

# C-28 | Owner's Manual



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## CONGRATULATIONS

The Cutwater family has a passion for boating. We are committed to continuous process improvement in all areas that affect our customer's satisfaction with our products and providing great customer service.

## SAFETY

Safety is always a concern at Cutwater. Please read all manuals to insure that equipment is used in a safe manner. We highly recommend attendance in a Coast Guard approved boating safety course. Such courses are available from the Coast Guard directly or from boating organizations. Owners should have annual inspections to ensure that all safety equipment is current.

## SYMBOL GLOSSARY

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Attention! – Important Operating or Maintenance Instructions



Attention! – Electrical Shock Hazard



Fresh Water



Black Water



Fuel



Standard Equipment



Optional Equipment



Hints

## SPECIFICATIONS

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LOA molded .....	28' – 4"	8.63 m
LOA rigged (with swim & pulpit) .....	32' – 4"	9.85 m
LOA on factory trailer .....	37' – 5"	11.4 m
Height on factory trailer (with folded mast) .....	12' – 9"	3.9 m
Bridge clearance (with folded mast) .....	9' – 1"	2.76 m
Beam .....	8' 6"	2.59 m
Draft .....	28"	.71 m
Fuel capacity .....	100 U.S. Gal	378.5 L
Water capacity .....	40 U.S. Gal	151.4 L
Holding tank capacity .....	30 U.S. Gal	113.6 L
Weight (Dry) .....	8,000 lbs	3,629 kg
Engine .....	Volvo D4 260 HP Diesel	

*(Subject to Change Without Notice)*

# EQUIPMENT LOCATION



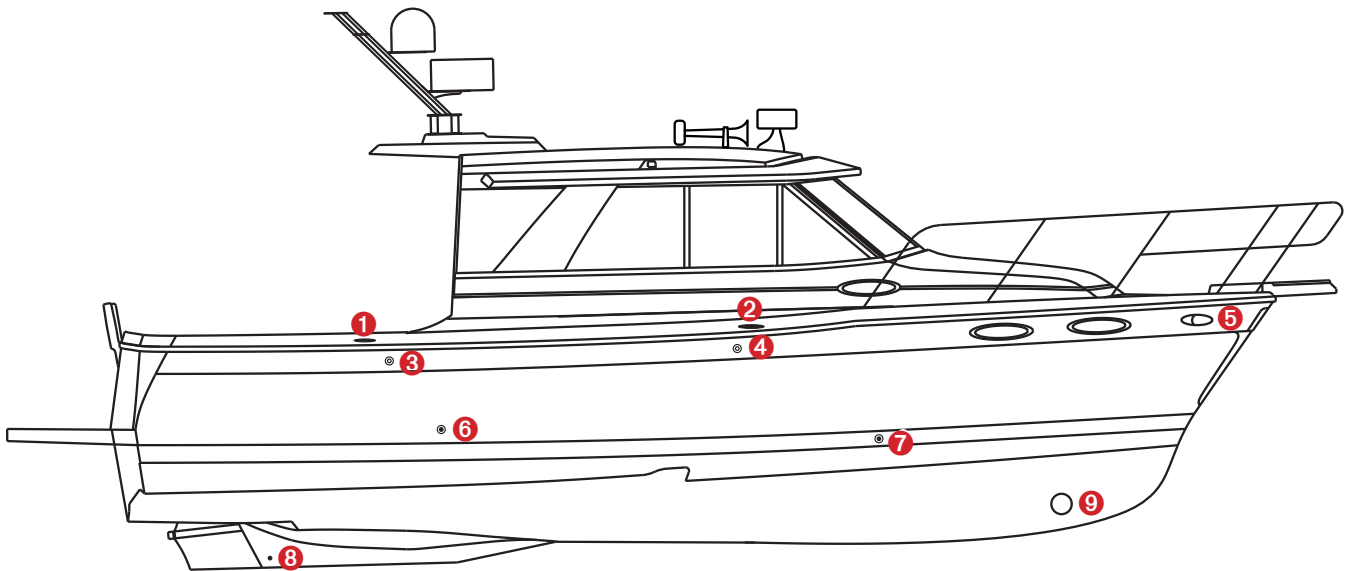
## STARBOARD FITTINGS

STE

1 2 3 4 5 6 7 8 9



Keep all vents, drains and exhausts clear of any obstructions to ensure proper performance of each system.



- 1 Diesel Fill
- 2 Fresh Water Fill
- 3 Fuel Vent
- 4 Water Vent
- 5 Docking Lights
- 6 Aft Sink Drain
- 7 Head Sink Drain
- 8 Keel Drain Plug
- 9 Bow Thruster

# PORT FITTINGS



**STE**

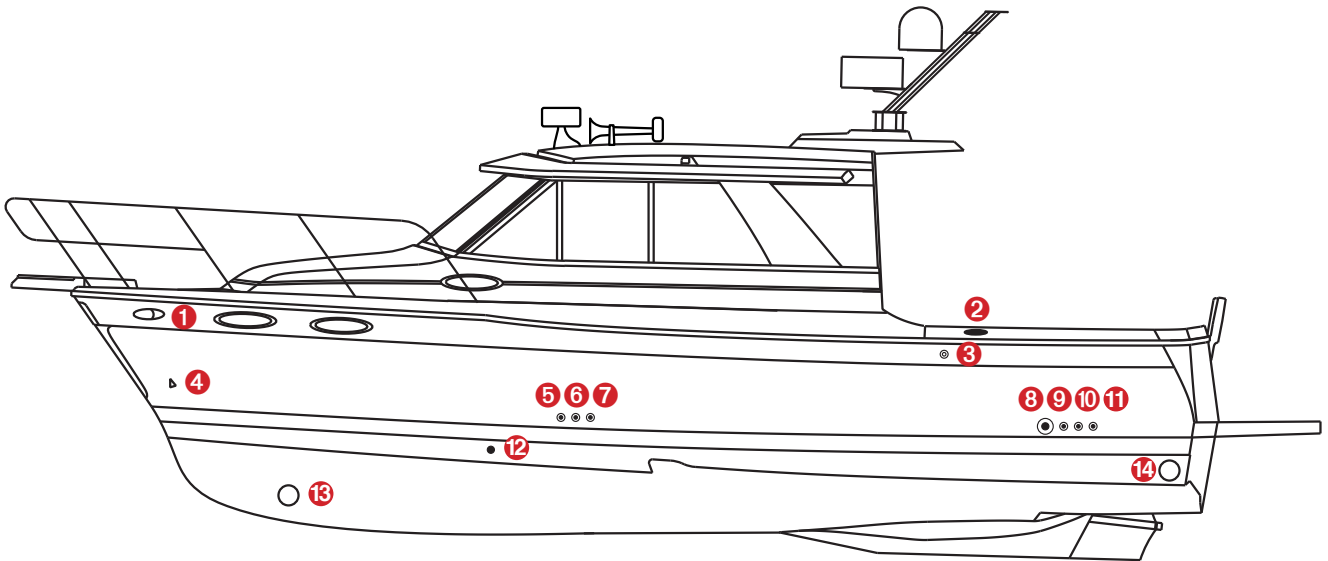
1 2 3 4 5 7 9 10 11 12 13 14

**OPT**

6 8



Keep all vents, drains and exhausts clear of any obstructions to ensure proper performance of each system.



- |                         |                       |
|-------------------------|-----------------------|
| 1 Docking Lights        | 8 Generator Exhaust   |
| 2 Waste Pumpout         | 9 Forward Bilge Drain |
| 3 Waste Vent            | 10 Aft Bilge Drain    |
| 4 Anchor Locker Drain   | 11 Macerator          |
| 5 Shower Sump           | 12 Forward Sink Drain |
| 6 Air Conditioner Drain | 13 Bow Thruster       |
| 7 Cabin Sink Drain      | 14 Engine Exhaust     |

## MAIN CABIN TOP DECK COMPONENTS

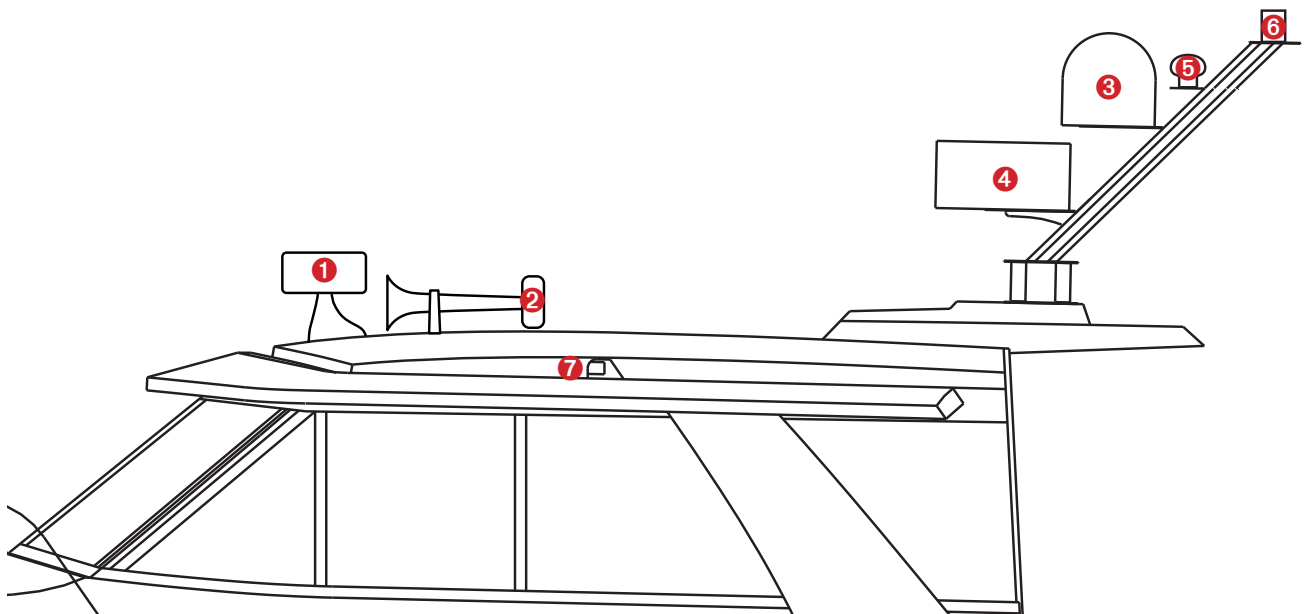


STE

1 2 3 6

OPT

4 5



- ① Searchlight
- ② Horn
- ③ Digital TV Antennae (satellite ready - not included)
- ④ Radar
- ⑤ GPS
- ⑥ Anchor Light
- ⑦ Port Navigation Light



# STERN COMPONENTS

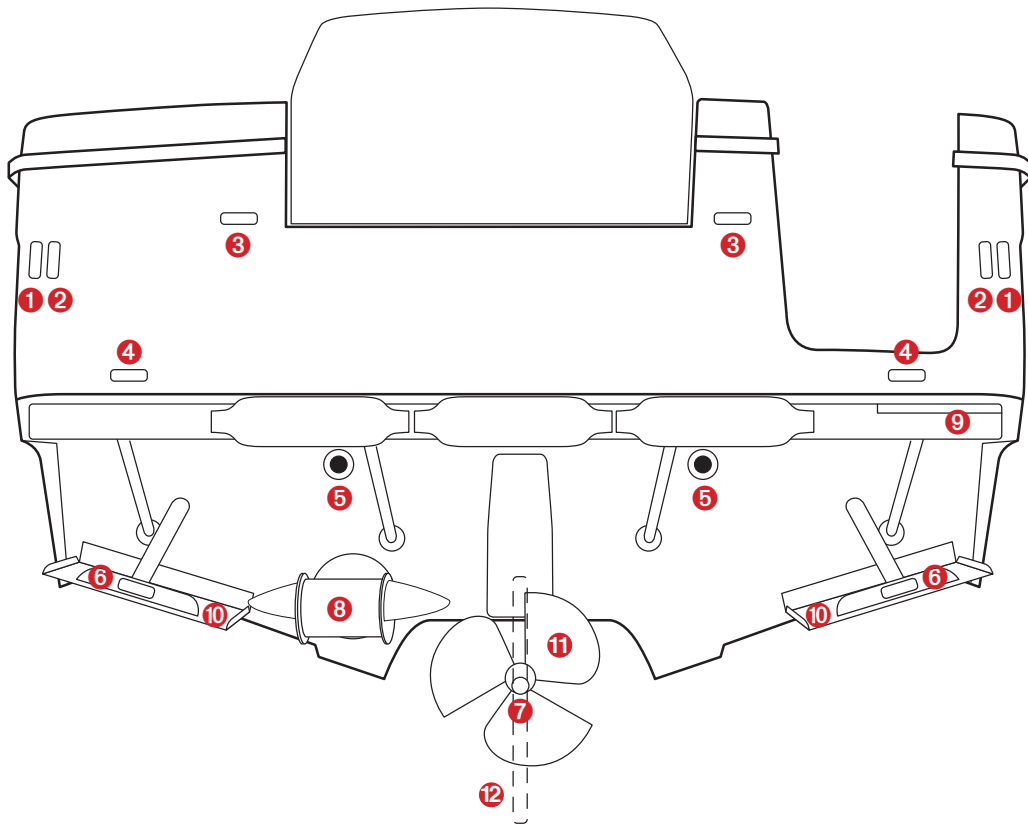


**STE**

1 2 3 4 5 7 8 9 10 11 12

**OPT**

6



- 1 Brake Lights
- 2 Backup Lights
- 3 Running Lights
- 4 Courtesy Lights
- 5 Cockpit Drains
- 6 Underwater Lights
- 7 Prop Zinc
- 8 Stern Thruster
- 9 Swim Platform Retractable Ladder
- 10 Trim Tabs
- 11 Prop
- 12 Rudder

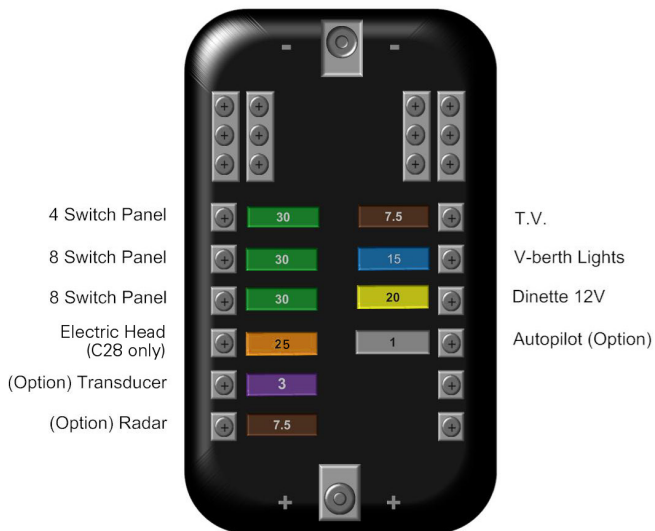
# FUSE LOCATION & VALUES



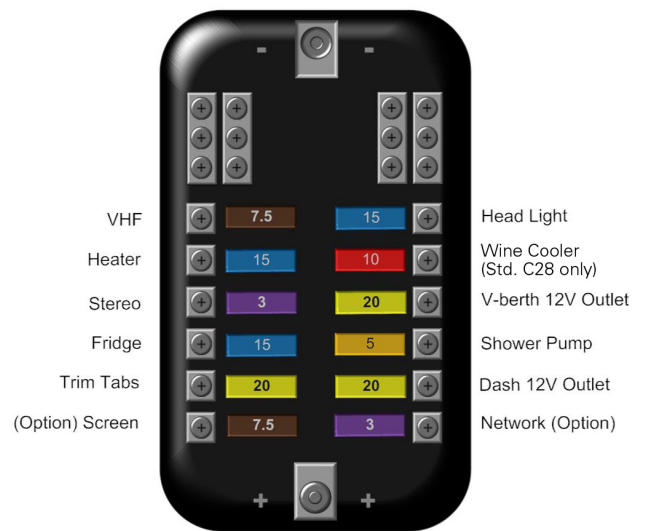
**STE**

The dash fuse blocks are located behind the hinged mirror located inside of the bathroom. Fuses are automotive blade type and all values are shown in amps.

**Dash Fuse Block #1**



**Dash Fuse Block #2**



# FUSE LOCATIONS AND VALUES CONTINUED



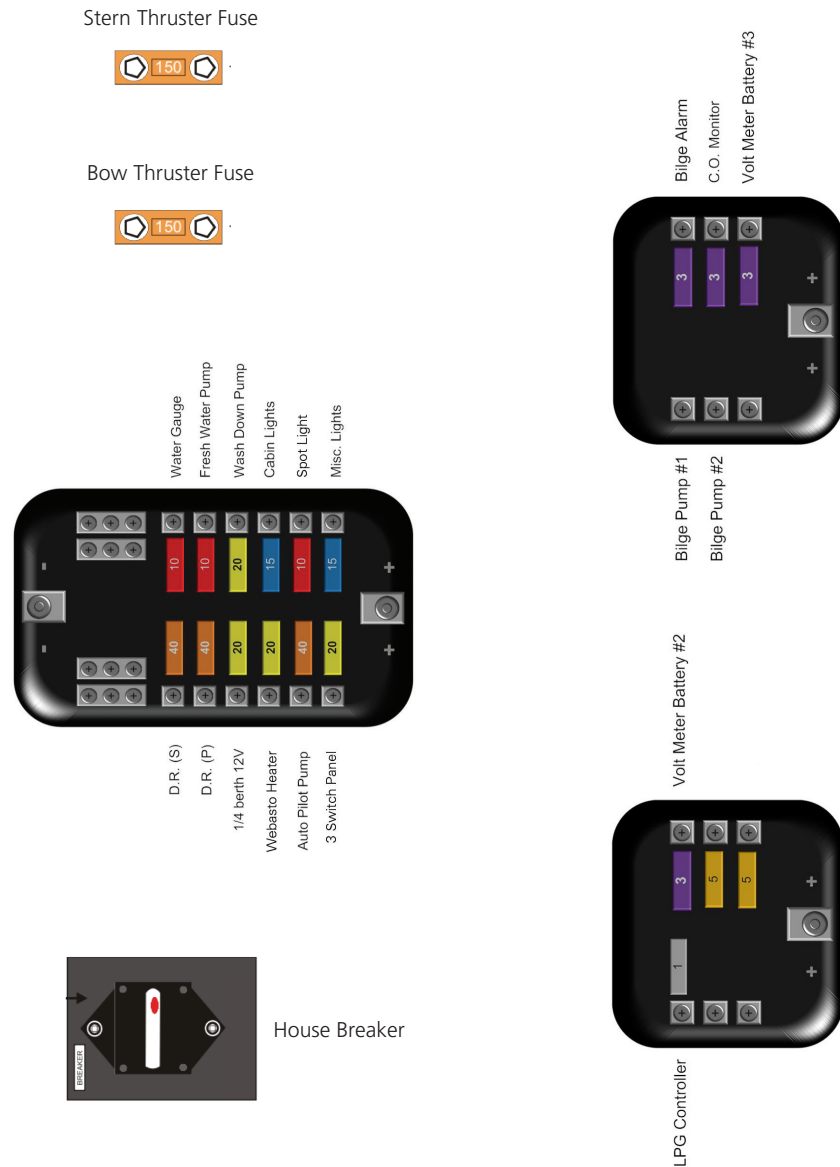
**STE**

These five blocks and fuses are located behind the carpeted panel that is removable on the aft wall just below the Power Distribution Panel.



The bilge pumps operate automatically with electronic float switches when all switches and breakers are in the OFF position.

However, the BILGE PUMP and BILGE PUMP2 will run continuously once their switches are placed in the on position. Monitor the outflow accordingly. Do not run when dry.

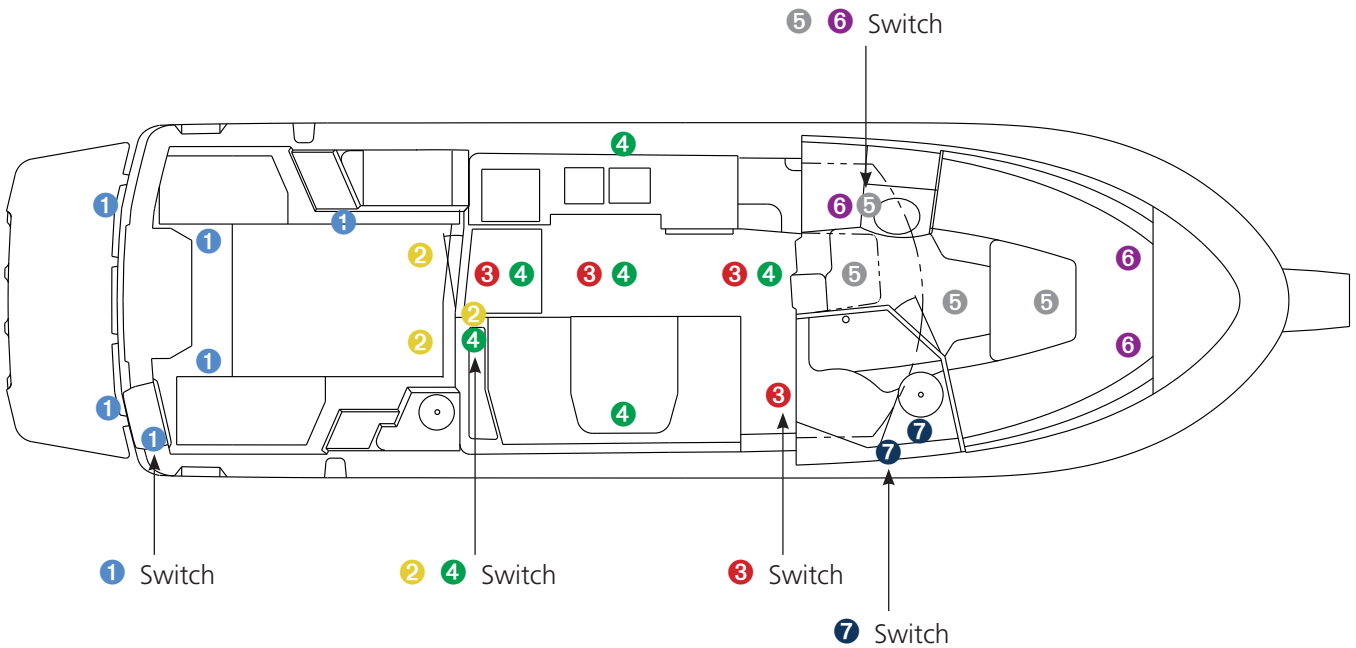


# MAIN CABIN AND COCKPIT LIGHTS



**STE**

	Courtesy Light Switch	V-Berth Light Switch	Cabin Light Switch	Head Light Switch	Chart Light Switch
1 Courtesy Lights	✓				
2 Deck Aft Lights			✓		
3 Chart Lights					✓
4 Cabin Lights			✓		
5 V-Berth Lights		✓			
6 V-Berth Bed Lights		✓			
7 Head Light				✓	



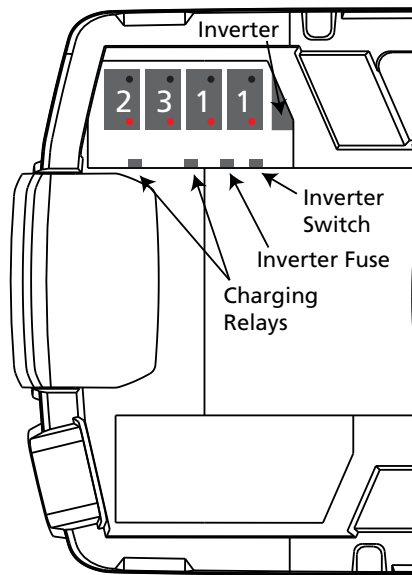
# BATTERY COMPARTMENT



**STE**

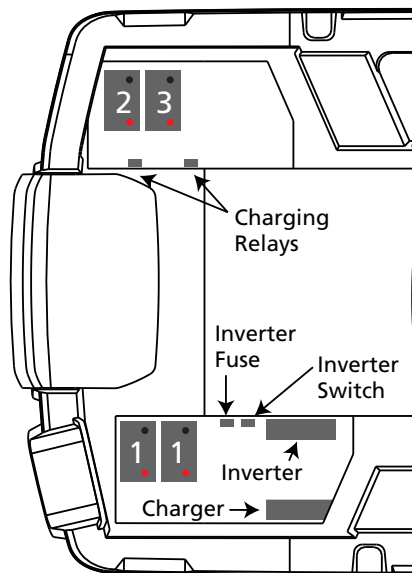
House Batteries, Engine Battery, Thruster Battery, Inverter/Charger, Engine ECM, Inverter Fuse (150 AMP), Inverter/Charger Cutoff Switch

Non-Generator



Batteries
1 = House
2 = Engine
3 = Thruster

Generator



## POWER DISTRIBUTION CENTER



**STE**

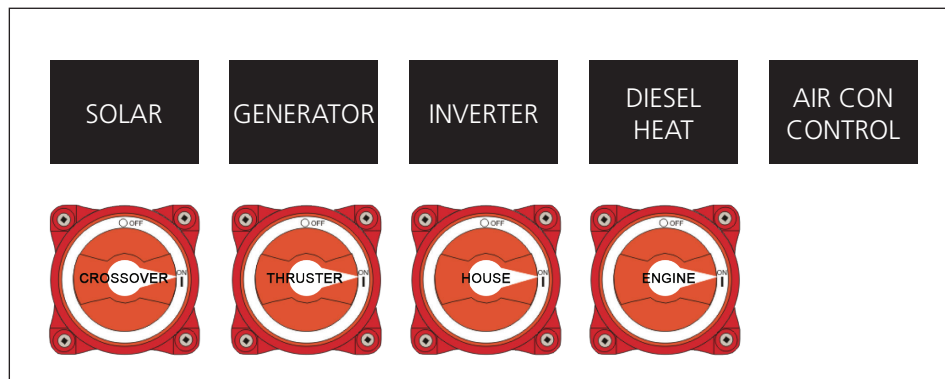
Located under aft dinette seat.  
House, Engine, Thruster crossover switch

**OPT**

Generator Panel, Solar Display, Diesel Heater Control, Air Conditioning Display



The crossover switch should always remain in the off position. While in the on position, the house and engine batteries will be combined as one.



# AC DISTRIBUTION PANEL, ROTARY SWITCH & DC VOLT METER



**STE**

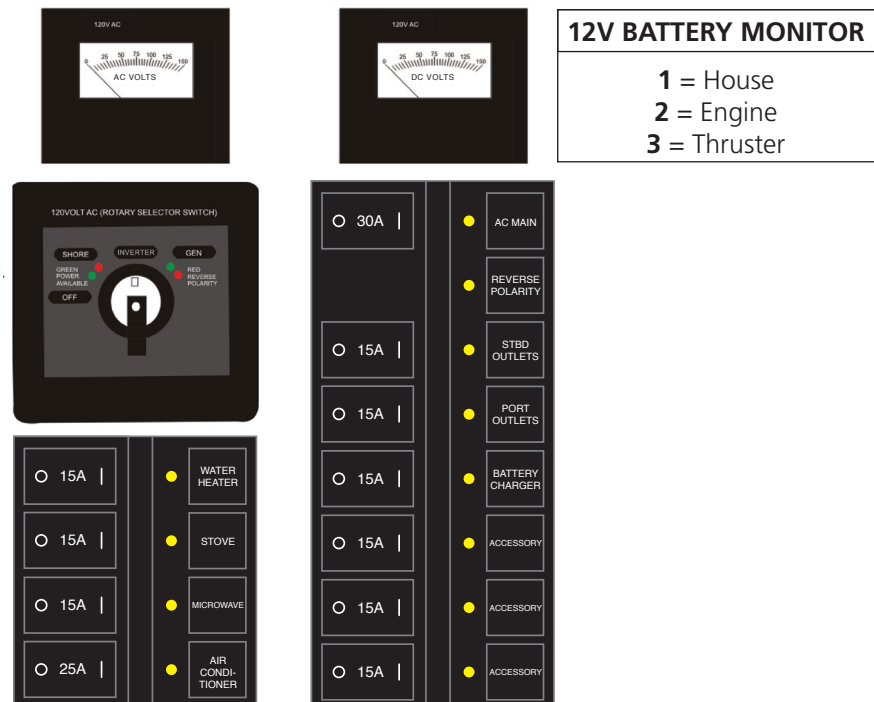
AC Distribution Panel

**OPT**

AC Rotary Selector Switch. Available with Generator



The AC Rotary Switch Selector Switch will determine which source of incoming 120 Volt power to use for your AC Distribution Panel.



# FUEL SYSTEM, ENGINE, GENERATOR & WEBASTO FURNACE



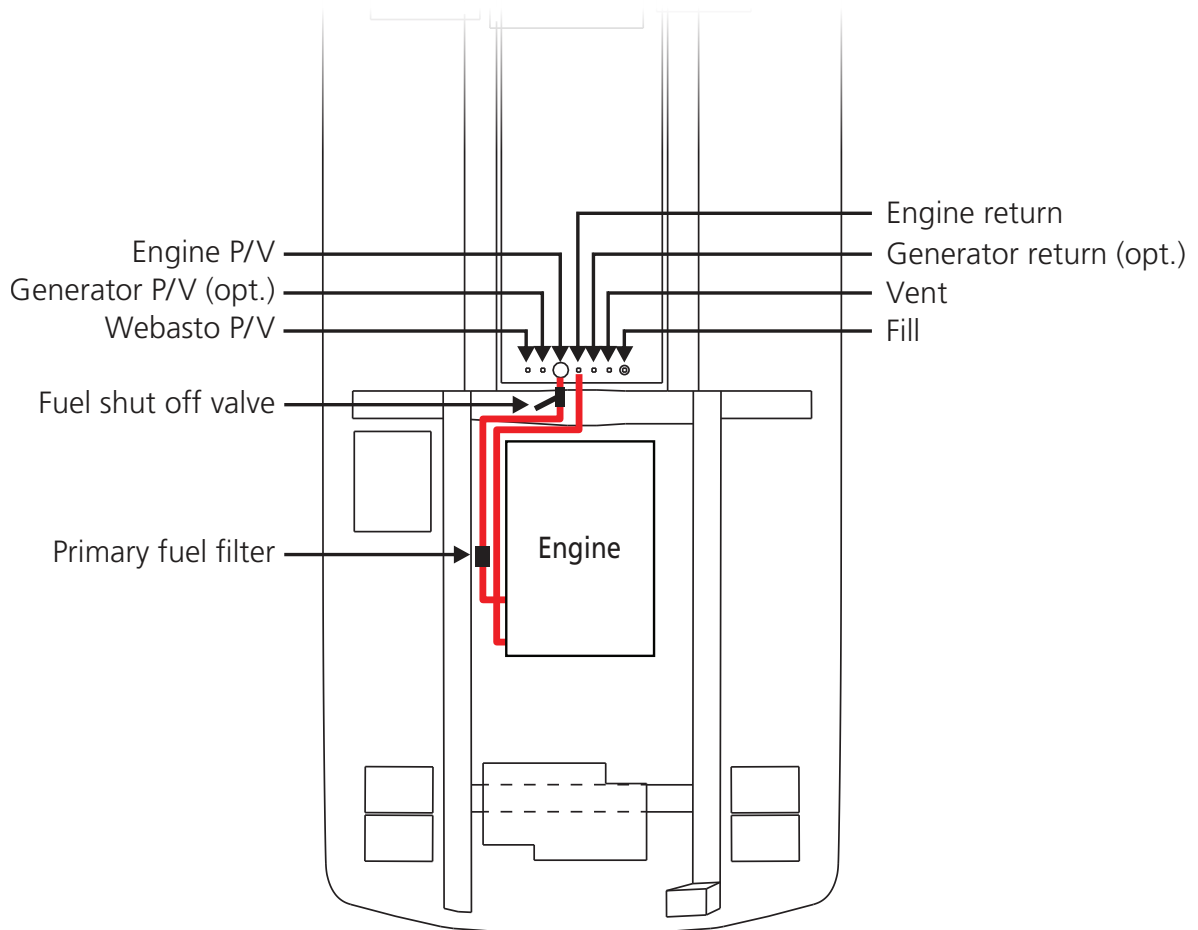
**STE**

C28 Volvo D4 260 H.P. Diesel

**OPT**

Generator 2.7 KW Mase, Webasto Furnace

- There is a secondary on engine fuel filter that is not shown on this drawing. You will be able to find information about this filter in the diesel engine manual supplied with your boat.
- Fuel shutoff and all fuel fittings are located inside the floor hatch as you enter the main cabin.





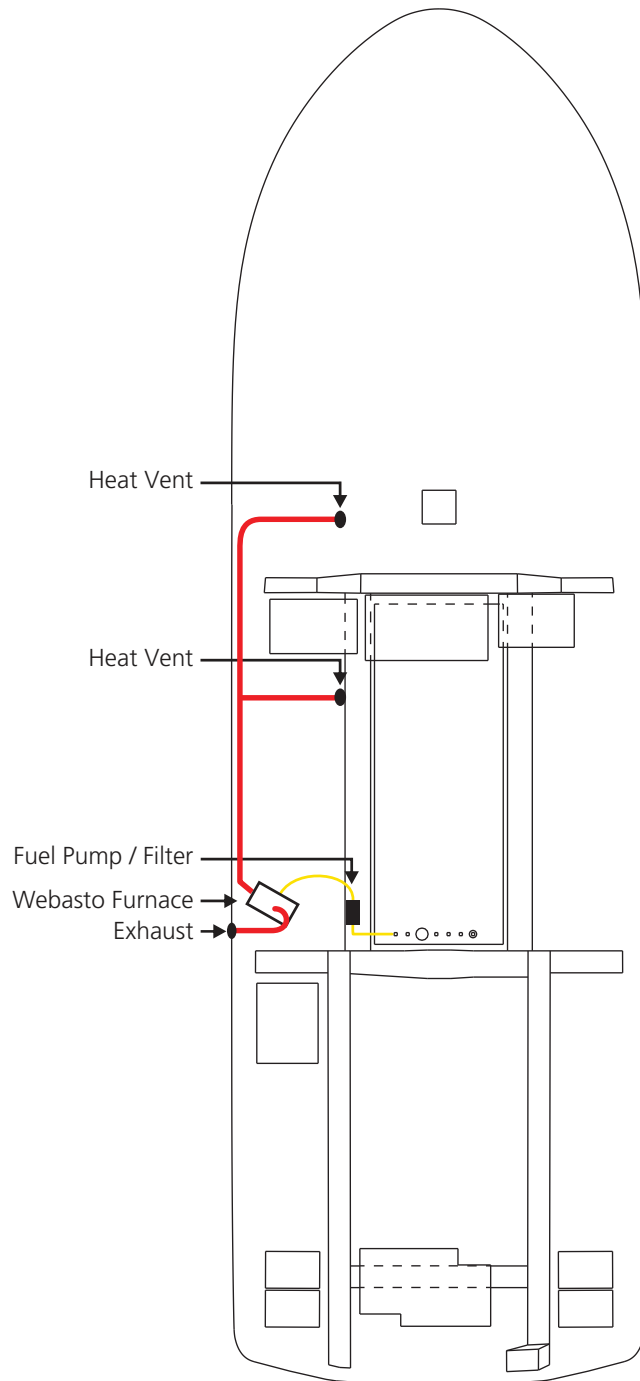
# WEBASTO FURNACE



**STE**

Webasto furnace & pump are located behind an access panel in the quarter berth. The controller is located at the power distribution panel.

**OPT**

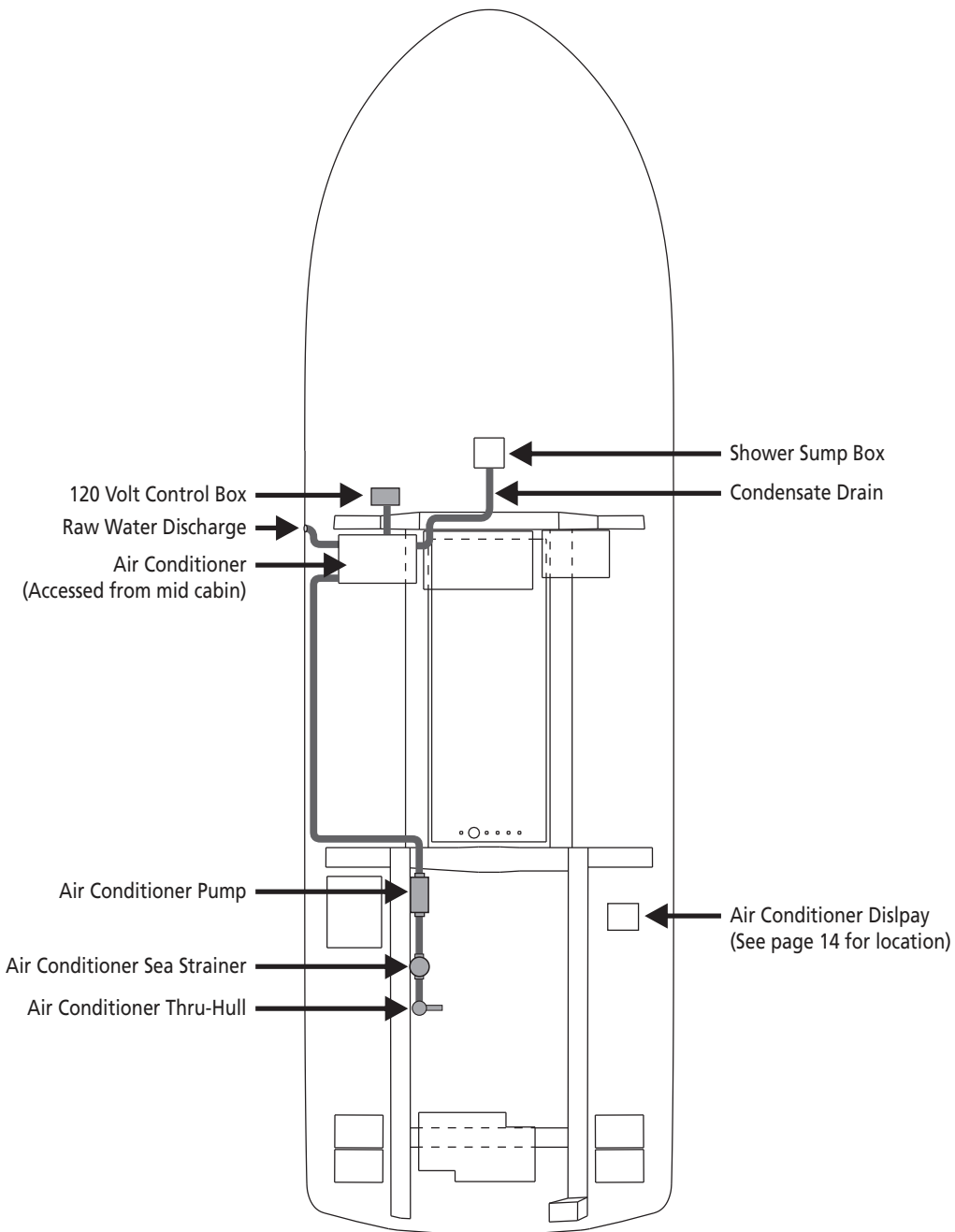


# AIR CONDITIONING SYSTEM



**OPT**

Air Conditioning System

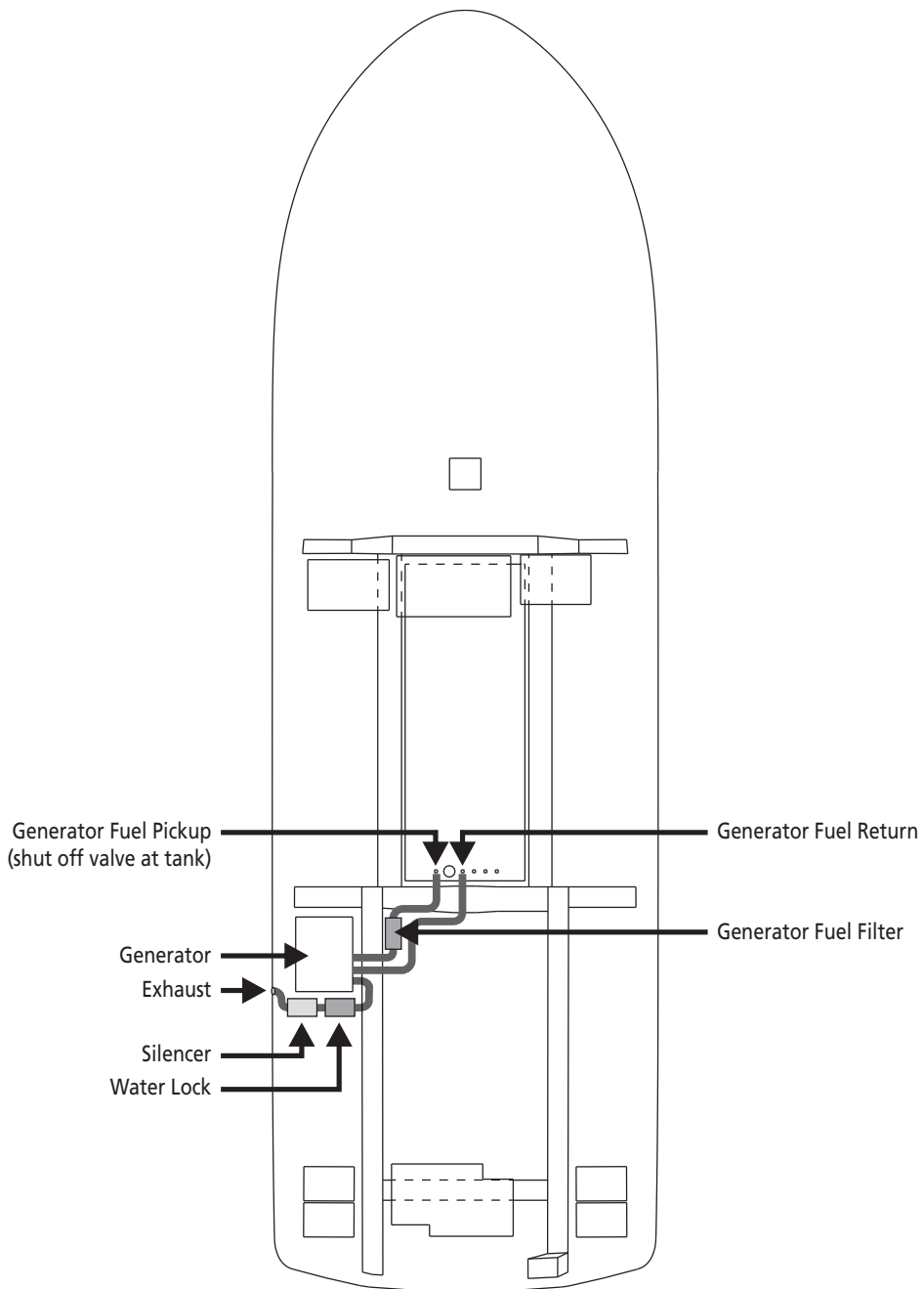


# GENERATOR



**OPT**

Generator 2.7 KW Mase  
\*Generator will start off of thruster battery #3



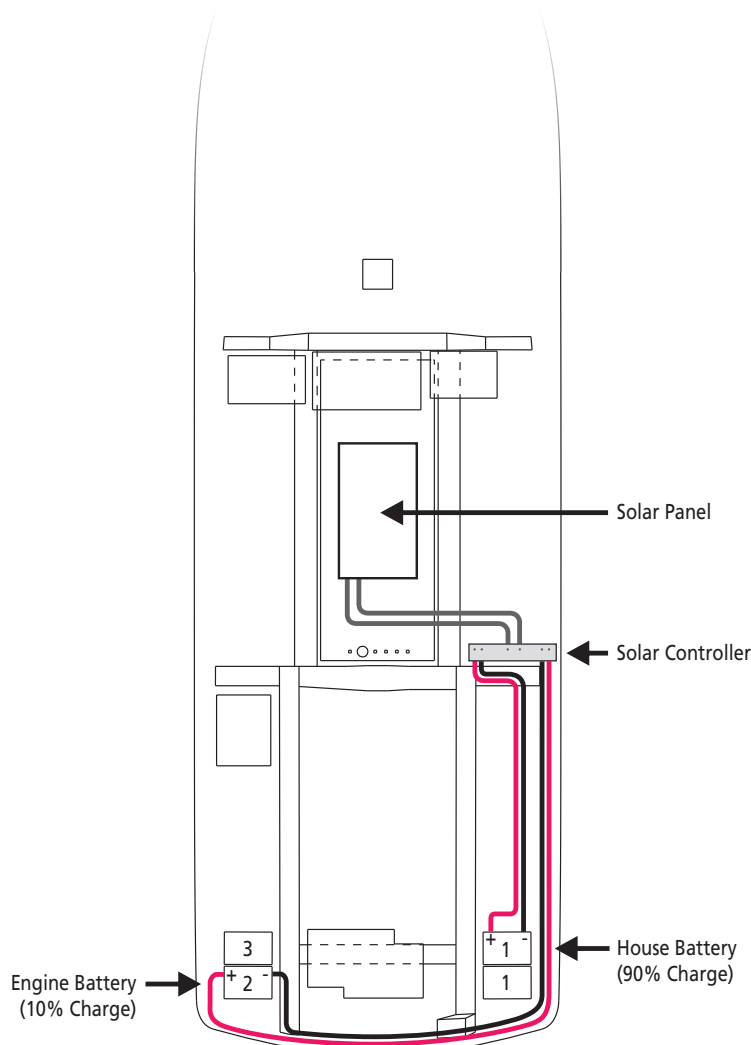
## SOLAR PANEL



OPT

Solar panel 140 watt, with control panel

- The solar panel is designed to provide charging to the house & engine batteries. 90% of its charge is dedicated to the house battery and 10% is dedicated to the engine battery.
  - The green light on the solar display indicates proper operation.
  - The solar controller is located behind the Velcro access panel inside the mid cabin at the aft bulkhead.
- \* House battery location shown with generator option equipped.

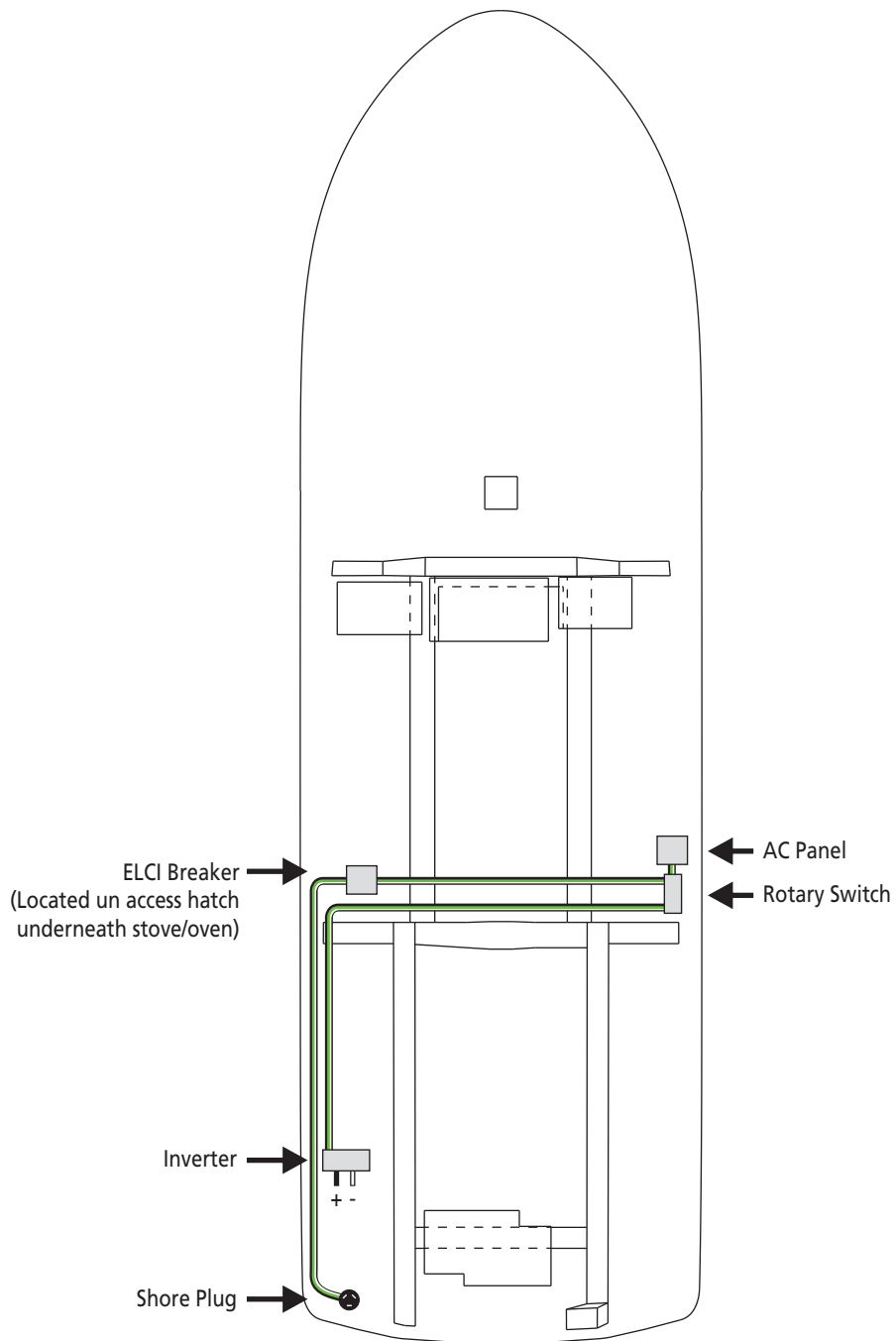


# SHORE POWER LAYOUT



**STE**

Shore Power

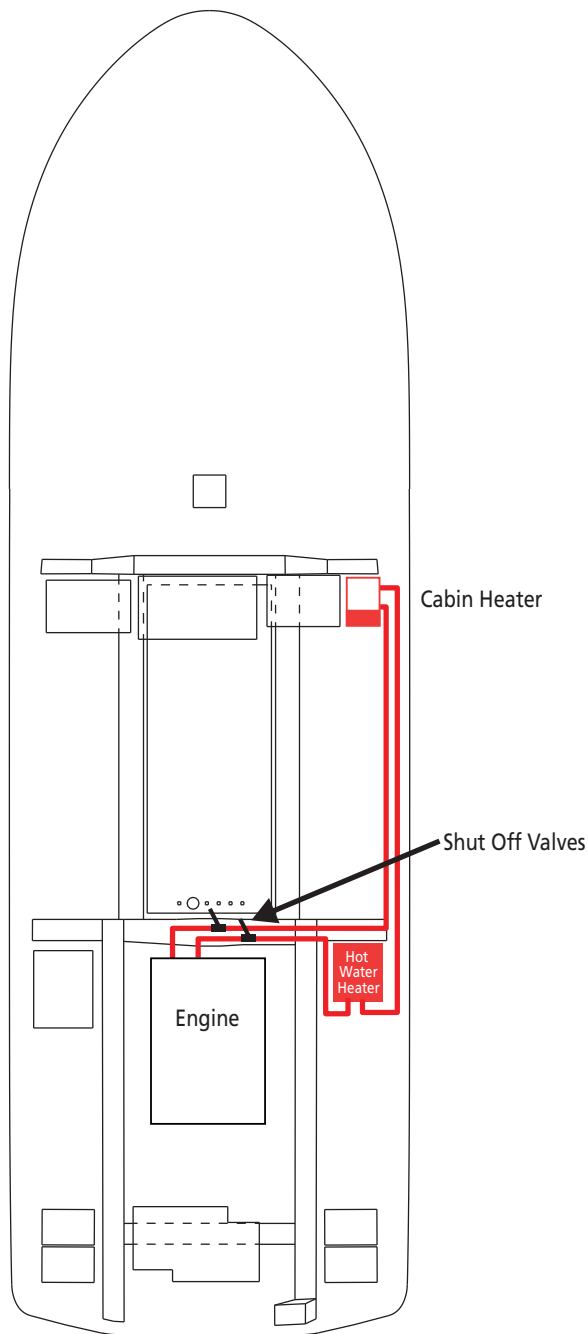


## CLOSED ENGINE COOLING SYSTEM



**STE**

Provides alternate heating system for the Fresh Water Heater and provides primary heating source for the Forced Air Cabin Heater. This system is also designed to provide cooling to the internal components of your engine. Please refer to your engine operations manual for more information.

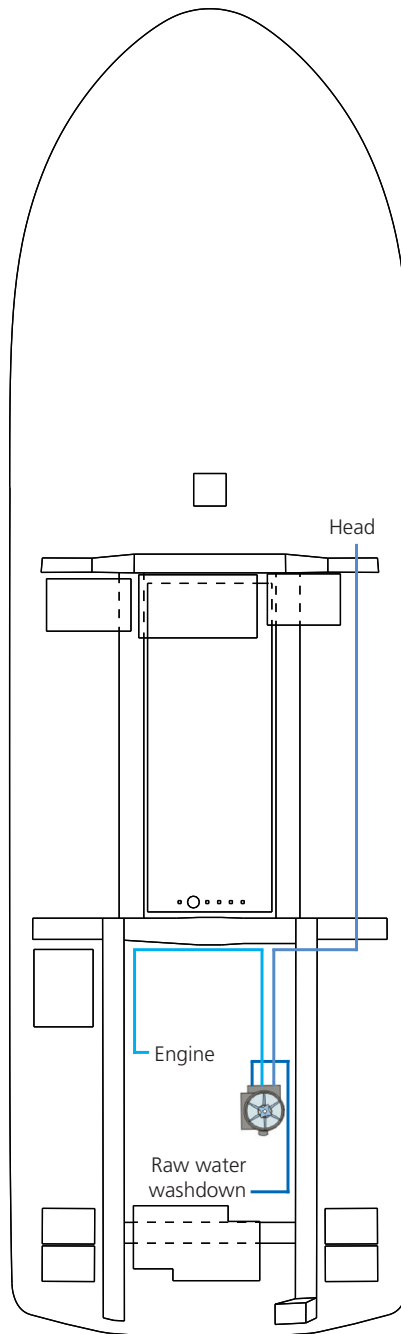


# SEA STRAINER SYSTEM



**STE**

Multi Port Sea Strainer for Engine, Marine Toilet and Raw Water Washdown



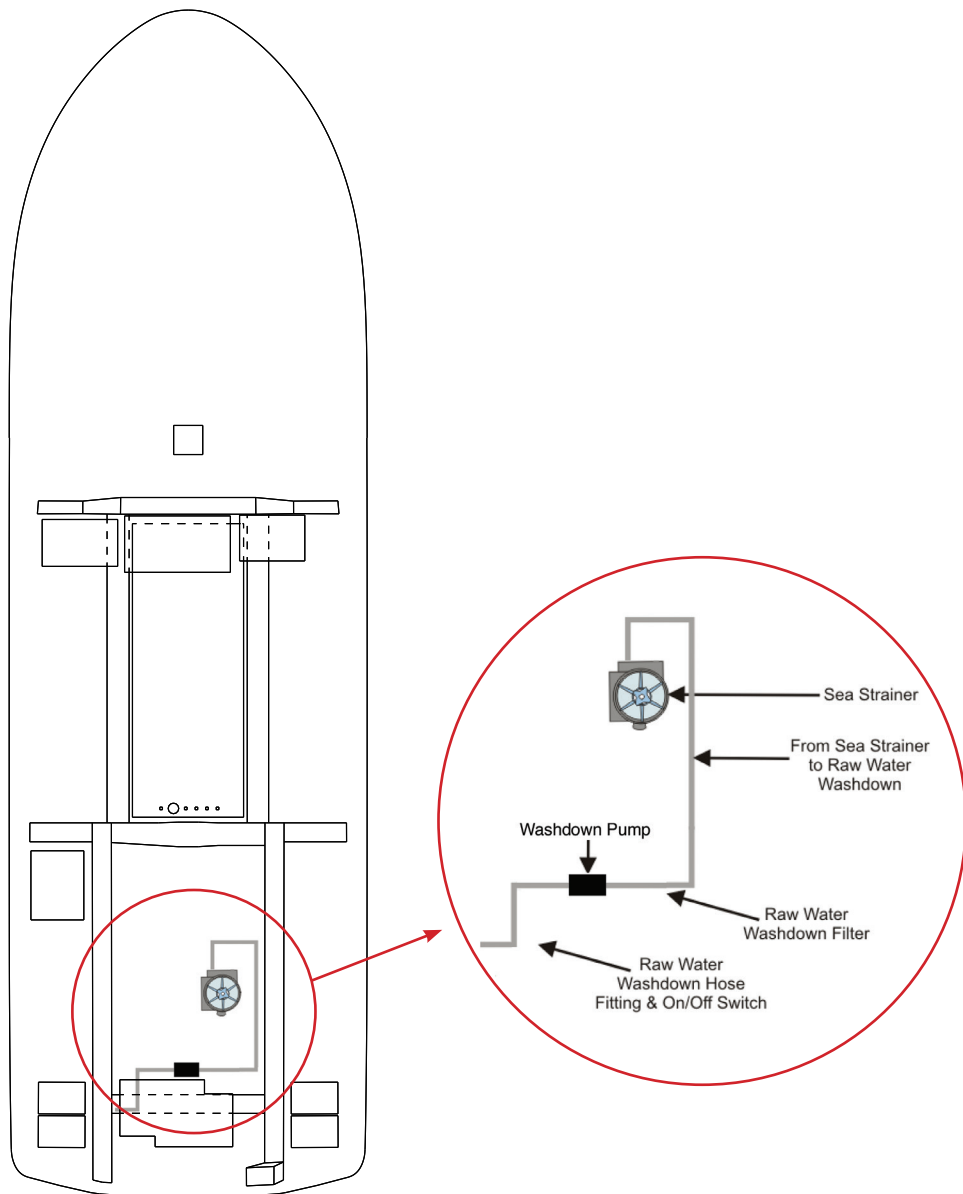
# RAW WATER WASH DOWN



**STE**

Johnson Aqua Jet 5.2 GPM

- The raw water washdown pump and all components shown are accessible from the rear of the engine compartment.



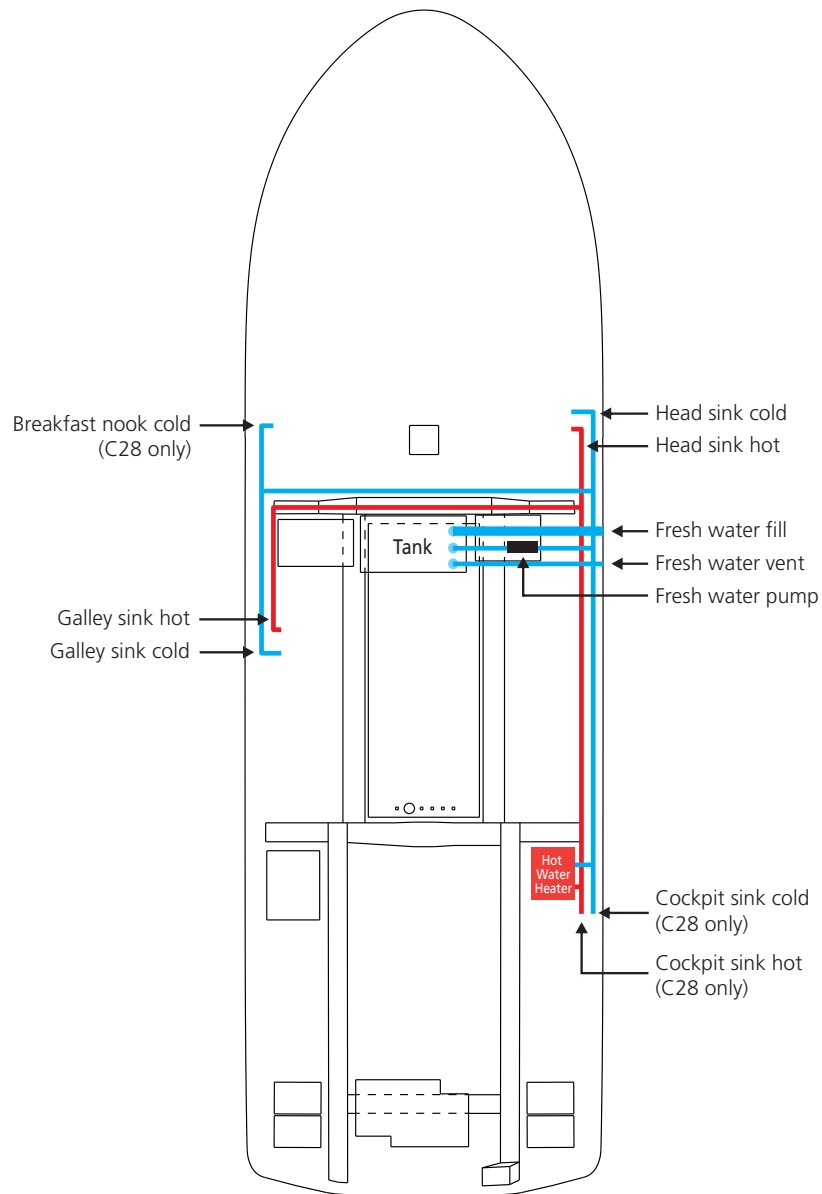


# FRESH WATER PLUMBING SYSTEM



**STE**

40 Gallon Fresh Water Tank, 6 Gallon Hot Water Heater, 4.0 GPM Fresh Water Pump.



## SHOWER SUMP

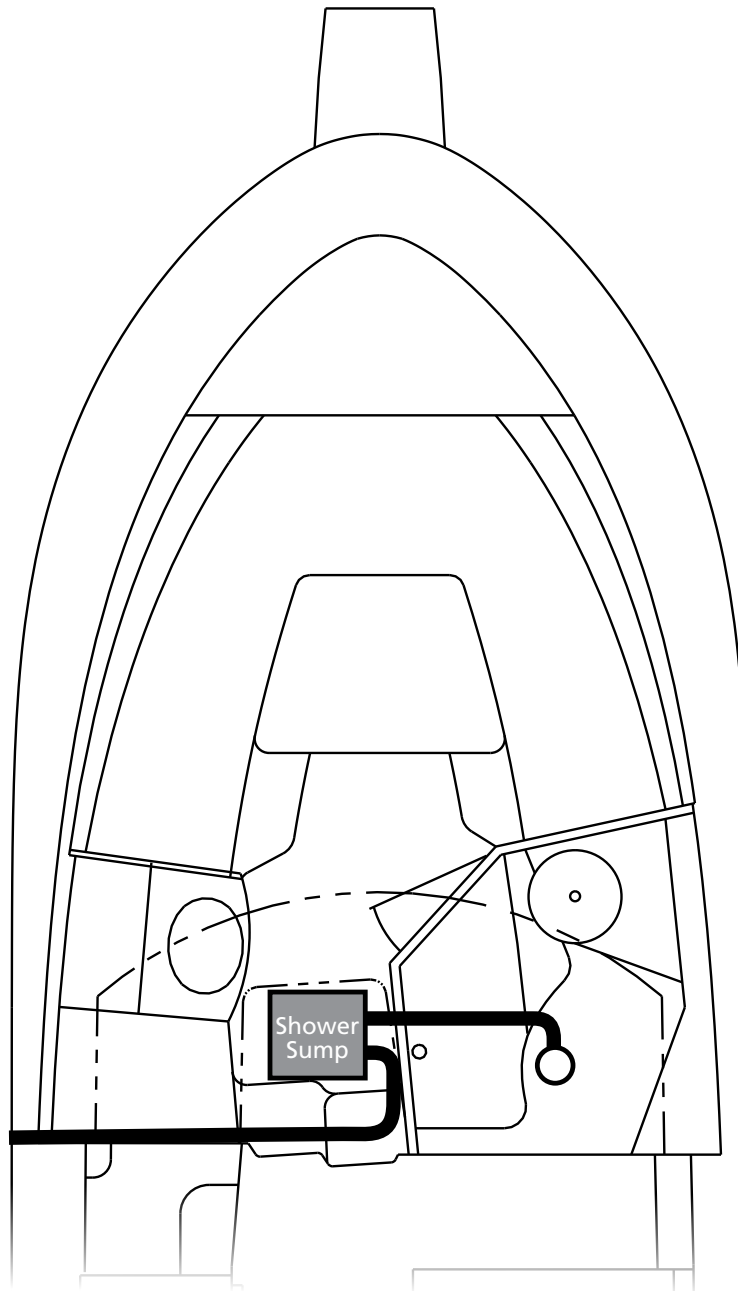
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**STE**

12V, 500 GPH  
(Sump should be inspected for debris on a regular basis if shower is used frequently.)

- The shower sump box is located underneath the teak and holly floor.



# BILGE PUMP SYSTEM



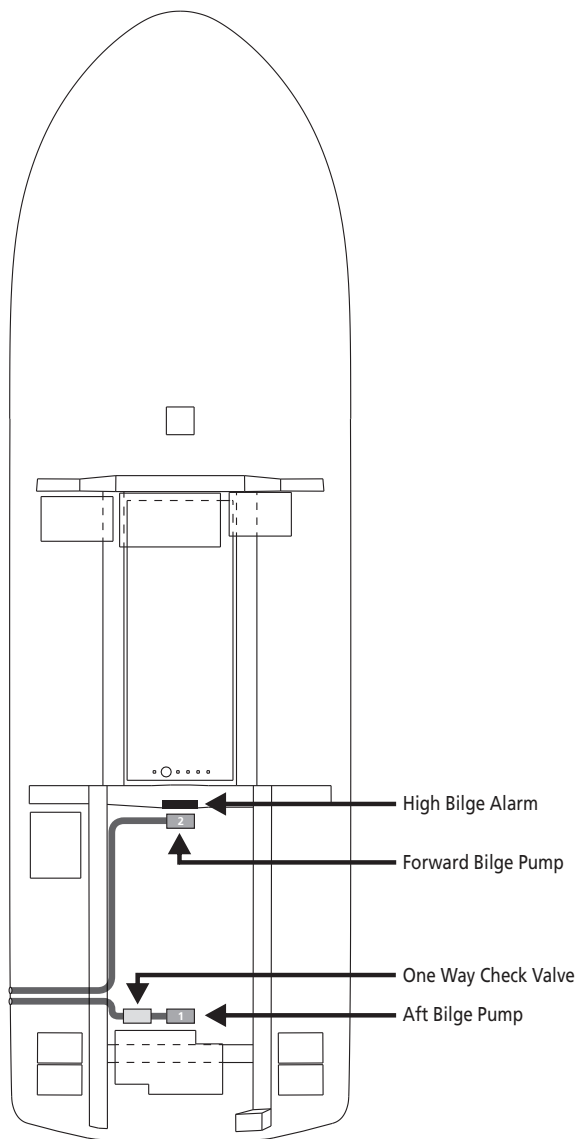
**STE**

12V 750GPH



The bilge pumps operate automatically with electronic float switches when all switches and breakers are in the OFF position.

However, the BILGE PUMP and BILGE PUMP2 will run continuously once their switches are placed in the on position. Monitor the outflow accordingly. Do not run when dry.



# WASTE SYSTEM WITH MACERATOR PUMP



**STE**



30 Gallon Tank with Macerator Pump Out, Standard Pump Out, and Vent



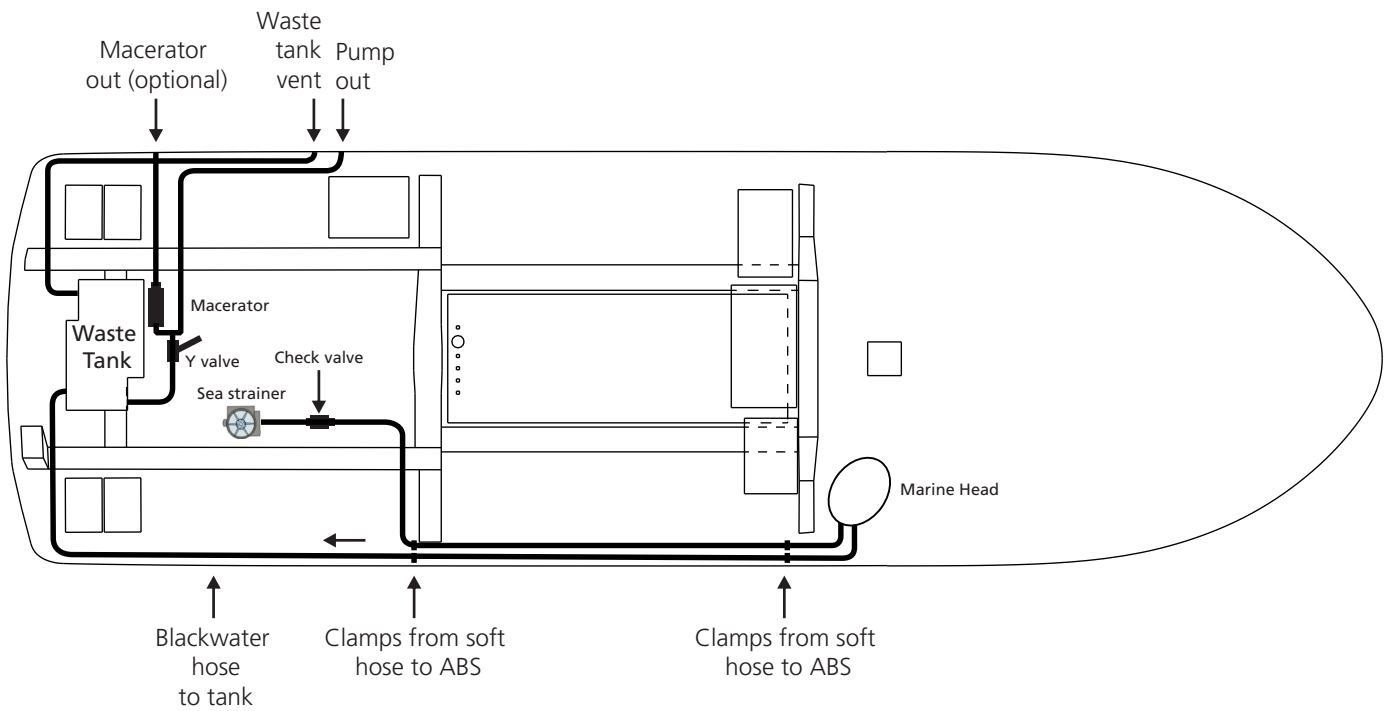
Waste tank fill level can be checked by lifting the engine access hatch and viewing the translucent waste tank. Pump out can be done with the macerator or standard pump out. The Y-Valve that switches between the two can be accessed through the Engine Hatch, aft of the engine.



Waste tank pump out stations are widely available. Please follow the directions carefully for the pump out equipment you are using to avoid damage to the waste system.



Boat owner is responsible for following all applicable laws when using the macerator system to pump out into the surrounding waters.



## MAST SET UP AND TAKEDOWN

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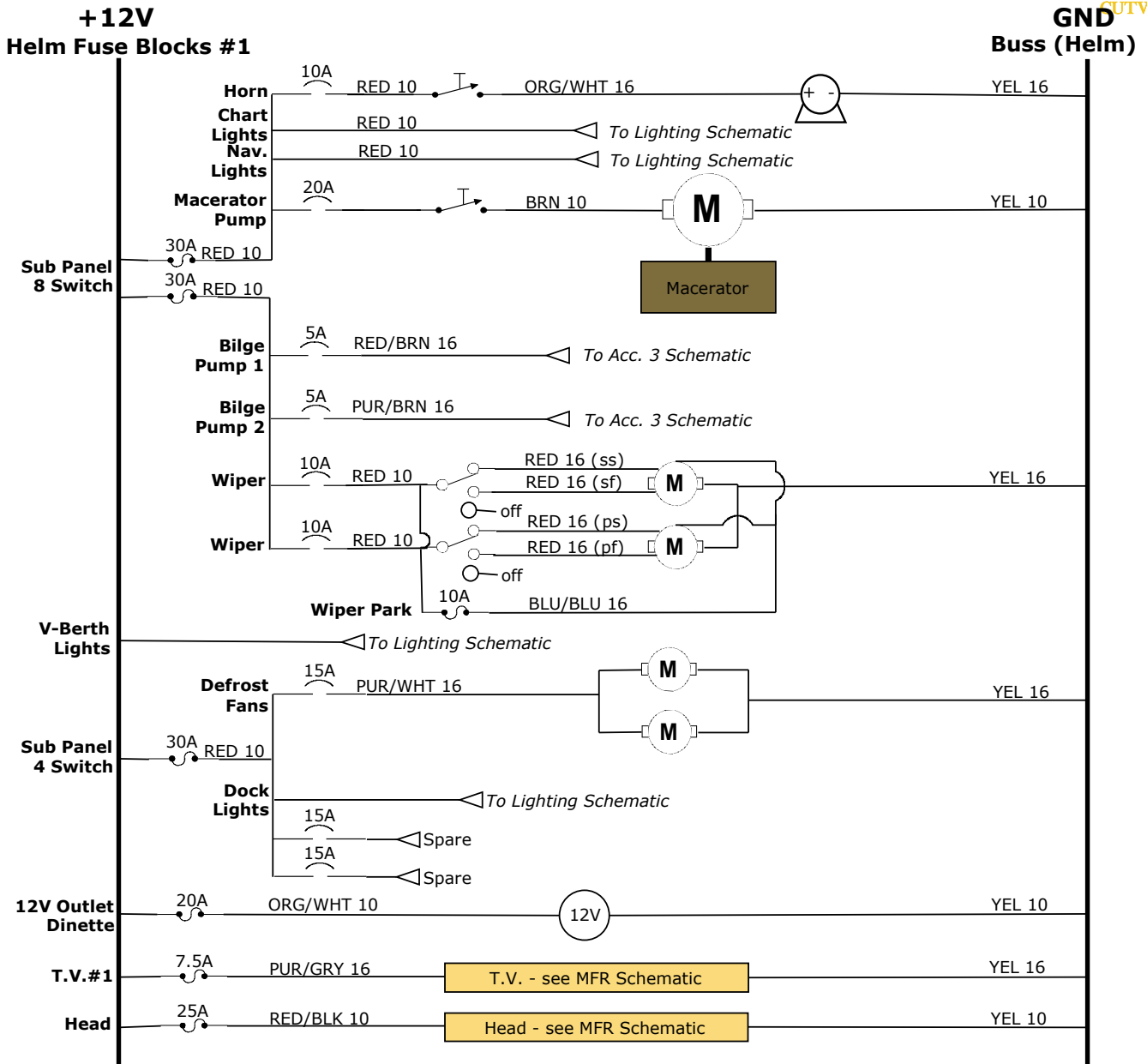
### MAST SET UP PROCEDURE

1. Remove the two black plastic wing nuts from the mast base.
2. While supporting the mast, remove the pin in the support bar.
3. Raise the mast to its full extension and ensure that it fits correctly over the mounting studs on the roof mounting plate.
4. Secure the stainless steel retaining bar in the appropriate clip attached next to the v-berth escape hatch.
5. Attach the two black plastic wing nuts to the mounting studs and hand tighten securely.

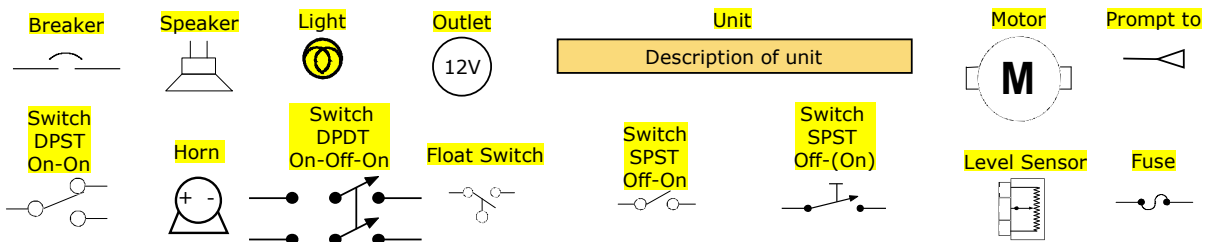
### MAST TAKE DOWN PROCEDURE

1. Remove the two black plastic wing nuts from the mast base mounting studs.
2. Carefully lower the mast onto the stainless steel support bar and attach retaining pin.
3. Attach the black plastic wing nuts back onto the screws on the mast mounting plate and secure them for storage by hand tightening.
4. Recommend securing the mast with a tie down.

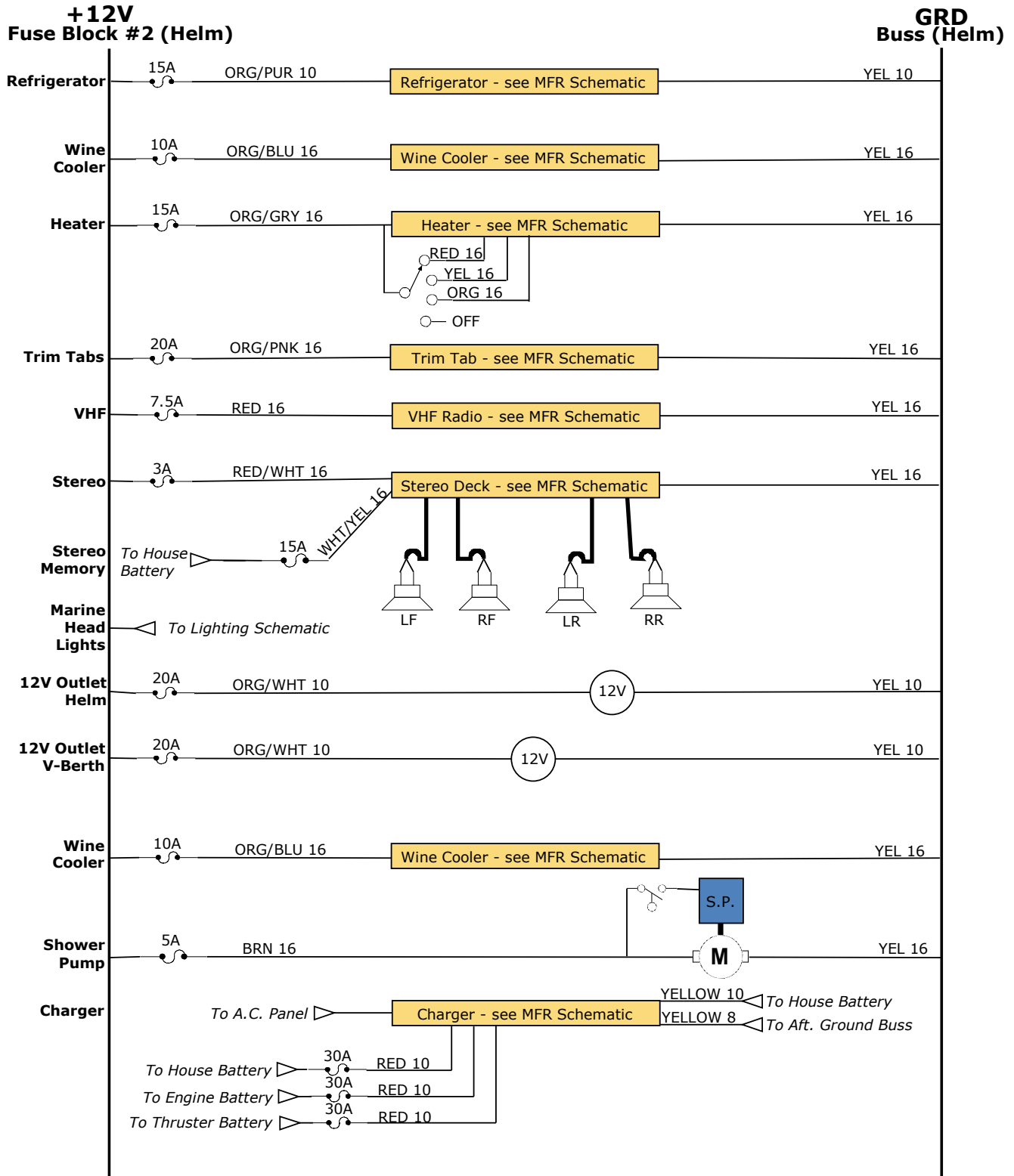
# CUTWATER 28 WIRING SCHEMATIC (ACC. 1)



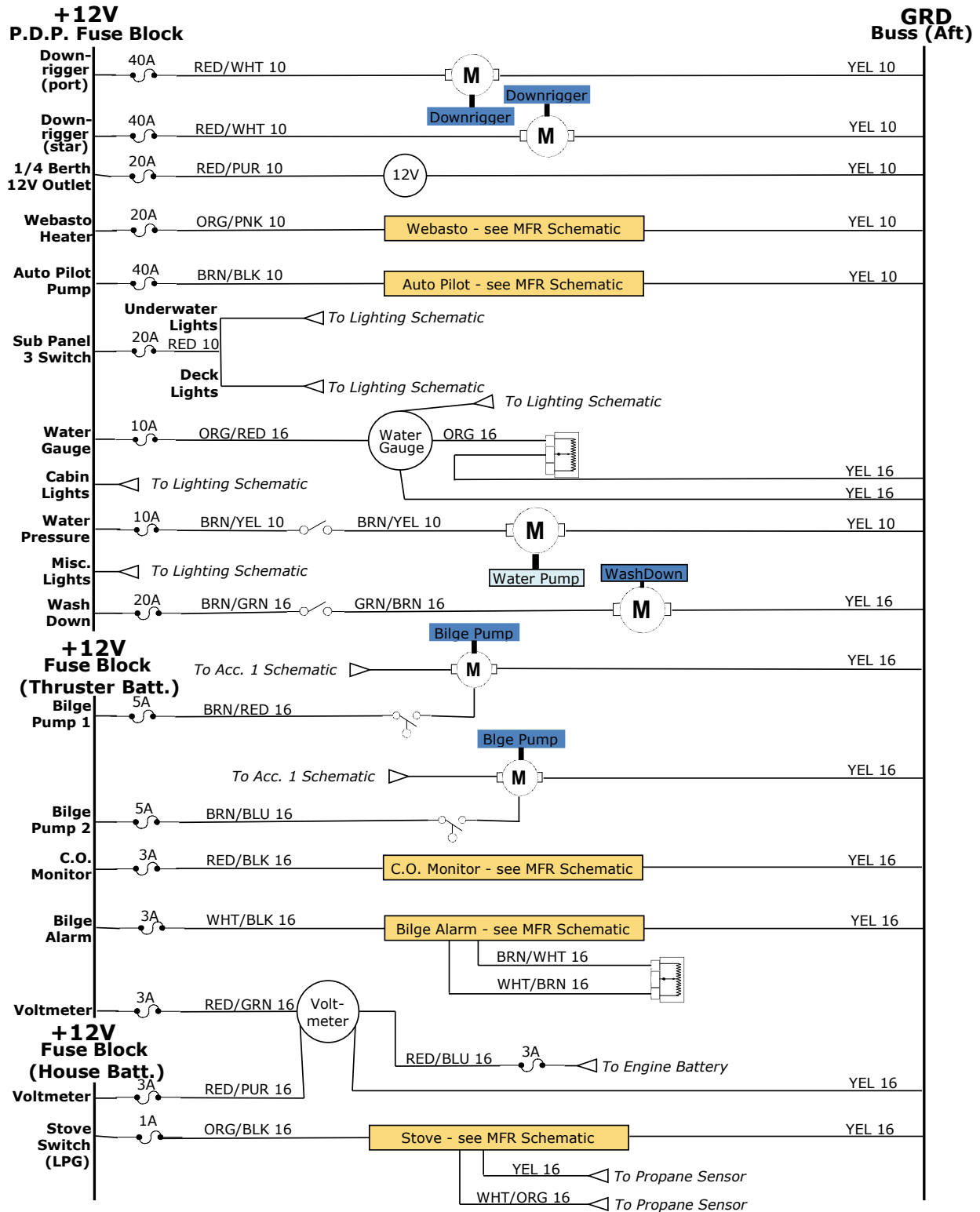
## SYMBOL KEY



# CUTWATER 28 WIRING SCHEMATIC (ACC. 2)

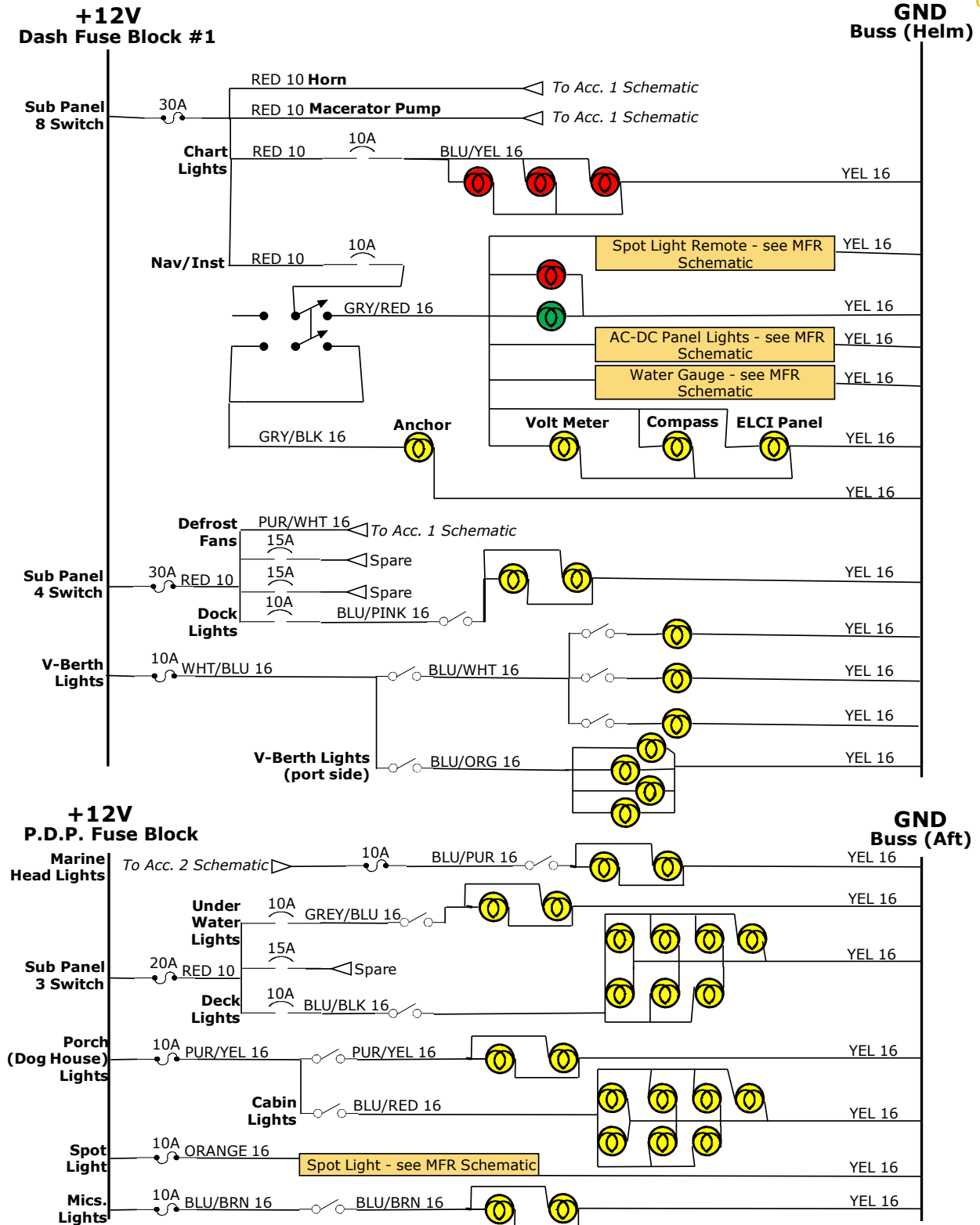


# CUTWATER 28 WIRING SCHEMATIC (ACC. 3)

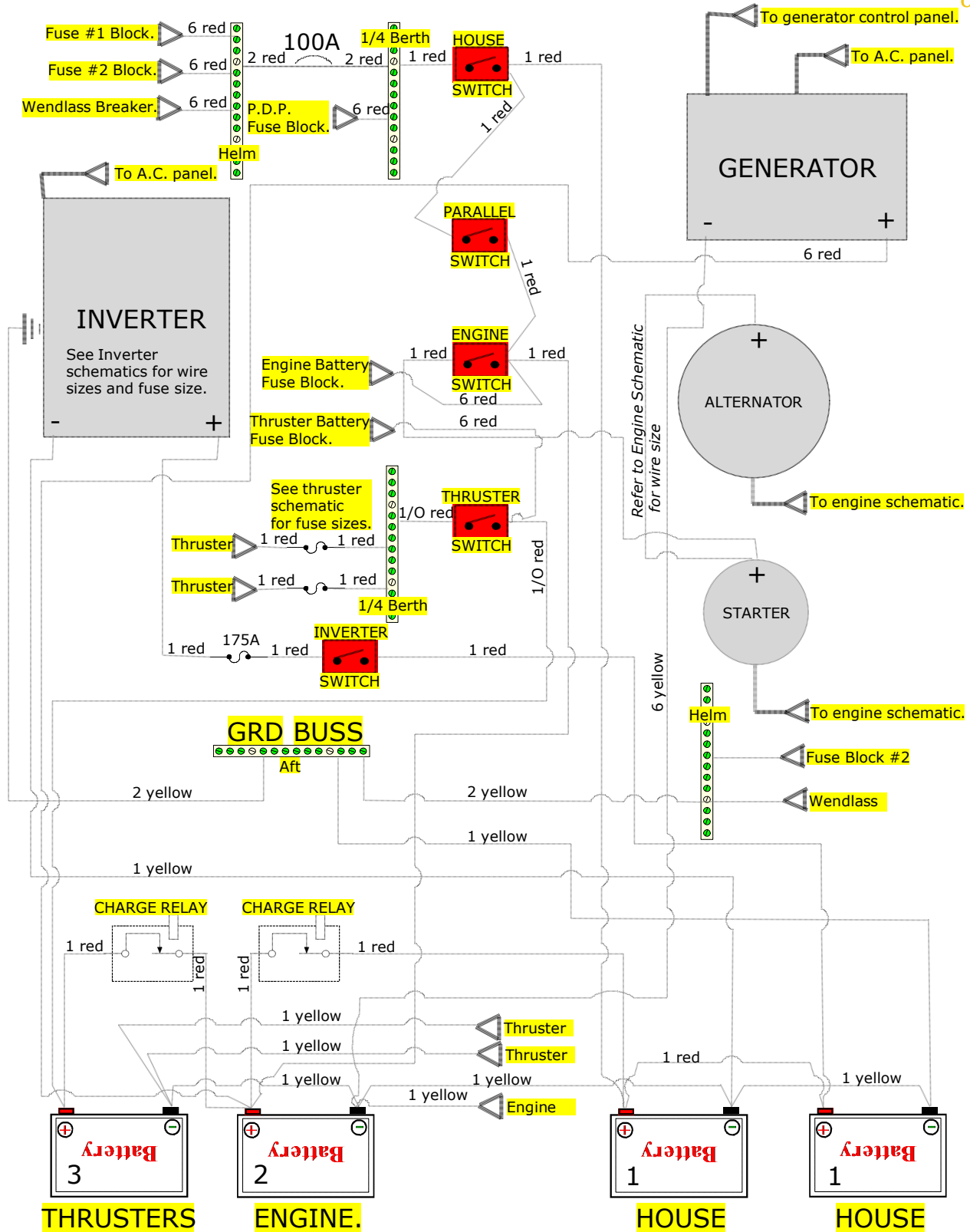




# CUTWATER 28 WIRING SCHEMATIC (LIGHTING)



# CUTWATER 28 WIRING SCHEMATIC (P.D.P.)

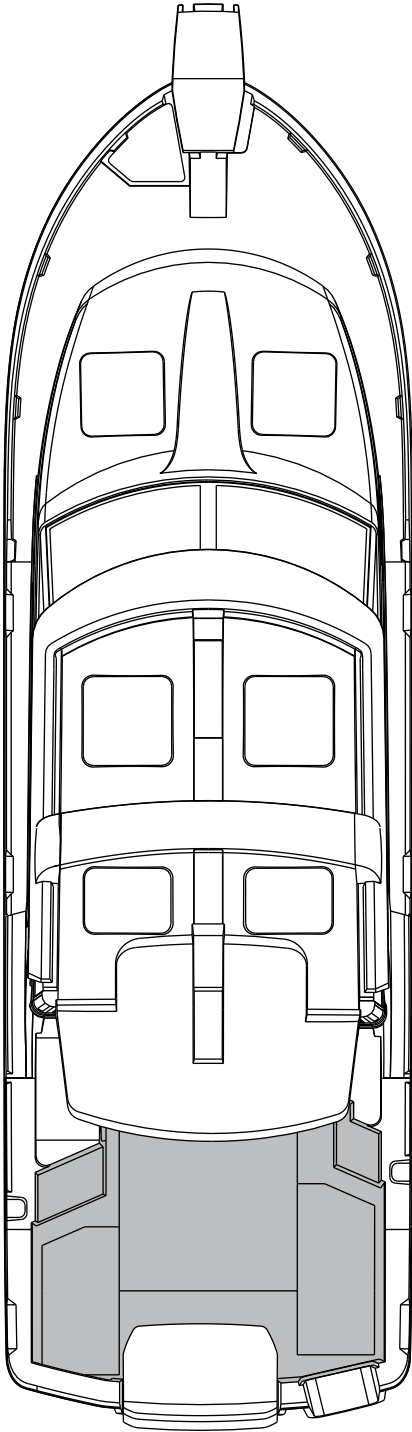


# WORKING DECK

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STE



## CARE AND MAINTENANCE

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The following checklists are examples and are not all inclusive and are provided only as a guide. Please customize to your personal needs. Consult your engine and trailer user manuals for additional information.

### EXAMPLE OF A PREPARATION FOR THE ROAD CHECKLIST

#### TOW VEHICLE – PRIOR TO USE

- Test Lights.
- Check brakes.
- Check tire pressure and condition.
- Check hitch related electrical connections.

#### TRAILER – PRIOR TO USE

- Check registration
- Check rollers and bed rails.
- Check wheel bearings and lubricate as required.
- Check winch.
- Test electrical connection and lights.
- Check tire pressure and condition.
- Check safety chains.
- Check boat straps.
- Check braking system.
- Check hitch for proper connection and lock down.
- Install safety chains (cross under hitch).
- Remove tire blocks.

#### BOAT – PRIOR TO USE WITH TRAILER

- Lower mast.
- Lower VHF antenna.
- Secure the Bimini awning frame.
- Raise and secure swim platform ladder.
- Set all switches and breakers to the OFF position, Including Thruster/Windlass cutoff switch
- Close and secure all windows, ports and vents.
- Lock cabin.
- Center rudder.
- Remove Drain Plug

## EXAMPLE OF A SPRING PRE-LAUNCH CHECKLIST

---



### CLEANING

- Remove debris from scuppers and scupper drains.
- Clean hull using a mild biodegradable detergent and then wax.
- Clean topsides and decks using a mild biodegradable detergent and then wax.
- Clean and polish all bright work.
- Clean and oil teak.
- Clean windows, ports, and hatches.
- Clean bimini cover.
- Check and clean anchor, rode, and anchor storage compartment.

### INSPECTION

- Check Drain Plug
- Check spare parts and tools and replace as necessary.
- Check wiper blades.
- Check swim platform.
- Inspect and test trim tabs.
- Check condition of bottom paint.
- Check windlass.
- Verify electronics for correct operation.
- Check all inside and outside lights.
- Macerator Y-Valve in proper position and secured.
- Inspect and verify position of all sea cocks and shut off valves.
- Check alarms for proper operation.
- Check fluid levels.

### SAFETY EQUIPMENT

- Sound signaling device.
- Check flares and their expiration dates.
- Check personal flotation devices.
- Check fire extinguishers and their fill dates.
- First aid kits.

### GALLEY

- Check stove for proper operation.
- Check everyday utensil stock.

### DOCUMENTS

- Registration sticker.
- Insurance papers and Passports.
- Boat Inspection sticker.
- Charts and float plan forms.

## EXAMPLE OF WINTER STORAGE CHECKLIST

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### GENERAL MAINTENANCE

- Fill Fuel Tank and add a fuel stabilizer.
- Empty and clean black water tank.
- Empty fresh water tank use a non-toxic antifreeze per manufacturer's directions.
- Winterize black and fresh water tanks as necessary based on weather.
- Check bilge area for oil and for proper operation
- Check zincs and replace as necessary.
- Check impeller.
- Check and clean water strainer.
- Clear barnacles and debris from hull fittings.
- Trickle charge batteries every 30-60 days.
- Vent boat to prevent mildew.
- Check trailer tire pressure and condition.
- Check trailer braking system.
- Check trailer bearings.
- Remove Drain Plug.
- Turn off all battery cutoff switches.

### ENGINE

- Flush sea strainer system with fresh water.
- Check all fluid levels.
- Check all hose fittings.
- Check engine maintenance requirements.
- Inspect and verify position of all sea cocks and shut off valves.

### GALLEY

- Empty, clean and freshen refrigerator.
- Remove all dry food from storage.









17300 Tye St S.E., Monroe, WA 98272

**Phone 253-839-5213**   Fax 253-839-5213   **[www.cutwaterboats.com](http://www.cutwaterboats.com)**

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