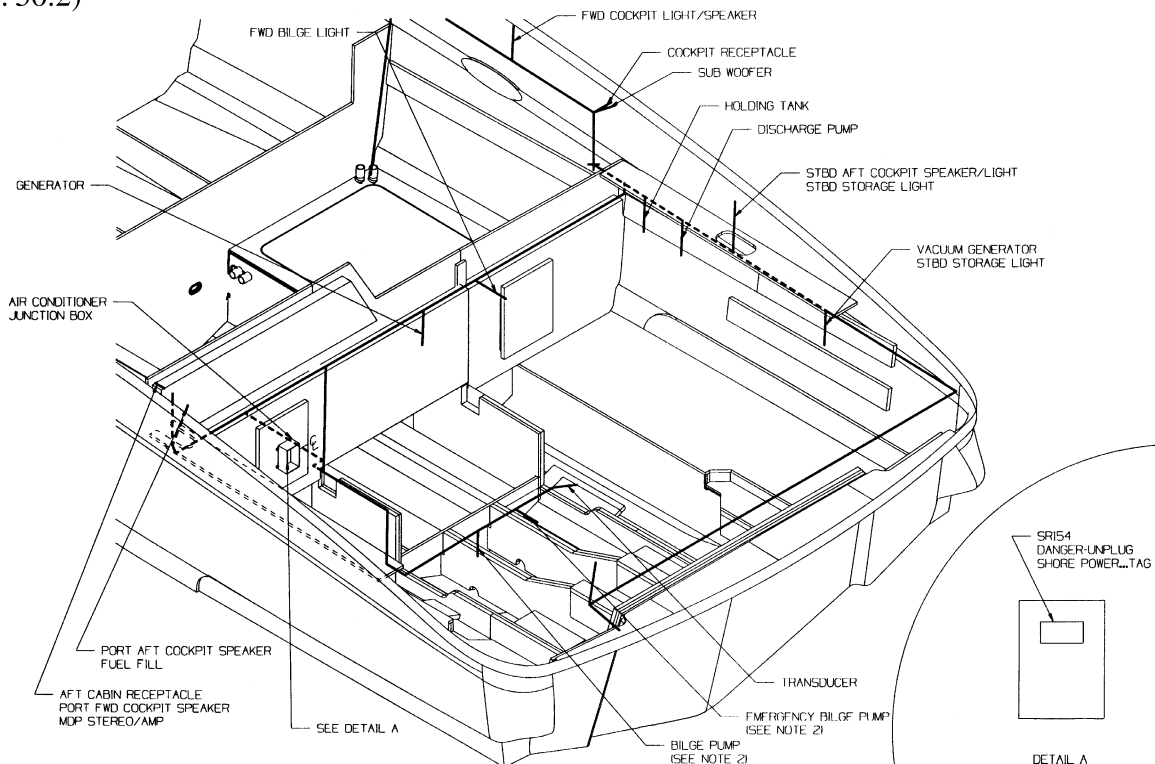


WIRE HARNESS INSTALLATION (CONTINUED)

BILGE HARNESS INSTALLATION (PRINT #09-871, 2 OF 3, REVISION #0)
(FIG. 50.1)

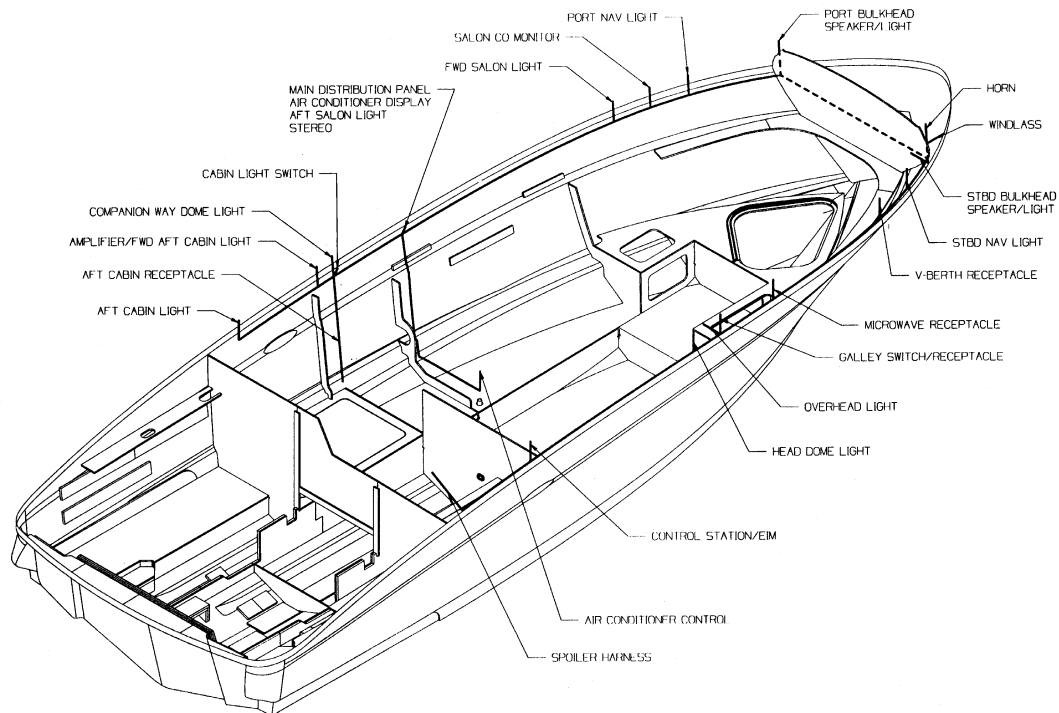


BILGE HARNESS INSTALLATION (PRINT #09-871, 3 OF 3, REVISION #0)
(FIG. 50.2)

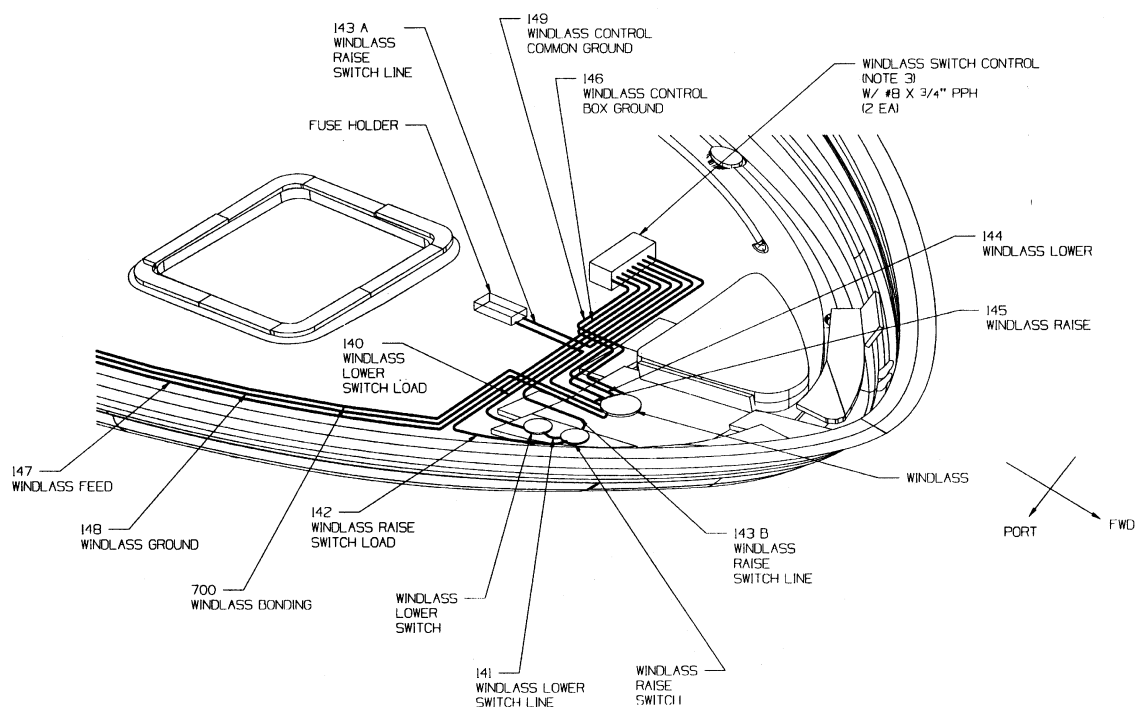


WIRE HARNESS INSTALLATION (CONTINUED)

CABIN HARNESS INSTALLATION (PRINT #09-875, 1 OF 1, REVISION #0)
(FIG. 51.1)

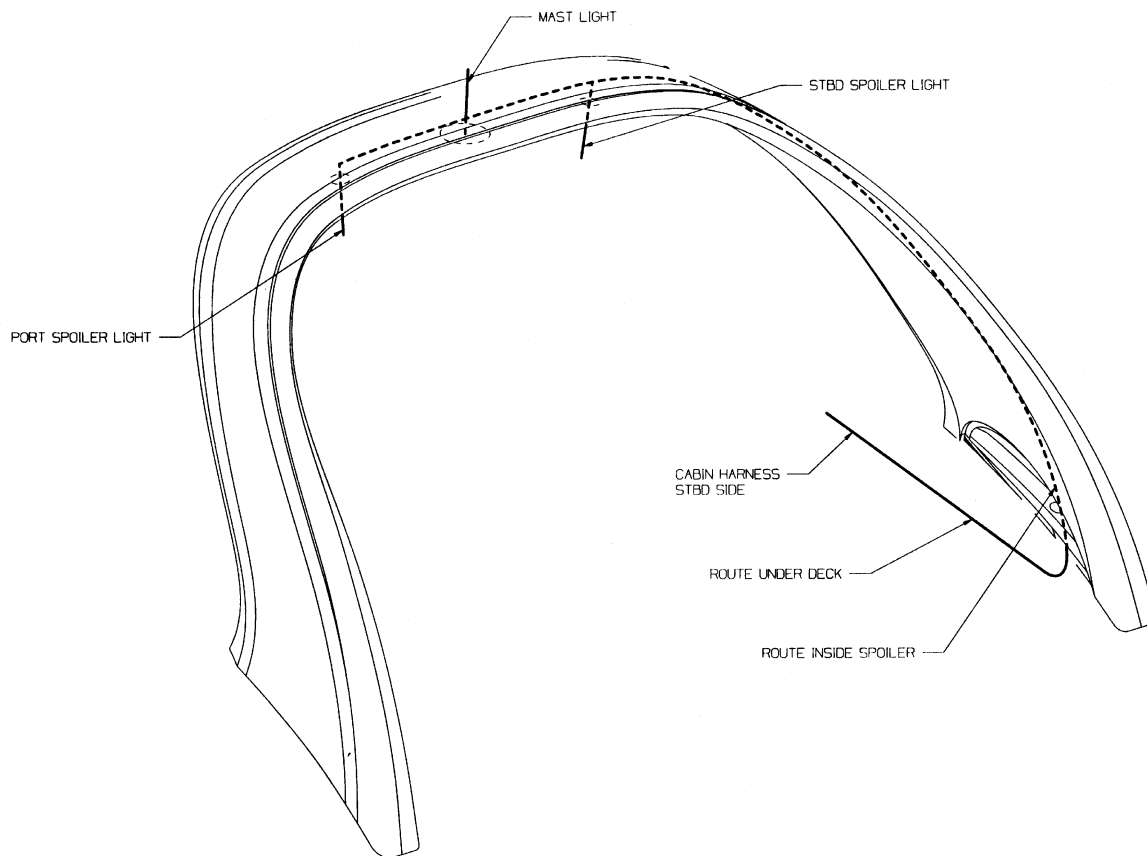


WINDLASS CABLE INSTALLATION (PRINT #09-881, 1 OF 1, REVISION #0)
(FIG. 51.2)

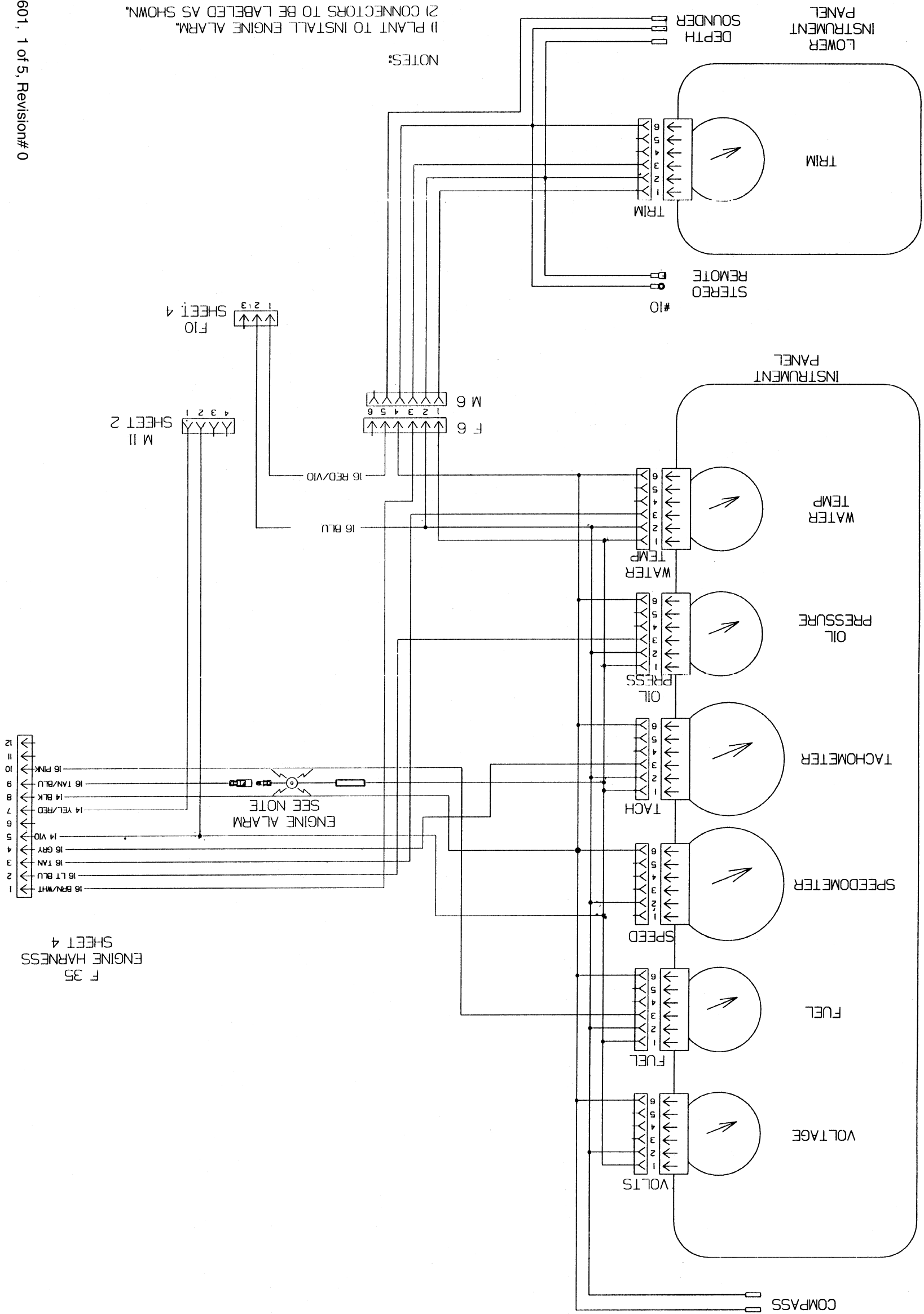


WIRE HARNESS INSTALLATION (CONTINUED)

SPOILER HARNESS INSTALLATION (PRINT #09-887, 1 OF 1, REVISION #0)
(FIG. 52.1)

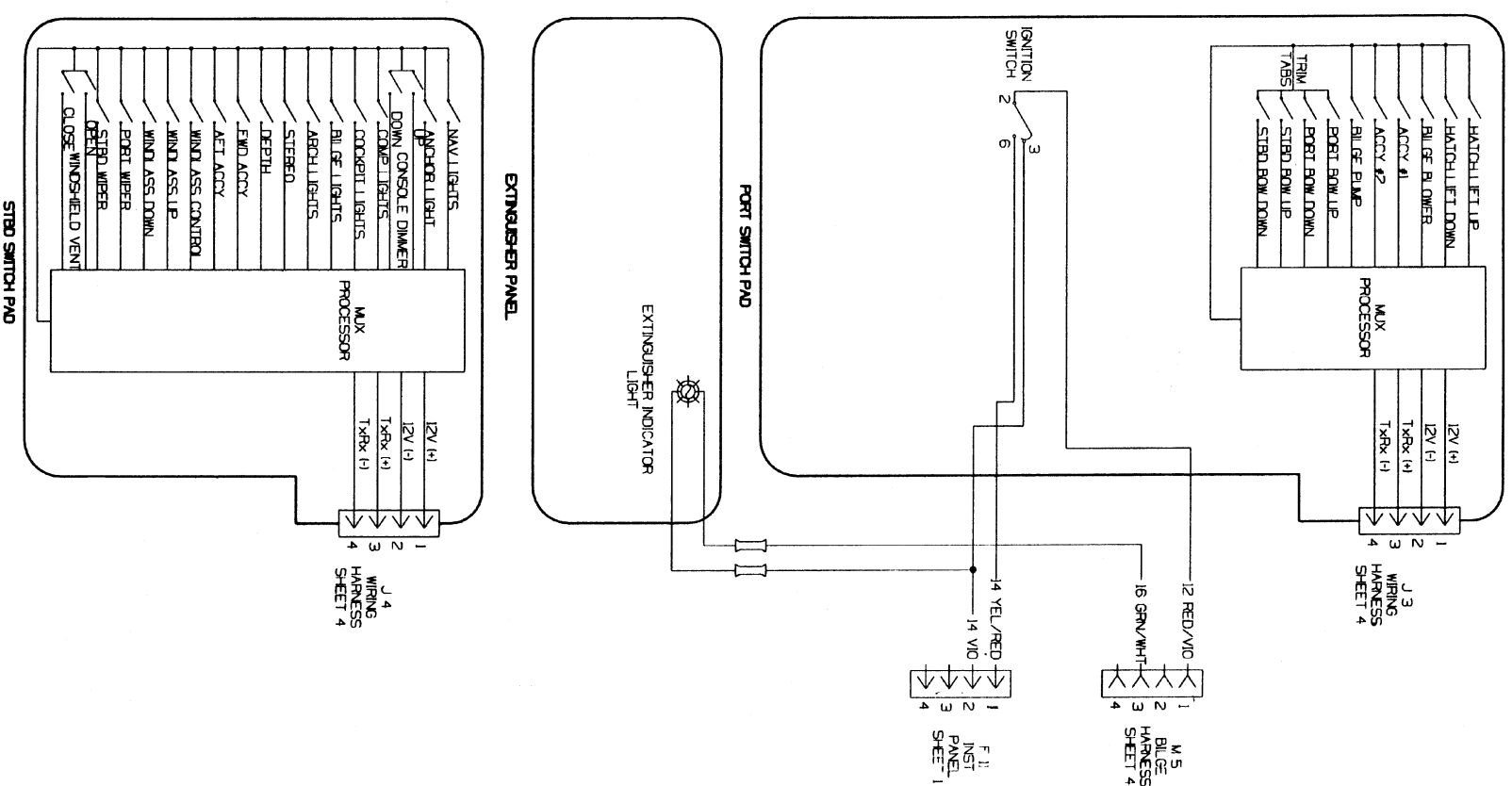


280 DA • DC WIRING SCHEMATIC (1 OF 5)



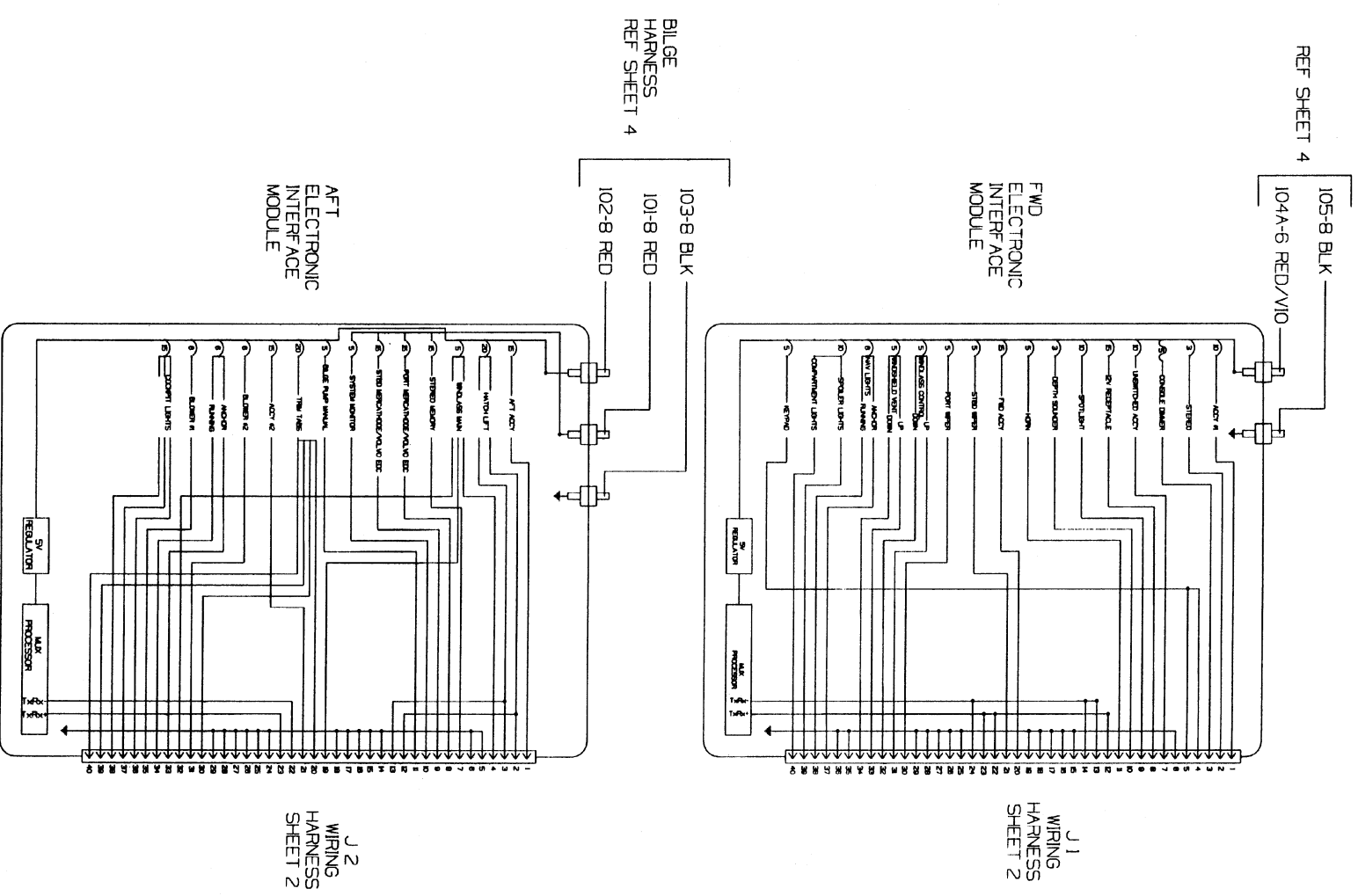
Print# 09-601, 1 of 5, Revision# 0

280 DA • DC WIRING SCHEMATIC (2 OF 5)



Print# 09-601, 2 of 5, Revision# 0

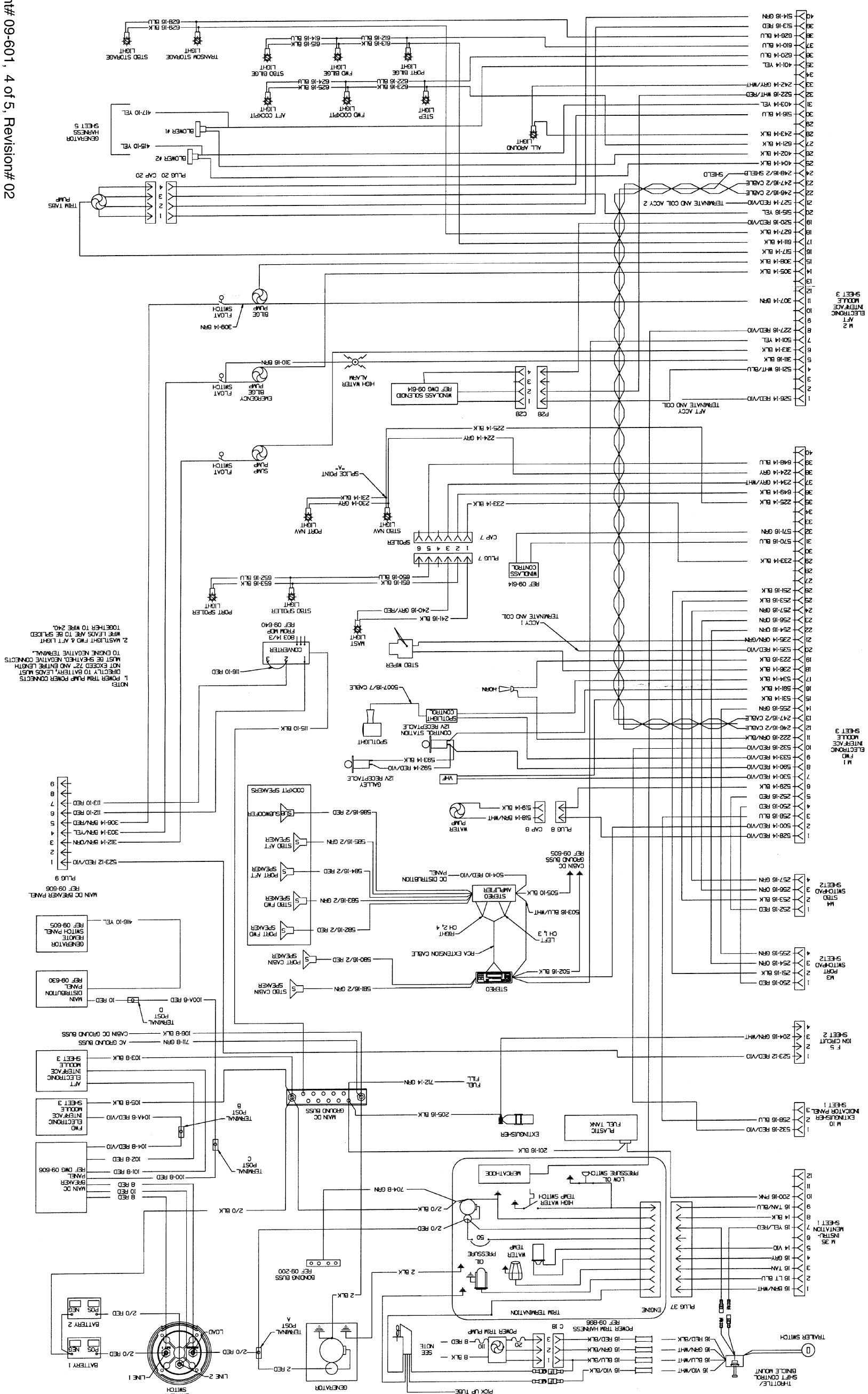
280 DA • DC WIRING SCHEMATIC (3 OF 5)



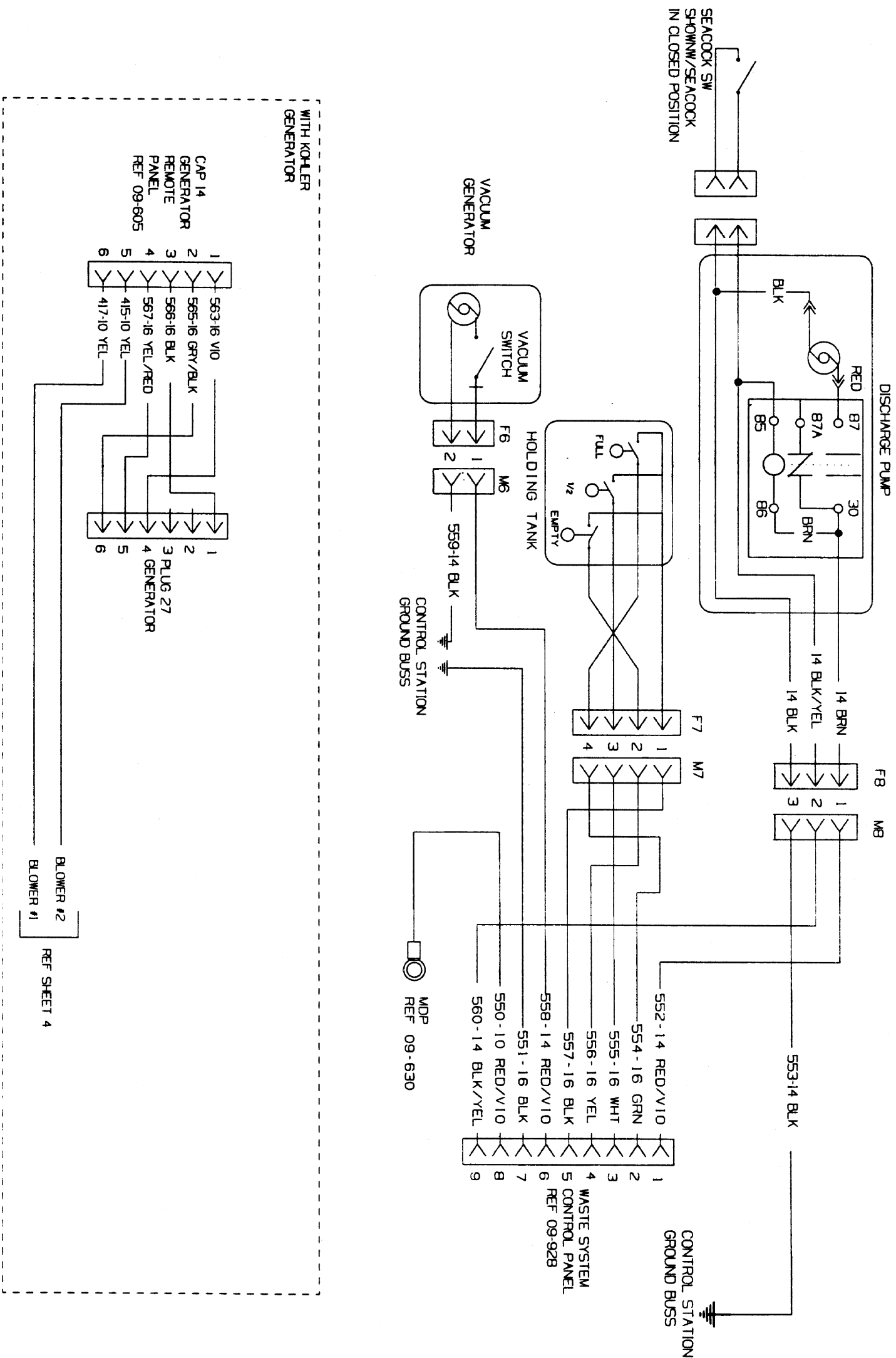
Print# 09-601, 3 of 5, Revision# 01

NOTE:
 1) DIAGRAM DOES NOT REFLECT THE INTERNAL WIRING OF THE ELECTRONIC MODULES

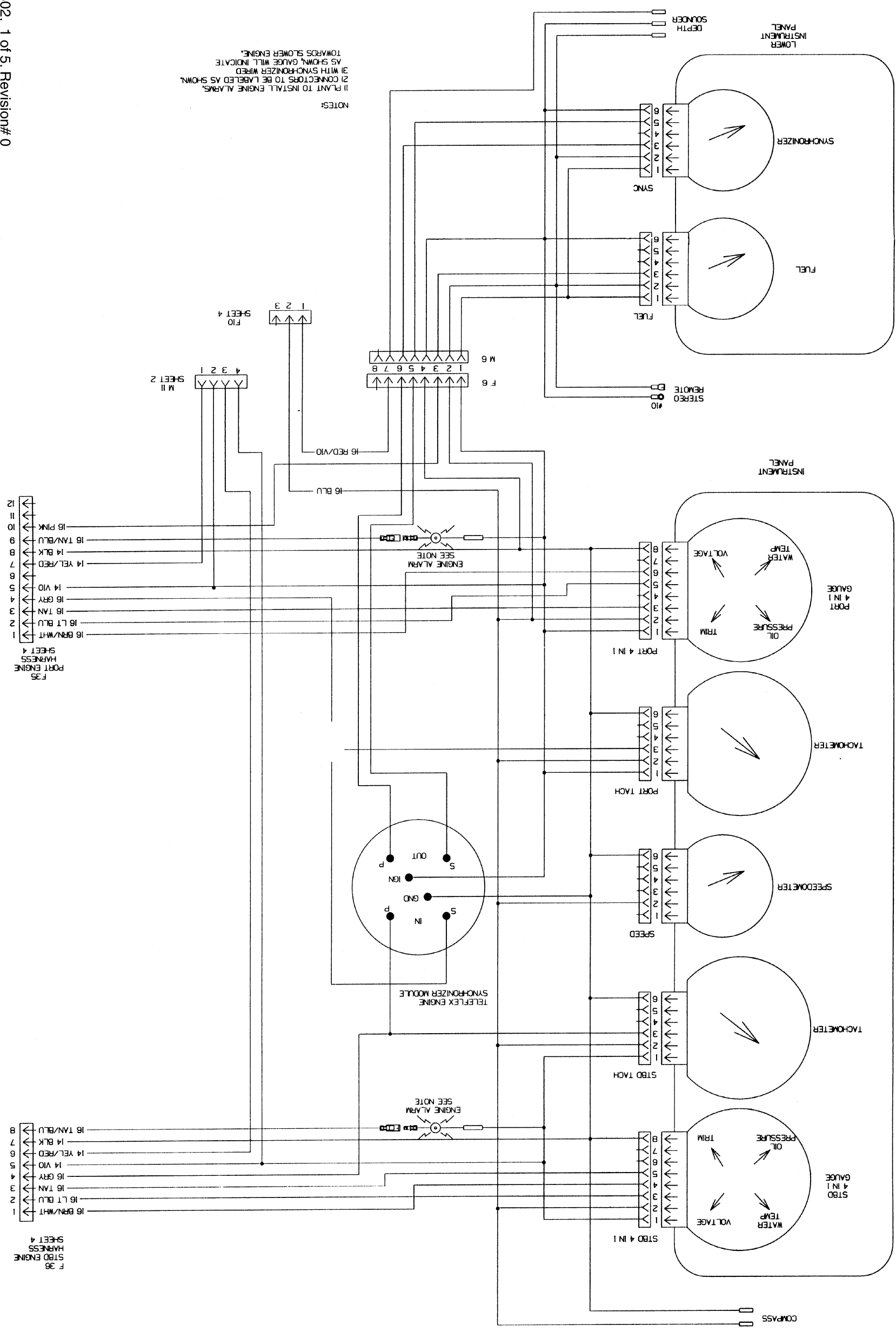
280 DA • DC WIRING SCHEMATIC (4 OF 5)



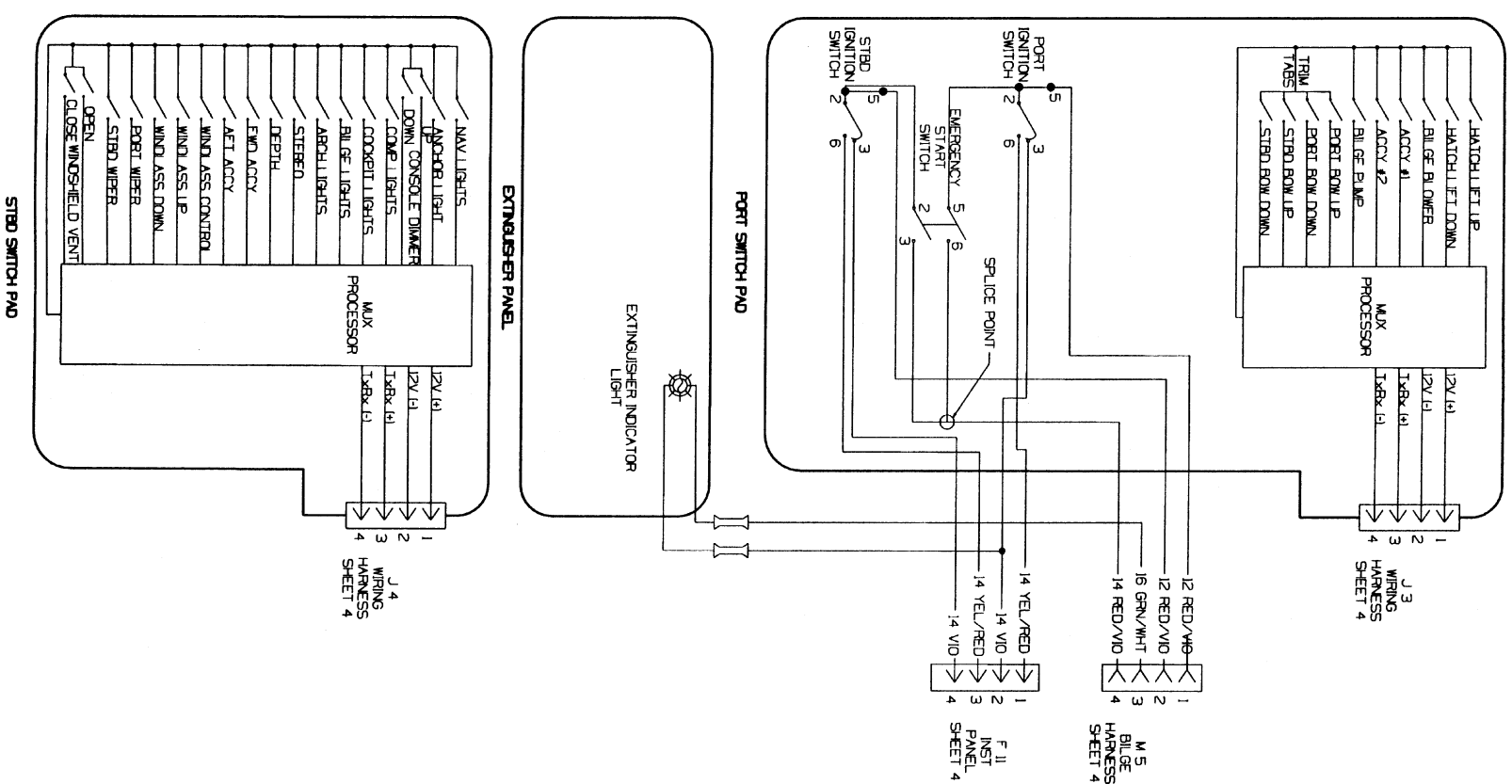
280DA • DC WIRING SCHEMATIC (5 OF 5)



280DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION) (1 OF 5)

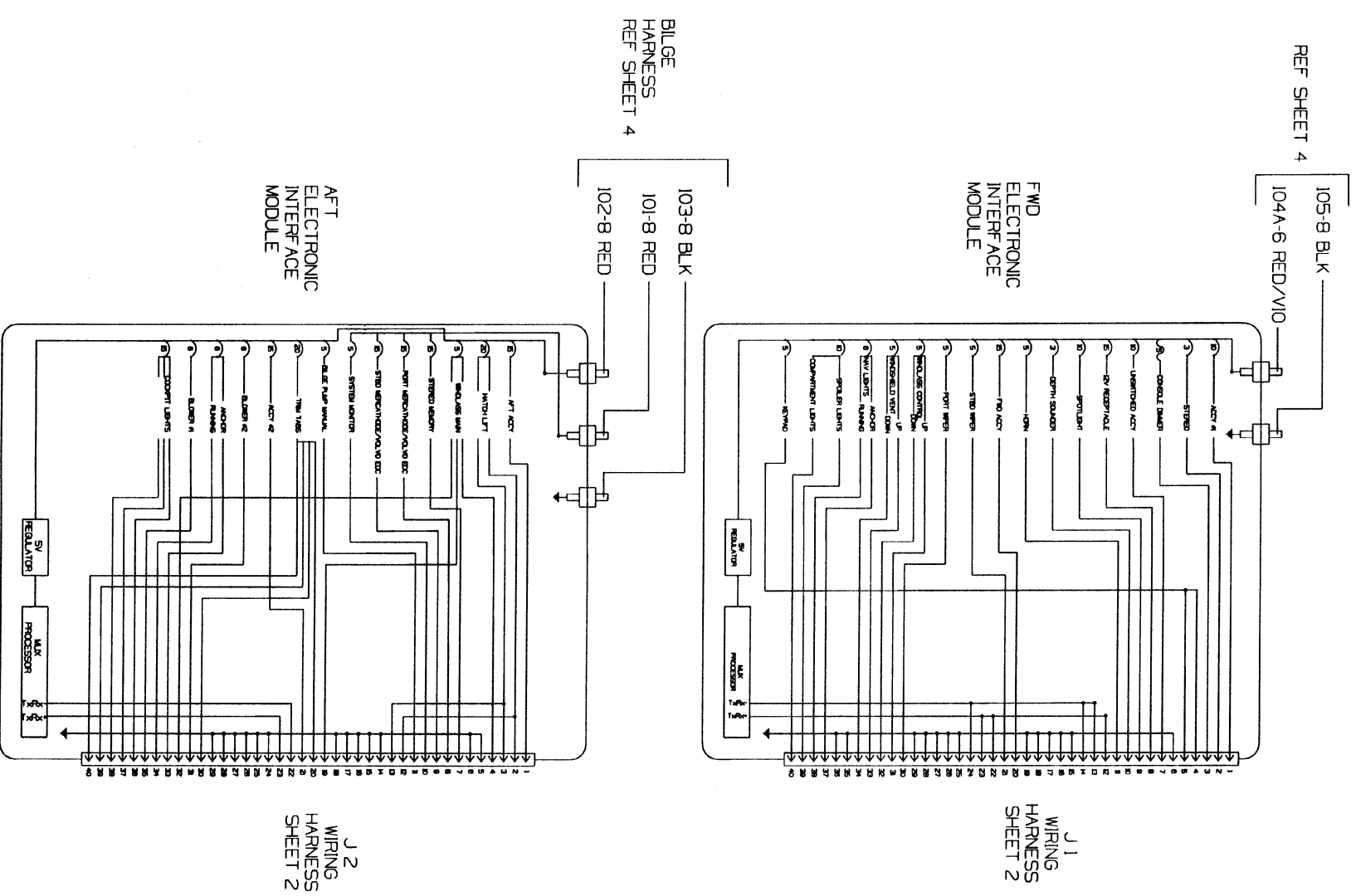


280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION) (2 OF 5)



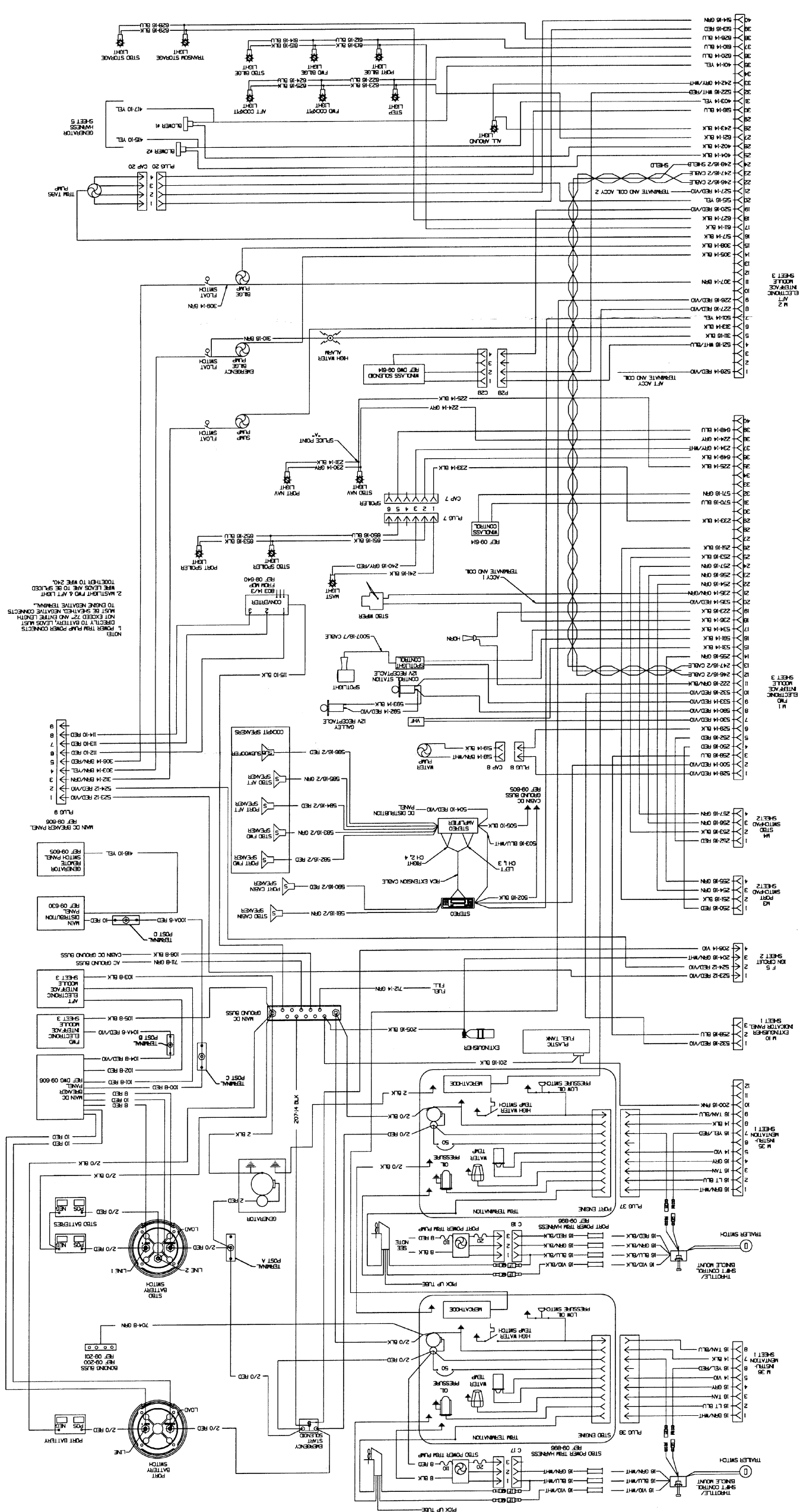
Print# 09-602, 2 of 5, Revision# 01

280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION) (3 OF 5)



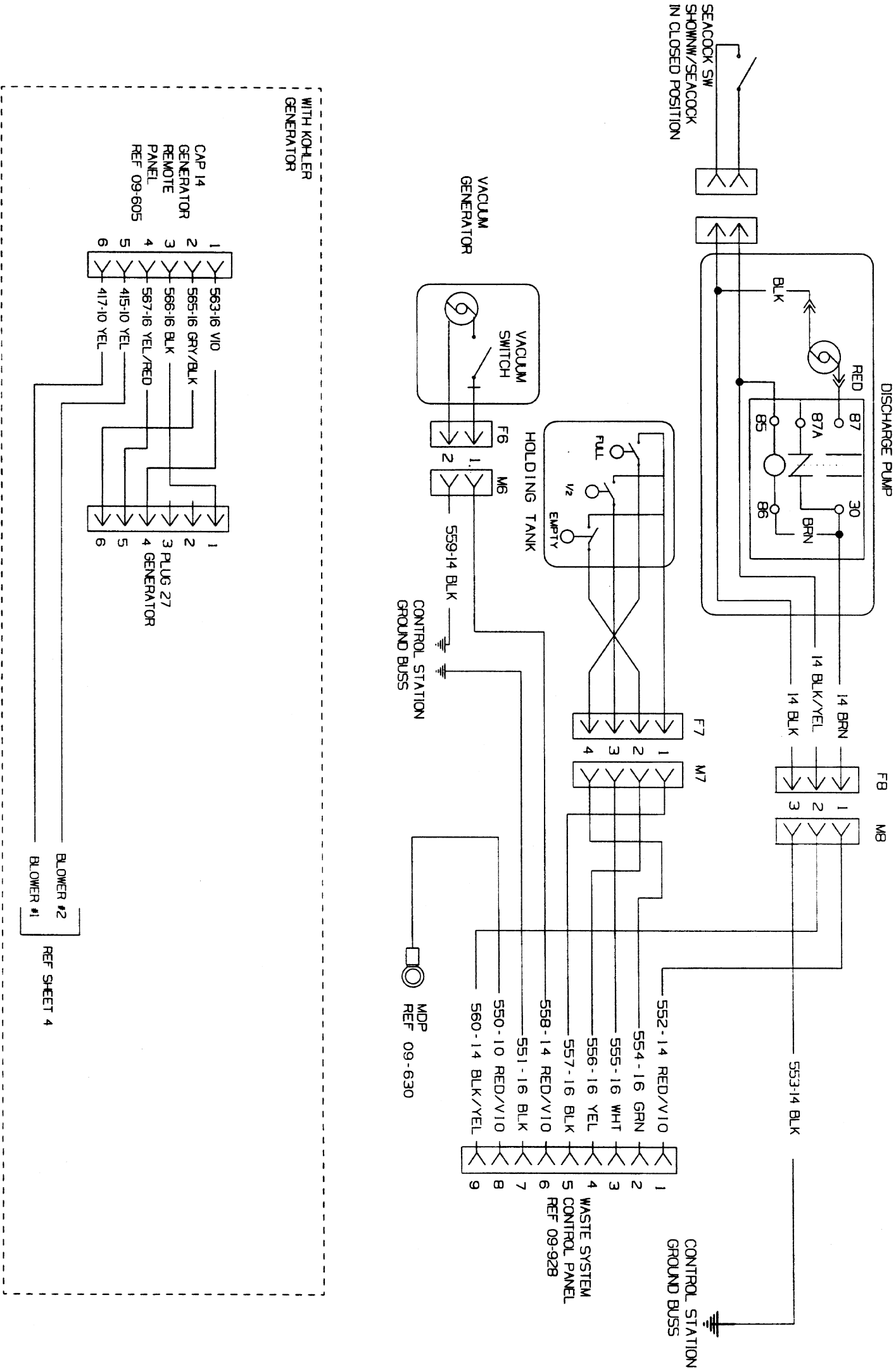
Print# 09-602, 3 of 5, Revision# 01

280 DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION) (4 OF 5)

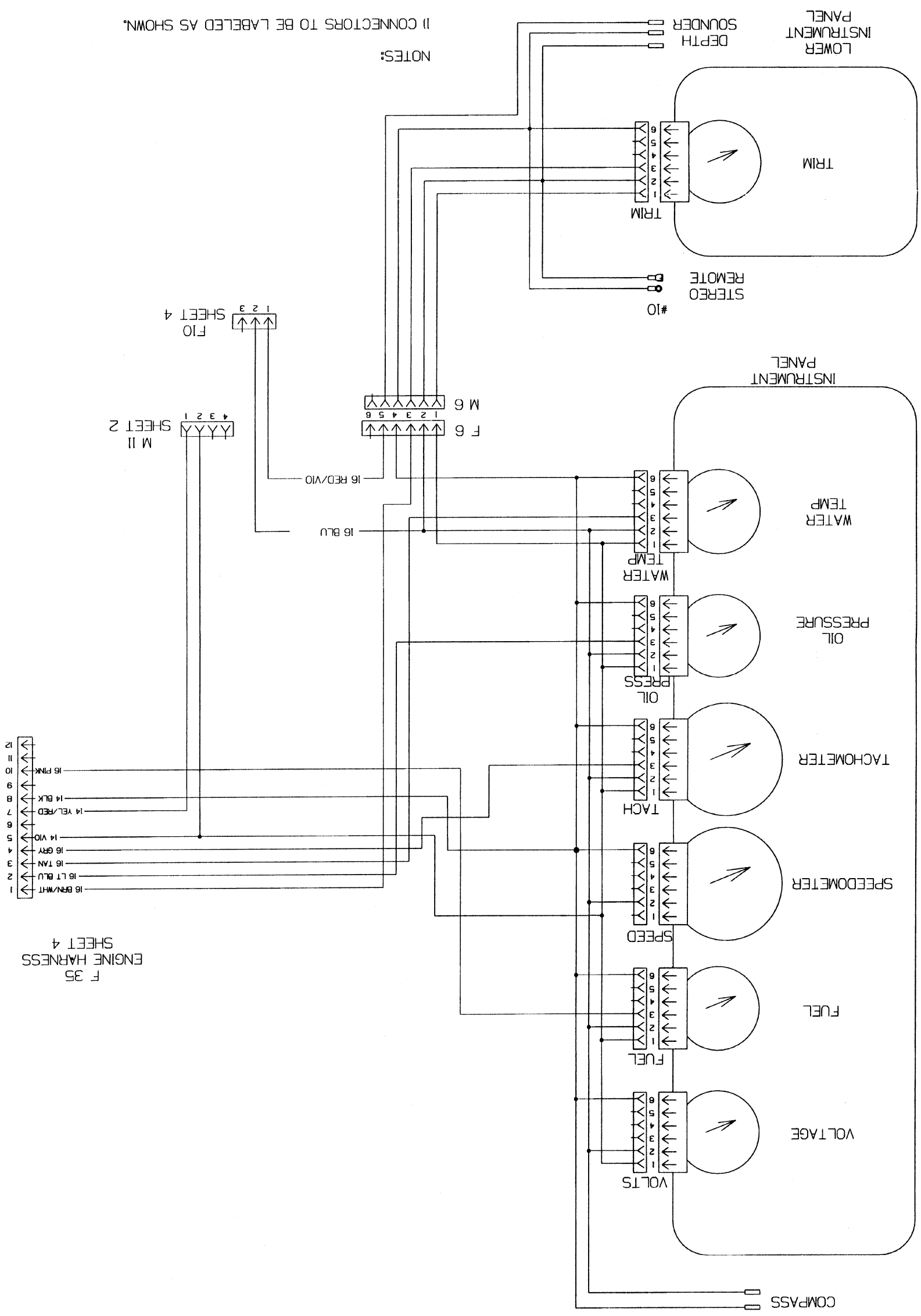


Print# 09-602, 4 of 5, Revision# 03

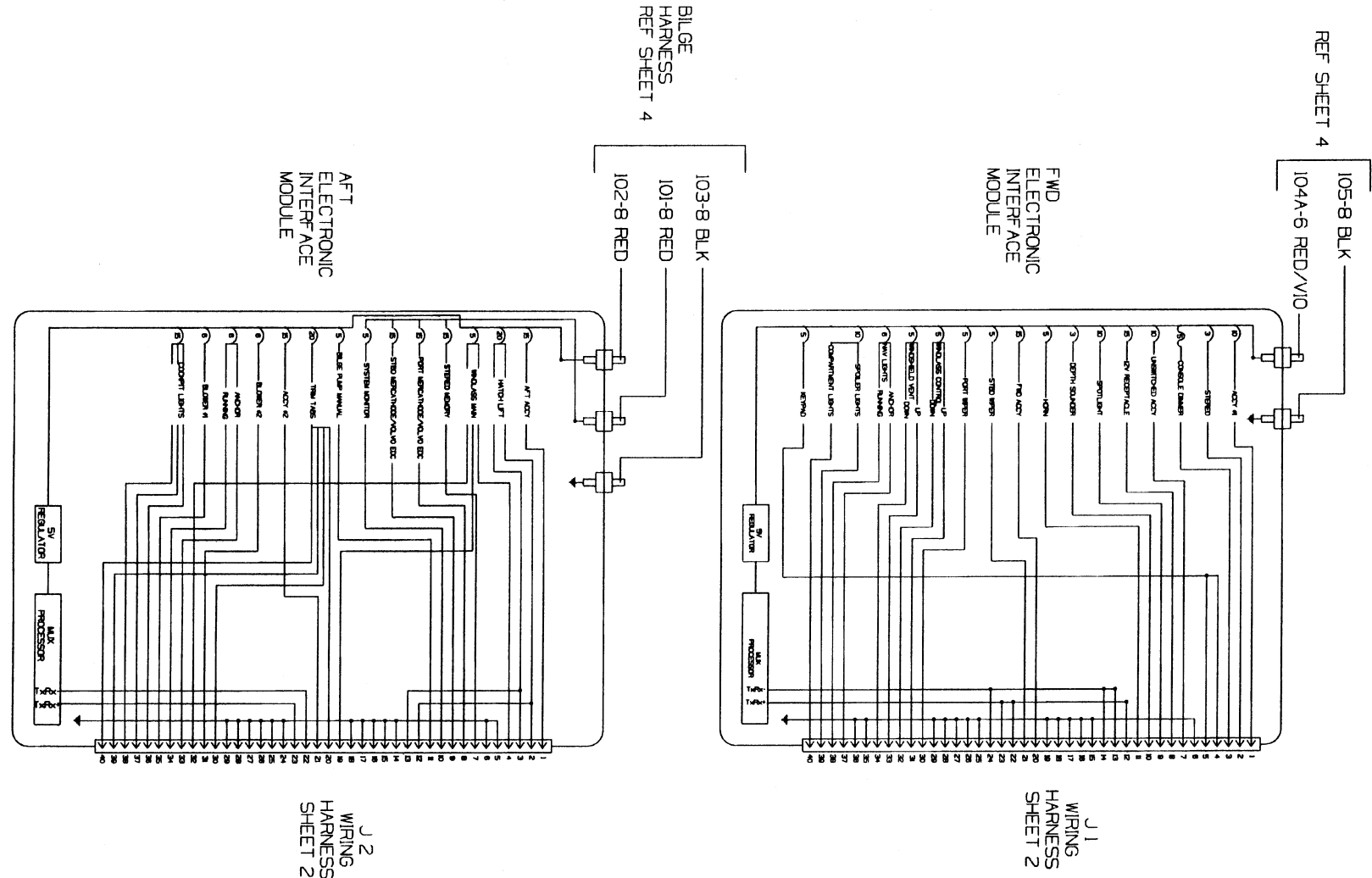
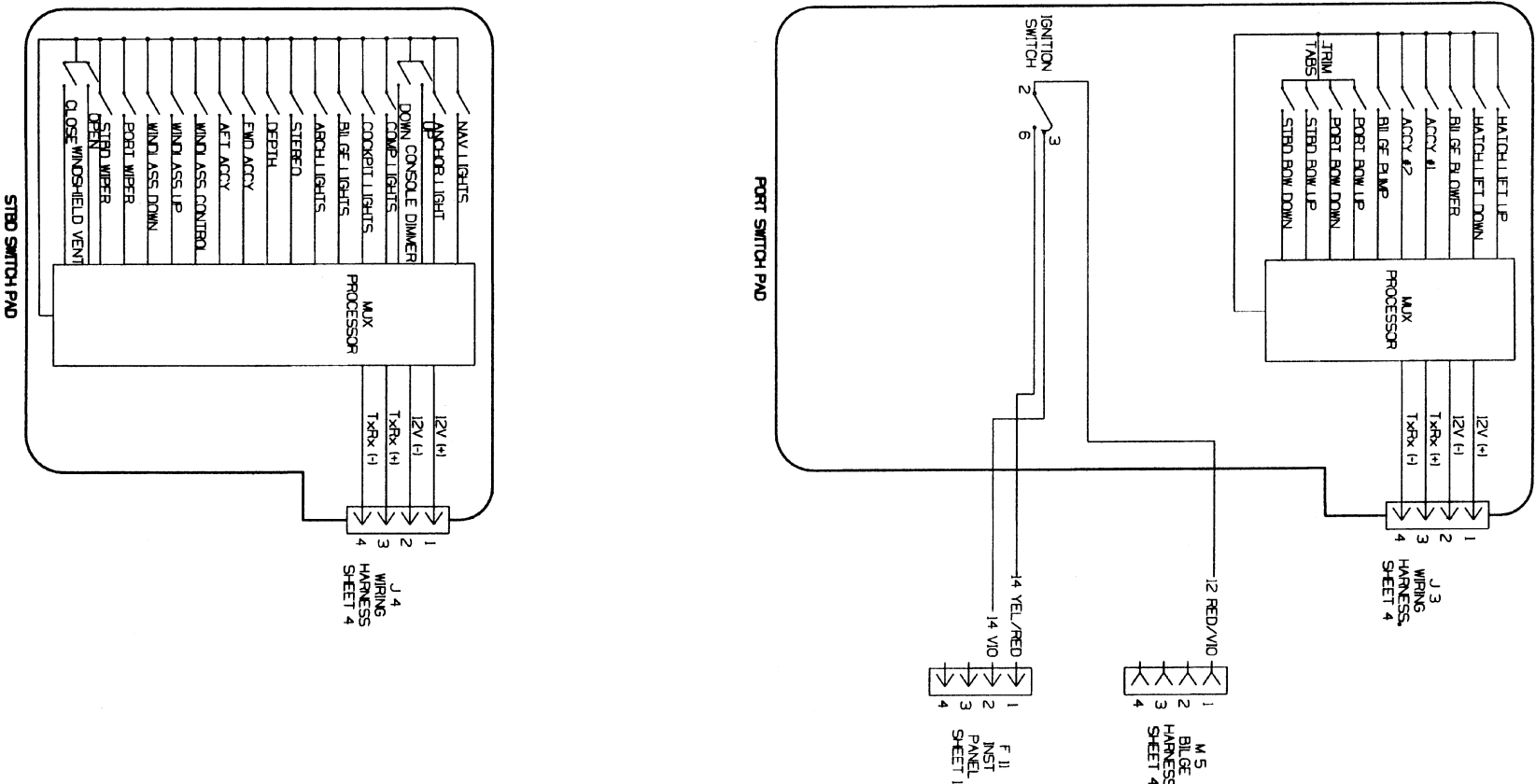
280DA • DC WIRING SCHEMATIC (TWIN ENGINE OPTION) (5 OF 5)



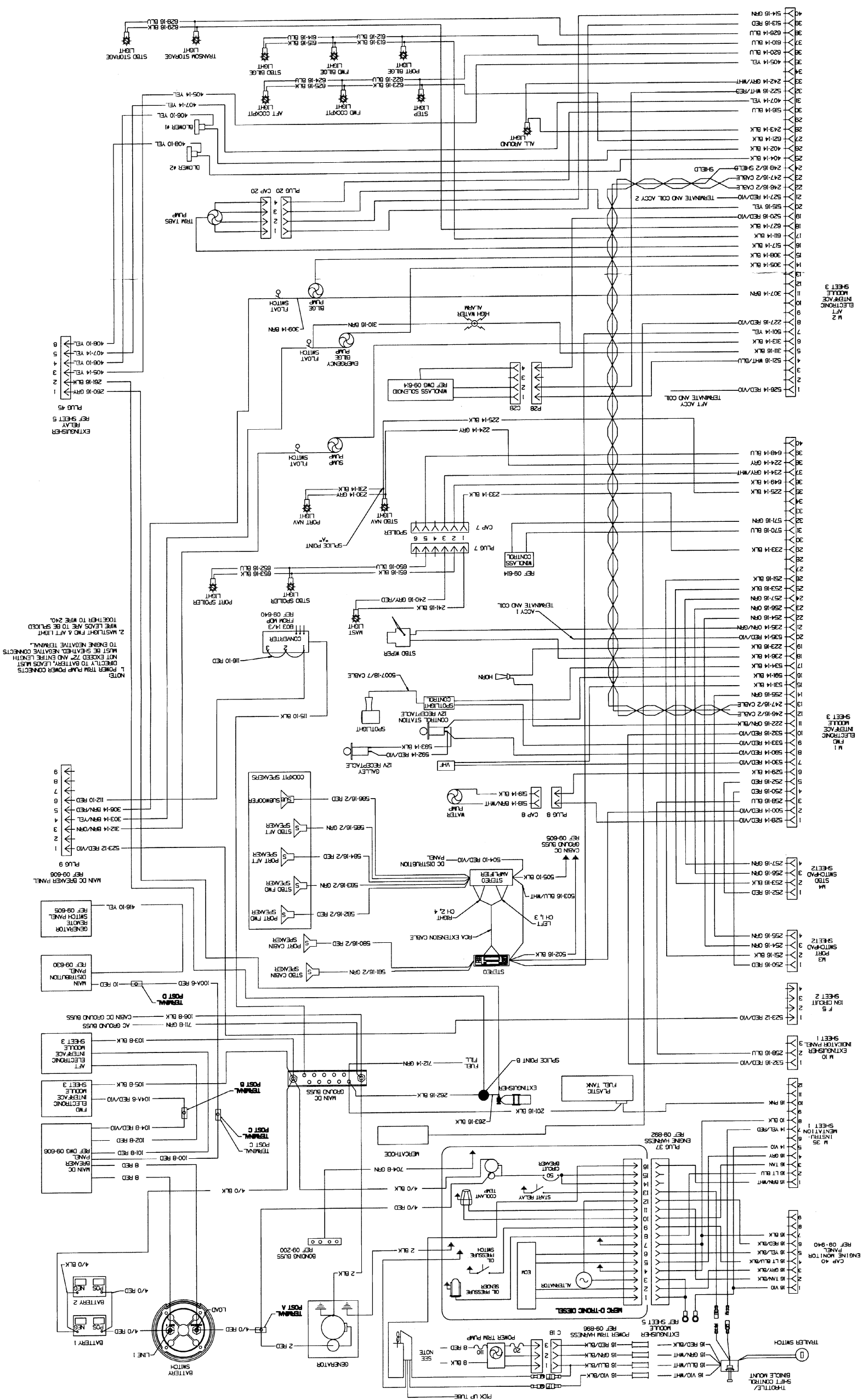
280 DA • DC WIRING SCHEMATIC (WITH D-7.3L D-TRONIC DIESEL) (1 OF 5)



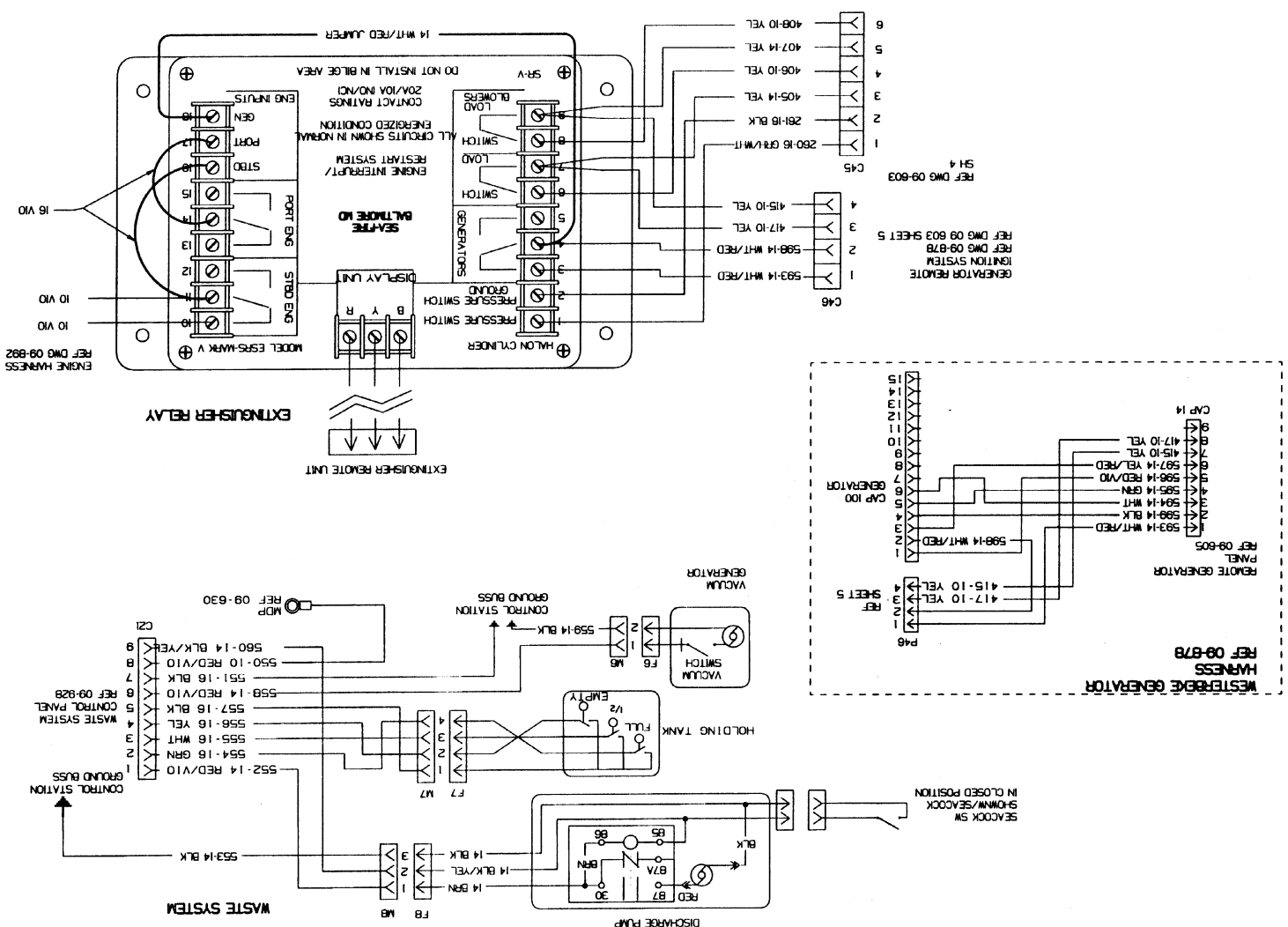
Print# 09-603, 1 of 5, Revision# 0



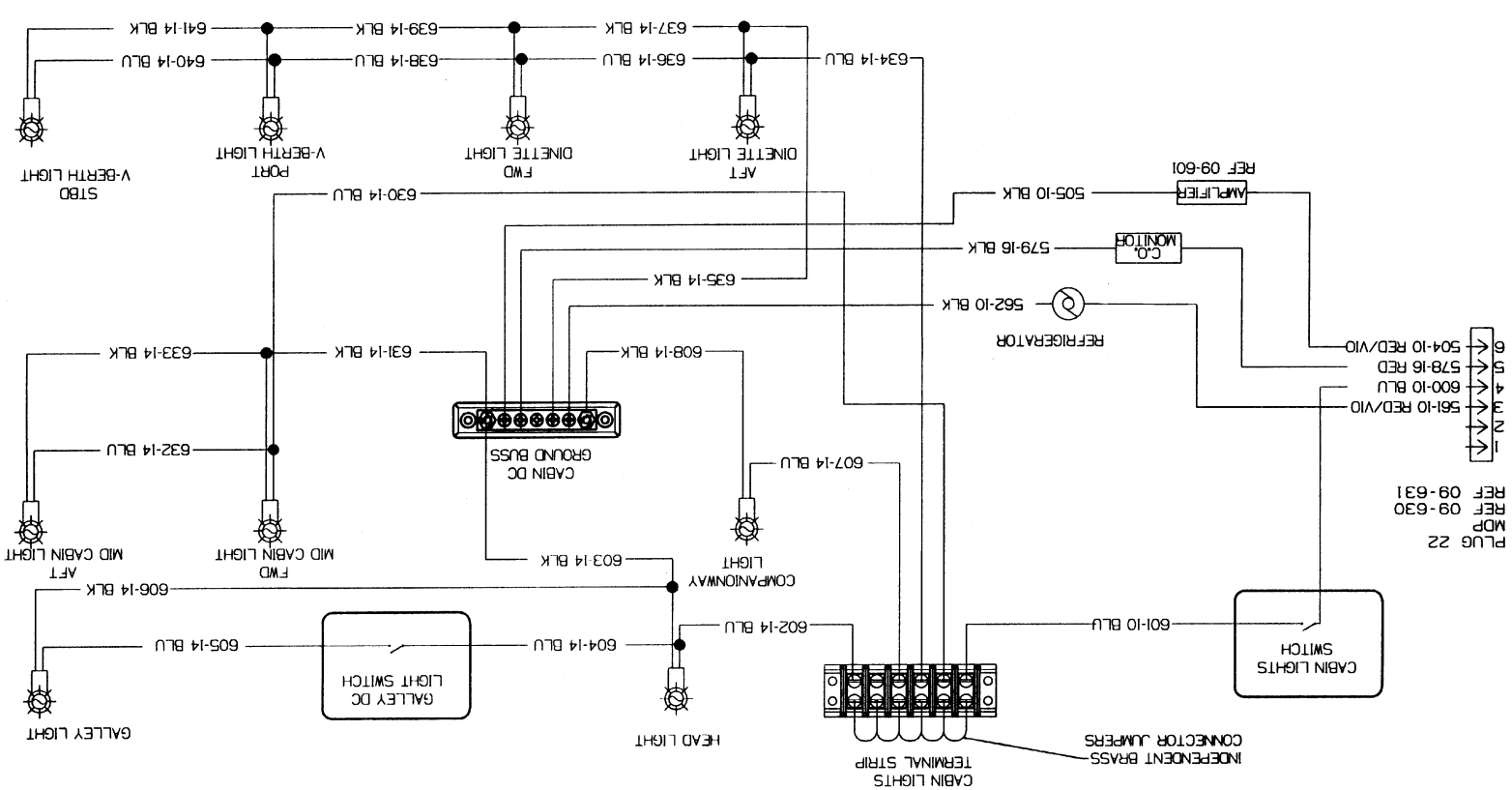
280DA • DC WIRING SCHEMATIC (WITH D-7.3L D-TRONIC DIESEL) (4 OF 5)



280 DA • DC WIRING SCHEMATIC
(WITH D-7.3L D-TRONIC DIESEL) (5 OF 5)



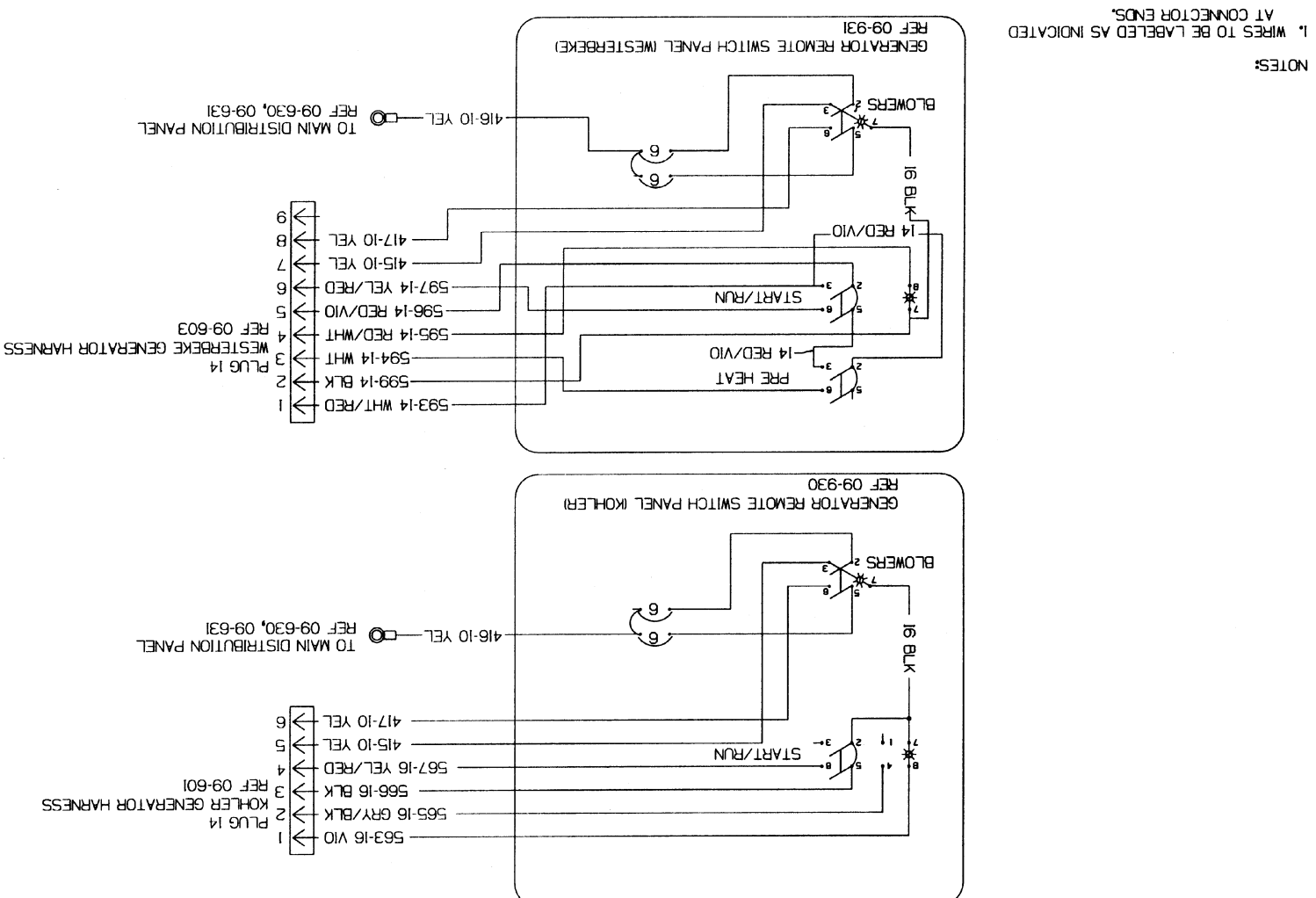
280 DA • CABIN DC WIRING DIAGRAM (1 OF 2)



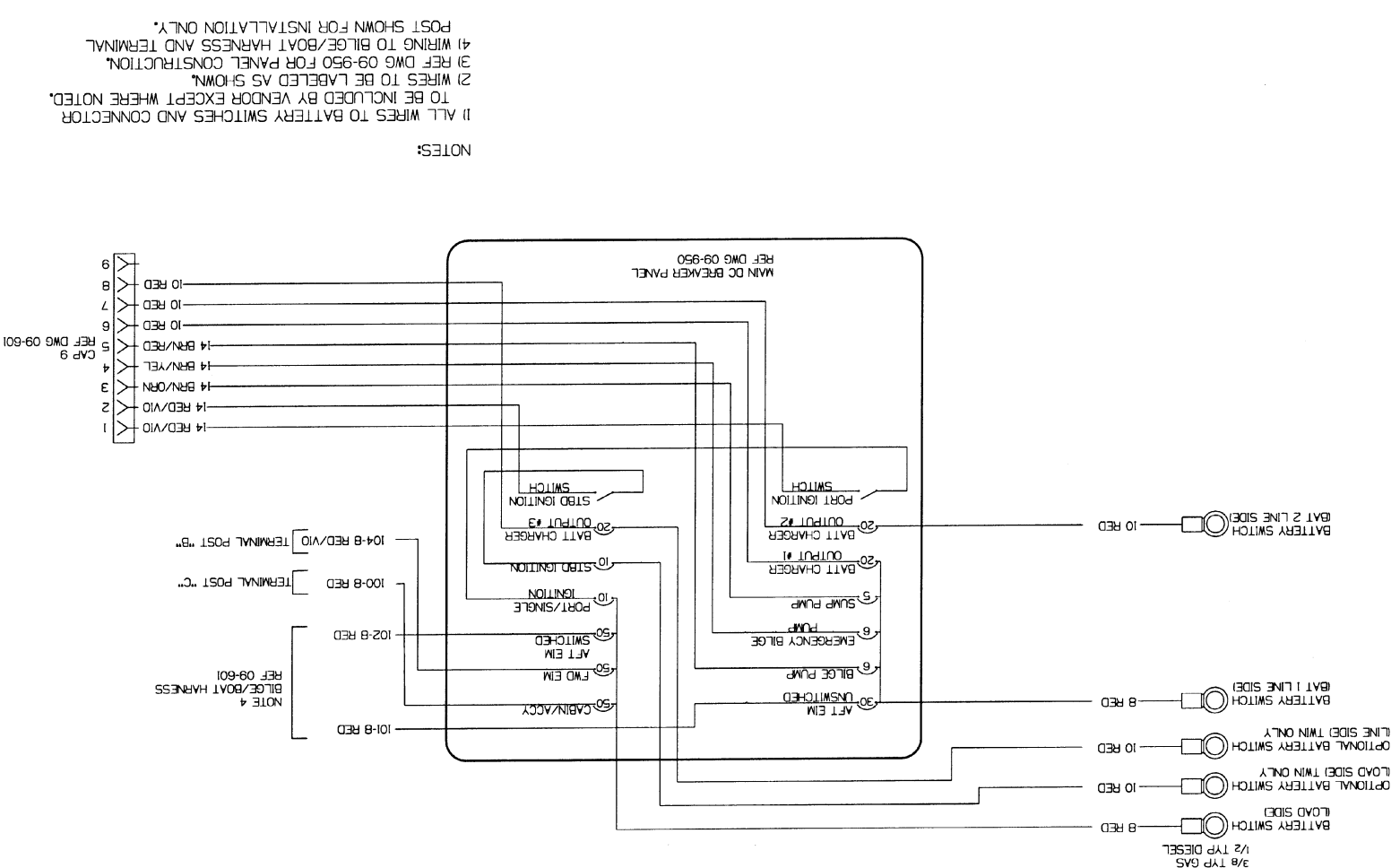
Print# 09-603, 5 of 5, Revision# 0

Print# 09-605, 1 of 2, Revision# 0

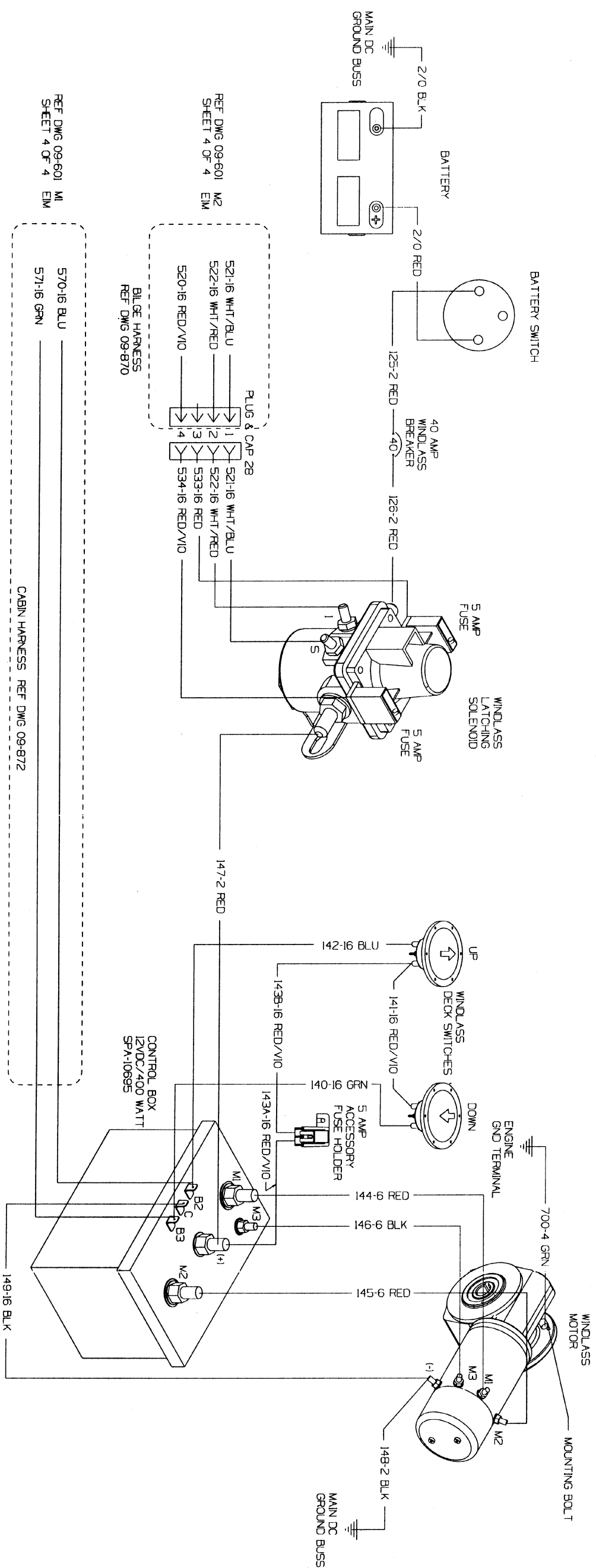
280 DA • CABIN DC WIRING DIAGRAM (2 OF 2)



280 DA • MAIN DC BREAKER PANEL WIRING DIAGRAM

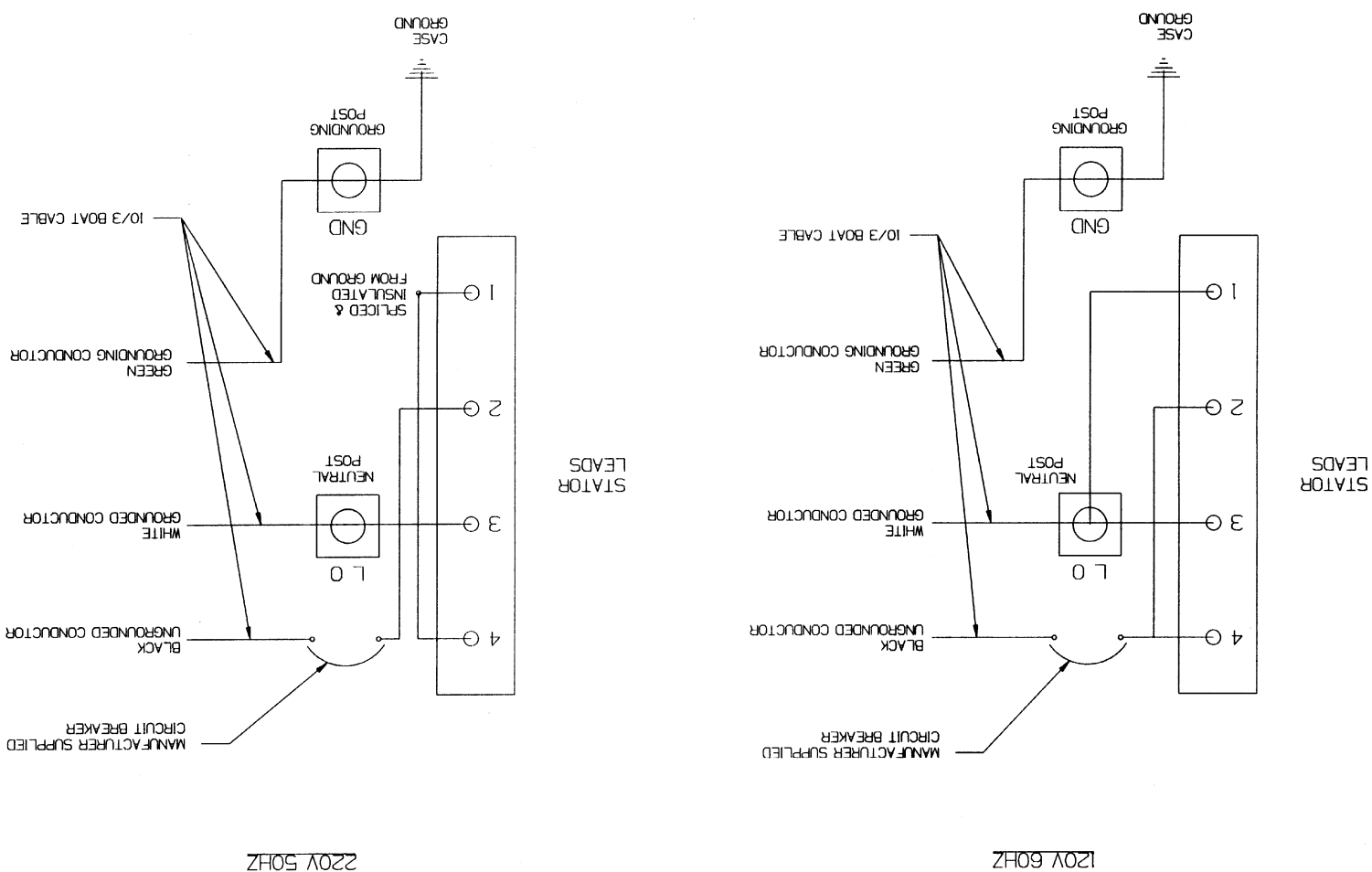


280 DA • WINDLASS WIRING DIAGRAM

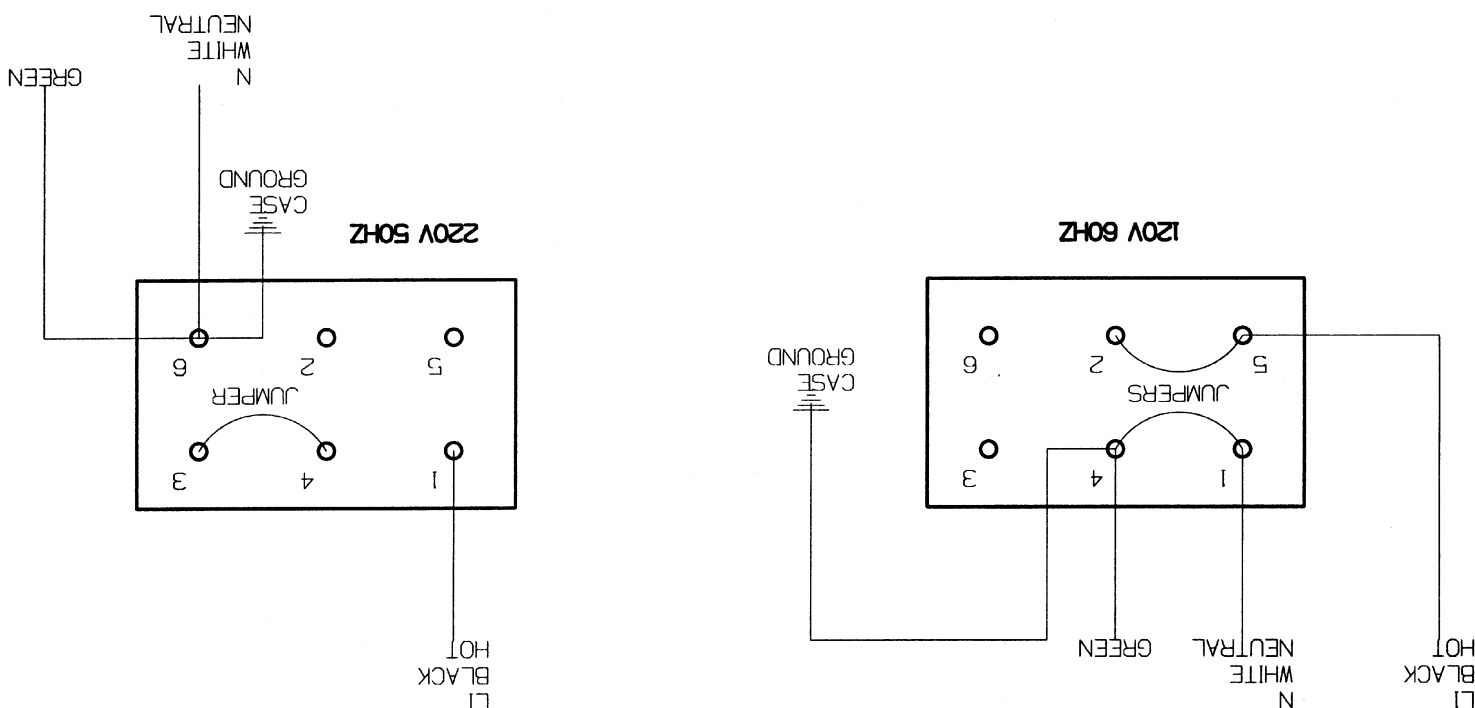


Print# 09-614, 1 of 1, Revision# 0

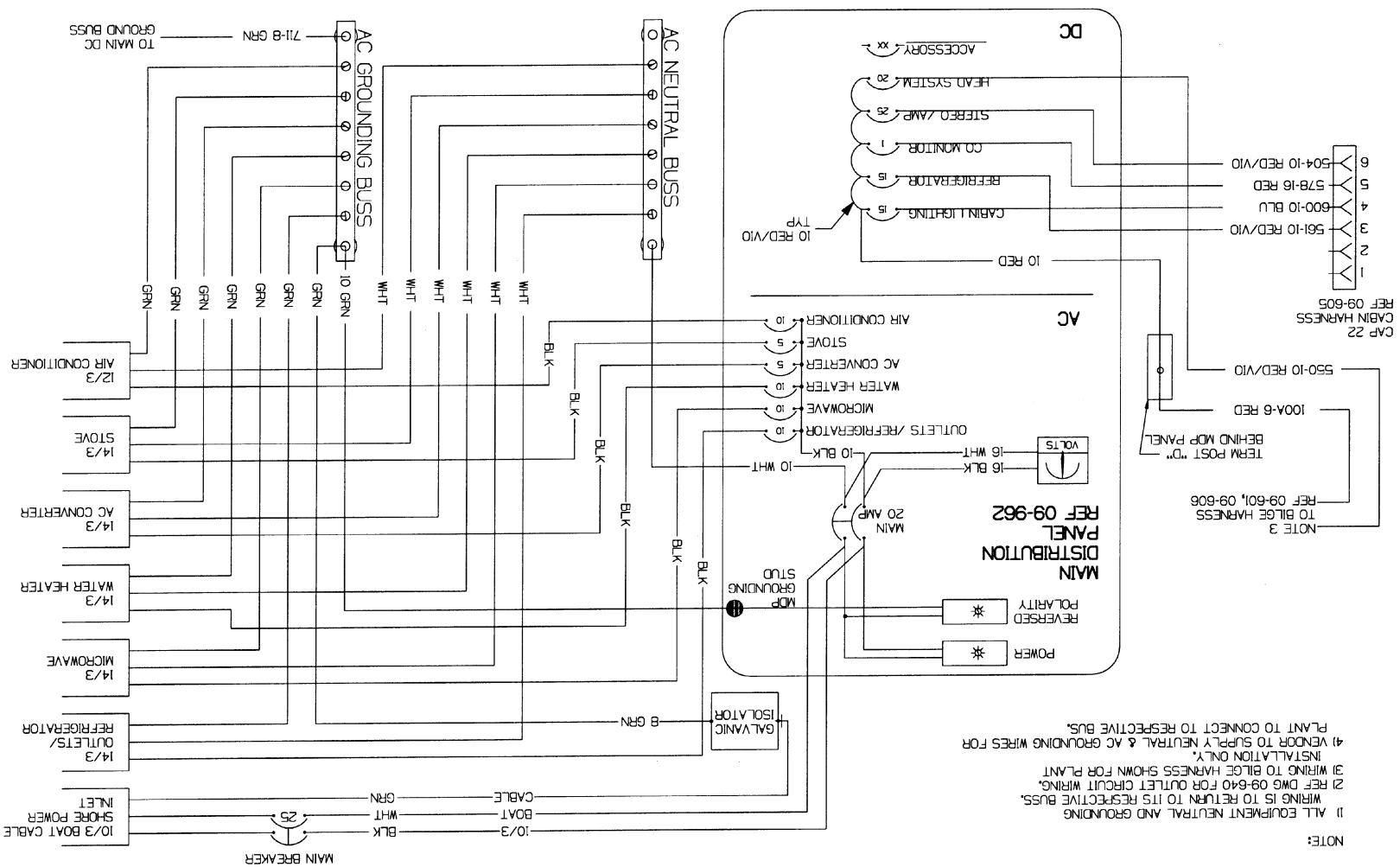
280 DA • KOHLER GENERATOR HIGH VOLTAGE
WIRING DIAGRAM (OPTION)



280 DA • WESTERBEKE GENERATOR HIGH VOLTAGE
WIRING DIAGRAM (OPTION)

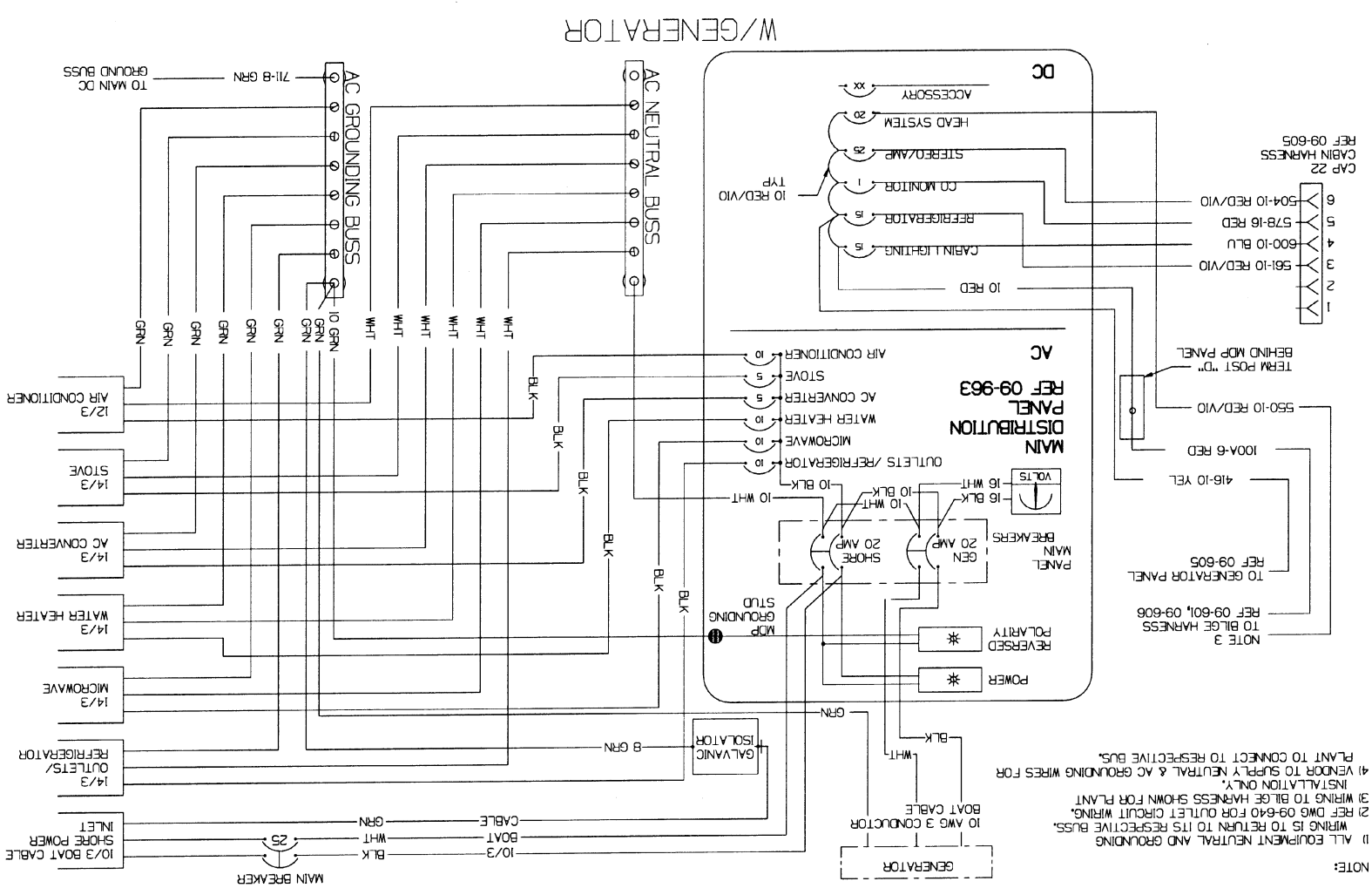


280 DA • MDP WIRING DIAGRAM (220VAC/50HZ) (1 OF 2)



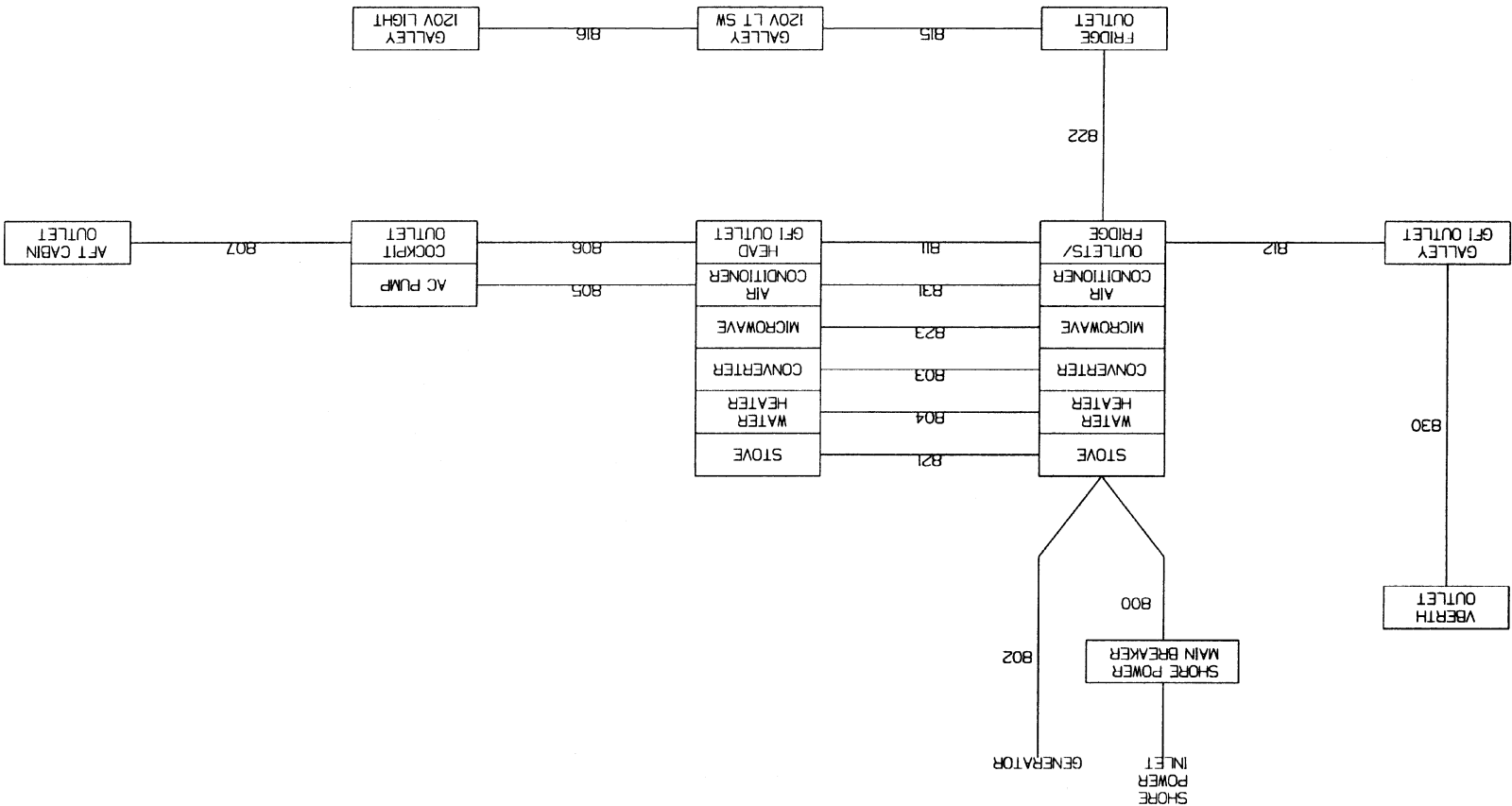
Print# 09-631, 1 of 2, Revision# 06

280 DA • MDP WIRING DIAGRAM (220VAC/50HZ) (2 OF 2)



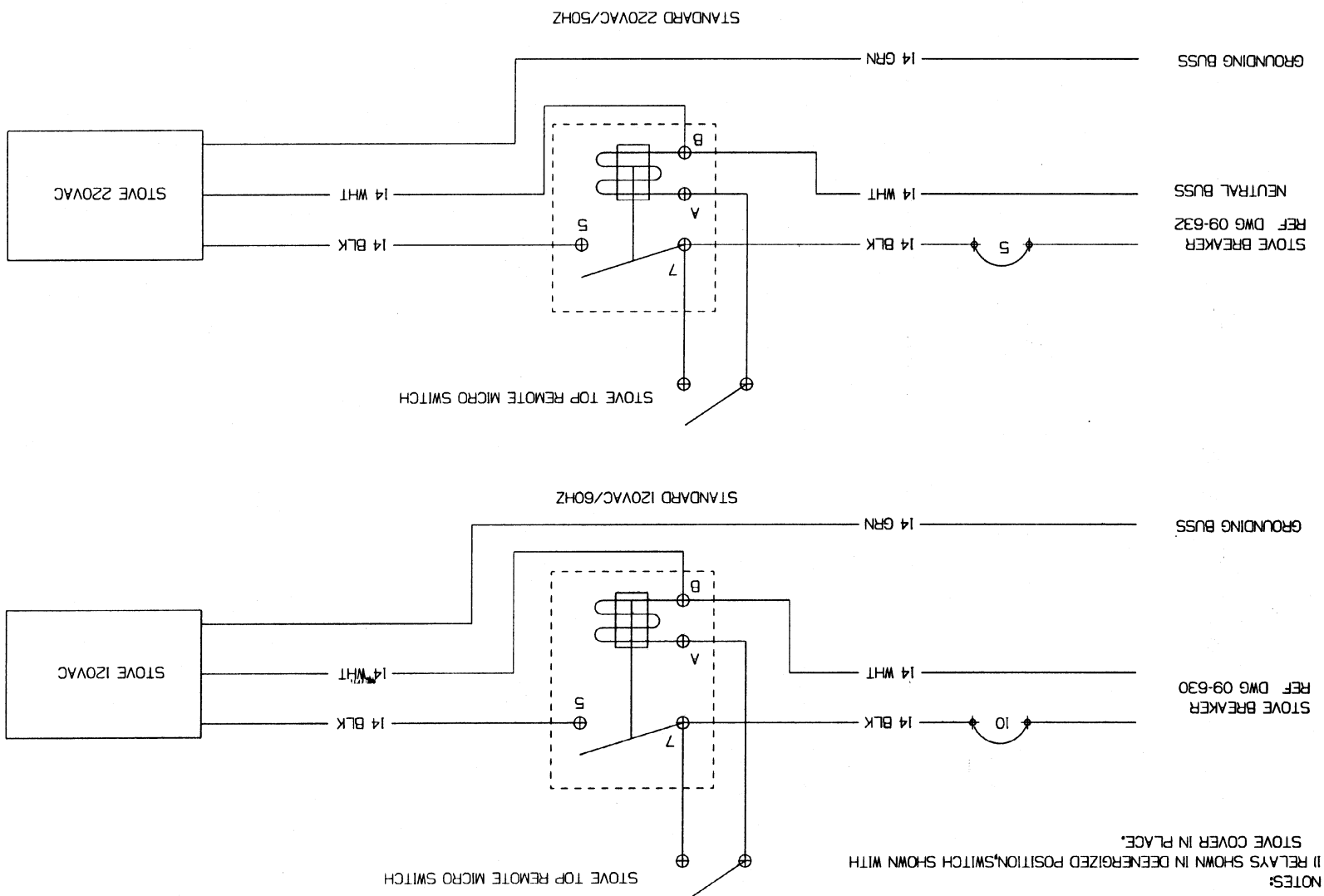
Print# 09-631, 2 of 2, Revision# 06

280 DA • AC SYSTEM WIRING DIAGRAM



Print# 09-640, 1 of 1, Revision# 0

280 DA • STOVE TOP SWITCH WIRING DIAGRAM



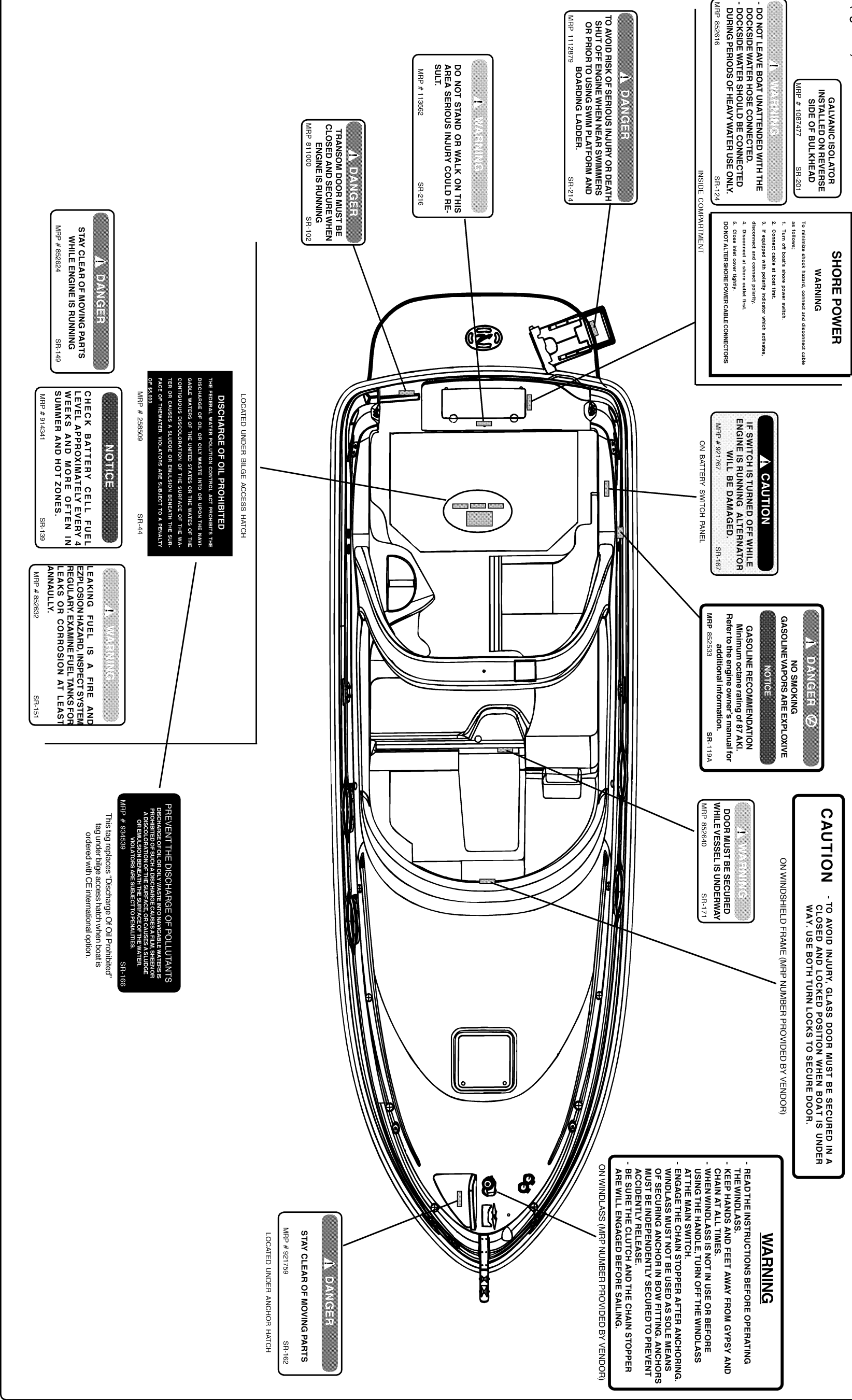
Print# 09-634, 1 of 1, Revision# 01

SAFETY LABEL LOCATIONS

Main Deck

(fig. 71.1)

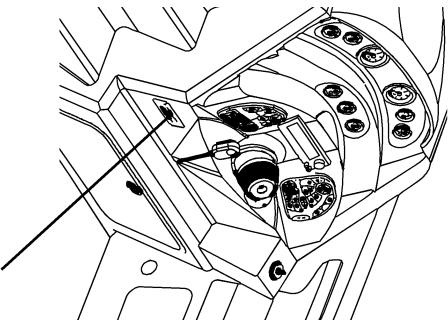
Figures 71.1 thru 73.1 identify the safety labels and their location on your boat. Make certain they are all on your boat. If any of these labels are illegible or missing, call 1-800-SRBOATS for free replacement labels.



SAFETY LABEL LOCATIONS (CONTINUED)

Main Deck
(fig. 72.1)

Dash Area
(fig. 72.2)



⚠ DANGER

UNPLUG SHORE POWER AND TURN OFF GENERATOR BEFORE REMOVING COVER.

MRP 852592 SR-154

On covers of all 120 Volt connection boxes and equipment.

⚠ WARNING

AVOID SERIOUS OR FATAL INJURY DUE TO ROTATION OF SEAT. LOCK SWIVEL WHEN SPEED EXCEEDS 5 M.P.H.

LOCATED UNDER SWIVEL SEATS (MRP NUMBER PROVIDED BY VENDOR)

⚠ DANGER

In all gasoline powered boats, engine and generator exhaust systems produce carbon monoxide gas (CO). Direct prolonged exposure can result in CO poisoning which may be harmful or fatal. To prevent excess exposure and reduce the possibility of accumulations of CO in the cabin and cockpit areas, proper ventilation is required. Proper ventilation in each the cabin and cockpit areas, through utilization of cabin hatches, cabin doors, cabin windows, cockpit windshield windows and side windshield vents to increase air movement through the cabin and cockpit areas. Proper ventilation is required to prevent the accumulation of CO in and about the boat and require the operator's particular attention:

1. Operation at slow speeds or dead in the water.

2. Operation with a high bow angle attitude.

3. The utilization of canvas tops, side curtains and back.

4. Contributing climatic conditions, such as a head wind.

5. Operation of engines and/or generator inclosed spaces or at deckside.

6. Any blockage of hull exhaust outlets.

Indications of excessive exposure to CO concentrations may include nausea, dizziness and drowsiness.

MRP 947838 SR-126

On Main Distribution Panel Door

AC
CONDENSATE

MRP # 939423 SR-174

DISCHARGE

MRP # 939431 SR-175

On shower sump under step, then under trash can.

⚠ WARNING

AUTOMATIC EXTINGUISHING SYSTEM
LIGHT ON - UNIT CHARGED/LIGHT OFF - UNIT DISCHARGED
IF UNIT DISCHARGES, SHUTDOWN ENGINE, BLOWER
AND ELECTRICAL SYSTEM.

GASOLINE VAPORS CAN EXPLODE
RESULTING IN INJURY OR DEATH
BEFORE STARTING ENGINE. CHECK ENGINE COMPARTMENT FOR
GASOLINE OR VAPORS. OPERATE BLOWER FOR FOUR MINUTES,
AND VERIFY BLOWER OPERATION. RUN BLOWER
WHEN VESSEL IS OPERATING BELOW CRUISING SPEED

Refer to parts manual for MRP number

NOTICE

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

MRP 955278 SR-118

On front of head system holding tank.

12VDC-15A MAX

MRP # 324756 SR-47

CE
0609
IMC
B

Sea Ray Boats
280 DA
MAXIMUM

10 ⬆ + ⬆ = 1180 kg

YACHT CERTIFICATION

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS IN EFFECT ON THE DATE OF CERTIFICATION IS VERIFIED MANUFACTURER RESPONSIBLE FOR PRODUCTION CONTROL.

NATIONAL MARINE MANUFACTURERS ASSOCIATION
THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION
SEA RAY BOATS, INC.

⚠ DANGER ⚠

AVOID SERIOUS INJURY OR DEATH. FROM CARBON MONOXIDE EXHAUST FUMES FROM ENGINES CONTAIN CARBON MONOXIDE GAS AND MAY COLLECT IN ENCLOSED AREAS

KEEP COCKPIT CABIN AND CABIN AREAS WELL VENTILATED. DO NOT USE CANNYS, SIDE CURTAINS, VESSEL WINDSHIELD PROPER VENTILATION

CO SICKNESS SYMPTOMS INCLUDE HEADACHE, NAUSEA, AND DIZZINESS. DO NOT INSTRUCT FOR DIZZINESS.

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION

MRP 1369743 SR-246

⚠ DANGER ⚠

AVOID COLLISIONS

- Maintain look-out as required by the "Rules of the Road".
- Visibility can be limited by high boat trim angles, persons, gear, or weather and light conditions.
- At all times proceed at a Safe Speed so that you can take proper and effective action to avoid hazardous conditions. Such issues are considered under the control of the operator!

AVOID COLLISIONS

In all gasoline powered boats, engine and generator exhaust systems produce carbon monoxide gas (CO). Direct prolonged exposure can result in CO poisoning which may be harmful or fatal. To prevent excess exposure and reduce the possibility of accumulations of CO in the cabin and cockpit areas, proper ventilation is required. Proper ventilation in each the cabin and cockpit areas, through utilization of cabin hatches, cabin doors, cabin windows, cockpit windshield windows and side windshield vents to increase air movement through the cabin and cockpit areas. Proper ventilation is required to prevent the accumulation of CO in and about the boat and require the operator's particular attention:

1. Operation at slow speeds or dead in the water.
2. Operation with a high bow angle attitude.
3. The utilization of canvas tops, side curtains and back.
4. Contributing climatic conditions, such as a head wind.
5. Operation of engines and/or generator inclosed spaces or at deckside.
6. Any blockage of hull exhaust outlets.

Indications of excessive exposure to CO concentrations may include nausea, dizziness and drowsiness.

DO NOT USE Sun Pads, Boarding Ladder or Swim Platform and Tamaron Door should be closed when engine is running.

MRP # 324756

SR-47

12VDC-15A MAX

⚠ DANGER

AVOID COLLISIONS

- Maintain look-out as required by the "Rules of the Road".

- Visibility can be limited by high boat trim angles, persons, gear, weather and light conditions.

- At all times proceed at a Safe Speed so that you can take proper and effective action to avoid hazardous conditions.

- Such issues are considered under the control of the operator!

AVOID RISK OF INJURY OR DEATH. SHUT OFF ENGINE PRIOR TO USING SUNPADS, SWIM PLATFORM OR BOARDING LADDER.

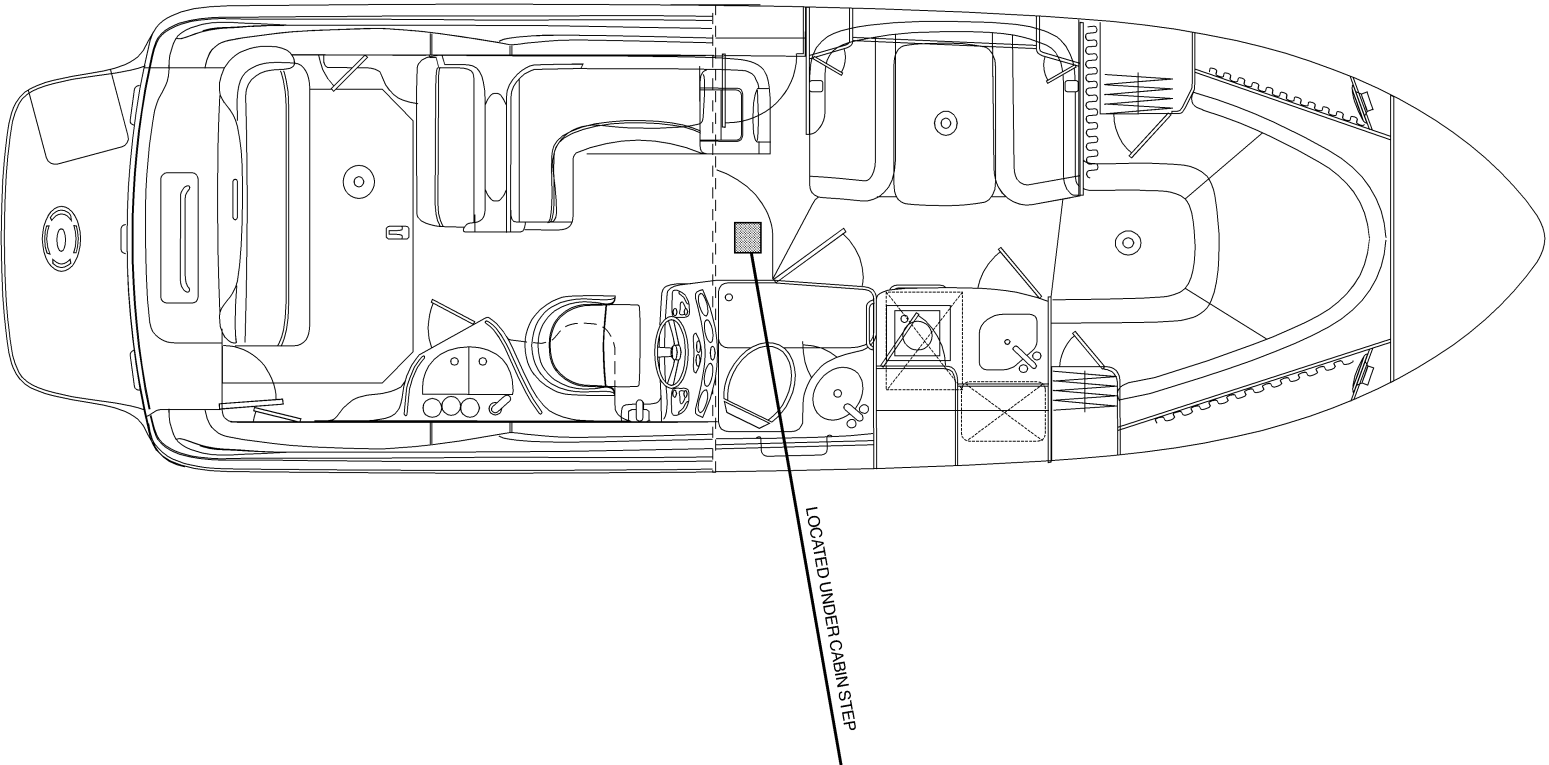
MRP 987727 SR-187

This tag is used on boats with diesel engines.

This tag is used on boats with gasoline engines.

Safety Label Locations (Continued)

(fig. 73.1)



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	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.
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	GRAYWATER - Means drainage from a dishwasher, shower, laundry, bath, and washbasin, and does not include drainage from toilets, urinals, hospitals, and cargo spaces.
12 TO 25 MILES PLASTICS	

MRP # 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.

Sea Ray