R-25
Owner's Manual

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Kent, Washington 98032

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CONGRATULATIONS

The Ranger Tug 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 Ranger Tugs. 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

	Attention! – Important Operating or Maintenance Instructions
	Attention! – Electrical Shock Hazard
	Fresh Water
	Black Water
	Fuel
STD	Standard Equipment
OPT	Optional Equipment
	Hints

SPECIFICATIONS (Subject to Change Without Notice)

Boat & Anchor Roller & Swim Step	28’ 5”
Length with Swim Platform on trailer	32’
Length Overall (LOA)	24’ 7” (7m)
Beam	8’ 6” (2.6m)
Draft	26” (.66m)
Displacement	5,750 lbs (2,608kg)
Fuel Capacity	75 US Gal (284L)
Fresh Water Capacity	30 US Gal (1133.5L)
Black Water Capacity	30 US Gal (1133.5L)
Sleeping Capacity	5
V-Berth Sleeping Length	6’ 3” minimum
Cabin Interior Height	6” 4” minimum
Water⇨Bridge Clearance w/ No Mast	7’ 6” (2.8m)
Water⇨Bridge Clearance w/ Mast Deployed	12’ (3.65m)
Height on Trailer w/ No Mast	10’ 9” (3.276m)
Bilge Pumps (2)	12v, AUTO, 750 gph
Shore Power	30amp/115V, w/ 50’ cord
Stereo	AM/FM, 4 speaker, CD/mp3
Stove, dual electric	Kenyon 120volt
Raw Water Washdown Pump	Johnson Aqua Jet 5.2 GPM
Lewmar Windlass (Pro Series) 1000lb Maximum Pulling Power (Up to 40’ Boats)	Pro Series 1000 (12v) (5/16”)
Shower Sump Pump	12V, 500 gph

Optional Equipment (Subject to Change Without Notice)

Air Conditioning w/ Rev cycle heat	Dometic Environment 16,000 btu
Bruce Style Anchor	16.5lb/200’ Line/50’ Chain
Generator	2.5 KW
Macerator Discharge w/ Y-valve	12v Johnson Macerator Waste pump
Navigation Package	Garmin 5212, 4kw Radar Dome, GPS antennae, Depth finder
Cummins Diesel Inboard Engine	150 hp
Stove/Heater Diesel, Tank Capacity	Wallas 85DU 2.5 gallon tank

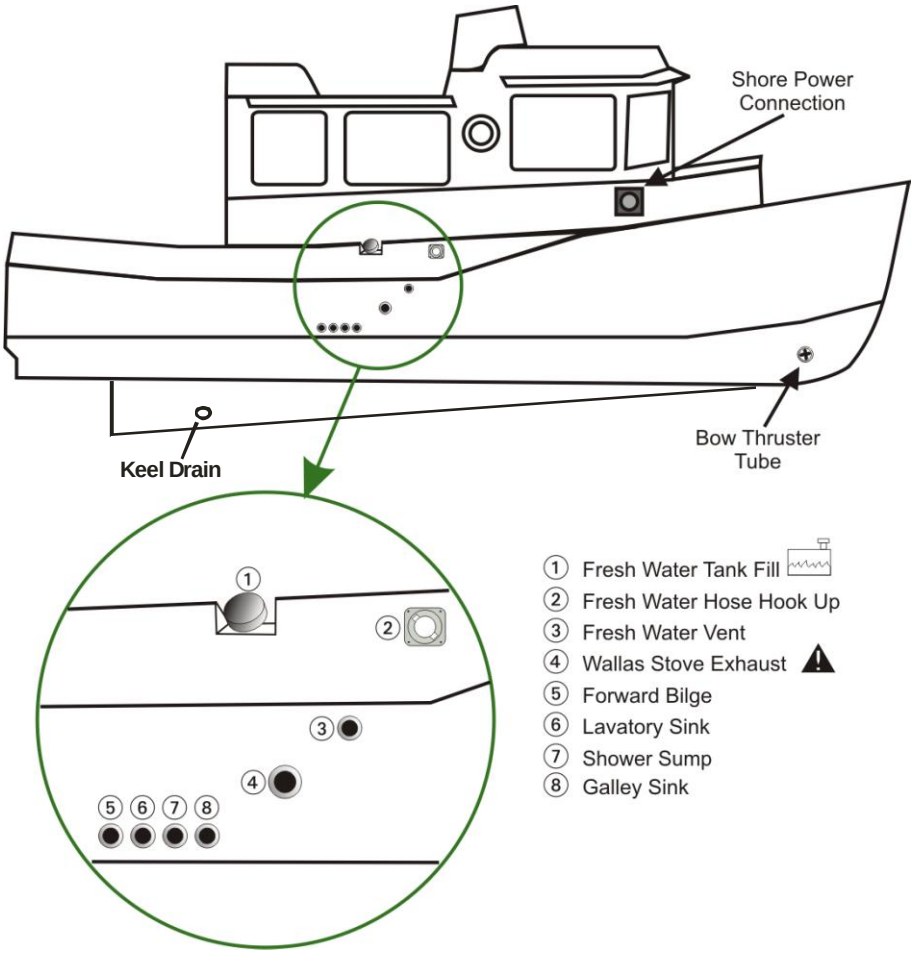
EQUIPMENT LOCATION

STARBOARD FITTINGS

STD 1235678, Shore Power

OPT 4, Bow Thruster

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

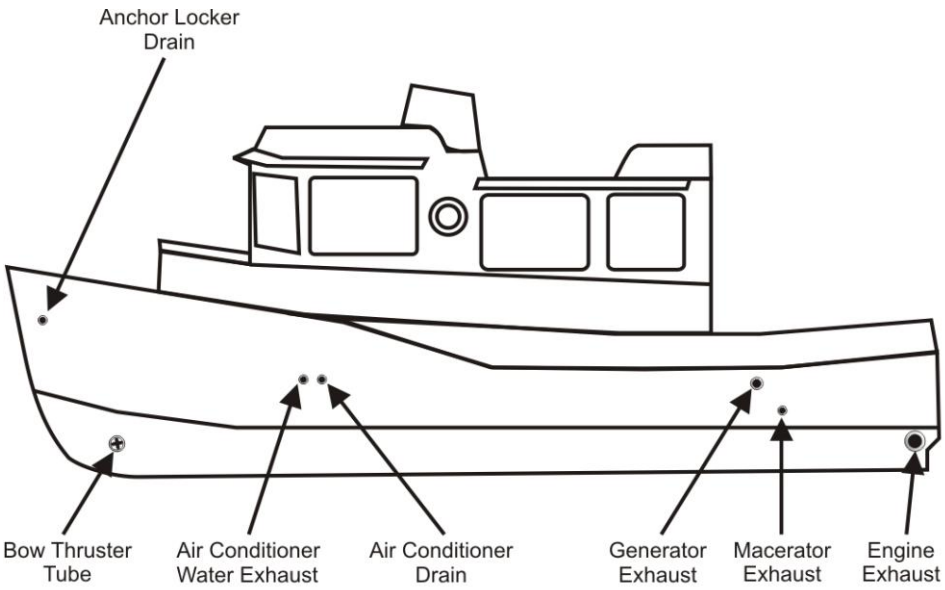


PORT FITTINGS

STD Anchor Locker Drain, Engine Exhaust

OPT AC, Generator, Bow Thruster, & Macerator

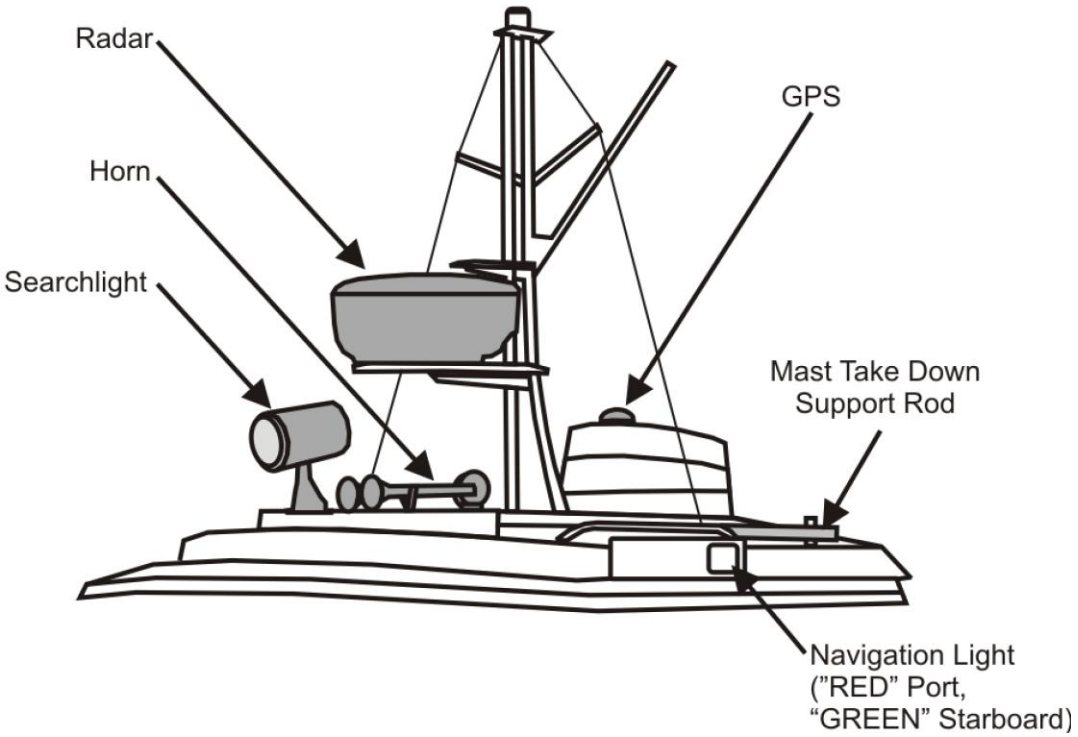
Keep all vents, drains and exhausts clear of any obstructions to ensure proper performance of each system.



MAIN CABIN TOP DECK COMPONENTS

STD Mast Take Down Support Rod, Horn, Navigation Lights

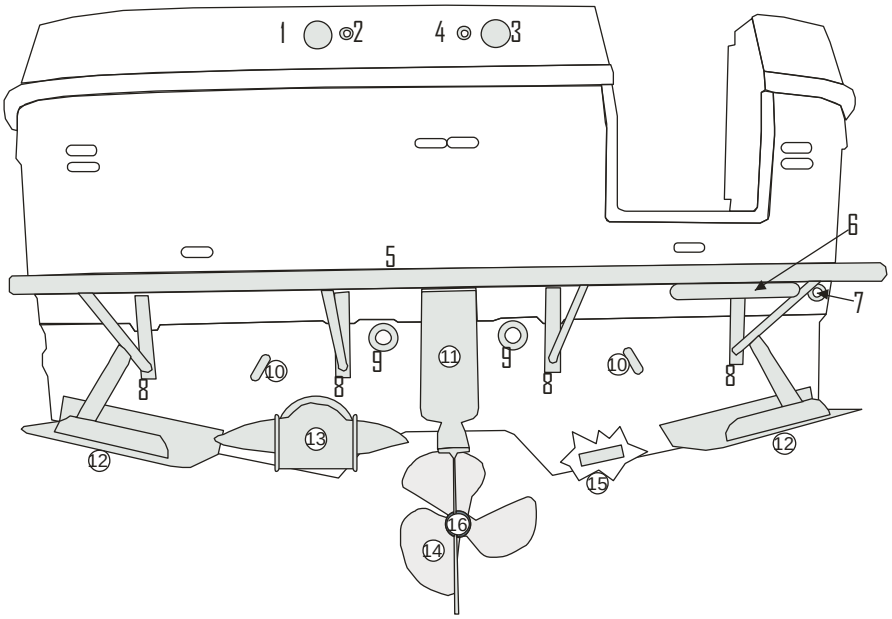
OPT GPS, Radar, Searchlight, Mast



STERN COMPONENTS

STD Waste Pump out Cap, Waste Pump out Vent, Diesel Fuel Cap, Diesel Fuel Vent, Swim Platform, Swim Platform Retracting Ladder, Aft Bilge Pump out, Swim Platform Supports, Scupper Drains, Stern Eyes, Rudder, Trim Tabs, Propeller

OPT Stern Thruster, Depth Finder Transducer



1 Waste Pump out Cap

2 Waste Pump out Vent

3 Diesel Fuel Cap

4 Diesel Fuel Vent

5 Swim Platform

6 Swim Platform Retracting Ladder

7 Aft Bilge Pump out

8 Swim Platform Supports, 4X

9 Scupper Drains, 2X

10 Stern Eyes, 2X

11 Rudder

12 Trim Tabs, 2X

13 Stern Thruster

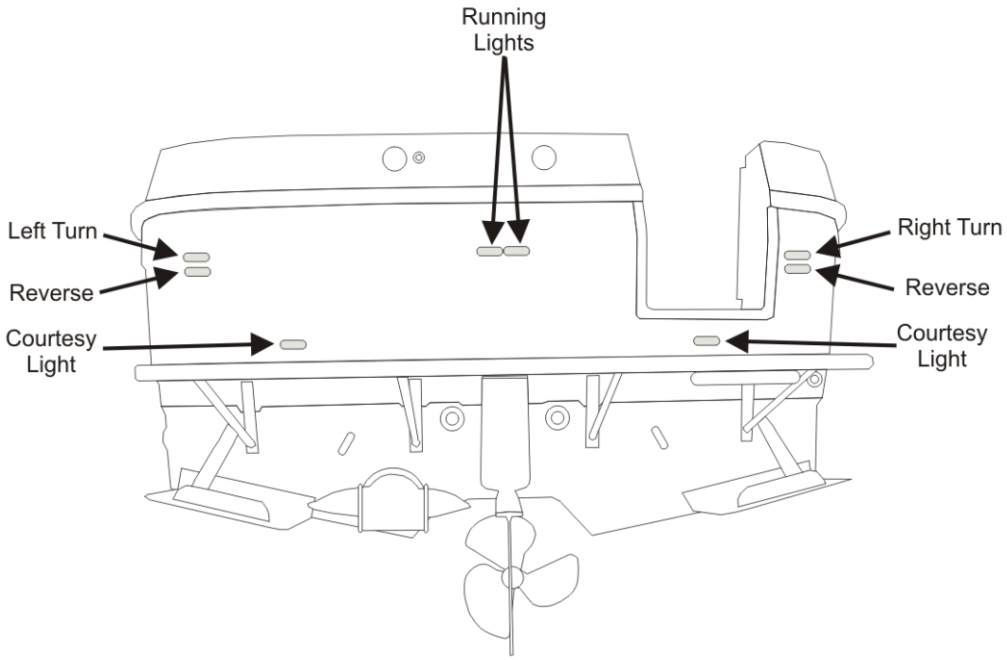
14 Propeller

15 Transducer, Depth Finder (Internal Mount)

16 Prop Zinc (Inspect and Replace)

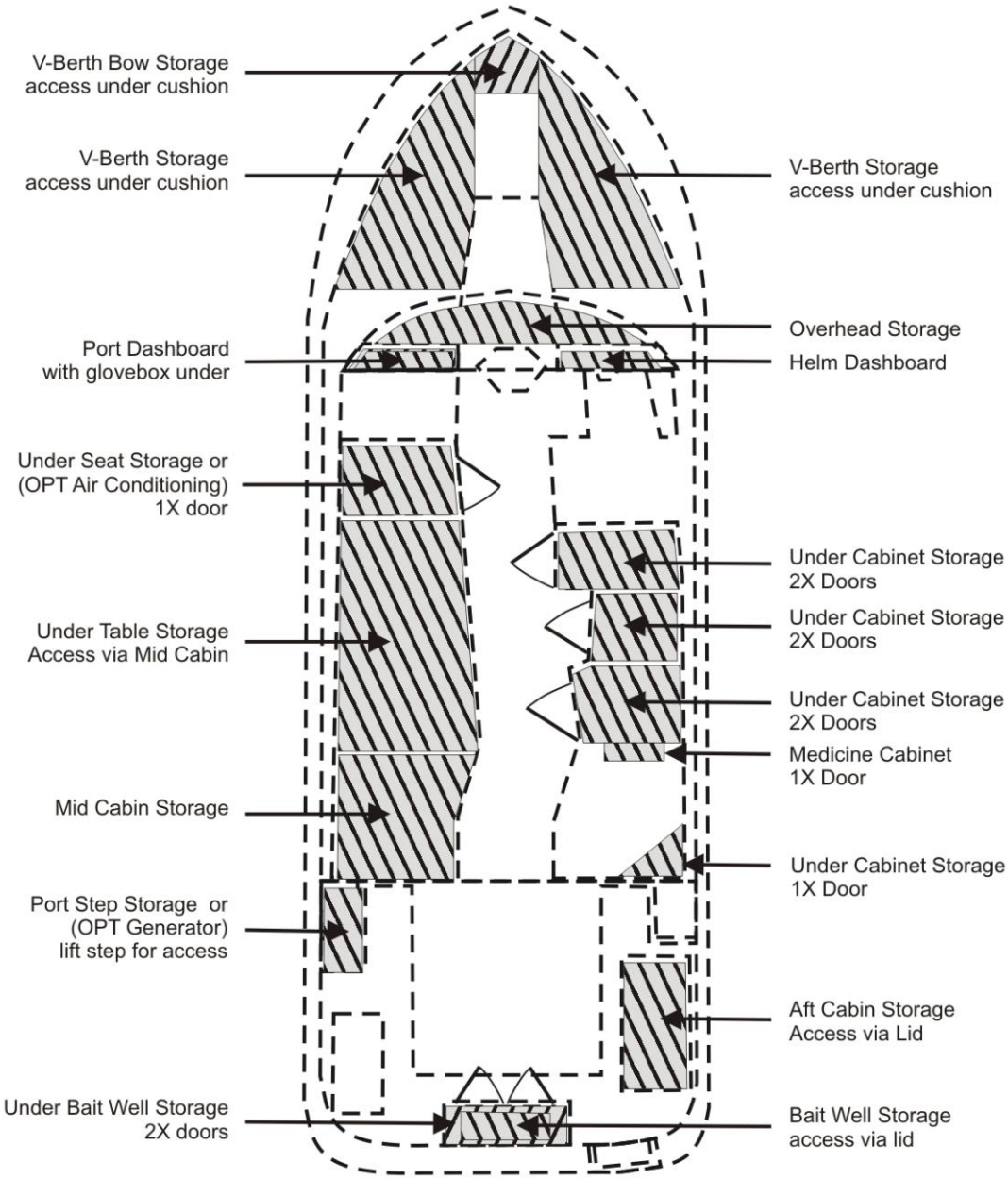
STERN LIGHTS

STD



AVAILABLE STORAGE

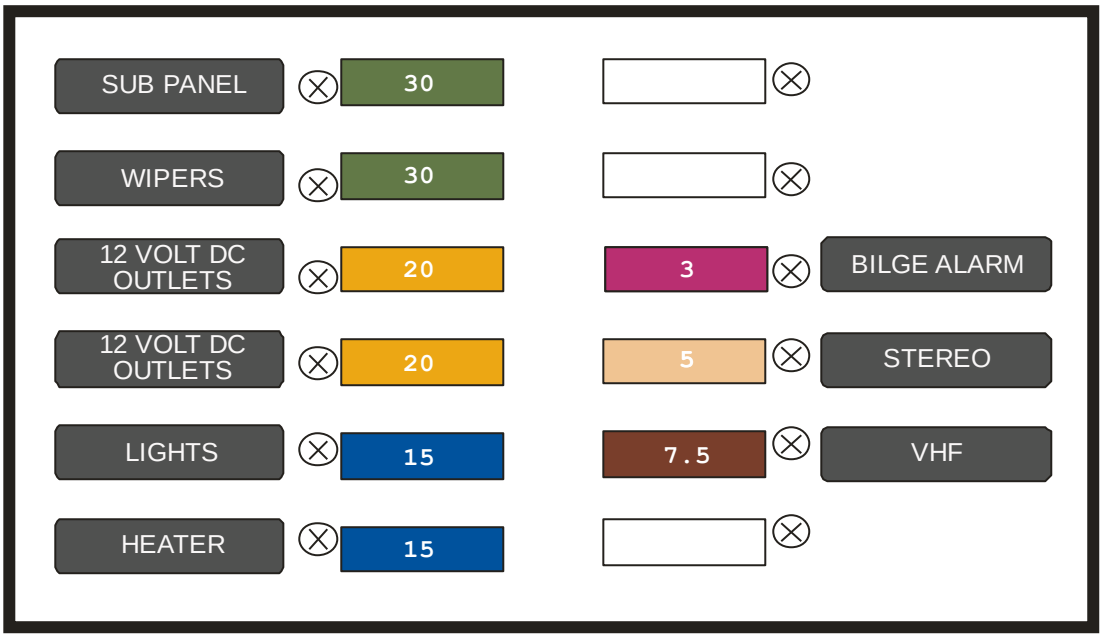
STD



FUSE LOCATION & VALUES

STD

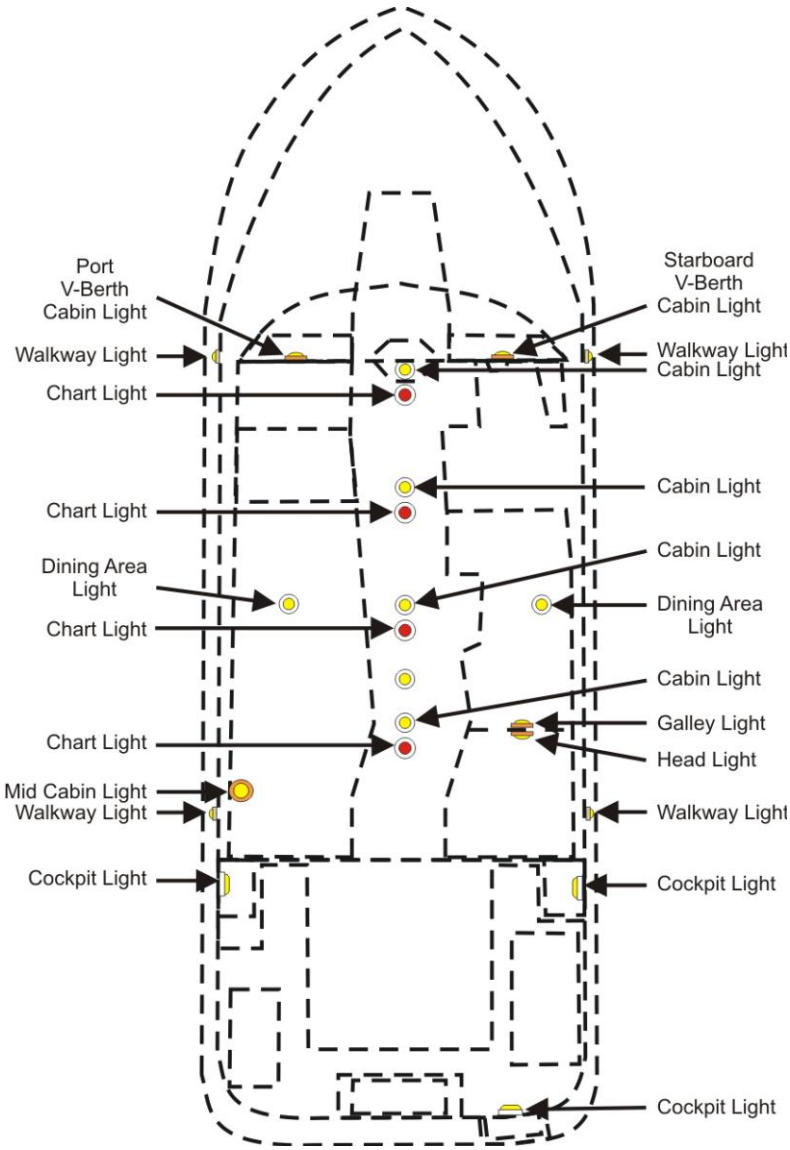
The DC fuse panel is located behind a hinged access panel on the starboard side in the V-berth next to the cabin light. Fuses are automotive blade type and all values shown below are in Amps.



MAIN CABIN AND COCKPIT LIGHTS

STD

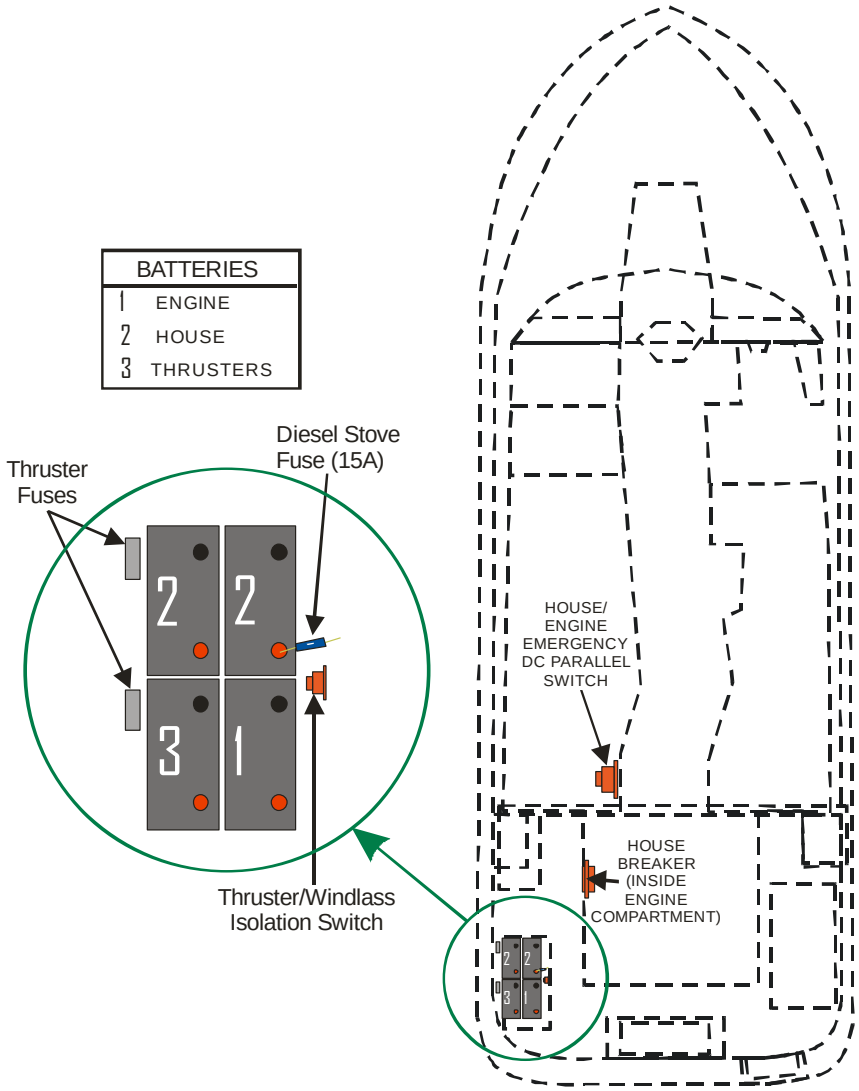
	On Light Fixture	DC Distribution Panel	Helm or Main Cabin Door Switch	Helm or Transom Door Switch	Helm Switch Panel
V-Berth Cabin Lights	✓				
Chart Lights		✓			
Cabin Lights			✓		✓
Walkway Lights				✓	✓
Galley Light	✓				
Bathroom Light	✓				
Mid Cabin Light	✓				
Dining Area Lights		✓			



BATTERY COMPARTMENT

STD House Batteries, Engine Battery

OPT Thruster Battery, Thruster Fuses, Diesel Stove Fuse

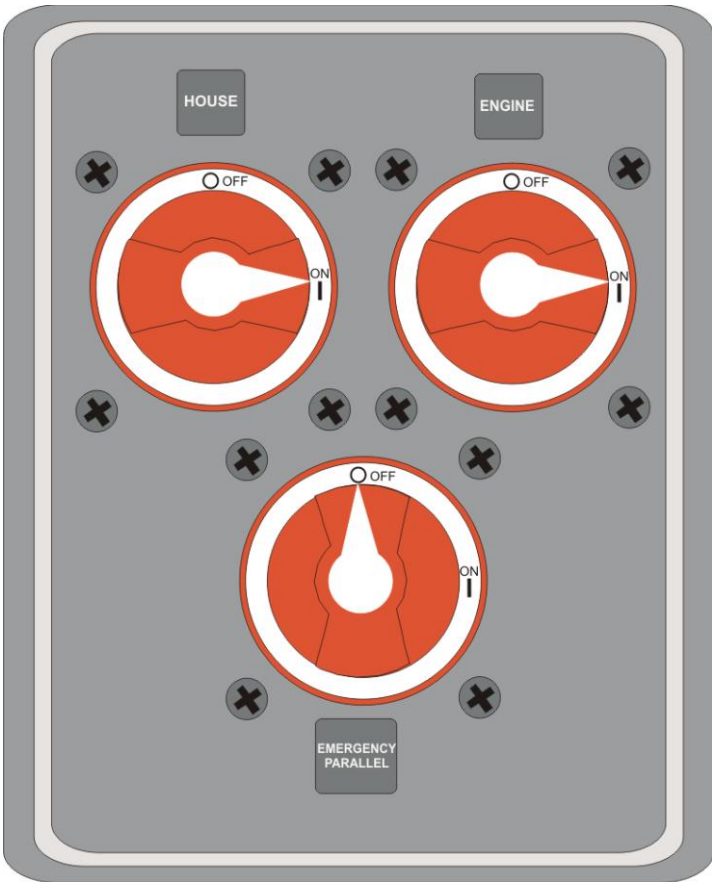


HOUSE / ENGINE EMERGENCY DC PARALLEL SWITCH

STD

This switch panel is located in the mid-cabin storage/extra sleeping area just to the port side of the main cabin entrance door, on the side of the entrance step. The switch is shown in the normal operational configuration.

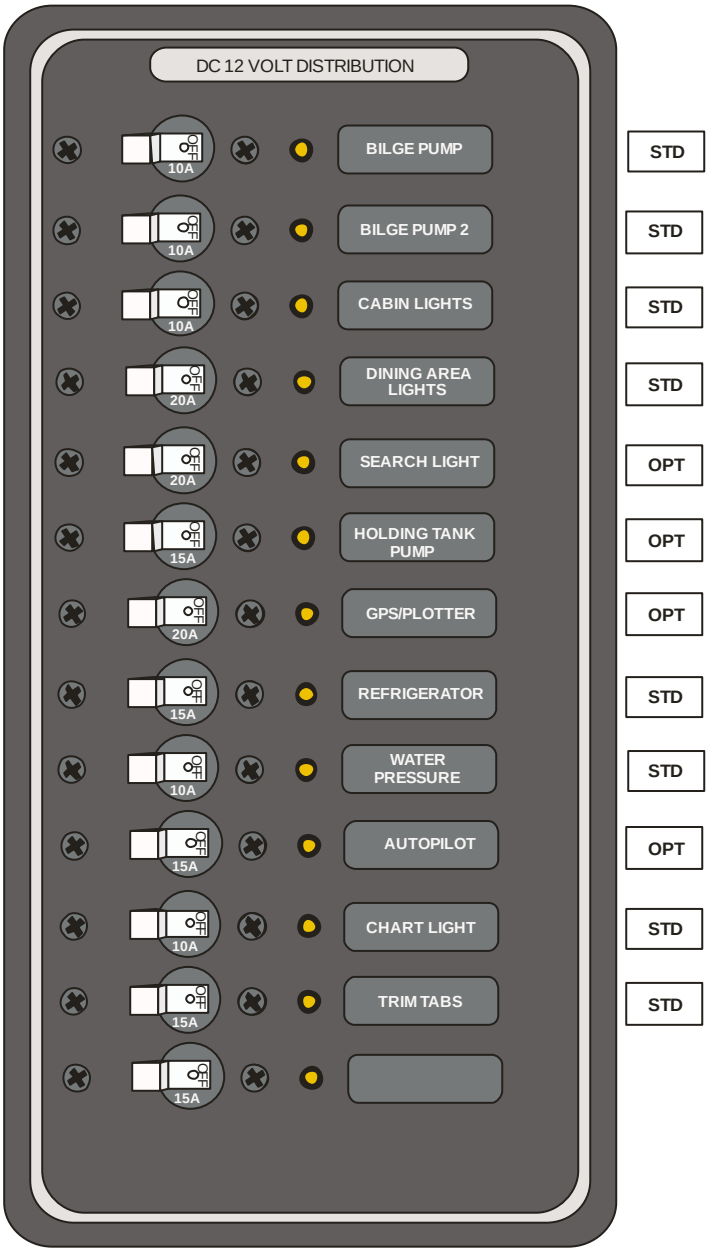
Once the EMERGENCY PARALLEL switch is placed in the on position the power from the HOUSE batteries will be transferred to the ENGINE batteries.



DC DISTRIBUTION PANEL

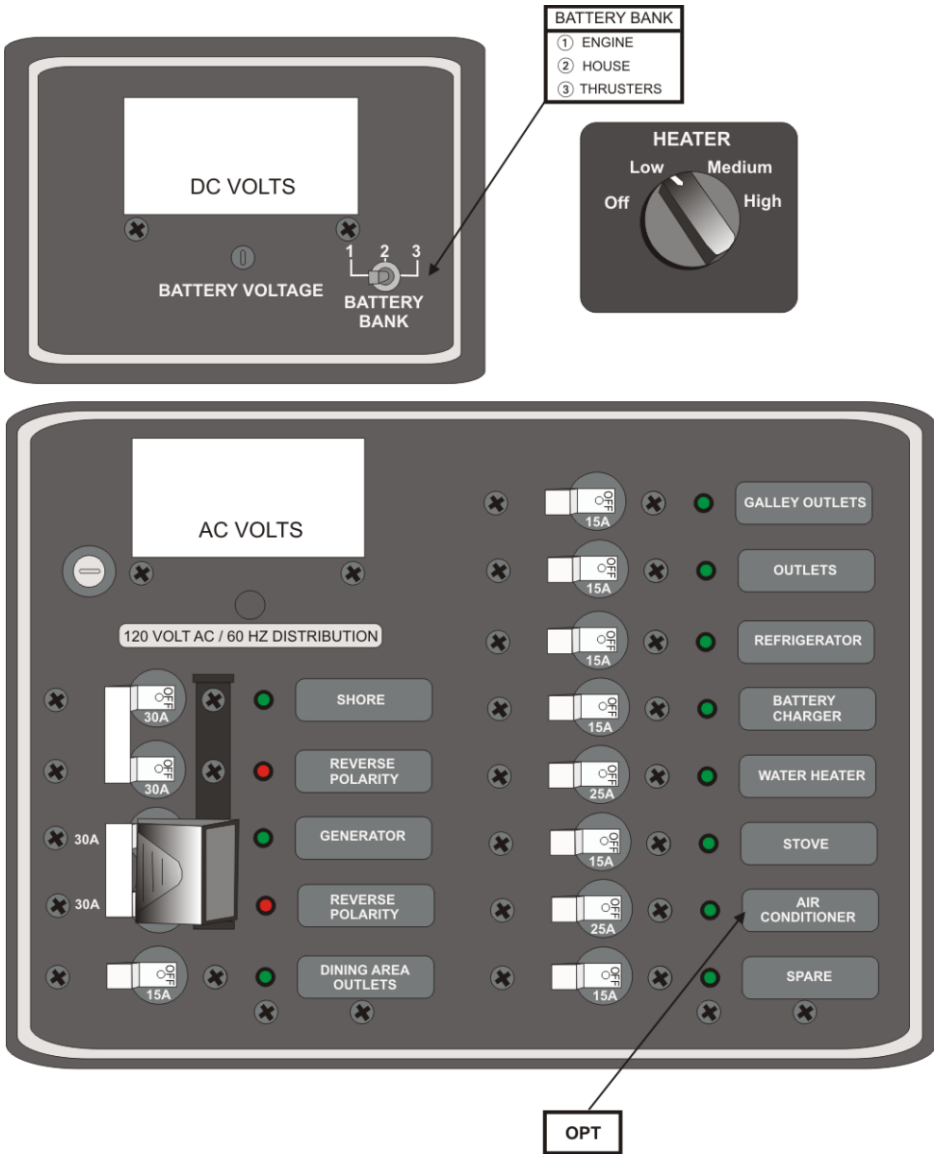
STD

☐ 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.



AC DISTRIBUTION PANEL, DC BATTERY BANK METER, HELM HEATER CONTROL

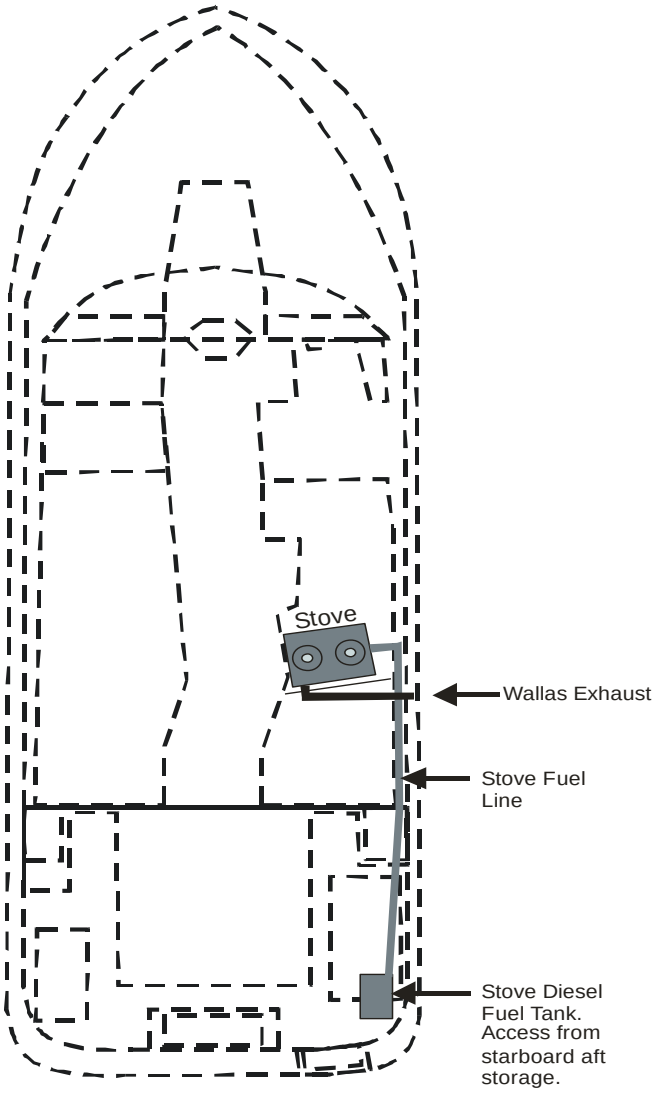
STD



WALLAS STOVE

OPT Wallas 85DU Stove, Dual Burner, Heater, Diesel, 2.5 gallon tank
(Refer to Wallas Owners manual for proper priming and reset functions.)

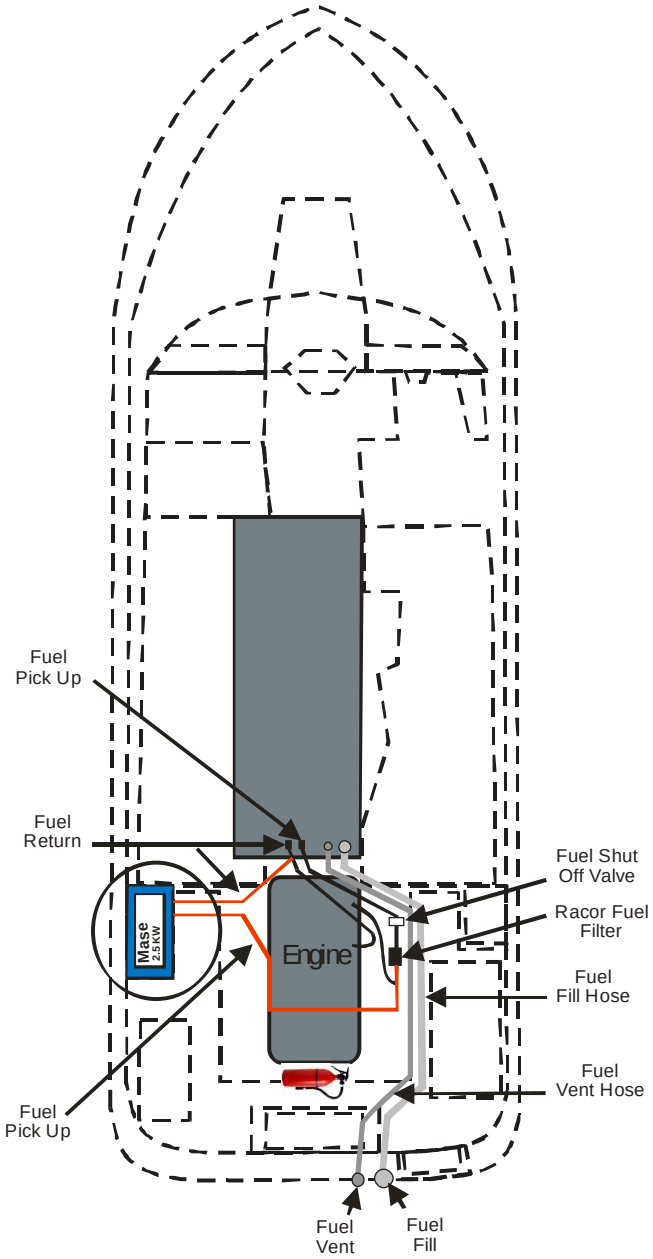
☐ Stove has a separate diesel fuel tank as shown below. Remove tank from vessel for adding fuel. DO NOT OVERFILL. Allow for fuel expansion.



ENGINE FUEL SYSTEM

STD

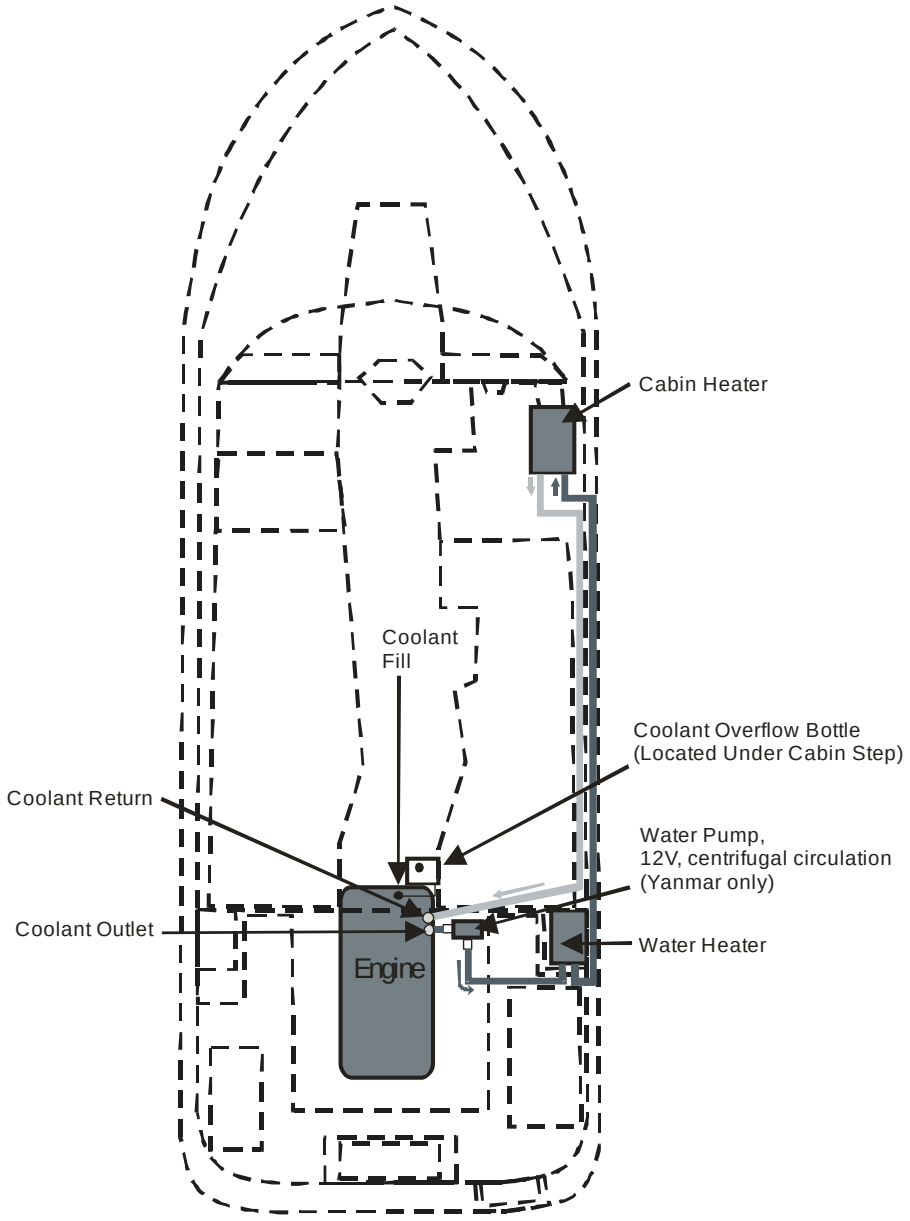
OPT Mase 2.5 KW Diesel Generator



- 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.

CLOSED ENGINE COOLING SYSTEM

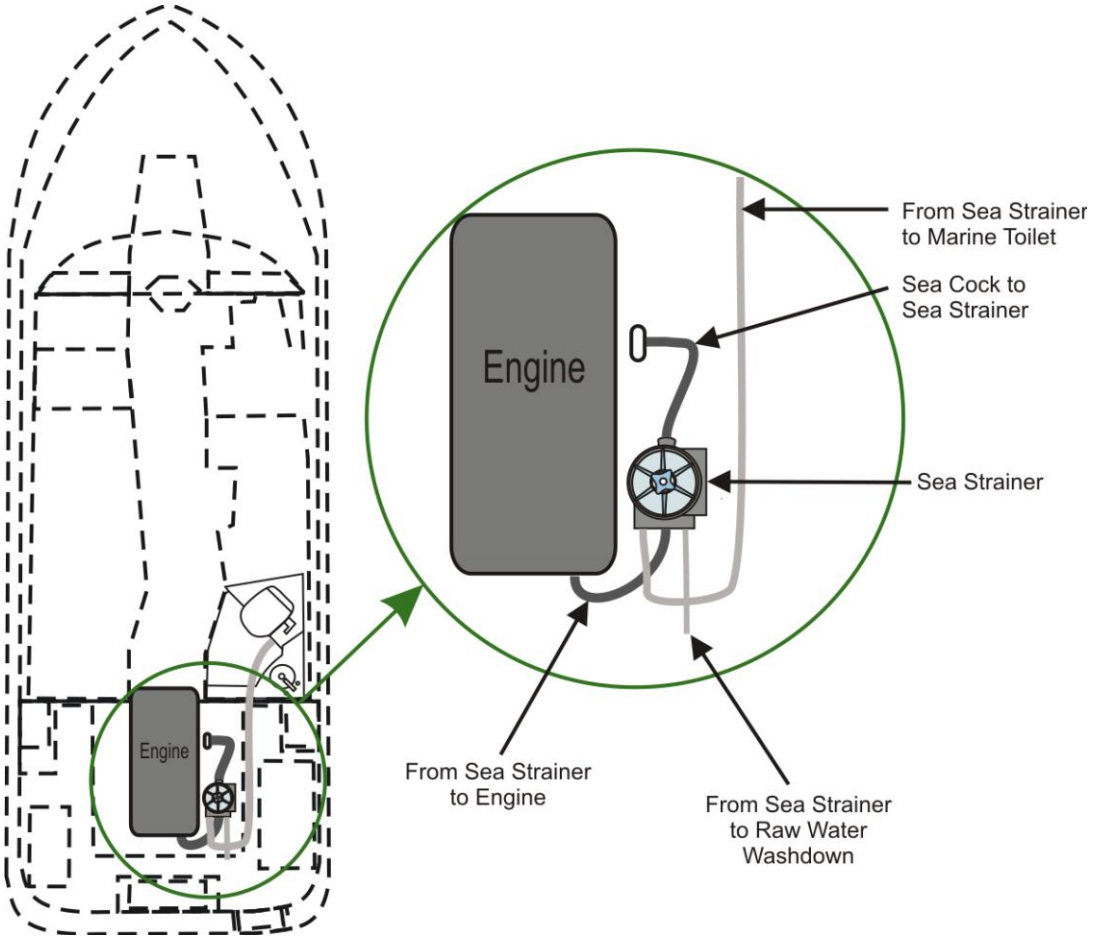
STD Provides alternate heating system for the Fresh Water Heater and provides primary heating source for the Forced Air Cabin Heater. The system uses a Johnson 12 volt centrifugal circulation pump (Yanmar only) fed by the coolant outlet of the engine and pumps it to the water heater and then onto the cabin heater. The cabin heater then passes the coolant to the engine return.



SEA STRAINER SYSTEM

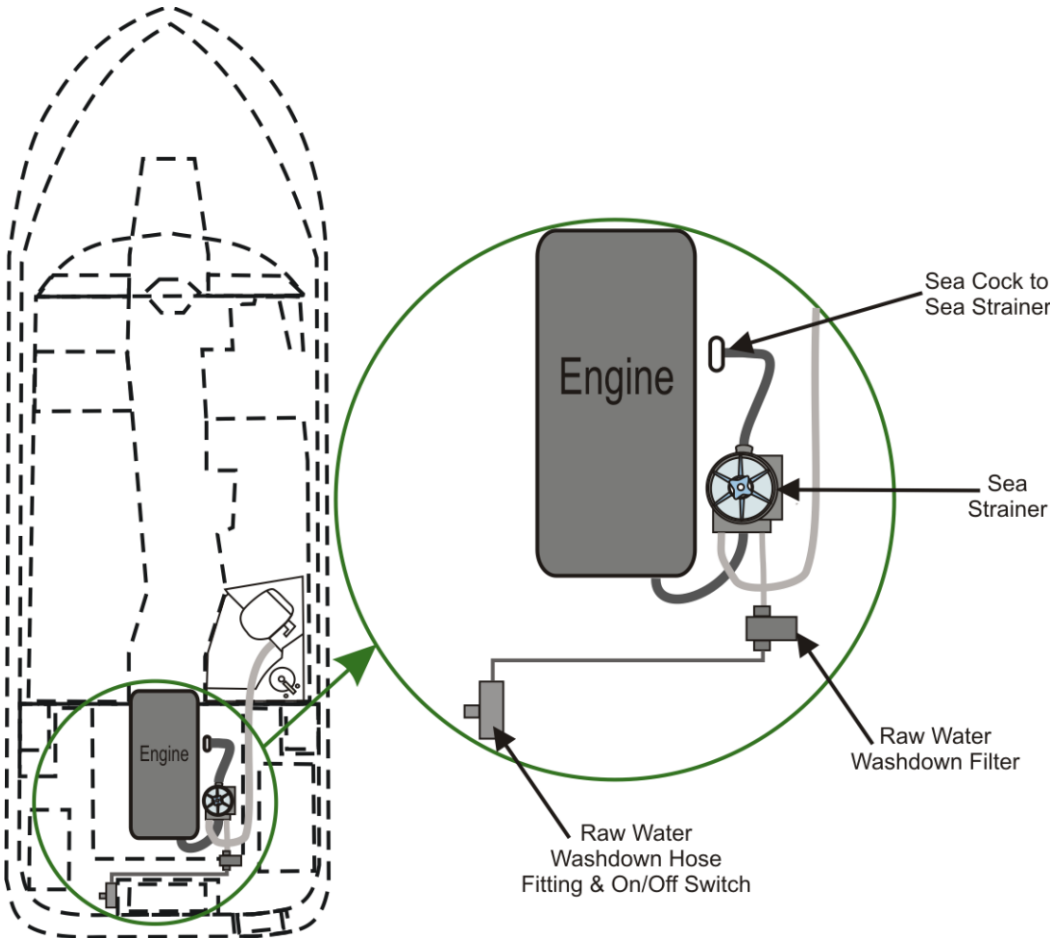
STD Multi Port Sea Strainer for Engine, Marine Toilet

STD Raw Water Washdown



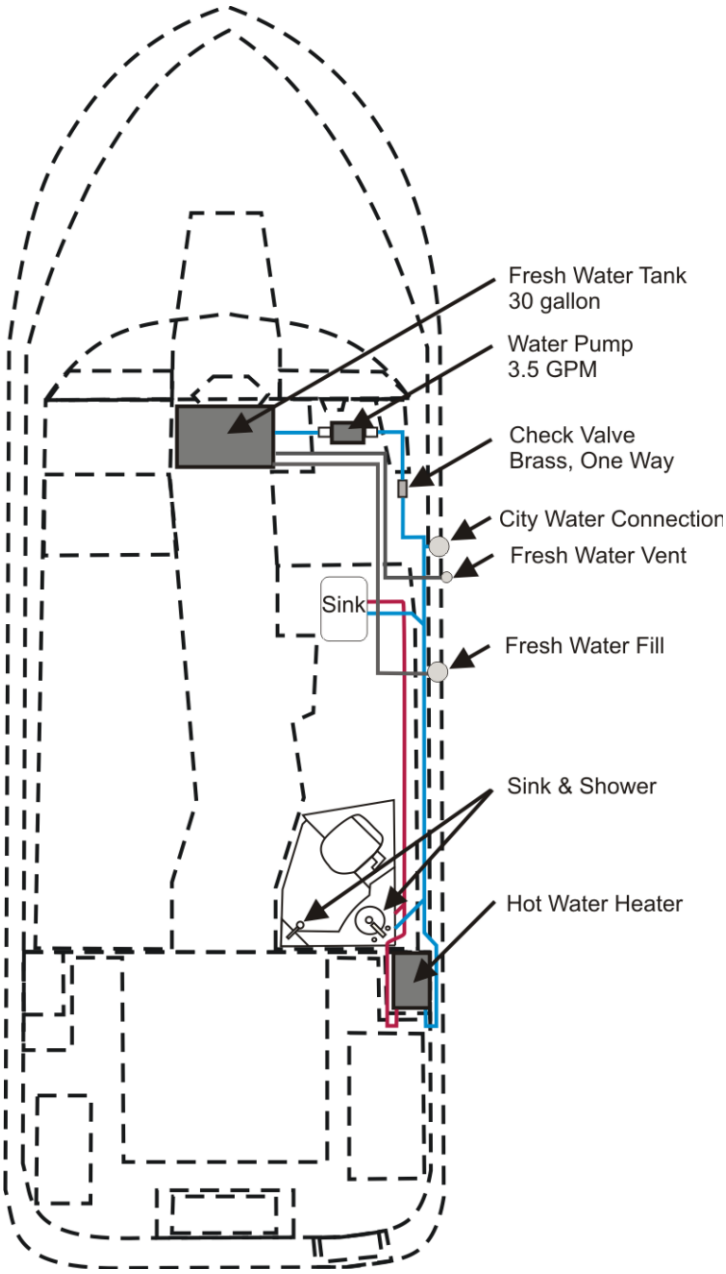
RAW WATER WASH DOWN

STD Johnson Aqua Jet 5.2 GPM



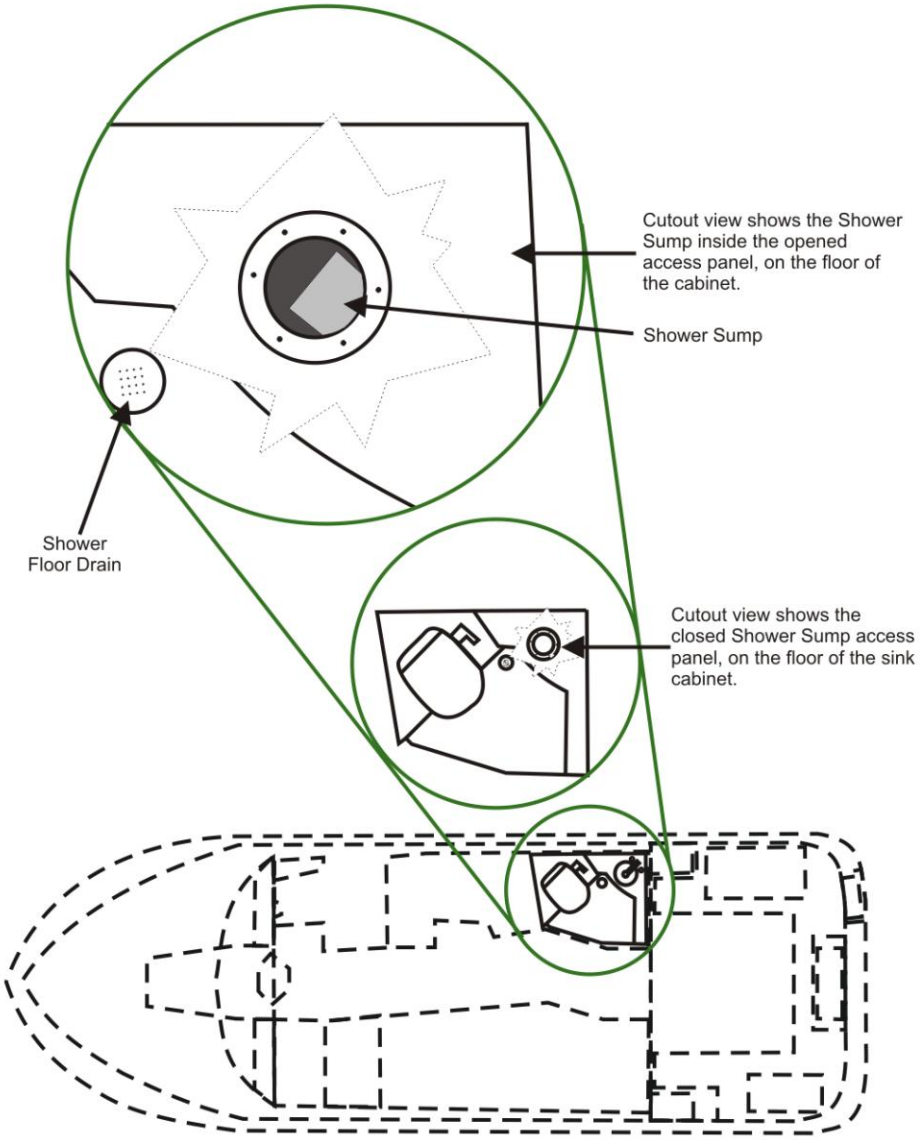
FRESH WATER PLUMBING SYSTEM

STD



SHOWER SUMP

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

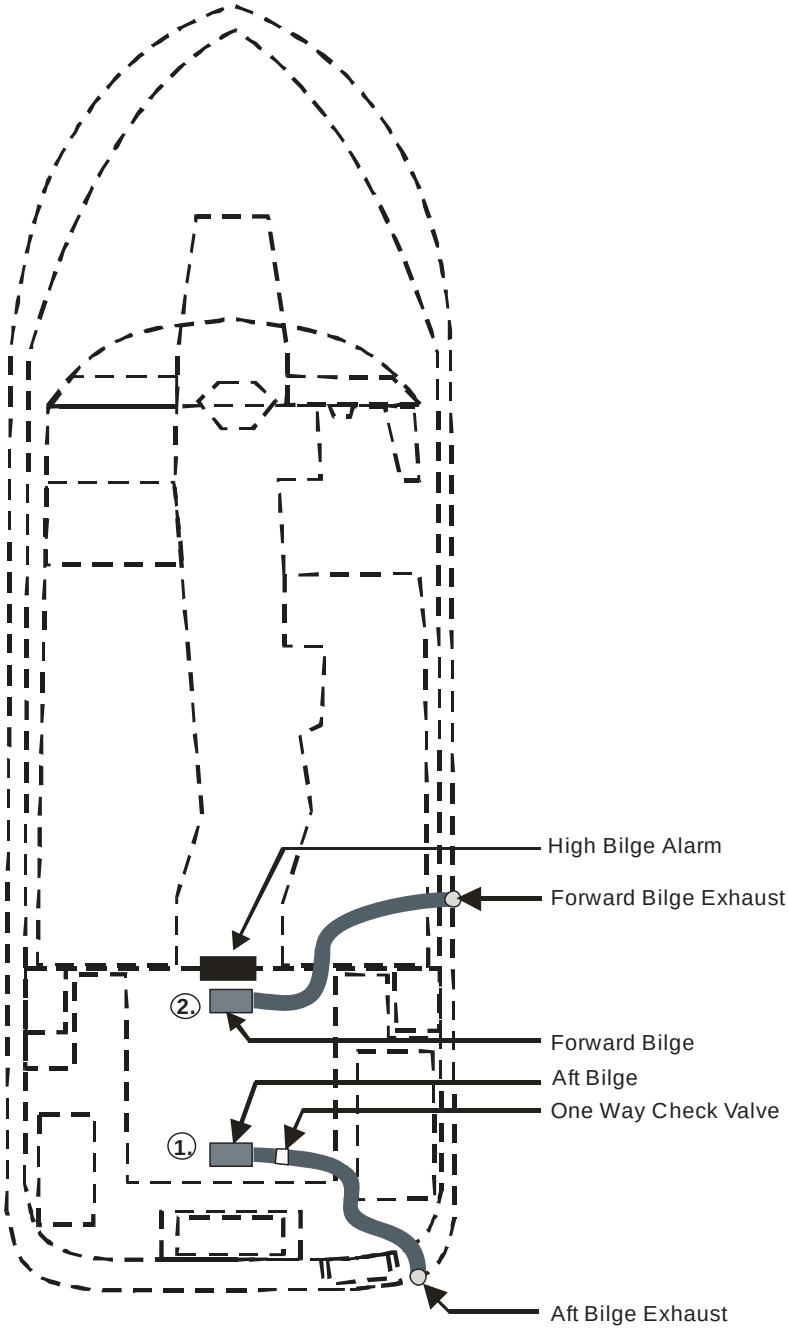


BILGE PUMP SYSTEM

STD 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.

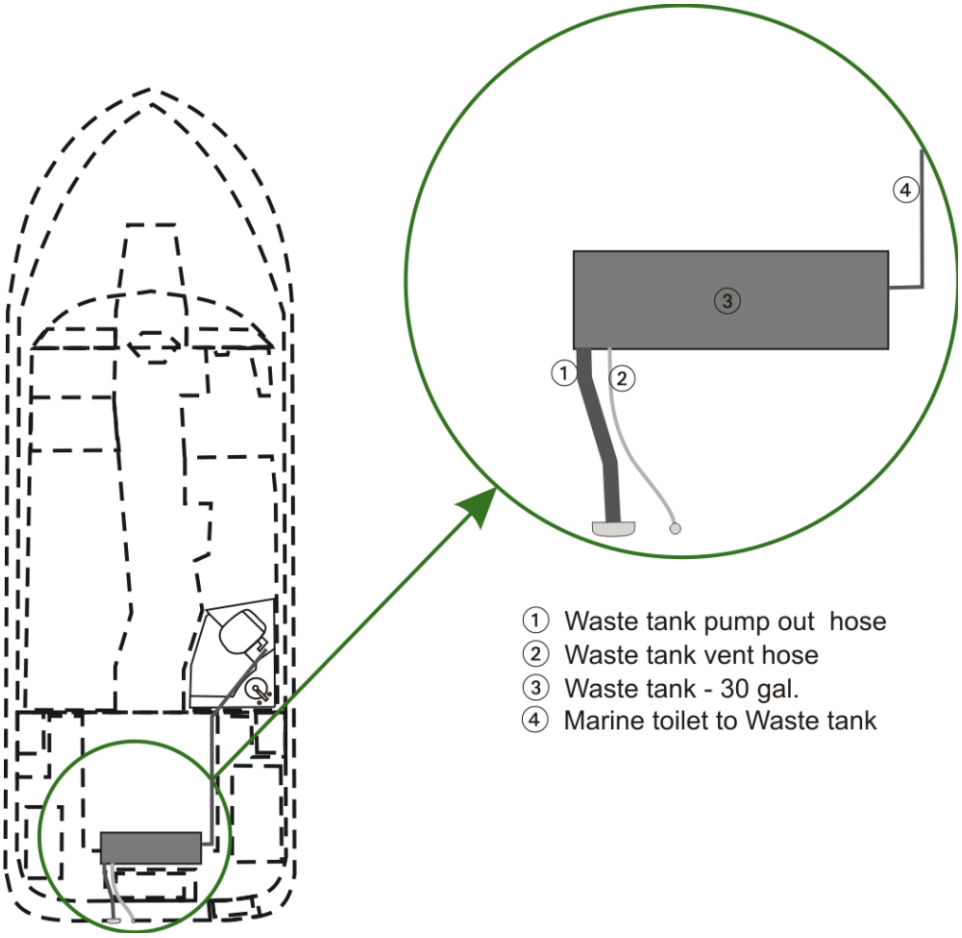


WASTE SYSTEM

STD 30 Gallon Tank with Pump Out and Vent

- Waste tank fill level can be checked by lifting the engine access hatch and viewing the translucent waste tank.

☐ 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.



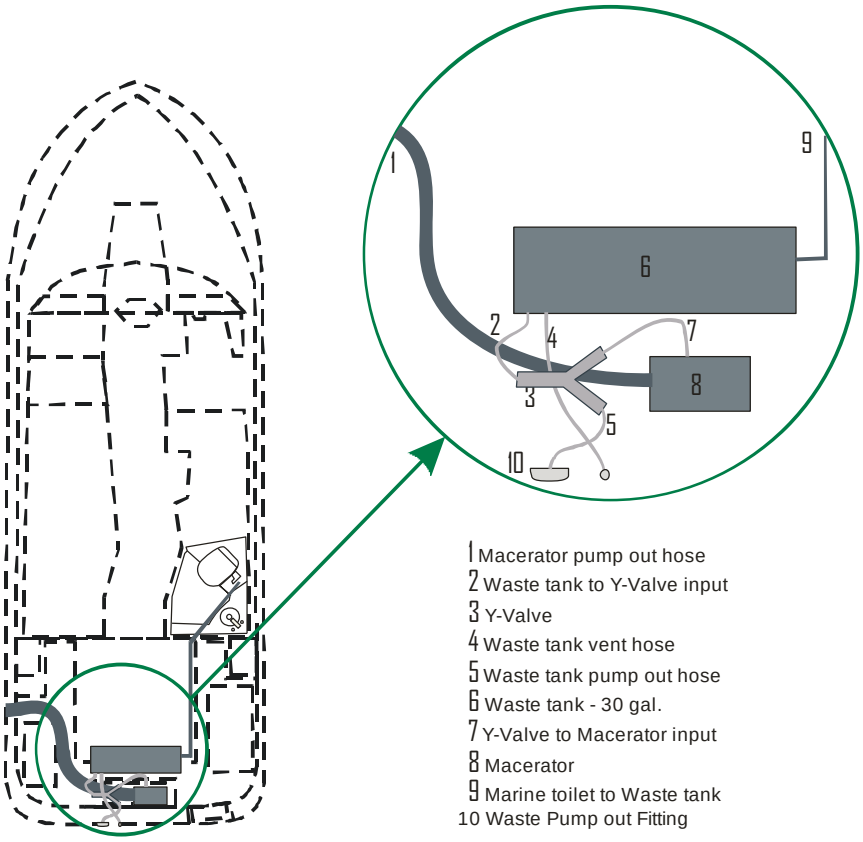
WASTE SYSTEM WITH MACERATOR PUMP

OPT 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 hatch under the bait tank/seat on the aft cabin.

☐ 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

MAST SET UP PROCEDURE

1. Remove the two black plastic wing nuts from the mast base.

2. Remove the two mast tie down cables from their storage positions in the roof clips.

3. With the mast tie down cables still loose, raise the mast off of the stainless steel support bar.

4. Secure the stainless steel retaining bar in the appropriate clip attached to the roof top.

5. Raise the mast to its full extension and ensure that it fits correctly over the mounting studs on the roof mounting plate.

6. Attach the two black plastic wing nuts to the mounting studs and hand tighten securely.

7. Attach the two mast tie down cables to their appropriate clips on the port and starboard side of the roof.

8. Make sure the mast tie down cables are adjusted properly.

MAST TAKE DOWN PROCEDURE

1. Remove the mast tie down cables from their clips on the port and starboard side of the roof.

2. Remove the two black plastic wing nuts from the mast base mounting studs.

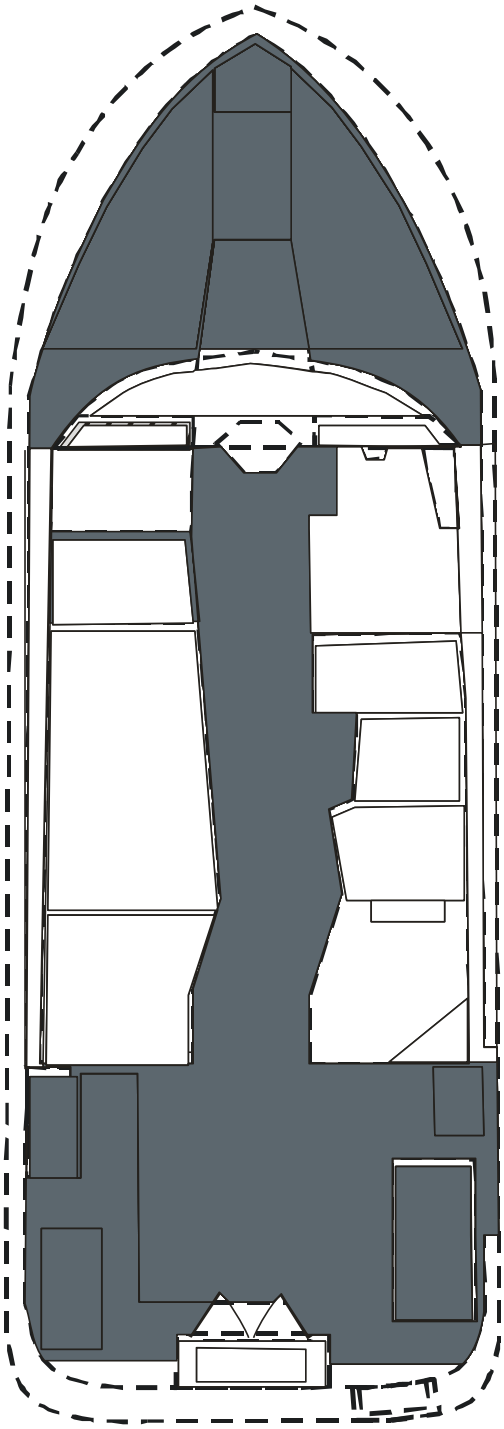
3. Carefully lower the mast onto the stainless steel support bar.

4. Attach the black plastic wing nuts back onto the screws on the mast mounting plate and secure them for storage by hand tightening.

5. Attach the two mast tie down cables to their storage positions in the roof clips.

6. Recommend securing the mast with a tie down.

WORKING DECKS



CARE AND MAINTENANCE

☐ 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 floatation 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

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.

REFERENCE MATERIAL

The following table contains a list of reference materials provided by Ranger Tugs that are contained under separate manuals.

EQUIPMENT	ORIGINAL MANUFACTURER
Navigation System	Raymarine
Engine	Yanmar / Cummins
Stove, diesel	Wallas
Trim Tabs	Bennett
Thrusters	Side Power
Search Light	Jabsco
Raw Water Wash Down	Johnson Pump
Water Pump	Johnson Pump
Engine Circulation Pump	Johnson Pump (Yanmar only)
Heater	Heater Craft
Water Heater	Seaward Products
Refrigerator	Norcold
Y-Valve	Jabsco
Compass	Ritchie
Power Cord	Marinco
Kitchen Faucet	ITC
Head Faucet	ITC
Sea Strainer	Marine Hardware
Battery Charger	Pro Sport (Pro Mariner)
AC Battery Monitor Panel	Blue Sea
Steering System	Ultraflex
Windlass	Lewmar
Generator	Mase

CONTACTS

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