C-302 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 ensure 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.

WARNING

Operating, servicing and maintaining a recreational marine vessel can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, service your vessel in a well-ventilated area and wear gloves or wash your hands frequently when servicing this vessel. For more information go to www.P65warnings.ca.gov/marine.

MAXIMUM HORSEPOWER

DESIGNED FOR TWIN OUTBOARDS
MAX 300 HORSEPOWER EACH

MANUFACTURER: FLUID MOTION LLC

MODEL: C30 OB KENT, WA

SAFETY STICKER LOCATION





GARBAGE DISPOSAL & OIL OVERBOARD PLACARDS



Required by the USCG in a language all passengers understand. These are installed at the factory. If damaged or missing after use they should be replaced. Text should cover approximately the following:

GARBAGE DISPOSAL

DISPOSAL OF ALL GARBAGE PROHIBITED EXCEPT OTHERWISE SPECIFIED

THE ACT TO PREVENT POLLUTION FROM SHIPS (MARPOL ANNEX V) PLACES LIMITATIONS ON THE DISCHARGE OF GARBAGE FROM VESSELS. IT IS ILLEGAL TO DUMP PLASTIC TRASH ANYWHERE IN THE OCEAN OR NAVIGABLE WATERS OF THE UNITED STATES. IT IS ALSO ILLEGAL TO DISCHARGE GARBAGE IN THE NAVIGABLE WATERS OF THE UNITED STATES, INCLUDING THE GREAT LAKES. THE DISCHARGE OF OTHER TYPES OF GARBAGE IS PERMITTED OUTSIDE OF SPECIFIC DISTANCES OFFSHORE AS DETERMINED BY THE NATURE OF THAT GARBAGE.

TYPE OF WASTE

DISCHARGE PERMITTED

PLASTICS - INCLUDES SYNTHETIC ROPES, FISHING NETS, AND PLASTIC BAGS

PROHIBITED IN ALL AREAS

FLOATING DUNNAGE, LINING AND PACKING MATERIALS

PROHIBITED LESS THAN 25 MILES FROM NEAREST LAND

FOOD WASTE, PAPER, RAGS, GLASS, METAL, BOTTLES, CROCKERY, OR SIMILAR REFUSE PROHIBITED LESS THAN 12 MILES FROM NEAREST LAND

COMMINUTED OR GROUND FOOD WASTE, PAPER, RAGS, GLASS, ETC.

PROHIBITED LESS THAN 3 MILES FROM NEAREST LAND

VIOLATION MAY RESULT IN HEAVY PENALTIES

OIL OVERBOARD

DISCHARGE OF OIL PROHIBITED

THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF OIL OR OILY WASTE INTO OR UPON THE NAVIGABLE WATERS OF THE UNITED STATES, OR THE WATERS OF THE CONTIGUOUS ZONE, OR WHICH MAY AFFECT NATURAL RESOURCES BELONGING TO, APPERTAINING TO, OR UNDER THE EXCLUSIVE MANAGEMENT AUTHORITY OF THE UNITED STATES. IF SUCH DISCHARGE CAUSES A FILM OR DISCOLORATION OF THE SURFACE OF THE WATER OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER, VIOLATORS ARE SUBJECT TO SUBSTANTIAL CIVIL PENALTIES AND/OR CRIMINAL SANCTIONS INCLUDING FINES AND IMPRISONMENT.

SYMBOL GLOSSARY





Attention! – Important Operating or Maintenance Instructions



Attention! - Electrical Shock Hazard



Fresh Water



Black Water



Fuel

STD

Standard Equipment

OPT

Optional Equipment

NW

Northwest Edition

LE

Luxury Edition



Hints

SPECIFICATIONS



C-3	02	CO	IIDE
C-3	UZ	CU	UPE

LOA (motor down)	. 37′ 10″	11.53 m
LOA (motor up)	. 39′ 8″	9.04 m
LOA on trailer (motor down)	. 41′ 8″	12.7 m
LOA on trailer (motor up)	. 43′ 6″	13.26
Beam	. 10′ 0″	3.05 m
Draft (motors up)	. 26"	.66 m
Draft (motors down)	. 33"	.84 m
Weight, dry	. 9,800 lbs	4,445 kg
Fuel capacity	. 300 gal	1,135.6 L
Water capacity	. 80 gal	302.8 L
Holding tank capacity	. 40 gal	151.4 L
Bridge clearance (mast/down)	. 9′ 9″	2.97 m
Height on trailer	. 13′ 2″	4.01 m
3		
S		
C-302 SPORT COUPE		
	. 37′ 10″	11.53 m
C-302 SPORT COUPE		11.53 m 9.04 m
C-302 SPORT COUPE LOA (motor down)	. 39′ 8″	
C-302 SPORT COUPE LOA (motor down)	. 39′ 8″ . 41′ 8″	9.04 m
C-302 SPORT COUPE LOA (motor down)	. 39′ 8″ . 41′ 8″ . 43′ 6″	9.04 m 12.7 m
C-302 SPORT COUPE LOA (motor down) LOA (motor up) LOA on trailer (motor down) LOA on trailer (motor up)	. 39′ 8″ . 41′ 8″ . 43′ 6″ . 10′ 0″	9.04 m 12.7 m 13.26
C-302 SPORT COUPE LOA (motor down) LOA (motor up) LOA on trailer (motor down) LOA on trailer (motor up) Beam	. 39′ 8″ . 41′ 8″ . 43′ 6″ . 10′ 0″	9.04 m 12.7 m 13.26 3.05 m
C-302 SPORT COUPE LOA (motor down) LOA (motor up) LOA on trailer (motor down) LOA on trailer (motor up) Beam Draft (motors up)	. 39′ 8″ . 41′ 8″ . 43′ 6″ . 10′ 0″ . 26″	9.04 m 12.7 m 13.26 3.05 m .66 m
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C-302 SPORT COUPE LOA (motor down) LOA (motor up) LOA on trailer (motor down) LOA on trailer (motor up) Beam Draft (motors up) Draft (motors down) Weight, dry Fuel capacity	. 39' 8" . 41' 8" . 43' 6" . 10' 0" . 26" . 33" . 9,800 lbs . 300 gal . 80 gal	9.04 m 12.7 m 13.26 3.05 m .66 m .84 m 4,445 kg 1,135.6 L
C-302 SPORT COUPE LOA (motor down) LOA (motor up) LOA on trailer (motor down) LOA on trailer (motor up) Beam Draft (motors up) Draft (motors down) Weight, dry Fuel capacity Water capacity	. 39' 8" . 41' 8" . 43' 6" . 10' 0" . 26" . 33" . 9,800 lbs . 300 gal . 80 gal	9.04 m 12.7 m 13.26 3.05 m .66 m .84 m 4,445 kg 1,135.6 L 302.8 L

(Subject to Change Without Notice)

SANITATION OF POTABLE WATER SYSTEM



SUGGESTED METHOD OF DISINFECTION

Perform the following steps in the order indicated at least once a year:

- a. Flush entire system thoroughly by allowing potable water to flow through it.
- b. Drain system completely.
- c. Fill entire system with a chlorine solution having a strength of at least 100 parts per million, and allow to stand for one (1) hour. Shorter periods will require greater concentrations of chlorine solution. **See Table Below**
- d. Drain chlorine solution from entire system.
- e. Flush entire system thoroughly with potable water.
- f. Fill system with potable water.

Table I shows how much disinfecting agent is required to make up various quantities of 100 parts per million chlorine solution.

CHLORINE CONCENTRATIONS

Amount of chlorine compound required for 100 ppm solution

Solution (Gallons)	Chlorinated Lime 25% (ounces)	High Test Calcium Hypochlorite 70% (ounces)	Liquid Sodium Hypochlorite 1% (quarts)
5	0.3	0.1	0.2
10	0.6	0.2	0.4
15	0.9	0.3	0.6
20	1.2	0.4	0.8
30	1.8	0.6	1.2
50	3.0	1.0	2.0
100	6.0	2.0	4.0

NOTE: This table contains information taken from the Handbook on Sanitation of Vessel Water Points, Public Health Service Publication No. 274 - Reprinted June 1963.

EQUIPMENT LOCATION



STARBOARD FITTINGS

STD

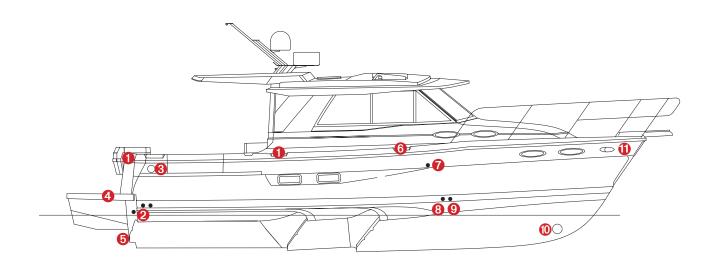
1 2 4 5 6 7 9 10 11

OPT

3 8



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



- Fuel Fills & Vents
- Bilge Pump Outlets
- **3** Generator Air Blower
- 4 Swim Ladder
- **6** Stern Thruster
- **6** Waste Pumpout

- Waste Vent
- 8 Macerator
- Head Sink Drain
- Bow Thruster
- ① Docking Lights

PORT FITTINGS



STD

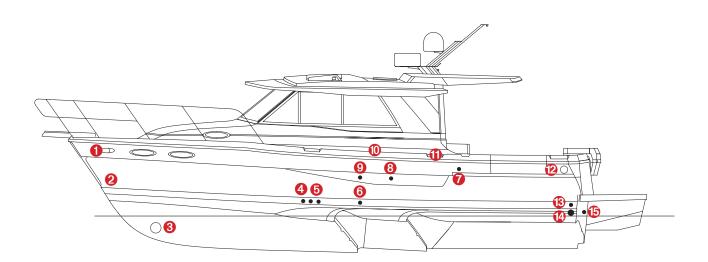
1 2 3 4 5 6 7 8 12 14 16

OPT

9 10 13 15



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



- ① Docking Lights
- 2 Anchor Locker Drain
- **8** Bow Thruster
- 4 Shower Sump
- **6** Air Conditioner Drains
- **6** Cabin Sink Drain
- Freshwater Vent
- Webasto Air Intake

- Webasto Exhaust
- Diesel Fill
- Freshwater Fill
- Generator Blower
- **(B)** Fish Locker Drain
- Generator Exhaust
- **1** Bilge Drain

MAIN CABIN TOP DECK COMPONENTS

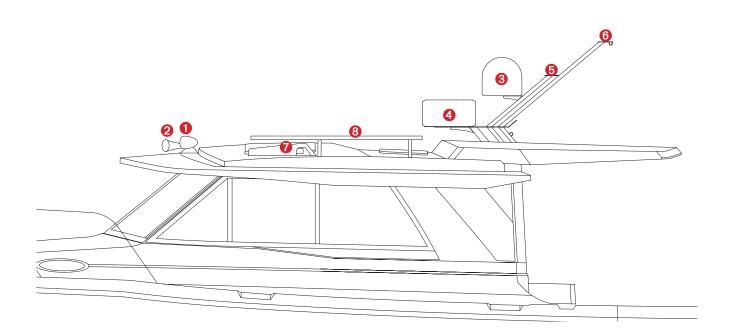


STD

1 2 3 6 7

OPT

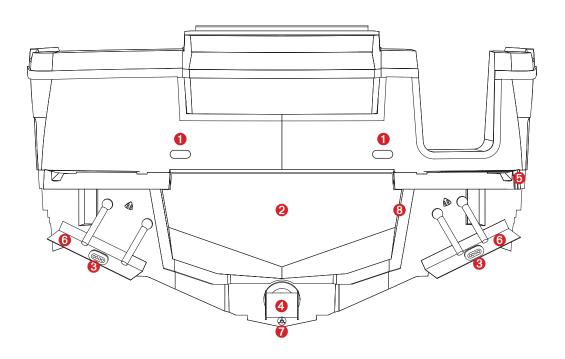
4 5 8



- Searchlight
- 2 Horn
- 3 Digital TV Antennae (satellite ready not included)
- 4 Radar

- **5** XM-Weather Antennae
- 6 Anchor Light
- Port Navigation Light
- 8 Solar Panel

1 2 3 4 5 6 7



- Courtesy Lights
- 2 Cockpit, Sink & Livewell Drains
- **3** Underwater Lights
- 4 Stern Thruster

- **5** Swim Platform Retractable Ladder
- **6** Trim Tabs
- **7** Drain Plug
- 3 Engine Pod Bilge Pump Outlet

FUSE LOCATION & VALUES



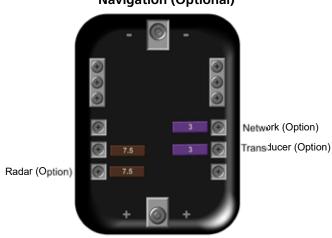
STD

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.

Inboard Panel (4 Switch) Outboard Panel (8 Switch) Outboard Panel (8 Switch) Head Radar (Option) Dash Fuse Block #1 V #1 V #2 V Antenna Light Switch (V-berth) 2V Outlet (Dinette) Webasto Heater



Navigation (Optional)



FUSE LOCATIONS AND VALUES CONTINUED



STD

These four blocks and fuses are located in the Quarter Berth aft storage area and under the Helm on the Bridge.



The bilge pumps operate automatically even when all switches and breakers are in the OFF position via electronic float switches or automated sensors, depending on the manufacturing year. The automated sensors will detect for water for 1 second once every 2 and a half minutes and run if needed.

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

Thruster Battery and Engine Battery fuse blocks are energized even when the battery switch is off.

Thruster Battery





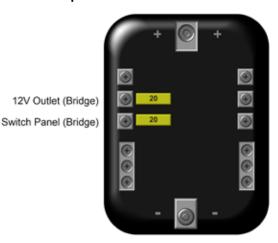
PDP



Engine Battery

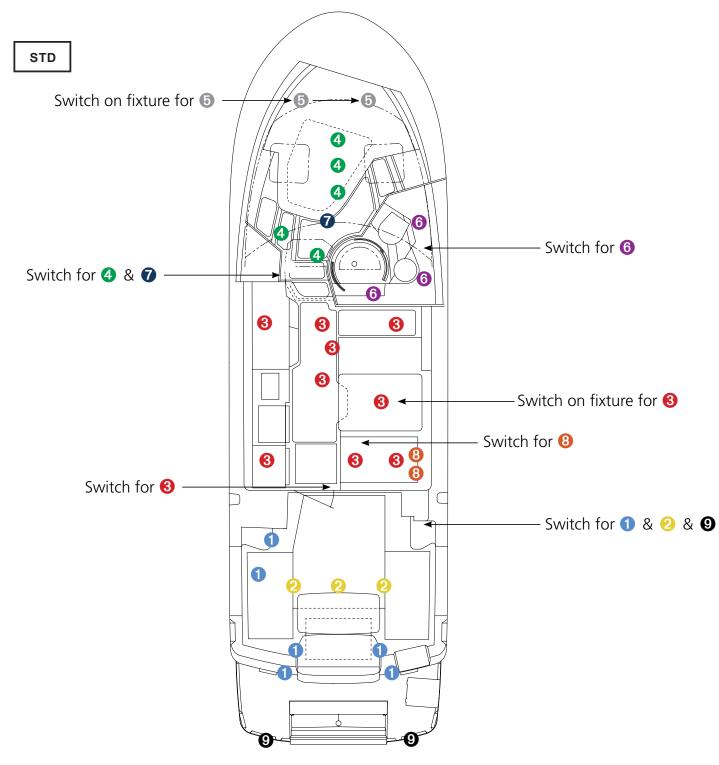


Optional: Located under Helm on Bridge



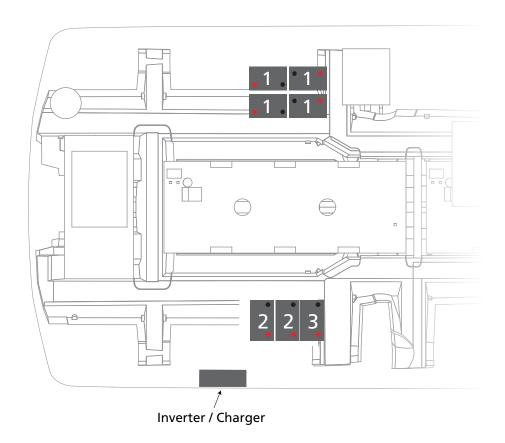
MAIN CABIN AND COCKPIT LIGHTS







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



Batteries

- **1** = House
- **2** = Engine **3** = Thruster

POWER DISTRIBUTION CENTER



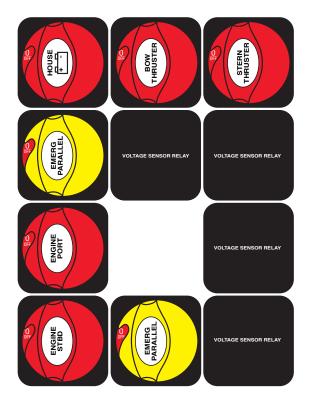
STD

Located in the upper cockpit hatch on the starboard side of the main cabin door. House, Engine, Thruster, and Crossover switches.



The parallel switch should always remain in the off position. While in the on position, the house and engine batteries will be combined as one for emergency start only.







50 Amp Bridge Breaker (optional)



50 Amp Quarter Berth Breaker



510 Amp Dash



Stern Thruster 200 Amp ANL Bus Fuse



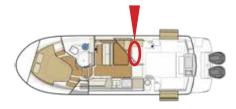
Bow Thruster 200 Amp ANL Bus Fuse

SYSTEMS CONTROL CENTER



STD

Located in midberth



Air Conditioner

Inverter/Battery Charger

Generator

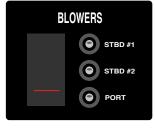
Blowers

Solar











AC DISTRIBUTION PANEL, SWITCH & DC VOLT METER



Located in midberth

NW

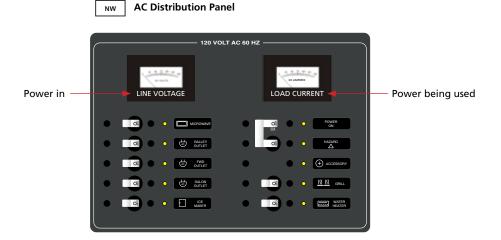
AC Distribution Panel



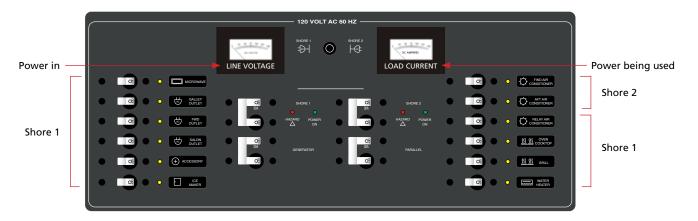
AC Selector Switch. Available with Generator



The AC Switch Selector Switch will determine which source of incoming 120 Volt power to use for your AC Distribution Panel. Slide gate for shore/generator power selection.



AC Distribution Panel with optional Air Conditioning and/or Generator

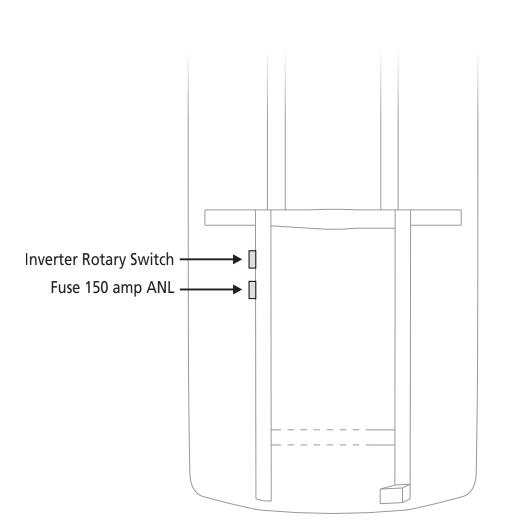




Inverter powers microwave and 110V outlets.

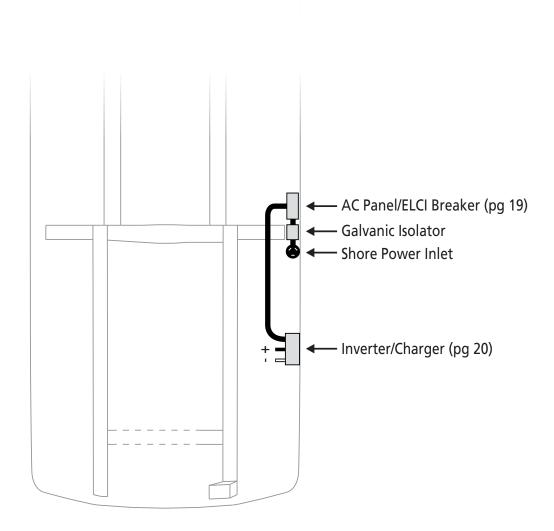
To power on inverter:

- Turn the rotary switch to the ON postion (located in port lazarette).
- Press the power button on the inverter panel in the system control center.
- Switch on load at AC Panel.





Shore Power



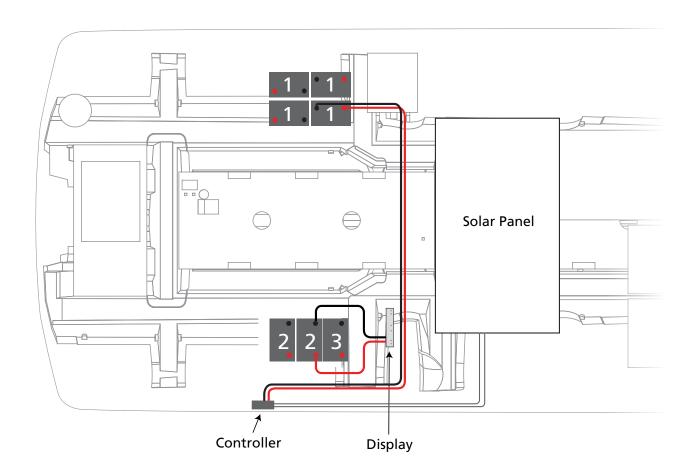
SOLAR PANEL



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 at the power management control center.



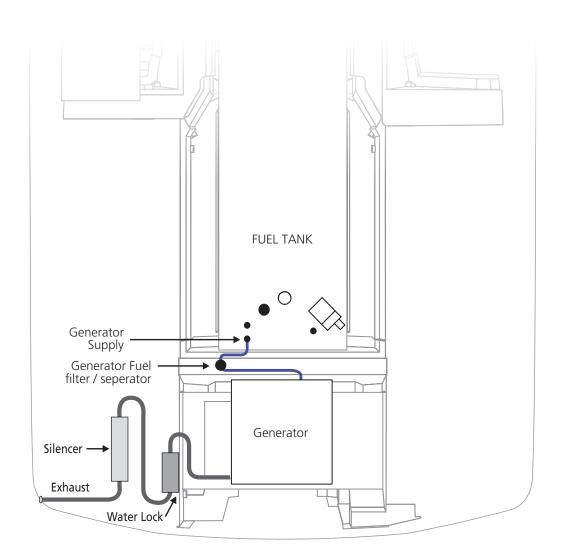
Batteries

- **1** = House
- **2** = Engine
- **3** = Thruster



OPT

Generator will start off of thruster battery #3



FUEL SYSTEM - ENGINE AND GENERATOR

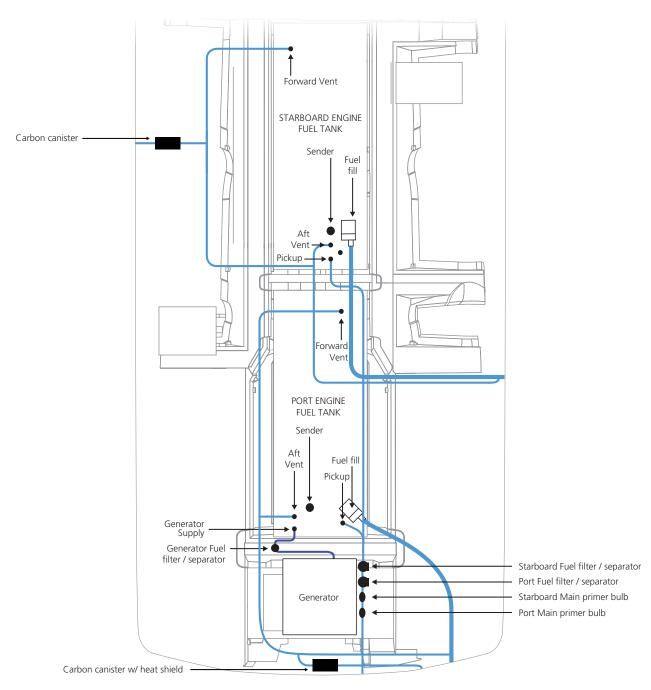


STD

2 x Yamaha 300

OPT

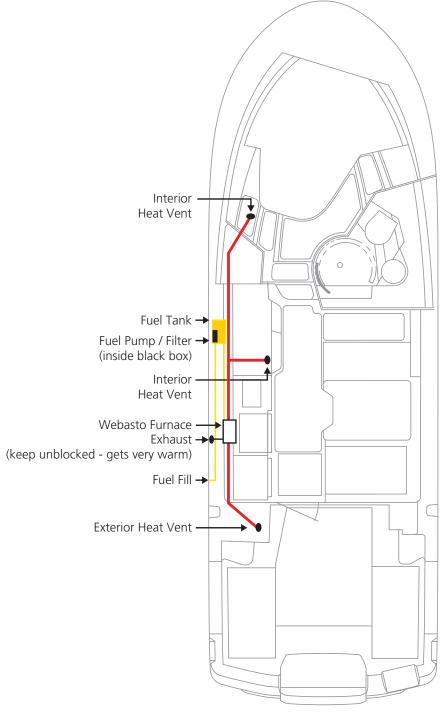
Generator





OPT

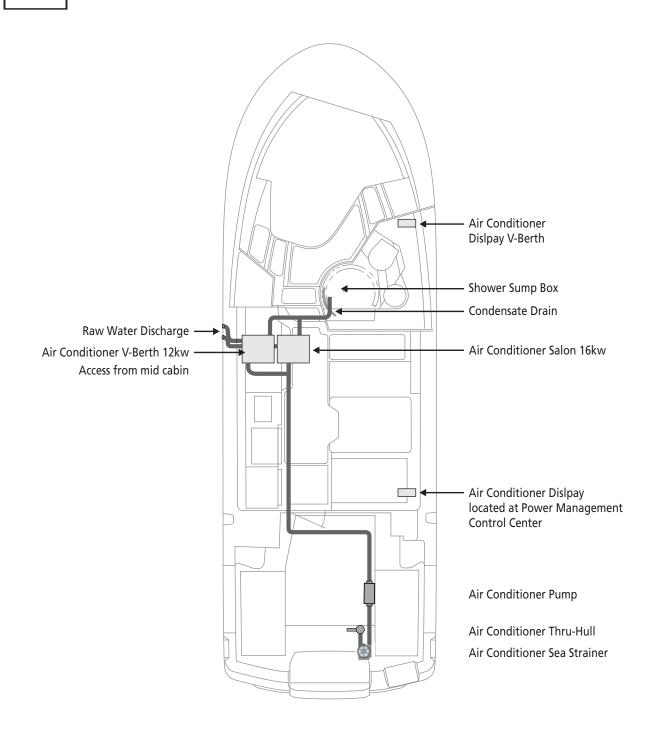
Webasto diesel furnace is located under access panel below range. The controller is located at the quarter berth power management center. The pump is underneath the forward passenger seat. The diesel tank capacity is 10 gal.





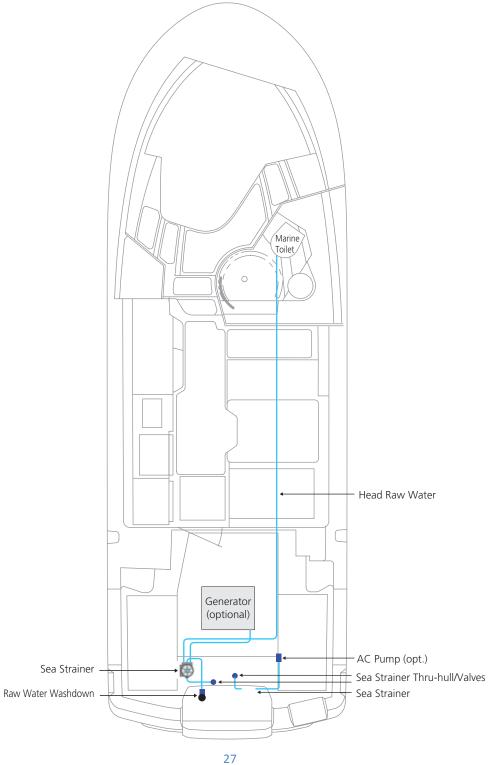
OPT

Air Conditioning System



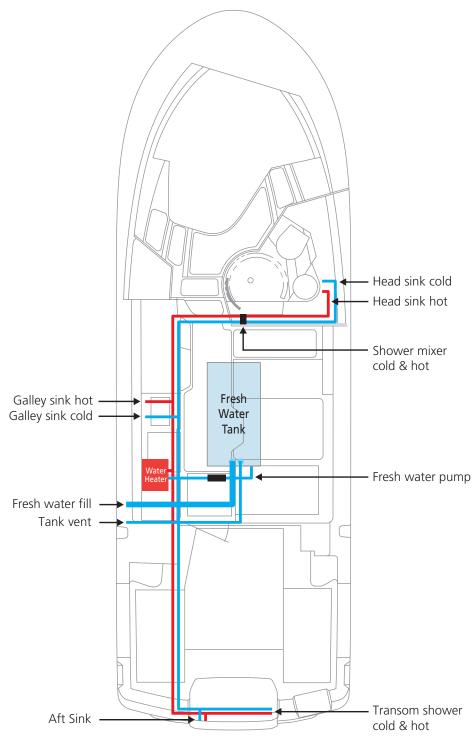


Multi Port Sea Strainer for Marine Toilet and Raw Water Washdown.





80 Gallon Fresh Water Tank, 11 Gallon Water Heater, 4.0 GPM Fresh Water Pump.

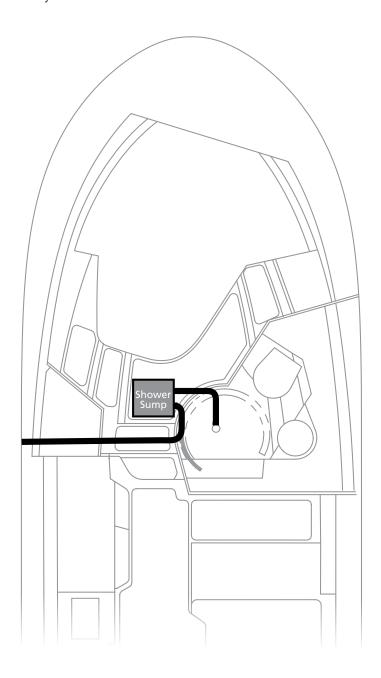




12V, 500 GPH

(Sump should be inspected for debris on a regular basis if shower is used frequently.)

• The shower sump box is located underneath the center removable teak and holly floor.



BILGE PUMP SYSTEM



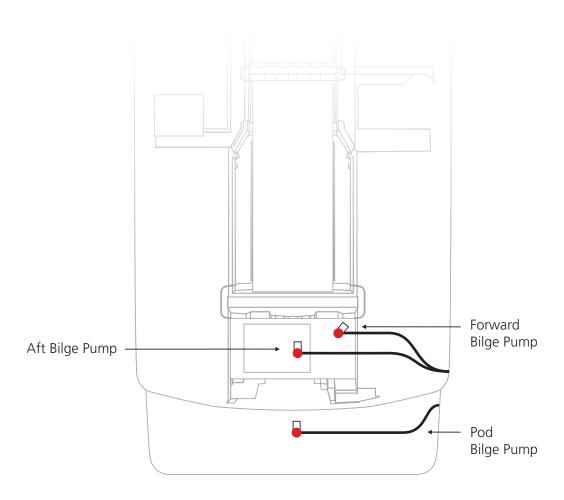
STD

12V 1000GPH



The bilge pumps operate automatically even when all switches and breakers are in the OFF position via electronic float switches or automated sensors, depending on the manufacturing year. The automated sensors will detect for water for 1 second once every 2 and a half minutes and run if needed.

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



WASTE SYSTEM WITH MACERATOR PUMP







Equipped with Raw Water Head, 40 Gallon Tank with Macerator Pump Out, Standard Dockside Pump Out, and Vent.



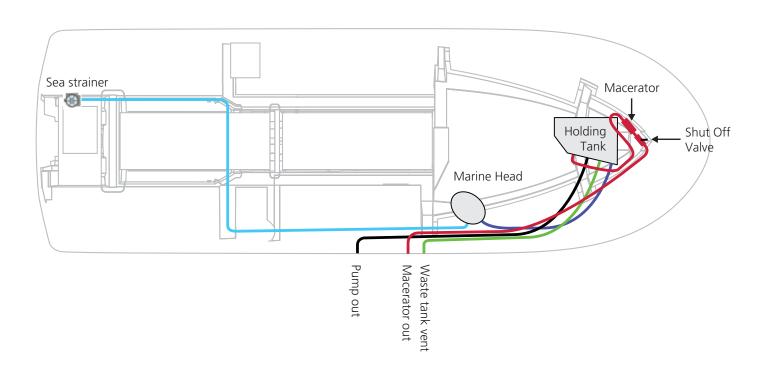
Waste tank fill level can be monitored by checking the electronic display in the head compartment. Green = Empty, Yellow = Half, Red = Full. Pump out can be done with the macerator or standard dockside pump out.



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 TAKE DOWN



SEDAN AND SPORT

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 rubber clip attached to the hard top.
- 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.

COMMAND BRIDGE

MAST SET UP PROCEDURE

- 1. Remove retainer clip from bottom end of support plate.
- 2. Using support pole, push mast into the upright position and secure with retaining clip to fitting on solar panel support bar.
- 3. Attach mast sides to port and starboard aft seat backs with retaining clips.
- 4. Attach port and starboard forward support arms to seat fittings with retaining clips.

MAST TAKE DOWN PROCEDURE

- 1. Detach port and starboard forward support arms from seat fittings.
- 2. Detach mast sides from port and starboard aft seat backs.
- 3. Release mast fittings from solar panel support bar and lower.
- 4. Install retainer clip on bottom end of support plate.

BRIDGE SET UP

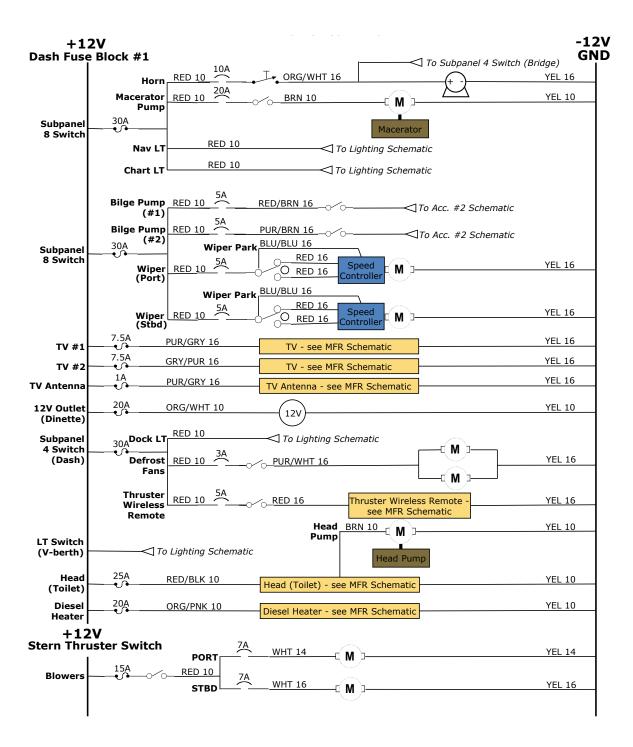
Always transport boat with Moving Bridge in the down position resting on support blocks and secured with provided ratchet strap. Helm seat should always be removed and stowed in main cabin.

To set Moving Bridge to upright position - remove ratchet strap - at that time the bridge should easily be lifted into the upright position. Move stainless support legs into retention blocks and flop latch into place to secure support legs.

To set bridge back into the transport position - disengage retention latches pull support legs aft and push bridge down to contact support blocks - secure with ratchet strap.

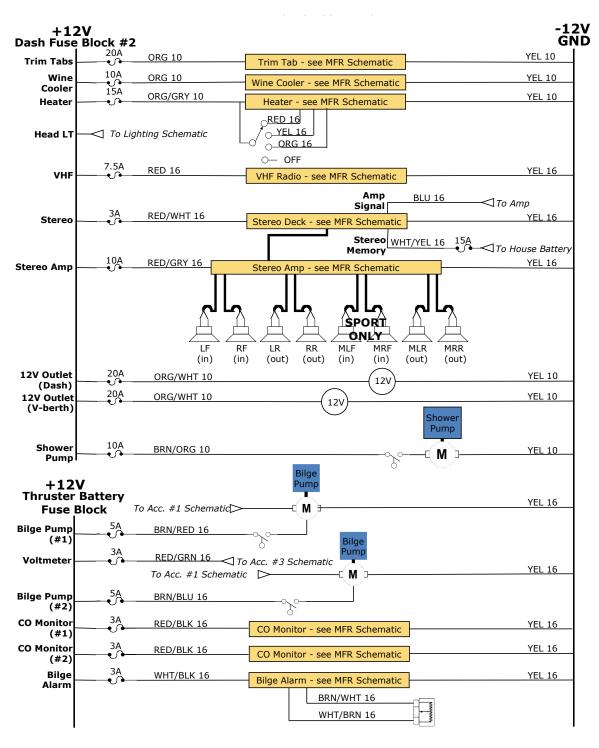
C-302 WIRING SCHEMATIC (ACC. 1)





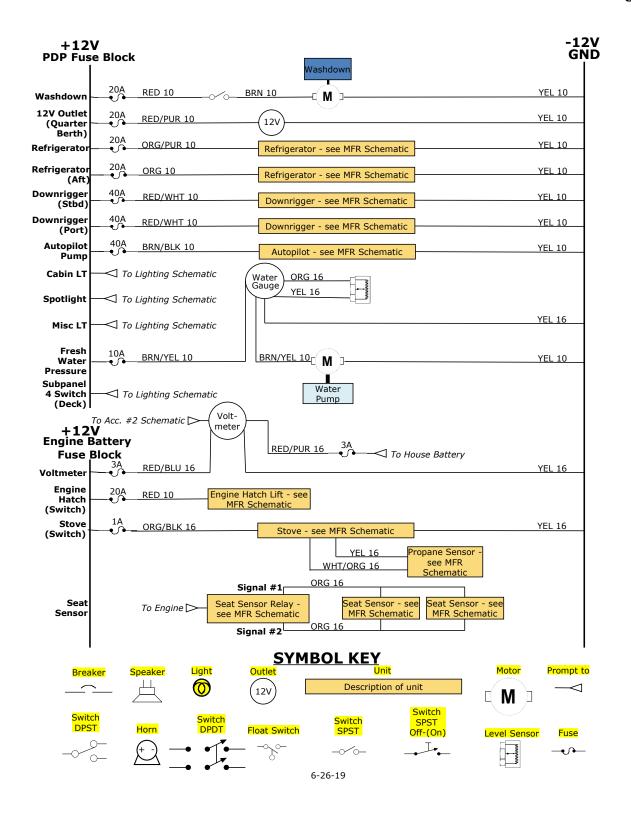
C-302 WIRING SCHEMATIC (ACC. 2)





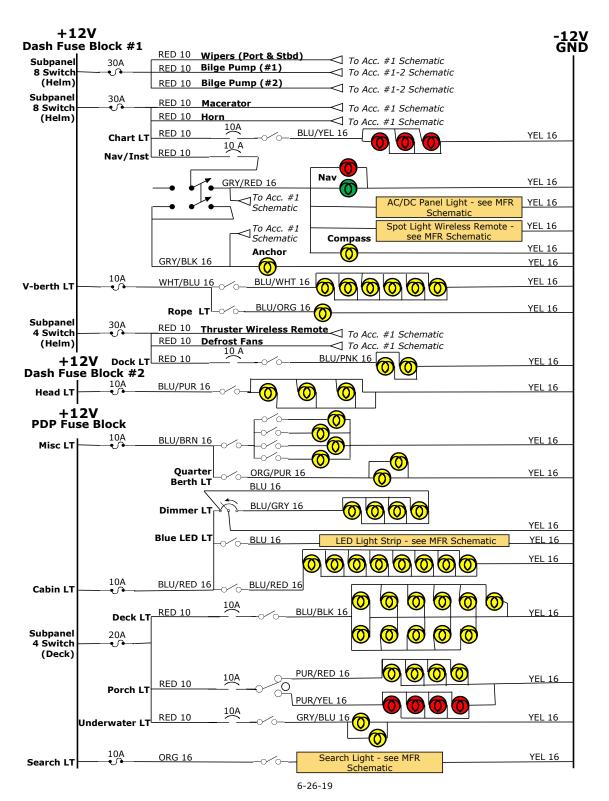
C-302 WIRING SCHEMATIC (ACC. 3)





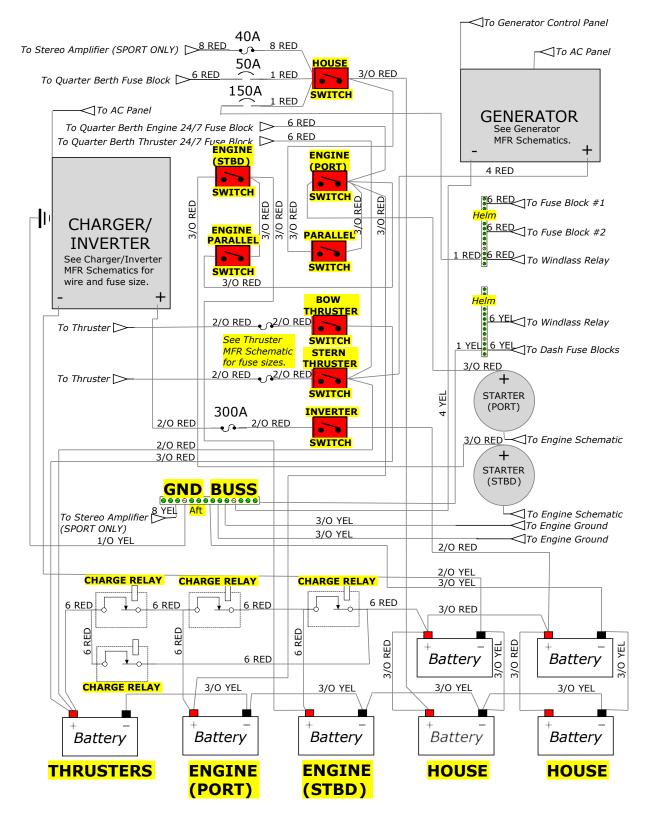
C-302 WIRING SCHEMATIC (LIGHTING)

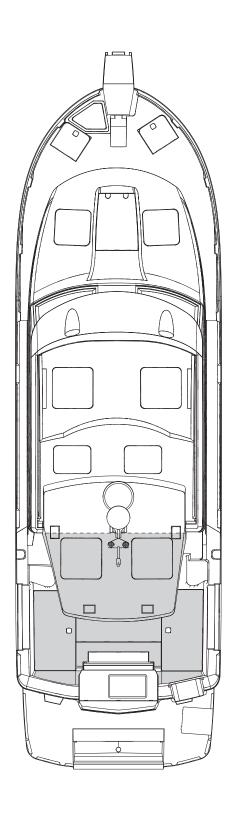




C-302 WIRING SCHEMATIC (P.D.P.)







CARE AND MAINTENANCE





TOW VEHICLE - PRIOR TO USE

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

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



CLEAN	ING
	Rer

Boat Inspection sticker.Charts and float plan forms.

	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.
INSPEC	
	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.
SAFET	Y EQUIPMENT
	Sound signaling device. Check flares and their expiration dates. Check personal flotation devices. Check fire extinguishers and their fill dates. First aid kits.
GALLE	Y
	Check stove for proper operation. Check everyday utensil stock.
DOCU	MENTS
	Registration sticker. Insurance papers and Passports.

EXAMPLE OF WINTER STORAGE CHECKLIST



GENE	RAL MAINTENANCE
	Fill Fuel Tank and add a fuel stabilizer.
	Empty and clean black water tank.
	Winterize black and fresh water tanks as necessary based on weather.
	Check bilge area for oil and for proper operation
	eneer and dean water strainer
	g
	e.a.g. e.a.e., e.a.g.
	Vent boat to prevent mildew.
	3
	Turn off all battery cutoff switches.
ENGIN	IE .
	Flush sea strainer system with fresh water.
	Check all hose fittings.
	Inspect and verify position of all sea cocks and shut off valves.
GALLI	ΕΥ
	Empty, clean and freshen refrigerator.
	Remove all dry food from storage.

CONTACTS



Customer Service

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